Climatic Ultimatum

The final description of the model, with global climate reconstruction and prognosis

Peter Jakubowski

Duesseldorf, April 2011

Preface

The word ‘ultimatum’ means[1] a final proposition, condition, or demand, especially one whose rejection will bring about an end of negotiations and resort to direct action. I have written this book in the hope that the endless debate to global-climate change can be finished and the necessary global action can be initialized with it. I am going to demonstrate in this book that we have really no more time to waste, and to continue the unfair discussions, independently of one’s skepticism about the global cooling or about the global warming hypothesis.

Since 2001 I have posted many various texts and diagrams on my website[2], in which I have explained the natural reasons of the global-climate change during the remote past and in the recent centuries. Many of those arguments are also included in my previous books[3]. Unfortunately the resonance, that my voice had found up to now, is too weak for to initialize the necessary activities, preparing our highly specialized, global civilization on the coming very soon dramatic change of the terrestrial climate.

The Kyoto Protocol which sets binding targets for the reduction of greenhouse gas emissions has been signed and ratified by 184 parties of the United Nations Framework Convention on Climate Change (UNFCCC). One notable exception was the United States. The UN climate conference in Copenhagen in December 2009 has aimed, if not to yield a new global climate treaty, then at least to close with agreements on some political essentials, creating a clarity the world needs. The main such agreement was seen as the answer to the following question: How much are the industrialized countries willing to reduce their emissions of greenhouse gases? The scientifically much more important question, however, has not been considered any more since Kyoto: Is the proposed reduction of the greenhouse-gases volume in our atmosphere really necessary from the point of view of Nature?

Only one aspect of the climate debate is not longer disputable. Meanwhile are we all aware of the real global-climate change during our own life. This change

---

[1] Webster’s New Encyclopedic Dictionary, 1994

[2] www.naturics.de

[3] see ibid.

means undoubtedly the strong warming of the Earth's surface between 1860 and 1990. It was even the strongest warming of the whole second millennium. It is a scientific fact. The question about the cause of this recent global-climate change, however, is much more difficult to be answered scientifically. But the forecasting of the further development of the global climate during the 21st century depends essentially on this specific answer.

A global-climate change is a physical process. The better the physics used for the explanation of the changes of the global climate, the better also this explanation. This connection seems to be obvious. Nevertheless, exactly this simple connection is a hiding place of the main misunderstanding of the whole climate debate. Which physics should be used to explain the global-climate change, the physics of the atmosphere, the physics of the oceans, or perhaps the solar physics? The answer is negative; none of those "partial" versions of physics. Why not? Because we know that the climate change is a global, holistic physical problem. Its explanation needs therefore some global, holistic version of physics, unifying the physics of the atmosphere, the oceans, and the Sun. It should also include of course all other "parts" of physics. Without such a unified physics no real solution of the problem is attainable.

On the other side, if one uses such a unified physics, the explanation of any global physical problem is much simpler than one has ever assumed. The unified-physics idea simplifies very radically the necessary calculations of the global-climate change. The single physical parameter that has to be controlled in our model of the climate change is the relative change of the global energy transfer towards the Earth. The aim of the present book is to give a detailed practical solution of the modelling of the global-climate changes, based on the best unified physics available at the present. The calculations I am going to present here can be carried out theoretically even without a computer at all. The advantage of using my home computer to this purpose is the clearness of the presentation of the resulting diagrams.

The first part of the book presents some of my previous texts and diagrams, introducing in the climate debate especially those readers not familiar with this topic until today. The second part of the book describes the model structure step-by-step. The third part discusses the results. In order to reach the accuracy of the model comparable with the accuracy necessary for the weather prognosis, I have included all the periods of the Cosmic Hierarchy of our Solar System down to the level -1, with the length of its period of 18.8 days, which is 147 times shorter than in the original calculations. Nevertheless, also at this high accuracy everyone is able to repeat the calculations of the model by oneself, using a standard PC.

The annual and monthly agreement of the past-climate reconstruction is discussed in Part 3 of the book. The corresponding prognosis of the global climate development in the next decades is an urgent warning directed to all nations of the world: beginning with 2015, we are returning to a climatic phase similar to the sixties of the 20th century. On a longer scale of time, our children have to be prepared for even colder times in the northern hemisphere. Such a warm climate like that one we have enjoyed at the end of 20th century will come never more in the whole third millennium.

The accuracy of our cosmic timescale used in the climate-change calculations is compared in Appendix 1 with the traditional geological timescale. The reality of the cosmic events called in *Naturics* as the "cosmic quantum jumps" is demonstrated in Appendix 2; all investigated impact craters on the Earth have been created exactly with the time intervals corresponding to our cosmic timescale. Finally, Appendix 3 gives the arguments for the real existence of the global center of mass of the whole Solar System exactly in that point of space where Venus was created during the formation of the Solar System.

PART ONE

The "hot and cool" climate-change debate

For the readers not familiar with the whole debate about the global climate change, this first part of the book presents some introductory texts and diagrams of my model of the global climate reconstruction and prediction based on the ideas of the Unified Physics and the Cosmic Hierarchy of our Solar System.

I have developed the Unified Physics during the last quarter of the 20th century[1]*. Since then it has been applied many fold successfully for solution of some of the greatest problems of the contemporary science. To them belong, among others, the following problems: a replacement of all universal interactions with the single one – the energy transfer, a unification of all known fields of the contemporary physics into a universal quantum field of energy (with its average state, the Field of Light), a unification of all physical quantities, including quantum mass and quantum electric charge, into a common Unified Family based on only two fundamental quantities, the quantum length and the quantum time, a derivation of all physical equations from the single equation of the universal Field of Light, and a unification of all possible states of matter in a common Quantum Spectrum of matter.*

The Cosmic Hierarchy of the Solar System is the most powerful application of the Unified-Physics idea to the solution of the fundamental astrophysical, geophysical and cosmological questions, including the global climate change. The other already solved problems include, among others, a discovery of the double-

---

[1] The Unified Physics has been published first in *Physics Essays*, 1990,Vol.3 pp. 156-160 and 281-283 and 1992, Vol.5, pp. 26-38, and with some additional applications in my recent book:
P. Jakubowski, "*Naturics: the unified description of Nature*" , Books on Demand GmbH, Norderstedt (Germany), 2010, ISBN 978-3-8334-6932-9.

star origin of our Sun, an extremely precise theoretical timescale for geology and paleontology, an explanation of the larger and smaller steps in our own evolution, and a possibility to predict the periods of an enhanced probability for the strongest earthquakes around the world.

The successful applications of the unification idea assure us of a high value of our prediction of the global-climate change in the coming decades and centuries. We have to decide soon which actions will we start just now and which will we leave to the next generations of our children and grand-children.

Chapter 1

The author’s contribution to the “2nd worldwide online Climate Conference 2009”

After my preliminary contact to the organizers of the **“2nd worldwide online Climate Conference CLIMATE 2009”**[1] *and the acceptance of my abstract, I have sent them the full text of my paper. Unfortunately, I have never seen it online and I have never obtained any explanation of this fact. Therefore, here is the full text once more.*

The present climate change involves us all

(*I abandon here the personal data and the abstract from the original version of the paper.*)

1. Do we still have any free choice of our climate models?

We all have to care about our global climate. Our world is standing shortly before a significant change of this climate. However, the world is still standing completely unprepared for the coming change. The reason is quite simple. The politicians have not been advised right yet. The global-climate policy relies on the climate models exclusively. It belongs to the fundamental responsibility of the climate-policy makers, to seek after the best possible climate models.

However, the debate-time should be finished now. We have no much time today (2009) to seek after the best possible climate model. We have to use the best one that already exists. One criterion seems to be obvious for all models and times: the better the used physics, the better the resulting climate model. From that reason, it belongs to the fundamental responsibility of all scientists, to build their

---

[1] http://www.klima2009.net/index.html

climate models based on the best physics available.

How much radical any change in our models of some natural behavior could be, can be seen for example, if we consider our knowledge about the structure of our Solar System before and after the famous mission of the two *"Voyager"* spacecraft (between 1977 and 1989). Similarly radical was the change of our point of view about Venus, before and after the *"Magellan"*-mission, or also our whole cosmology, before and after the positioning (and repair) of the *"Hubble"* telescope on its orbit around the Earth.

It is thus also quite possible, that by using some new physics, our point of view on the global-climate physics will change in a similarly radical way. Imagine that we can prove, that the new physics is much better than the traditional one. Are we not obliged then to develop our global-climate models based on this new physics, regardless of how radical the resulting conclusion will be? I think, the obvious answer is yes, we have to handle in that manner.

I cannot imagine that any scientist could catch the idea to neglect the new knowledge, as gained with the *"Hubble"* telescope, and to persist in his old cosmological models from the era prior to the new astrophysical tool. Similarly, I cannot understand why thousands of scientists are still using the traditionally unsuccessful physics of the past centuries for their climate models. By using the false tools they are producing the false images for the policy makers. The only true in such a case is the sinful waste of our all money.

The only remaining problem is to prove that the new, unified physics of *Naturics* is really much better than the traditional one. Physics is nothing else as our tool helping us to describe the Nature, like the *"Hubble"* telescope or any other scientific instrument. Most of happenings of the past 20th century was dominated by the rapid technical and scientific development, basis of which was unquestionably created through the ideas of the greatest scientists, from Newton to Einstein, from Maxwell to Planck, from Galileo to Heisenberg. There are surely many great scientists also today (honored, for example, with the corresponding Nobel prizes), who are able to continue the development of physics also in the present century. Why has been the new physics not yet generally used for the construction of our climate models?

In order to find the answer, it should be differentiated between the fundamental, theoretical physics and the applied physics (together with all correlated domains of science and technique). If we consider the applied physics at first, we observe its continuous progress through the recent decades. There were developed more and more advanced research methods in astrophysics, biophysics, chemical physics, geophysics, and medical physics, leading to more advanced technological processes, and finally, to more advanced technical equipment for all of us. Computer devices, entertainment electronics and communication tools are perhaps the most widely known examples of the recent development in the applied branch of physics.

These new developments could be maybe treated as a local revolution in the proper domains of science or technology. They are however not the general revolutions, concerning the whole "body" of physics; they are not deep and wide enough for to change the theoretical foundations of physics.

However, the situation is diametrically different for the basic, theoretical physics. In contrary to the applied physics, a continuous progress seems to be non-realizable in the fundamental physics. One is either able to understand the considered natural phenomena by means of the description of the traditional physics, or one is forced to revolutionize the very foundation of physics, in order to open quite new areas and possibilities for the description of such natural phenomena, which cannot be explained in concepts of the traditional physics.

The reason for this dilemma lies in the model character of physics itself. Each traditional model of Nature, and almost each physical equation within such model, has a given range of validity of physical quantities (as high temperatures or room temperatures, high pressures or low pressures, large dimensions or small dimensions, etc.). Most of the actual problems of the traditional physics are bound with such application constraints of the traditional model (and equations). Electrodynamics, for example, perhaps the most beautiful theory of the traditional physics, is not directly applicable inside atomic nuclei or in the planetary science. Also the traditional theoretical quantum mechanics is only hardly applicable in modern technologies or technique.

The unsuccessful efforts of many great and greatest physicists of 20th century, trying to extend the application ranges of the traditional physics onto the new emerging problems, have suggested to us, that the best, if not the only way to further develop the fundamental physics, has to be a radical separation from the traditional physics and development of the new foundations of physics on its deepest level of the primary axioms. On the other side, in order to make the true advance possible, we have to save from the traditional physics its best ideas: the quantization, the relativity, and the universality.

Exactly these three great ideas was the starting point to my new foundation of the unified physics. The universal, relativistic quantum of matter is the main concept of the new model. We have to accept that the world is relativistic, the world is quantized, and the nature of the relativistic quantum of matter is universal. *"Naturics"*, the new unified description of Nature, is universal, easy to learn and easy to apply in any technique and technology.

Although it could seem at first sight almost unbelievable for a traditional climatologist, our quantum treatment of the relative changes of the global average temperature (please, do not misunderstand with the local meteorological temperature) is successfully solvable by using of our own PCs. It is possible, because the Earth is just a quantum member of the energetically quantized system, the Cosmic Hierarchy of our Solar System. Our Earth is a member of the quantized and relativistic Universe, and its climate is primarily influenced by the cosmic-energy transfer inside this hierarchy.

Obviously, everyone has to learn the new physics before it can be successfully applied to any desired scientific, technical or technological problem. However, the present Conference "Climate 2009" is not devoted to any new physics but to social, economic and political consequences of the coming global climate change. Therefore I give here only the single link to the *Naturics*-Website (www.naturics.de; where everybody can find the desired information about the new physics) and present below the most important information to the reliability of the reconstruction of the past global climate periods in the previous thousands of years and, what is the most important for this Conference, to the reliability of our prediction of the future development of the global climate during the coming centuries.

2. Reconstruction of the past periods of the global climate

We are using our new paradigm: the extra-solar cosmic "wind" of the Sun's Cosmic Hierarchy warms and cools the Sun's and the Earth's surfaces almost simultaneously. Solar energetic activity responds to the periodic motion of all its partners in this cosmic hierarchy. The resulting variability of the solar activity is a superposition of these periodic changes. The Earth obtains a corresponding part of the solar energy emitted to the environment, however modified through the direct energy transfer from the Cosmic Hierarchy.

The quantization and periodicity of all natural phenomena are very tightly bound to each other. If some process is quantized, it surely shows its characteristic periodicity. And also reversely, if a natural process is periodic, cyclic, it has to be understood as a process of some quantized object.

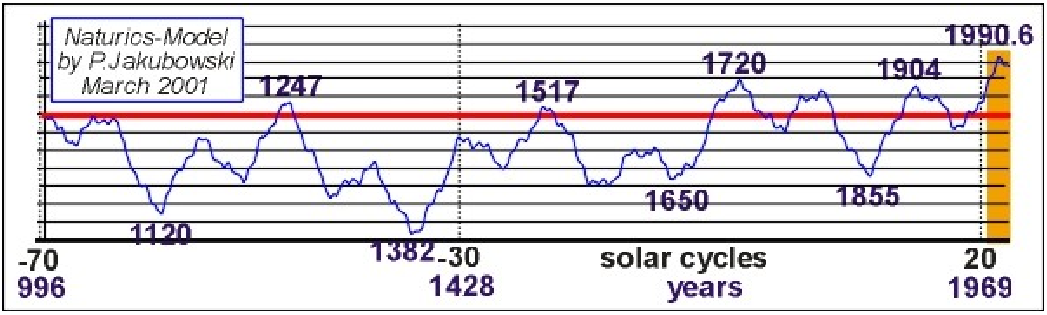


Figure 1. Relative deviation of the averaged solar (*energetic*) activity between the years 1000 and 2000 in relation to some arbitrary level. The blue curve is a 22-years-average (*over two solar cycles*) of the results which have been calculated with the idea of the Sun's Cosmic Hierarchy, one of the most successful applications of the unified physics of *Naturics*.

This new paradigm is an opposite of the currently popular one, trying to find the causes for the terrestrial climate fluctuation in the "internal", terrestrial reservoirs of energy, and adding the cosmic irradiation as a possible, but almost negligible, contribution. For example, in the traditional models, certain phenomena, such as cloud formation, oceanic heat transport and the mixing of the air, are still so poorly understood that certain assumptions have to be made about the way the atmosphere behaves. From our point of view, however, all those phenomena are an effect of the climate fluctuations, and not their cause.

The new paradigm provides us with a very exact reconstruction of the past global climatic fluctuations on the Earth and allows us to predict the future climate development with a very high precision, over many centuries ahead. We are going to discuss our theoretical diagrams as that one above on the following pages.

Our new paradigm concerns the main sources of the extra-solar cosmic energy coming in and out of the whole Solar System. It is the cosmic energy of the Sun's Cosmic Hierarchy that warms or cools the Earth surface, mainly influencing our global climate. The anthropogenic contribution can be then obtained as a difference between our theoretical, exclusively natural contribution, and the actually observed climate fluctuations.

On the other side, our model clearly demonstrates that there is no direct connection of the Earth's global temperature to the sunspot numbers. The sunspot number alone seems to be not a direct indicator of the Sun's energetic activity. The sunspot number varies much more as a response to the extra-solar energy transfer incoming to the Sun, rather than due to some internal solar activities. This new observation could perhaps explain the failure of some other climate models to give reliable long-term solutions.

There is an observationally confirmed consensus that the recent decades, the eighties and nineties of the 20thcentury, were the warmest ones of the whole past millennium. Qualitatively, our theoretical results very evidently confirm this observation (*note the yellow column on the right side of the diagram above*). Qualitatively, this warm period also agree with the report of the Intergovernmental Panel on Climate Change, "Summary for Policymakers"; A Report of Working Group I (*compare Fig. 1b of this report*).

In respect of quantity, however, our precise theoretical results put the observation in its right light. The diagram below shows the above data in their original form, in relation to our long-term mean value, averaged over 2200 years (or 200 theoretical solar cycles) rather than in a relation to any arbitrarily chosen level (as the red line on the previous figure).

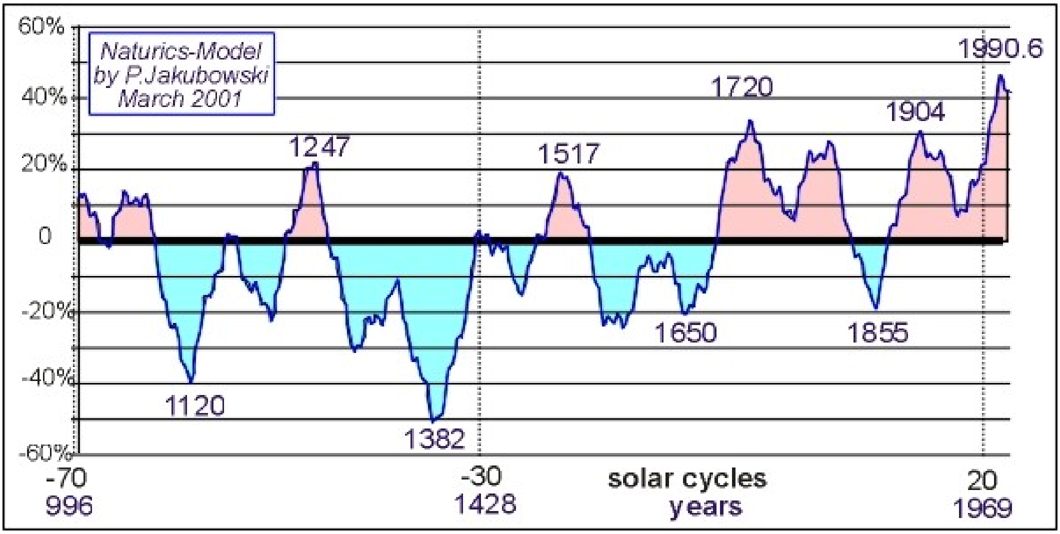


Figure 2. Relative deviation of the averaged solar activity between 1000 and 2000. The relation level is now not an arbitrary one (*as previously on Fig.1*), but it is an average level over the whole 200 solar cycles (*not completely shown on this figure*) of the calculation.

The view changes itself even more if considered along some yet longer period of the energetic fluctuations. We see now that the highly "alarming" forecast basing solely on the narrow “window” between 1860 and 1990, commonly discussed in almost all public groups, provide a quite different impression, if observed along the whole period of our model. We are able to extend that original diagram just above over our long-term reconstruction, over the period of 2200 years. We reconstruct and predict the relative change of the global Earth's temperature between the year 347 (solar cycle -130) and the year 2550 (solar cycle 74).

The complete diagram (Figure 3) presents three new aspects of the recent global warming. Firstly, it shows that the two last decades of the recent millennium were accidentally the warmest two of the whole millennium.

Secondly, these warm decades were just one example of many such naturally warm periods, occurring every eleven centuries, the last but one time in 8th century. Thirdly, the coming centuries will be as cold as during the previous "Little Ice Age". And this new cold phase has already begun in summer 1990.

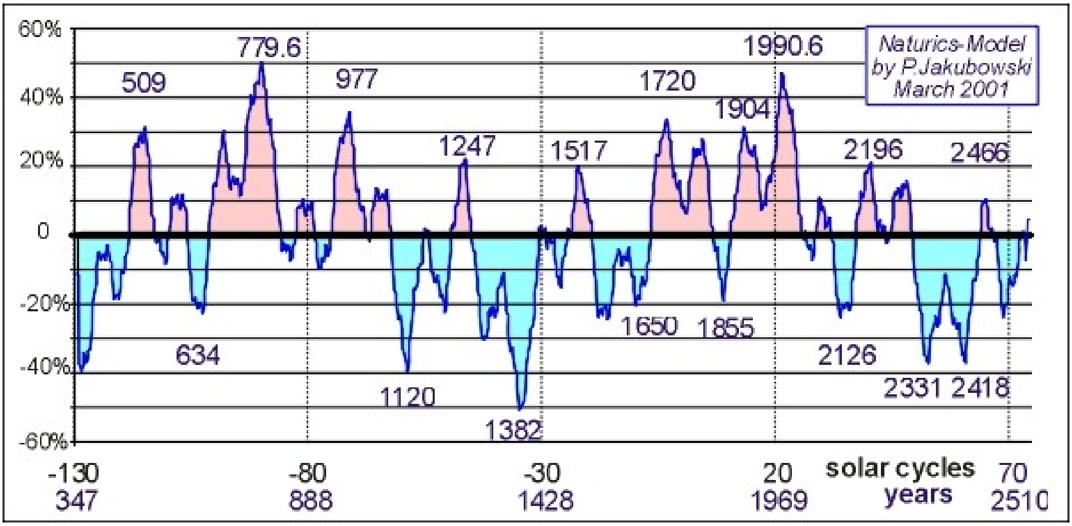


Figure 3. The complete result of our calculation of the relative deviation of the averaged solar activity during 200 solar cycles (*or approximately 2200 years*), between the past (*theoretical*) cycle -130 in year 347 and the coming (*also theoretical*) cycle 70 in year 2510 (*Today, 2009, we are still at the minimum between the cycle 23 and 24.)*

As we can see, our theoretical reconstruction of the past changes in the terrestrial global climate is overwhelming, indeed. It coincides with all historical warm and cold periods of the past climate over two millennia. Let us consider the past 160 and future 40 years in more detailed version in Figure 4.

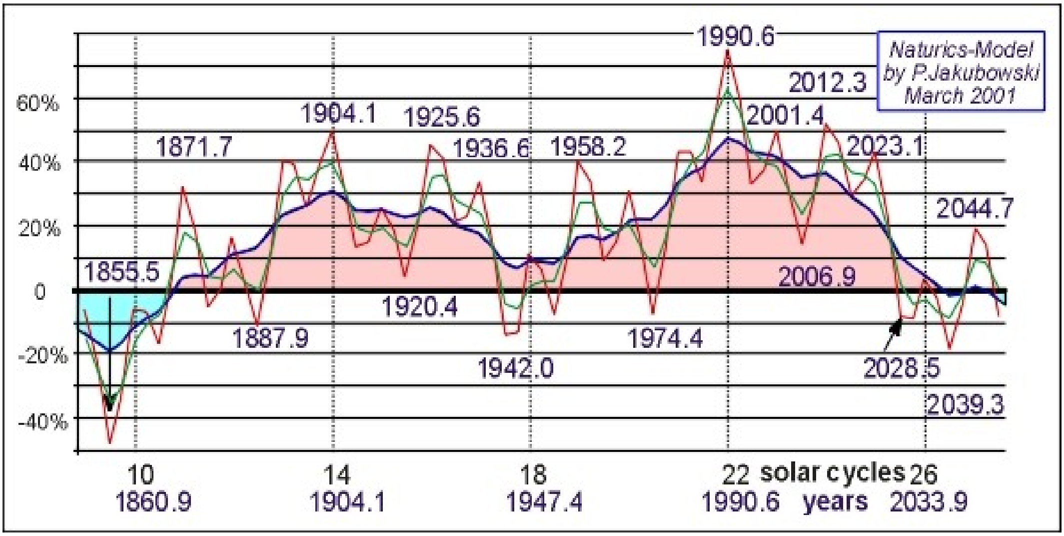


Figure 4. A comparison of the three steps of averaging of the raw data. The red curve shows the raw, non-averaged data, calculated in distance of every fourth of a solar cycle (*approximately every 2,75 years*). The green curve is averaged over every half cycle (*5,5 years*) and the blue one – over every 22 years (*two complete cycles*). The short, middle and long-term climatic prognosis could be supported with these different curves.

Our previously shown theoretical (blue-colored) curve represents the mean relative energetic solar activity averaged over two solar cycles, i.e., over 22 years. It corresponds to the long-term global changes of all energy reservoirs on the Earth's surface (first of all, land and deep oceanic water). The same solar activity averaged over one half of a cycle, i.e., over 5.5 years, is shown on the diagram above as the green curve. It corresponds to the middle-term climatic fluctuations (ice shields, surface layers of the land and water masses). The red curve of the diagram shows the actually calculated relative energetic solar activity. It was calculated in four points for every solar cycle (*the points density is restricted only by the used computer capacity; I have used my standard PC for these calculations about fifteen years ago*). The red curve corresponds to the short-termed, atmospheric fluctuations of the global climatic changes.

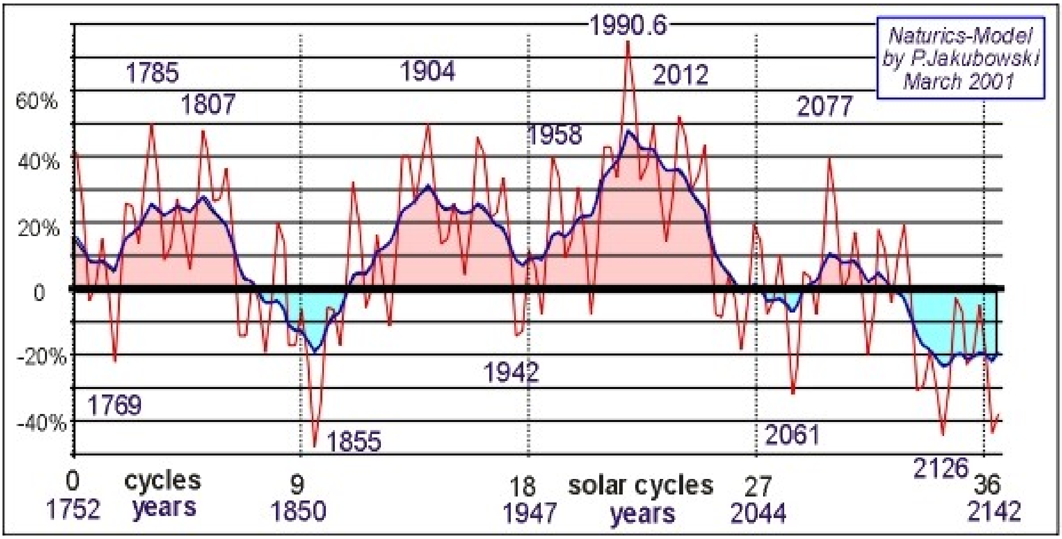


Figure 5. This part of our full diagram demonstrates the similarity of our present climatic situation to that one from the years of the Napoleonic wars in Europe at the beginning of the 19th century. The historical analysis of the climatic changes during the first half of the 19th century can help us to imagine, which energetic and economic problems we shall meet soon.

The rise of the global temperature in 20th century was imposing, indeed. However, it is already and definitively over now. In the present situation we have the opportunity to predict the future climatic development quite precisely by studying our chronicles from the beginning of the 19th century, when a similar cooling has occurred. The coming global cooling starts from some higher level, so it will be yet more rapid.

One of the best verifications of our reconstruction of the past climatic fluctuations is the comparison of the past cold and warm periods with the known historical activities (*presented in the table below*), intensity of which evidently depend on the climatic fluctuations.

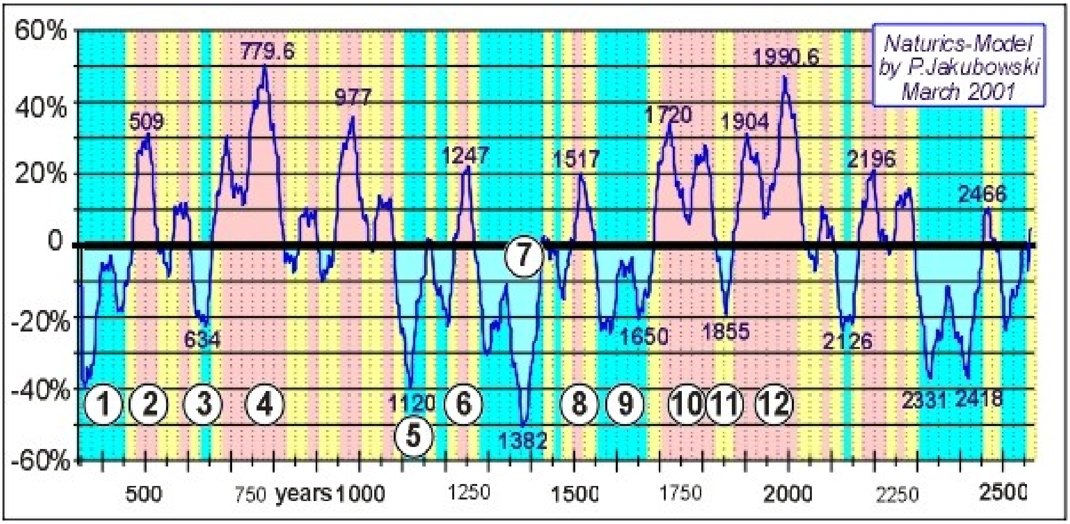


Figure 6. Our full diagram divided into six cold (*cyan-colored*) and six warm (*rose-colored*) past periods. Some examples of the corresponding historical happenings, very probably influenced by the climatic conditions of these periods, are listed in Table 1.

Table 1: Historical happenings (very probably) influenced by the climatic conditions of the cold and warm periods, as listed in Figure 6 of our full calculations diagram

Nr	General tendency during the historical climate period	Examplary happenings
1	The extremely cold period of the fourth century forces the North to South and East to West displacements of many tribes out of the coldest regions of	360 - Huns invade Europe
		395-476 - Western (colder) Roman Empire declines, whilst the eastern (warmer) Roman Empire rises

	the Earth.	
2	The quick warming between 450 and 500 causes the opposite movements and more peaceful development	ca. 470 - Huns leave Europe
		ca. 500 - Native Americans begin cultivation of the Mississippi Basin
		529 - Byzantine art and architecture enters a golden age (Justinian rule)
3	The rapid decrement of the average global Earth's temperature after 509 promotes the development of plagues and intensifies the religious activities	542 - Great Plague begins in Constantinople, spreads across Europe over next fifty years, killing about half of Europe's population
		622 - The year one in Muslim calendar
		630 - Muhammad and followers conquer Mecca in holy war
4	The permanently warm period between 650 and 1080 forces many peaceful and also adventurous developments	> 600 - Barbarian invasions, which plagued Europe since fall of Roman Empire, come to an end during the 7th century
		618-907 - Chinese culture and literature enjoy a Golden Age under T'ang Dynasty
		8th-11th century - Period of Norse invasion in France, Germany, Russia and England
		982-1000 - Vikings establish colonies in Greenland and (probably) in Nova Scotia
5	The end of the medieval climatic optimum causes the unstable climatic conditions again. The peaceful but also the martial trials to stabilize the situation follow in next centuries	1054 - Schism between Eastern Orthodox and Western Churches becomes permanent
		1068 - Chinese Emperor Shen Tsung introduces radical reforms in agriculture and state finances
		1071 - Beginning of Ottoman Empire and end of Byzantine rule in Asia Minor
		1099 - Only every fifth crusader survives the First Crusade in Near East

6	The short warm period in the middle of the 13th century forces some new development	1167 - Oxford University in England founded
		1233 - Coal mined for the first time in Newcastle, England
		1253 - Sorbonne founded in Paris
		1291 - The Mamelukes conquer Acre, ending Christian rule in the East and bringing an end to the crusades
		1298 - Spinning wheel invented in Germany
7	The first half of the coldest period of the previous millennium, the "Little Ice Age" between 1275 and 1675, was a period of wars, plagues, colonization, and slavery	1300 - Gunpowder introduced into Europe during the early 14th century
		1333-1568 - Conflicts among independent warlords; the Muromachi era in Japan
		1337-1453 - Hundred Years' War between England and France
		1348-1351 - The Black Death kills half of Europe's population, crippling industry and agriculture for the next century
		1434 - African slaves introduced into Portugal
		1476 - Incas complete conquest of South America
8	During the short warm period in the middle of the "Little Ice Age" the Renaissance culminates, but the period brings also wars	1481-1512 - The Turks fight against Hungary, Poland, and Venice
		1482 - Spanish Inquisition begins the persecution of the so-called "heretics"
		1487-1533 - Portuguese and Spanish explorers "discover" the seaway to the New World, India, and China, and bring African slaves to the new colonies
		1517 - Martin Luther sparks the Protestant Reformation

		1543 - Copernicus publishes his Solar System
9	The second part of the "Little Ice Age" is again a period of wars and plagues	1550-1600 - The population of Native Americans declines from 7 million to 1 million
		1588 - The English defeat the Spanish Armada
		17th century - English, Dutch and French colonization culminates
		1655 - Sweden invades Poland and begins the Northern Wars
		1669 - Famine in Bengal kills 3 million people
10	The first half of the present climatic optimum forces the worldwide "revolution" of industry, culture, but also of war and sweating-system	1721 - Russia becomes a dominant power in northern Europe
		> 1721 - Baroque and Rococo styles spread throughout Europe
		1733 - Invention of the flying shuttle revolutionizes the cottage industry
		1769 - Famine in Bengal kills 10 million Indians
		1776 - American Declaration of Independence
		1789 - The French Revolution begins
		1796-1815 - Napoleon's Period in France and Napoleon's Wars across the whole Europe
11	The short climate cooling in the middle of the present optimum brings dynamics again	> 1832 - Unification movements in Europe and independence movements worldwide
		1833 - Slavery abolished in the British Empire
		1837 - Panic depression in the United States
		1842 - Positivism and sociology expands from France
		1859 - Darwin publishes his Origin of Species

12	The present part of our climatic optimum is very well known to continue the previous tendency of the "revolution" of industry, culture, science, war technique and sweating-system	- Communism Revolution in Russia and China
		- First and Second World War
		- Independence Wars throughout the world
		- "Cold" War between East and West
		- Cosmic space exploration
		- Environmental "Revolution"
		- Global communication system

3. Conclusion

I have never heard about any other theoretical reconstruction of the warm and cold periods of the global Earth's climate with such an extraordinary precision. This result gives me the conviction that my unified physics generally, and the Cosmic Hierarchy of the Solar System particularly, are the proper tools for the necessary global climate forecast for the coming decades and centuries. Our scientific community, including the participants of the “Climate 2009”-Conference, has duty to support the political decisions preparing our world, and especially the world of our children, for the coming soon cold era in the next Earth's history.

References

- **Books:** Jakubowski, P. (2003), *The cosmic carousel of life; Our evolution and our perspectives,* Books on Demand GmbH, Norderstedt, ISBN-10: 3-8330-0402-9
- Jakubowski, P. (2010), *Naturics; The unified description of Nature*, Books on Demand GmbH, Norderstedt, ISBN: 978-3-8334-6932-9
- **Articles:** Jakubowski, P. (1990), *"Equivalence of Electrodynamics with Dynamics"*, Physics Essays, 3, 156-160
- Jakubowski, P. (1992), *“Alternative Foundation of Physics”*, Physics Essays, 5, 26-38
- **Remarks:** Website of *Naturics*: http://www.naturics.de/index.html

Chapter 2

Naturics philosophy versus other models ideas

(Quoted after Naturics-website of February 2007)

Naturics says 'yes'
to the worry about the future of our Earth,
but 'no'
to the global-climate hysteria.

1. *Naturics* commentary to IPCC-report 2007

The situation

On 2nd February 2007, the Intergovernmental Panel on Climate Change (IPCC) presented in Paris the 4th Assessment Report: "Climate Change 2007". According to the presented materials, the report should give "a comprehensive and rigorous picture of the global present state of knowledge of climate change". The "Summary for Policymakers" can be downloaded from http://www.ipcc.ch/SPM 2feb07.pdf. We are considering here mainly the Contribution of Working Group I, the part of the Summary entitled: "The Physical Science Basis". The conclusions of all other parts of the report are of course founded upon this "physical basis".

My motivation

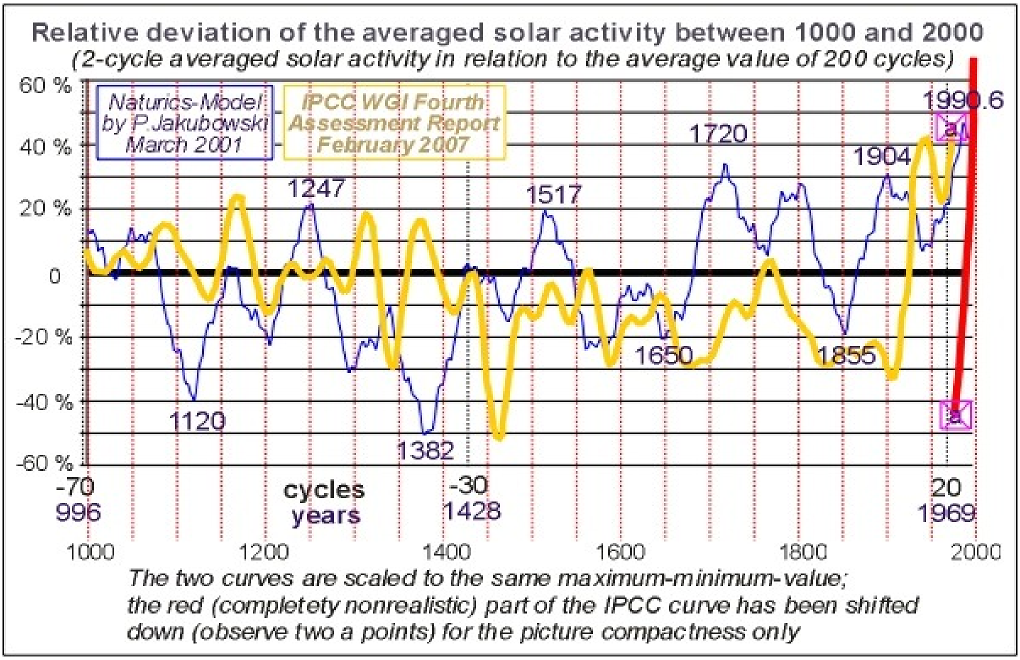
I have already compared the previous IPCC-reports with my own results of the global-climate reconstruction and prognosis (being based on the *Naturics*-model of the **Cosmic Hierarchy of the Solar System**[1]). I have also widely

---

[1] For its definition and properties compare the following point 2 of this chapter.

discussed on a **previous issue**[1] of the present website the dramatic differences between the both series of results. However, my forecasting has been seemingly overlooked until now. Therefore, I feel obliged to repeat my argumentation once more, because the recent six years seem to be completely lost for the governments worldwide. Our available fossil resources of energy become more exhausted every year, and no true alternative has been yet developed until today. However, the beginning of the real cooling down of the whole Earth will surely come according to plan[2].

The comparison of results


Relative deviation of the averaged solar activity between 1000 and 2000
(2-cycle averaged solar activity in relation to the average value of 200 cycles)

The two curves are scaled to the same maximum-minimum-value; the red (completety nonrealistic) part of the IPCC curve has been shifted down (observe two a points) for the picture compactness only

Figure 7. Comparison of *Naturics* reconstruction of the average energy reaching Earth with the IPCC (2007) report about the past global temperature changes

---

[1] No longer available online; a part of this discussion has been repeated here in point 4 below.

[2] Compare Parts 2 and 3 of this book.

Over 800 contributing scientists from over 130 countries have worked during the past six years on the newest report of IPCC. One of the worked out diagrams (available in the "Presentations & Graphics"-gallery of the IPCC-Website) presents[1] the "Variations of the Earth's surface temperature for the past 1000 years (on the Northern Hemisphere)". Overlapping of this diagram with our results[2] for the same time interval gives the above diagram (Figure 7). In relation to the previously presented, more differentiated[3] IPCC-results, the new diagram seems to be somehow "artificially adjusted" to the actually forced point of view (compare also the other diagram[4]). One of the evident inconsistencies is the deep minimum about 1460 (instead of the historically proven minimum some eighty years earlier) and the about eighty-year long flat minimum between 1830 and 1910 (instead of some sharp minimum around 1850). There were no such events noted in any historical climatic report (compare our historical overview[5] above).

Conclusion

No simple adjustment of the IPCC diagram (like the **following example**: Figure 8 below) seems to be reasonable in that situation. The whole physical basis of the IPCC-Report-2007 should be reconsidered by the contributing authors themselves. Considering the *Naturics* results, I say of course "yes" to the IPCC worry about the future of our Earth, but I have definitively to say "no" to the global-climate hysteria in the daily press and TV-news provoked by the unlucky IPCC-interpretation of the global climate parameters. Without the enormous advantage of the Unified Physics[6] we have probably no a realistic possibility to predict the global-climate change.

---

[1] http://www.ipcc.ch/present/graphics/2001syr/large/05.16.jpg

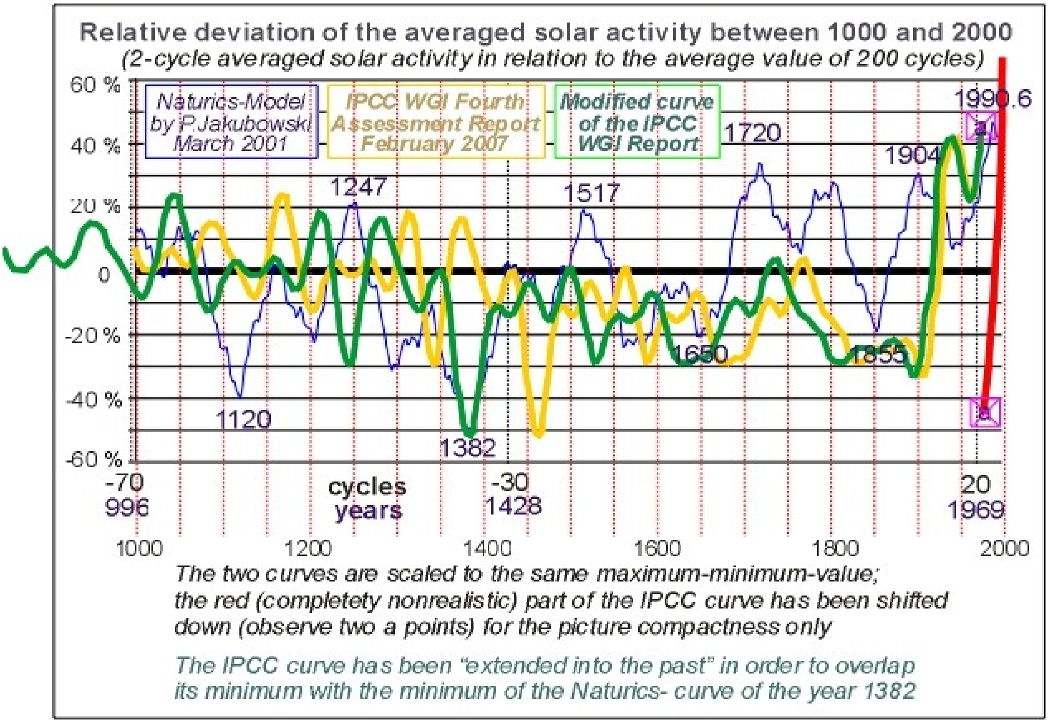
[2] As shown in Figure 2 in Chapter 1.

[3] http://www.grida.no/climate/ipcc_tar/wg1/fig2-20.htm

[4] http://www.grida.no/climate/ipcc_tar/wg1/fig2-21.htm

[5] Historical overview in Chapter 1, figure 6 and table 1.

[6] For the full information see the references to the previous Chapter 1.



The two curves are scaled to the same maximum-minimum-value; the red (completety nonrealistic) part of the IPCC curve has been shifted down (observe two a points) for the picture compactness only

The IPCC curve has been “extended into the past” in order to overlap its minimum with the minimum of the Naturics- curve of the year 1382

Figure 8. One negative example of the scientific-curves “adjustment”. In that simple test the IPCC-curve of Figure 7 has been shifted in order to compare the minimal values of this curve with the minimal value of the *Naturics* curve.

As we see in Figure 8, the resulting “green” curve could be perhaps treated as some plausible approximation of the *Naturics*-curve, but there are no observational data producing such a “modified” curve. We have to produce our scientific curves directly from our observational or theoretical data, without their “manipulation” after this process.

2. Cosmic Hierarchy of the Solar System

Our Solar System is embedded in the hierarchically ordered larger cosmic structures. The (seemingly) best known of them is our own "mother" galaxy, the Milky Way. There are, however, two other levels of this Hierarchy, intermediate between the Solar System and Milky Way. First of them is the Local Group of stars, the Sun's stellar neighborhood. Next, this Local Group of stars is a satellite of the next higher level of the Hierarchy, our Local "Minigalaxy", i.e., local cluster of stars, called Orion-Spur that stretches between the Sagittarius and Perseus arms of Milky Way.

Our quantized model orders the Large Magellanic Cloud on the next higher level of the Sun's Cosmic Hierarchy, direct above the Milky Way (in contrast to the hitherto assumed order) and immediately below the Andromeda Group of galaxies.

Table 2. Characteristics of the Cosmic-Hierarchy levels

L	**Object**	**Cycle** [yr]	**Radius** [ULyr]	**Radius** [AU]	**Relative velocity** [km/s]	**Mass** [$M_{\text{Proto-Sun}}$]
9	Coma(?) Supercluster	$3.585*10^{9}$	$3.585*10^{9}$	$1.951*10^{10}$	2033.2	$1.056*10^{26}$
8	Hydra(?) Supercluster	$295.201*10^{6}$	$295.201*10^{6}$	$1.607*10^{9}$	1089.2	$5.898*10^{22}$
7	Virgo Cluster	$24.3109*10^{6}$	$24.3109*10^{6}$	$1.323*10^{8}$	583.48	$3.294*10^{19}$
6	Andromeda Group	$2.00209*10^{6}$	$2.00209*10^{6}$	$1.090*10^{7}$	312.57	$1.840*10^{16}$
5	Magellan Cloud	164878	164878	$8.974*10^{5}$	167.44	$1.028*10^{13}$
4	Milky Way	13578.3	13578.3	$7.390*10^{4}$	89.698	$5.739*10^{9}$
3	Orion-Mini-galaxy	1118.22	1118.22	6085.97	48.051	$3.206*10^{6}$
2	Local Group	92.0896	92.0896	501.201	25.741	1790.4155
1	Solar System	7.58390	7.58390	41.2757	13.76	1
0	Proto-Sun	0.62456	0.62456	3.39920	-	1/1790
S	-	**cqn^{8}**	**cqn^{8}**	**cqn^{8}**	**cqn^{2}**	**cqn^{24}**

Color code used in the above table:	Exactly the same value as observed	The same observed order of magnitude	The level discovered with *Naturics*

Note to the above table: **L** - level; **S** - scale factor

The above used units and symbols are:

- the cosmic quantum number, cqn = 1.3662801; (from our relation of the present mass density of the Solar System to that of the Proto-Sun System); the used powers of this number are: cqn^2 = 1.8667213; cqn^8 = 12.142775; cqn^{24} = 1790.4155;
- the universal speed of light, c_{univ} = 25741.16 m/s; (it is one of the new discoveries of *Naturics*);
- the astronomical unit of distance, AU = $1.492581*10^{11}$ m; (the mean Earth-Sun distance);
- the universal light year, ULyr = $8.123429*10^{11}$ m = 5.442538 AU; (the distance, a light-ray travels with the universal speed, c_{univ}, during a year).

Table 3. The cosmic order of the individual hierarchy levels

Level	**Radius** [ULyr]	**Parent object**	**Satellite object**
9	$3584.57*10^6$	Coma Supercluster of galaxies (probably)	Hydra Supercluster
8	$295.201*10^6$	Hydra Supercluster of galaxies	Virgo Cluster
7	$24.3109*10^6$	Virgo Cluster of galaxies	Andromeda Group
6	$2.00209*10^6$	Andromeda Group of galaxies	Magellanic Cloud
5	164878	Magellanic Cloud supergalaxy	Milky Way
4	13578.3	Milky Way galaxy	Orion Minigalaxy
3	1118.22	Local Minigalaxy (Orion open cluster of stars)	Local Group of stars
2	92.0896	Local Group of stars	Sun
1	7.58390*	Sun	Sun's destroyed companion (now distributed along Kuiper Belt)

* Note: The universal velocity of light in the Proto-Solar System was the same as in the whole observable Universe; it equals 25741.16 m/s. Therefore, the previous distance of the Proto-Sun to its "Dark Companion" (of 7.58390 universal light years) was the same as the present Sun's distance to Kuiper-Belt center of mass: (7.58390 ULyr) x (25741.16 m/s) = 41.2757 AU (see level 1 in Table 2).

All known results of observations, as the interstellar gas distribution and velocities, Magellanic Stream of gas sweeping away from the Large Magellanic Cloud towards the Andromeda Group, the exactly "measured" distances of our Sun from the Large Magellanic Cloud and Andromeda, and the very recent recognition of the superimposed role of the Andromeda galaxy in the so-called Local Group of galaxies, underpin this here proposed hierarchical order.

However, the strongest confirmation of this order comes from the universal timescale[1] of this Cosmic Hierarchy. All past periods of the Solar System, including those of the Earth of course, have begun and finished exactly in accordance with this scale.

Conclusions

The following arguments for the idea of the Sun's Cosmic Hierarchy could be read out from the above tables.

- All distances (as expressed in light years) between the individual parent objects of the levels 2 to 6 and the corresponding satellite objects are really observed. Therefore, also the distances for the remaining levels have to be accepted (*because they all are scaled with the same scaling factor*).
- The incredible distance-gap (of four orders of magnitude) of the traditional astrophysics between the Solar System boundary (the orbit of Pluto - its outermost "planet") and the next stellar group (Proxima Centauri, the nearest known star to the Sun) does not really exist. The Oort's Cloud and the Kuiper Belt is one and the same cosmic "object". The "vacuum"-speed of light (of 299792458 m/s) inside our Solar System is much higher than the universal speed of light in the whole observable Universe (*the life on Earth accumulates energy from the cosmic environment of the Solar System; the energy density inside the system, an equivalent of the local speed of light, is increasing since the Moon's formation 3509 million years ago*).
- The reality of the Sun's Cosmic Hierarchy necessitates the existence of the corresponding dark mass distributed along the second lowest satellite orbit, Kuiper Belt. The "Dark Companion" of the Proto-Sun was probably a

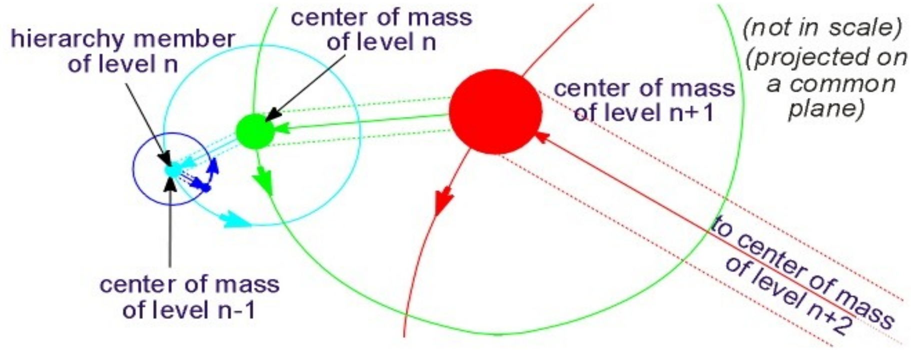
---

[1] Compare the next point 3 of this chapter.

brown dwarf, the most popular companion of all stars in Universe. The traditional "myth" about the Sun formed as a single star is no longer acceptable.

- The whole observable Universe could be described by means of the single quantum number of our model. The Universe is relativistic and quantized, and it is hierarchically organized. We do not need to quantize the Einstein's general relativity theory for to realize this knowledge. The universal interaction of *Naturic*s, the universal energy transfer, is the only necessary interaction in such enterprise.

3. The universal cosmic timescale


"Energy bridges" between three adjacent levels of the Cosmic Hierarchy

The energy absorbed (mostly during cosmic impacts) by a coloured object (here green, cyan or blue) reaches its maximum when this object crosses a differently coloured "bridge" (for instance, the red one) between a higher hierarchy member and its center of mass.

Figure 9. Energy bridges between adjacent members on various levels of the Cosmic Hierarchy.

The universal cosmic timescale of *Naturics* is an extremely precise timescale of the Earth's history. All past time intervals of the Cosmic Hierarchy of the Solar System can be ordered along a single scale of time. The hierarchical cycles of the Sun's Cosmic Hierarchy[1] provide us with a precise timescale for geological, paleontological, archaeological, and even historical events, first of all, the most interesting and the most important of them - the evolutionary "quantum jumps". These "jumps" mean the mass extinctions of the already long living organisms and simultaneously the origination of new groups of the organisms. A typical chain of events combining the mass extinction with the origination of new groups of living organisms is always the same: the cosmic impacts (of the intensity corresponding to the actually active level of the Cosmic Hierarchy), the resulting increased volcanism, earthquakes, earth slides and tsunamis, and finally - the climatic and environmental changes. These evolutionary steps are clearly seen during the long Earth's history[2].

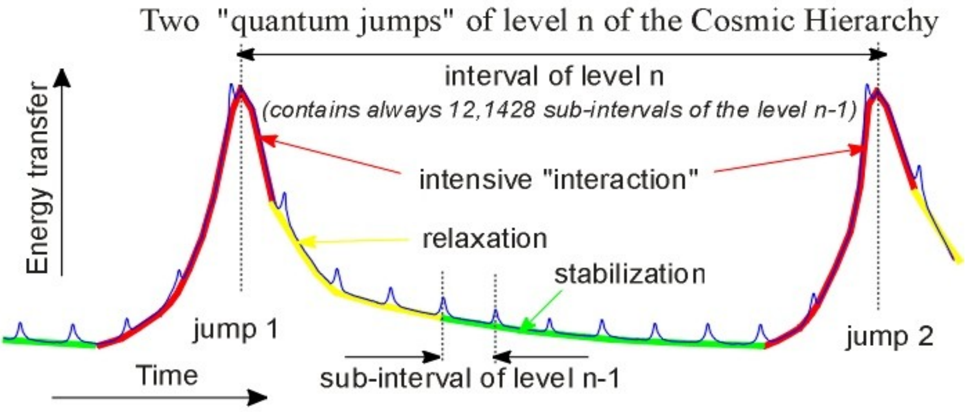


Figure 10. Energy transfer during two consecutive quantum jumps of the Cosmic Hierarchy. The corresponding jumps of the level n-1 deliver “only” about one percent of the energy of the level n.

---

[1] Compare the timescale-table just below and the appendix concerning the impact-craters age at the end of the book.

[2] Compare the first reference to Chapter 1 and the Appendixes 1 and 2 in the present book.

Our universal cosmic timescale

* The first step to the terrestrial human life has begun at the level 9, 3506.673 My (millions of years) ago, with a complete restructuring of the Solar System[1]. One of the most important events for the evolution of life was the resulting collision of the Proto-Mars with the Proto-Earth, ending with the formation of the Earth's Moon.

.

Note, that one period of the level 9 of the Cosmic Hierarchy lasts 3584.559 My; therefore the current period of that level ends "already" in 77.897 My, probably with some similarly dramatic happenings.

* That decisive happening was followed by many consecutive happenings of the lower level 8 (with the interval of 295.201 My), which have started:

- 3506.673 My ago; Archean eon
- 3211.472 My ago
- 2916.271 My ago
- 2621.070 My ago; Proterozoic eon
- 2325.869 My ago
- 2030.668 My ago
- 1735.467 My ago
- 1440.266 My ago
- 1145.065 My ago
- 849.864 My ago
- 554.663 My ago; Paleozoic Era
- 259.462 My ago; Mesozoic Era

Let us look one level deeper into the two recent steps of the level 8. Levels 7 (with duration of 24.3109 My) of the last but one level-8 step have started:

- 554.663 My ago; Cambrian
- 530.352 My ago
- 506.041 My ago; Ordovician
- 481.731 My ago

---

[1] About details read in my first book: P. Jakubowski, *"The cosmic carousel of life"*, Books on Demand GmbH, Norderstedt (Germany), 2003, ISBN 978-3-8330-0402-5.

- 457.420 My ago
- 433.109 My ago; Silurian
- 408.798 My ago; Devonian
- 384.487 My ago
- 360.176 My ago; Carboniferous
- 335.865 My ago
- 311.554 My ago
- 287.241 My ago; Permian
- 262.932 My ago

Levels 7 of the last level-8 step have started:

- 259.462 My ago; Triassic
- 235.151 My ago
- 210.840 My ago; Jurassic
- 186.530 My ago
- 162.219 My ago
- 137.908 My ago; Cretaceous
- 113.597 My ago
- 89.286 My ago
- 64.975 My ago; Cenozoic Era; Tertiary-Paleogen
- 40.664 My ago
- 16.353 My ago; Tertiary-Neogen; *Ramapithecus*

Let us look one level deeper into the present step of the level 7. Levels 6 (with duration of 2.00209 My) have started:

- 16.3533 My ago
- 14.3512 My ago
- 12.3491 My ago
- 10.3470 My ago
- 8.3449 My ago
- 6.3428 My ago
- 4.3407 My ago; *Australopithecus*
- 2.3386 My ago; Quaternary; Lower Pleistocene; *Homo erectus*
- 0.3366 My ago; Middle Pleistocene; *Homo sapiens*

Let us look one level deeper into the present step of the level 6. Levels 5 (duration of 164878 years) have started:

- 336568 years ago; *Homo sapiens heidelbergensis*
- 171690 years ago; Upper Pleistocene; *Homo sapiens neanderthalensis*
- 6812 years ago; Holocene; "Floods" originator; *Homo sapiens sapiens*

Let us look one level deeper into the last but one step of the level 5. Levels 4 (duration of 13578.3 years) of the last but one level-5 step have started:

- 171690 years ago; *Homo sapiens neanderthalensis*
- 158112 years ago
- 144534 years ago
- 130955 years ago
- 117377 years ago
- 103799 years ago
- 90221 years ago
- 76642 years ago
- 63064 years ago
- 49486 years ago
- 35907 years ago
- 22329 years ago
- 8751 years ago

No further levels 4 of the present level-5 step have started till today:

- 6812 years ago; "Floods" as originator of the greatest civilizations.

Let us look one level deeper into the present step of the level 4: levels 3 (duration of 1118.22 years) have started:

- 6812 years ago; *Homo sapiens sapiens*
- 5694 years ago
- 4576 years ago

- 3458 years ago
- 2339 years ago; (328 B.C.E.)
- 1221 years ago; (in year 790)
- 103 years ago; (in year 1908.5).

The next step of the level 3 comes in 1015 years; in year 3026.9.
The next step of the level 4 comes in 6766 years.
The next step of the level 5 comes in 158066 years.
The next step of the level 6 comes in 1.6655 millions of years.
The next step of the level 7 comes in 7.958 millions of years.
The next step of the level 8 comes in 35.739 millions of years.
The next step of the level 9 comes in 77.897 millions of years.

Note: Our above "steps of life" begin and end always with an extremely warm period connected with the "quantum jump" of the lower member of the Cosmic Hierarchy through the energy bridge (compare Figure 9 above), a region of increased density, connecting two higher hierarchy members. The cooling of the Earth's surface follows always about the middle of each period. This could be a reason for some small differences between our points of time and those traditionally used ones, which are defined from one cold period to another.

Appendixes 1 and 2 (at the end of this book) demonstrate the precision of the above timescale. Appendix 1 shows it in relation to the contemporary geological timescale and Appendix 2 uses it for the first worldwide theoretical estimation of the age of the mostly investigated impact craters, confirming the reality of the cosmic jumps (as shown in Figure 10) in the evolution of life on the Earth.

The universal cosmic clock

The universal cosmic timescale can be visualised by means of a universal clock showing all the cosmic periods of time simultaneously. Figure 11 presents such a universal cosmic clock adjusted to the present year 2011.

Figure 11. The "now" (2011) point of the cosmic time shown by the universal cosmic clock of *Naturics*. Each full period of any level L contains 12.1428 hours of the level L-1 (compare the notes to Table 2 above), what is visualised here with the additional small sector between the twelve o'clock and zero o'clock.

The clock has shown zero o'clock on all eight levels at the moment of formation of our Moon 3506.673 million years ago. It was the starting point to the presently "finishing" period of the level 9. The difference between the theoretical period-9 length (3584.559 My) and the passed part (of 3506.673 million years) of the running period gives us the remaining part of "only" 77.9 million years. But practically already after the next "midnight" of the level 7 (in 35.7 million years) the life of *Mammals* on our Earth will be no longer possible. And the period of *Primates* (including human being) ends theoretically in 8 million years. However, it is still so long a period of time that we can forget it at the moment and consider rather the shortest periods of this cosmic timescale.

The hand of the level 2 shows now (in Figure 11) shortly after one o´clock. The recent "midnight" of the level 2 (or the full six o'clock of the level 3) occurred on 11 June 1908, when our Solar System together with the whole Local Group of Stars entered the energy bridge connecting the Orion "Minigalaxy" with the center of Milky Way galaxy. About this moment also the Tunguska "projectil" had entered the Solar System on a collision course with the Earth.

The name "Tunguska event" comes from the Siberian river Podkamennaya Tunguska (Under-Stony Tungus-River) near the impact place. The impact area lies nowadays in the Evenki District in Central Siberia and remains, as in the year 1908, almost completely empty. The impact has happened at 7:17 am. on 30th June 1908. It was surely the greatest cosmic impact of the last centuries. The impacting body was exploded in the atmosphere several kilometers above the Earth's surface. The old taiga forest was flatened within a few seconds to an expanse of approximately 10,000 km^2. The glowing sky during the nights between 29th June 1908, one day before(!) the event, and 2nd July 1908, was shining so intensely that one could read a newspaper in Europe even at midnight without any other light. However, as shown in Figure 10, the "cosmic jump" has intensified the energetical influence on the Earth considerably earlier. The Earth's rotation was measurably slower between 1905 and 1911. The number of the strongest earthquakes between 1905 and 1911 was distinctly higher than the average, but exactly during the year 1908 it has lowered below the avarage. It was not until 1927 that the first scientist, the Russian Leonid A. Kulik[1], reached the very inaccessible region of the catastrophe. Since then scientists from many countries have studied the event. However, it is with our timescale the first connection of the Tunguska explosion with the level-3 period of the Cosmic Hierarchy, with its duration of 1118.22 years.

---

[1] http://unmuseum.mus.pa.us/kulik.htm

The recent "midnight" of the level 1 (or the one o'clock of the level 2) occurred than on 14th July 2000 (i.e. 92.0896 years later; compare Table 2 once more). The consecutive one o'clock of the level 1 occurred then still 7.5839 years later, on 13th February 2008. The next hour of this level (two o'clock) passes on 14th September 2015. These three shortest periods of the cosmic clock will be also "a pulse generator" or "a pulse stimulator" for our ultimative model of the global climate presented in the next part of this book.

4. Some previous comments (from years 2000/2001) to the past and future global-climate changes

The new paradigm of *Naturics*

We are using the new paradigm: the extrasolar cosmic "wind" of the Sun's Cosmic Hierarchy warms and cools the Sun's and the Earth's surfaces. The new paradigm provides us with a very exact reconstruction of the past global climatic fluctuations on the Earth and allows us to predict the future climate development with a very high precision over many centuries ahead.

Past and future global climatic changes: The warming debate

(*Some exemplary quotations from the global-warming debate from years 2000/2001*)

- BBC-Service "Global Climate Change"; (http://newssearch.bbc.co.uk/hi/english/static/in_depth/sci_tech/2000/climate_change/default.stm)
- IPCC-"Summary for Policymakers"; A Report of Working Group I; (http://www.ipcc.ch/) (IPCC was established, under the auspices of the United Nations, to advise governments on the state of knowledge of climate change and its implications),
- A Project of the George C. Marshall Institute; (http://marshall.org/sunclimatejj.htm) (American Institute dedicated to providing rigorous, unbiased technical analyses of scientific issues which impact public policy).

(*My personal comments from the year 2001 to those quotations are written here in italic*; P.J.).

Part A: “Further warming is indisputable”

From the BBC-article: "Climate change outstrips forecasts"; (Monday, 22 January, 2001)

"The world's leading climatologists say global warming is happening faster than previously predicted. They say world temperatures this century could rise by between 1.4 and 5.8 degrees Celsius." (*It's our luck that not all climatologists agree with that point of view*; P.J.).
...

"The decade of the 1990s was the hottest decade of the last century and the warming in this century is warmer than anything in the last 1,000 years in the Northern Hemisphere." (*It's true, but it is just a fragment of some larger picture*; P.J.).
...

"It gives details of several trends, for example:

- the global-average surface air temperature has increased since the mid-19th century
- in the last four decades, temperatures have risen in the lowest few kilometers of the atmosphere
- snow cover and ice extent have decreased
- global average sea level has risen, and ocean heat content has increased
- ...

(*Yes, but they are now starting to go back to their previous levels;* P.J.).

From the IPCC-report: "Summary for Policymakers" (March, 2001)

"This Summary for Policymakers (SPM), which was approved by IPCC member governments in Shanghai in January 2001, describes the current state of understanding of the climate system and provides estimates of its projected future evolution and their uncertainties." (*Let us read it that way: it describes "the current state of understanding of the climate system" by the IPCC-members;* P.J.).

"Natural factors have made small contributions to radiative forcing over the past century." (*It is also just a quite subjective impression of the IPCC-members;* P.J.).

"Confidence in the ability of models to project future climate has increased." (*I would like that their confidence would be deep enough for to stimulate them also to study the present model;* P.J.).

"The globally averaged surface temperature is projected to increase by 1.4 to 5.8°C (Figure 5d) over the period 1990 to 2100. These results are for the full range of 35 SRES (Special Report on Emission Scenarios) scenarios, based on a number of climate models." (*This is the most dangerous statement of this report. It will be enough to measure just a small cooling of the surface temperature in the next years and all these scenarios will become useless;* P.J.).

"Further action is required to address remaining gaps in information and understanding." (*The present page is already such "further action";* P.J.).

"Cutting across these foci are crucial needs associated with strengthening international co-operation and co-ordination in order to better utilize scientific, computational and observational resources. This should also promote the free exchange of data among scientists." (*I am ready for such "co-operation" and for "free exchange of data";* P.J.).

Part B: "Further warming is questionable"

From the BBC-article: "Questioning global warming" (Tuesday, 14 November, 2000)

"There is nothing so hot as the debate that has surrounded global warming. Most mainstream scientists believe that human activity - notably emissions of greenhouse gases - has contributed to a significant increase in the average surface temperature of the planet. However, there is still a sizeable group of researchers who dissent from this consensus. They question much of the science which underpins the global warming hypothesis." (*Our results relies upon a paradigm quite different from that used by any other group;* P.J.).

...

"Sceptics say the scenarios of future climate change that are produced by computer models are deeply flawed. They believe the task of simulating the complexities of our climate system is beyond the capabilities of even the fastest supercomputers." (*Our "simulation" of the global energetic fluctuations is calculable on a small PC;* P.J.).

"Certain phenomena, such as cloud formation, oceanic heat transport and the mixing of the air, are still so poorly understood that certain assumptions have to be made about the way the atmosphere behaves." (*From our point of view, all those phenomena are an effect of the climate fluctuations, and not their cause;* P.J.).

"There is a growing movement that argues that the Sun is a more significant factor in climate change than the rising load of man-made heat-trapping gasses in the atmosphere." (*It's a positive development. However, our results suggest that we have to promote the cosmic factor, not only the solar one, to the main contributor in the debate about the global climate change; P.J.*).

From the BBC-article: "Viewpoint: Get off warming bandwagon" (Thursday, 16 November, 2000) By Professor William M. Gray of Colorado State University:

"As a boy, I remember seeing articles about the large global warming that had taken place between 1900 and 1945. No one understood or knew if this warming would continue. Then the warming abated and I heard little about such warming through the late 1940s and into the 1970s. In fact, surface measurements showed a small global cooling between the mid-1940s and the early 1970s. During the 1970s, there was speculation concerning an increase in this cooling. Some speculated that a new ice age may not be far off. Then in the 1980s, it all changed again. The current global warming bandwagon that US-European governments have been alarming us with is still in full swing." (*All the global climatic fluctuations, as described above, can be also directly seen from our theoretical diagram;* P.J.).

From the G.C.Marshall-Institute-page: "Comments on New Danish Solar Study" (in year 2000) Dr. Willie Soon comments:

"More important is what is missing from the discussion – the question of the actual changes in terms of the Sun's radiative and charged-particle emission. It is not the changes in the solar cycle length that will effect the Earth's globally-averaged temperature; it is the changes in the Sun's visible light, or Sun's ultraviolet light, or its charged-particle winds, or even the incoming, but sun-modulated, cosmic rays that will make a difference in the Earth's temperature." (*He is arguing directly towards my new paradigm, isn't he?* P.J.).

"This matter of having an accurate global temperature records is important enough that it has been examined in the January 2000 National Academy of Science report. The bottom line is that the apparently accelerated warming of 0.3-0.4°C in the world-wide surface temperature records over the last twenty years is not supported by either the balloon or the satellite measurements of the global air temperature over the lower troposphere. In the lower troposphere, the global trend in air temperature change measured by the Microwave Sounding Units onboard NOAA/NASA satellites has only been barely above zero. Therefore, the apparent surface temperature trend over the last twenty years is not a proof of any human-induced changes. This is mainly because the expected anthropogenic greenhouse gases-caused temperature trend in the troposphere should be even larger than the surface trend and no accelerated warming trend in the troposphere has thus far been observed." (*Exactly in the middle of the last twenty years, in the year 1990.6, the maximum of the global warming was reached; the measurements during this period could thus not show anything else as that apparent "stagnancy";* P.J.).

Chapter 3

The present state of the climate-change debate

1. The "cooling-sceptics" side

An example of a reasonable argumentation, without offensive and injurious remarks addressed to the opposite side of the debating community, is the lecture[1] "Climate-Change Science and Policy: What Do We Know? What Should We Do?" by John P. Holdren, Assistant to the President for Science and Technology and Director of the White House Office of Science and Technology Policy, Executive Office of the President of the United States, presented at Kavli Prize Science Forum, International Cooperation in Science, in Oslo on 6th September 2010.

Inviting Dr.Holdren, the Kavli Foundation - an impressive example of the modern possibilities[2] to support the advanced science - demonstrates that it is possible to be open to different opinions in science without trying to suppress the opposite side.

What are the old and what are the new sounds of the "cooling-sceptics" side?

Dr. Holdren has given the first very typical old "sound" immediately at the beginning of his talk, when he commented his second slide: "I'm going to cover the basic science fairly quickly – the essence of the challenge we face in the climate domain." However, the basic science "in the climate domain" cannot be covered "fairly quickly" as long as we do not understand why, when and how much the climate changes. All of Dr. Holdren's remaining 58 slides (and thousands further slides and diagrams of his collegeaus) depend on this basic science very fundamentally. As I have partly demonstrated in the two previous chapters of the present book, in order to improve our basic understanding of "the climate domain"

---

[1] link: 2010 Kavli Prize Science Forum Keynote Address John P. Holdren, US Presidential Science Advisor | The Kavli Foundation; http://www.kavlifoundation.org/2010-kavli-prize-science-forum-john-holdren-keynote-address

[2] link: http://www.kavlifoundation.org/kavli-prize-ceremony

we are forced to revise the whole basic physics at first. We have to repeat to ourselves, if necessary even day after day, the obvious scientific truth that the real climatic changes follow the real Nature and not our modelled, physical description of the Nature. And our contemporary physics is still very far from the natural reality.

Please understand that I do not like to make an impression here, it would be my pleasure to criticize the mainstream climate-change research. I am trying to be as objective as possible. Fortunately for me, the first new "sound" in Dr. Holdren's talk is coming also very soon, with slide 3, when he says: "The problem is that the world is getting most of the energy its economies need in ways that are wrecking the climate its environment needs. That is the fundamental dilemma and the fundamental challenge we face." And this is true, independently of one's opinion in the whole climate-change debate. Just a small correction is necessary however: "The problem is that the world is getting most of the energy its economies need in ways *that are wrecking the environment the world needs*. That is the fundamental dilemma and the fundamental challenge we face." This fundamental problem has nothing in common with our climate. We have to solve it independently of the future climate development. We have to do it not so much for us ourselves, but for our children and our grand-children.

The second "old sound" accompanies the fifth slide, when the speaker tries to dismantle some myths abouth the climatic challenge. It is not important for us here and now to know how many truth, if any, is contained in those myths. The false "sound" means here that both deliberating sides are trying to disassemble some "myths" by using of another myths. We read there[1]: "Global warming implies something that’s uniform across the planet; it’s mainly about temperature that’s gradual; and it is quite possibly benign. What could be wrong with a little bit of warming? What’s actually happening is none of these things. It’s highly nonuniform geographically. It’s not just about temperature, but as we’ll see in a moment about a whole panoply of variables that make out the climate." Is it not just about temperature? Of course, it is! We are trying to unify our physics. Why? Because we know that the Nature is already unified. She was never non-unified. Therefore it is really enough to have understood and properly measured only a single physical quantity in order to "control" any global phenomenon. And the

---

[1] link: http://www.kavlifoundation.org/2010-kavli-prize-science-forum-john-holdren-keynote-address

proper and careful temperature measurement alone provides a quite practicable description of any global-climate change. It is a "classical" myth that there is " a whole panoply of variables that make out the climate".The single variable "making out" our global climate is the energy transfer between the Solar System (including the Earth of course) and its Cosmic Hierarchy.

At the same moment of the talk we hear also the second "new sound" in the "song" of the cooling sceptics. Standing face to face with the reality that average temperatures have not increased for over a decade 2000-2010[1] they changed their tactics and are not longer speaking about global warming (what has been now declared as "a misnomer and indeed a dangerous misnomer"). Instead of that we are told that "We should be calling it global climate disruption, even though that is a larger mouthful than global warming."

One further "new sound" provides the slide 37: "All science is contingent; there are always uncertainties and needs for refinement. And there's always a chance that new observations and analyses will not just refine but overturn previous conclusions. That does happen from time to time." This is really a new sound in this debate.

However, the "old-sounding" myth about the force of "unprecedentedly extensive peer review" is coming immediately after that (slide 38): "Because of their relevance to policy choices in part, key findings from climate science have been subjected to unprecedentedly extensive peer review. And so it's highly unlikely that new data or insights will alter those findings in a fundamental way." Let us consider one similar problem. We are living 60 minutes long hour after hour, 1440 minutes every day, more than half million minutes during one year. It is therefore highly unlikely that exactly the next minute could be our last one. We can provide ourselves with hundreds of medical "peer reviews". It changes the probability not much indeed that one of the next minutes will be the last one of our physical existence on the Earth. Why not? Because the large amount of medical examinations don't increase our life time. Just the opposite could even happen. As long as all peer reviewers of the climatic debate are "singing the same song", or using the same fundamental physics and philosophy of science, they have no influence on the proximity of their opinion to the reality. They can be even made responsible for some damages resulting from their nonrealistic judgement, as for

---

[1] compare for example http://news.bbc.co.uk/2/hi/8299079.stm

example increasingly in the case of the recent australian flood[1].

The next slide 39 is perhaps the most important and useful one from the whole presentation: "What should we do?" Dr. Holdren writes there: "We have only three options. Mitigation, meaning measures to reduce the pace and magnitude of the changes in global climate being caused by human activities. Adaptation, meaning measures to reduce the adverse impacts on human well-being resulting from the changes in climate that do occur. Suffering the adverse impacts that are not avoided by either mitigation or adaptation." All the following conclusions are important and realistic, with one additional, even more important correction, however. I would like to delete the first option completely, we have not got this option at all. We have no finacial and no energetical means "to reduce pace and magnitude of the changes in global climate". We have to use this money and this energy to reduce our damage in our environment, especially in the environment of the poorest nations.

One another example, typical for the "cooling-sceptics" argumentation, can be found in the lecture about the statistical analysis of the global-climate change given by Christian-D. Schoenwiese[2] 2008 in Marburg (in German). Working with statistical analysis of the physical processes is certainly useful in special cases. However, it is also difficult, because it can become dangerous, if misused. I am gonig to show here just one example of such a danger. I have re-drawn one of the Schoenwiese's diagrams (see Figure 12 below). It is not so much important for the present aim what exactly should be the original of this drowing. In short it shows an annual distribution of the temperature anomalies along the time period between 1960 and 2002 measured in the stratosphere.

The point we are going to discuss here is the trend line (the blue one in Fig. 12) proposed by Schoenwiese on the basis of the measured temperature anomalies. He is "cooling sceptic" and proposes the continuously decreasing trend of the presented data. I am sure that the global temperature has reached a flat maximum at the end of the 20th century, so I would propose the red-line trend for the same data set. The difference seems to be not very distinct on the picture scale. What is

---

[1] http://anhonestclimatedebate.wordpress.com/2011/01/15/what-was-the-role-of-warmists-in-the-queensland-flood-disaster/

[2] link: http://www.geo.uni-frankfurt.de/iau/klima/PDF_Dateien/SW-KLIA17-_Klimastudie-Chem_-2_pdf.pdf; http://www.geo.uni-frankfurt.de/iau/klima/PDF_Dateien/Sw_112E_2008.pdf

important, however, is the suggested further trend for the time after 2002 shown in both the cases on this diagram.

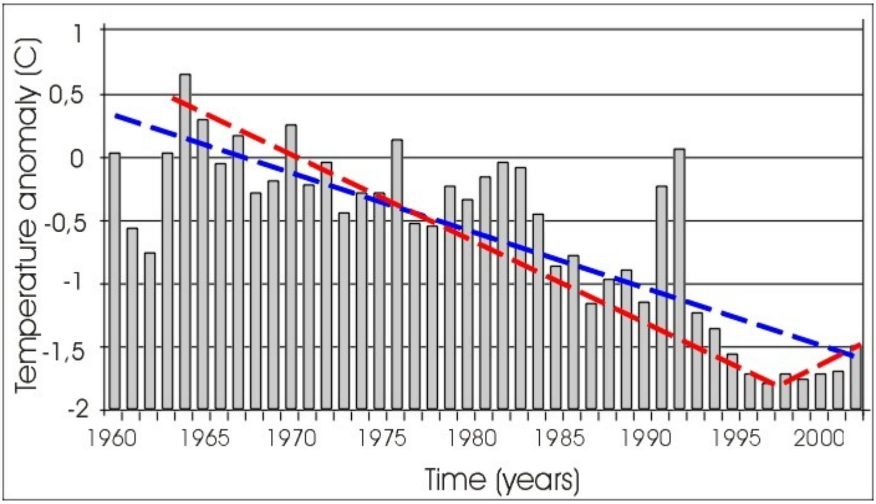


Figure 12. An example of different statistical interpretation of the measurement-results (re-drawn by author from the lecture by Christian-D. Schoenwiese; see footnote 1 on the preceding page). The blue line gives the statistical trend if we follow the "cooling-sceptics" idea of the continuously rising global Earth's temperature (causing cooling of the upper atmosphere). The red one would be preferred if we assume a maximum of the global warming at the end of the 20th century.

Of course, the data of the years 2002-2010 are not easy to obtain in internet dominated by the "cooling sceptics". What I have found out, confirmed the red trend at least qualitatively. The newer data will come one day.

2. The "warming-sceptics" side

One of the best sources of information from the opposite side of the global-climate debate I have found in English is the blog "An Honest Climate Debate"[1].

As the owner of this blog writes: "this weblog has been created to discuss anthropogenic (man-made) global warming and climate change. ... This blog brings you the other side of the debate by exposing the inconvenient truths about the man-made climate change theory."

Because I agree with the main idea of this blog, here are some further remarks of its owner.

> "Everyday we hear news about a climate catastrophe somewhere in the world and it's almost always attributed to human induced climate change. The media tells us there is a consensus on the science, the debate is over, and that human CO_2 is the main driver of climate change. This is not true, the debate is NOT over! The world is no warmer today than it was in 1998 and yet CO_2 levels are at record high levels and a recent cooling trend has begun. Clearly natural forces must therefore have a larger impact on the earth's climate than human CO_2. Climate changes, always has and always will. In the mean time there are other global issues we can do something about, like helping those who are starving in Africa, instead of squandering millions on trying to change the climate, something we have no control of. After all, Mother Nature doesn't care much for computer model predictions or 'science by consensus'. What looked good in theory is clearly not happening in the real world."

I am not going to copy more texts from any blog here. I do not like to repeat opinion of people who I cannot identify with their name and profession. Unfortunately, the most of the bloggers writing presently on internet cannot be identified in that traditional way. Therefore here are just some further titles of the exemplary articles presented by the blog holder himself: "Global temperature forecast for 2011" (26 Jan 2011); "Met Office: 2010 Globally second warmest on record" (19 Jan 2011); "December 2010 update: Second coldest since 1659" (4 Jan 2011); "2008 Coldest Year Since 2000 and Clearly Not a Top Ten Warmest Year" (10 Jan 2009). There is one very important point documented in the last of these

---

[1] link: http://anhonestclimatedebate.wordpress.com/

articles[1]. Its author shows a diagram presenting a jump of the averaged measured temperatures from 10 ^{0}C to 11,5 ^{0}C in year 1990 exactly in that year when the number of meassuring stations dropped from about 5000 in 1989 down to about 2800 in 1991 and next to 1700 in year 2000. Indeed, it could explain many of the discontinuities in diagrams presented by the "cooling sceptics".

3. The ultimate solution

Twenty years ago, when I have started to make public announcements of the results of my own research on the global-climate change in newsgroups (the "ancient" blogs), I was immediately branded to went mad. In that hot time of the culmination of the long-term global-warming phase, there were not many other "warming sceptics" around the world. And my Unified Physics was much too young to give me a necessary support in such a debate. However, the Unified Physics became stronger and stronger with each new application, with each new solution of one or another difficult problem of the contemporary physics[2]. One of the most difficult, but simultaneously the one providing the farthest consequences, reaching deep into other domains of our scientific knowledge, was the problem of the real structure of our Solar System and of the way, in which it is embedded in the greater and greater structures of the Universe. The idea of the Cosmic Hierarchy of the Solar System was born for the solution of this problem[3]. One of its direct applications is the precise timescale of all relative changes of the global energy incoming and outcoming from the Solar System. The exact time-table of this energy transfer provides our ultimate solution of the climatic debate.

One of the most interesting voices concerning the climate debate that I met in internet till today is that of Paul Hudson[4], climate correspondent by BBC News. In one of his articles ("What happened to global warming?" from Friday, 9 October 2009) we read the following:

> "What happened to global warming? This headline may come as a

---

[1] That one from 10 Jan 2009 is by Joseph D'Aleo, CCM, AMS Fellow

[2] Compare references to Chapter 1.

[3] Compare Chapter 2, point 2.

[4] link: http://news.bbc.co.uk/2/hi/8299079.stm

> bit of a surprise, so too might that fact that the warmest year recorded globally was not in 2008 or 2007, but in 1998. But it is true. For the last 11 years we have not observed any increase in global temperatures. And our climate models did not forecast it, even though man-made carbon dioxide, the gas thought to be responsible for warming our planet, has continued to rise. So what on Earth is going on?"

Naturics answer to this simple and direct question is also quite simple and direct. What on Earth is going on? Exactly the same as on all the other members of the Solar System, the Sun inclusive. Climatologically it means a "thermal" activity decreasing at the moment, and physically - the weakening flux of the incoming extrasolar energy. That's all. It is the basic idea of our theoretical model of the past climate-changes reconstruction and the future climate-changes forecast. In the next part of the book I am going to present the detailed calculations of the relative changes of the global energy transfer, reaching the Earth year after year, and even month after month, in accordance with the tact given by the hierarchical motion of the Solar System inside its huge Cosmic Hierarchy. The absolute amount of this energy does not matter in the first approxination of the problem solution. The relative changes of the energy transfer with time is what we are looking for at the beginning.

PART TWO

The ultimate global-climate change model

We are modelling the global-climate changes, because we have to prepare our global-world economy for the cold phase of the global climate coming very soon. The desired accuracy of the forecast is very high, higher than ever. It should be comparable with the actual meteorological "long-term" predictability of a few weeks. Only then we are able to verify our climate model directly by "looking through the window". In order to reach such a high accuracy, we have to use the most realistic model of our cosmic environment available in the contemporary science. And it is evidently our model of the Earth that is embedded into the Cosmic Hierarchy of the Solar System. The Cosmic Hierarchy delivers a completed, revised structure of this system, including the periods we need for our calculation of the relative changes of the energy transfer to the Earth at every moment. The reached high accuracy of our detailed reconstruction of the past climatic events gives us the desired guarantee of a similarly detailed accuracy of our forecast of the global-climate changes. On the other hand, the reached agreement of our reconstruction of the past climatic periods with the historically documented, climatic-dependent events, provides an additional very powerful confirmation of the correctness of the Cosmic-Hierarchy idea, with all its consequences, first of all - the acceptance of the double-star origin of our Sun.

Before we begin with our calculations, we identify the most important modulators of the cosmic-energy flux reaching the Earth. They are the "internal modulators" - the most massive members of the Solar Sytem, and the "external modulators" - the lowest members of the Cosmic Hierarchy. The numerical calculations of the model has been divided into two phases. In the first of them we simply add together all the contributions due to the individual modulators. We reach in that way the correct order of the past and future climate changes along *the usual scale of time. This phase of our calculations has been finished and described here completely. In the second phase we have to consider also the different intensity of the individual modulations, depending on the actual level of the Cosmic Hierarchy. This phase of our calculations is presented here on an example of the preliminary analysis of the El Niño events in relation to the cosmic-energy transfer.*

A complete quantitative analysis of this phase demands a force of more than one researcher and will take probably several years. Nevertheless, the ultimate structure of the model, and the information reached hitherto, concerning our future global climate, drives our efforts not only in the further study of the climate-changes but also in the preparation on the coming very soon the first "wave" of the global cooling. For these activities, we have from now (2011) only twelve years of time.

Chapter 4

The *Naturics* global-climate change model; the basic calculations

1. The idea

The Cosmic Hierarchy of our Solar System delivers a revised structure of this system and the necessary periods we need for our calculation of the relative changes in energy-flux to the Earth at any given moment. The theoretical length of a solar cycle of the energetic activity equals 10,81254 years. These cycles are also observed as the sunspot cycles and documented since about 1700[1]. However the first numbered cycle was cycle "0" with its maximum of activity in year 1752,76. I have also chosen exactly this year for my numbering of the cycles[2]. I have originally decided to calculate as far into the past and into the future as was allowed by the technical parameters of my personal computer of the year 1992. At four calculation points per cycle I could calculate over 200 cycles. Therefore I have chosen the range between the cycle -130 in the past (with its theoretical maximum in year 347,130) and cycle 70 in the future (with maximum in year 2509,638).

2. First steps

The main problem was to decide which cosmic periods could influence the energy flux to the Earth during this chosen range of 2162,508 years. It was surely Jupiter, with its direct energetic influence upon the Sun, and Saturn, modulating this basic influence through its own mass, but also the "Dark Companion" of the Sun, the "broken" mass distributed along the Kuiper Belt; its collective mass is

---

[1] For sunspot database see, for example: http://solarscience.msfc.nasa.gov/greenwch.shtml.

[2] The numbering has no meaning other than for a comparison with the sunspot-cycle observations.

still over seventeen times the Jupiter mass[1].

From the periods of the Cosmic Hierarchy only the levels 2 and 3, with their length of 92,0896 and 1118,228 years, respectively[2], are longer than a single solar cycle but shorter than our chosen range of time of about 2200 years.

Those five periods has been chosen as the main modulators of the energy transfer between our Solar System and its cosmic environment. The Earth is just a kind of front-seat passenger in that transfer[3].

The enormous improvement of the computer technique since my original calculations in 1992[4] allows us today a much more detailed calculations with our home computers. Therefore I am starting the basic calculations here with a doubled accuracy, using eight calculation-points for each solar cycle. In following chapters we will increase this accuracy as high as to 512 points for a single cycle of the solar energetic activity. This highest accuracy will be necessary for our detailed forecast of the global climate changes during the next months and years. But at the moment, for a reconstruction of the historical climate changes back to the year 347 the doubled original accuracy should be quite satisfactory. I have also slightly extended the forecast period up to the year 2569.

3. Basic calculations down to level 2 of the Cosmic Hierarchy

The following table presents the details of our basic calculations. If someone wish to repeat these calculations, it is enough to type the given here starting values (in columns B-G) and functions for further modulation of these values (in columns H-R) and calculate them all down, according to the instruction given in the last but one column of the table.

---

[1] I expect a direct observational confirmation of its existence at the very latest in four years, when the spacecraft "New Horizon" should reach the Pluto orbit.

[2] Compare Table 2 in Chapter 2.

[3] The life on the Earth is "consuming" a continuously increasing part of this energy; but this is already another story, not directly considered in the present book.

[4] being documented in figures of Chapter 1.

Table 4. Calculation details of the global-energy-transfer changes

Column		Starting value	Status	Calculating function[1]	Following calculation	Note
Name	Description					
A	Nr	A8= -1040	set	A9 = A8+1	calc. down	a
B	Year	B8= 347,130	set	B9 = B8+1,3515675	calc. down	b
C	Jupiter	C8= 347,794	set	C9 = WENN(ABS(C8-B9)<= 5,40627;C8;C8+10,81254)	calc. down	c
D	Saturn	D8= 339,510	set	D9 = WENN(ABS(D8-B9)<= 14,729;D8;D8+29,458)	calc. down	d
E	LGS	E8= 316,616	set	E9 = WENN(ABS(E8-B9)<= 46,0448;E8;E8+92,0896)	calc. down	e
F	DC	F8= 258,670	set	F9 = WENN(ABS(F8-B9)<= 123,595;F8;F8+247,19)	calc. down	f
G	OLMG	G8= 790,217	set	G9 = WENN(ABS(G8-B9)<= 559,114;G8;G8+1118,228)	calc. down	g
H	Jup-M.	H8= 0,8772	calc.	H8 = 1-ABS((C8-B8)/5,40627)	calc. down	h
I	Sat-M.	I8= 0,4827	calc.	I8 = 1-ABS((D8-B8)/14,729)	calc. down	i
J	LGS-M.	J8= 0,3373	calc.	J8 = 1-ABS((E8-B8)/46,0448)	calc. down	j
K	DC-M.	K8= 0,2843	calc.	K8 = 1-ABS((F8-B8)/123,595)	calc. down	k
L	OL-M.	L8= 0,2075	calc.	L8 = 1-ABS((G8-B8)/559,114)	calc. down	l

---

[1] I have used my German version of the Open Office Calculation program.

M	Total	M8= 2,1889	calc.	M8 = H8+I8+J8+K8+L8	calc. down	m
N	Scale	N8= 4,518	calc.	N8 = MAX(M8:M1652)	N9 = N8; calc. down	n
O	Cycle	O8= -130,00	calc.	O8 = A8/8	O9 = A9/8; calc. down	o
P	Year	P8= 347	set	P8 = A8	calc. down	p
Q	Rel.	Q8= 48,4	calc.	Q8 = 100*M8/N8	calc. down	q
R	Aver.	R8= 34,6	calc.	R8 = SUMME(Q4:Q12)/9	calc. down	r

Notes:

a) The starting value was chosen to be eight times the theoretical number of the Sun-Jupiter cycle, where eight sets the desired number of calculation points for each single cycle (-130*8 = -1040).

b) The observed sunspot cycle 20 has culminated about New Year of 1969. I have assumed this point of time were also the culmination of the theoretical (*Naturics*) Sun-Jupiter cycle 20. Returning 150 times from this point of time with the theoretical length of 10,81254 years to the starting cycle -130 gives the starting year (347,13) of our calculation. All following calculation points are separated from each other with an eighth of the theoretical cycle length (1,3515675 = 10,81254/8).

c) One of the both ends of every Sun-Jupiter cycle becomes chosen, depending on its smaller time-difference to the actual calculation point. In that way the calculation point wandering with constant steps along the time scale (between the years 347 and 2566) activates the consecutive “critical moments” of the Sun-Jupiter (energetic) interaction.

d) Saturn modulates this interaction between Jupiter and Sun through its own motion around the center of mass of the Solar System. I have assumed this modulation can be properly approximated with the known period of Saturn circulation around the Sun.

e) The Local Group of stars interacts energetically with our Solar System in a similar way like Jupiter interacts directly with the Sun. For our theoretical interaction period compare Table 2 in the previous Chapter 2 of Part 1.

f) The total mass of the Dark Companion of the Sun, though widely distributed along Kuiper Belt, interact "collectively" with all remaining members of the Solar System, also modulating the energetic solar cycles. Its period is known exactly from the observation of Pluto, which circulates simultaneously around the center of mass of this Dark Companion in a plane perpendicular to the ecliptic and together with this dark mass around the center of mass of the whole Solar System (in Venus) in the ecliptic plane.

g) For a medium-range analysis we need also to include the 3rd level of the Cosmic Hierarchy of the Solar System (*compare Table 2 in the previous chapter*). The Orion Local Minigalaxy has influenced the energy transfer to the Earth only twice during the analyzed period of 2200 years.

h-l) The interaction between Solar System and Orion Minigalaxy is much stronger than all other considered here. Nevertheless, for our analysis of the relative changes of this energy transfer we can assume the same contribution from each of the considered factors. Therefore we use the same formula for the modulation of all five contributions.

m) We simply add all five contributions.

n) We look for the maximal value of the summarized contributions.

o-p) The exact cycle number and the actual year of each point of calculation have just an auxiliary role for better orientation and/or diagram production.

q) The total contribution of all five modulators of the energy transferred to the Solar System (including the Earth of course) is recalculated here in relation to the maximal value of the whole analyzed period of 2200 years.

r) The resulting curve Q is averaged here over the whole solar cycle of 10,81254 years (or nine calculation points).

Table 5. Page 1a

A	B	C	D	E	F	G	H	I
Nr	Year	Jupiter	Saturn	LGS	DC	OLMG	Jup-M.	Sat-M.
-1040	**347,13**	**347,79**	**339,51**	**316,62**	**258,67**	**790,22**	0,8772	0,4827
-1039	348,48	347,79	339,51	316,62	258,67	790,22	0,8728	0,3909
-1038	349,83	347,79	339,51	316,62	258,67	790,22	0,6228	0,2991
-1037	351,18	347,79	339,51	316,62	258,67	790,22	0,3728	0,2074
-1036	352,54	347,79	339,51	316,62	258,67	790,22	0,1228	0,1156
-1035	353,89	358,61	339,51	316,62	258,67	790,22	0,1272	0,0238
-1034	355,24	358,61	368,97	316,62	258,67	790,22	0,3772	0,0679
-1033	356,59	358,61	368,97	316,62	258,67	790,22	0,6272	0,1597
-1032	357,94	358,61	368,97	316,62	258,67	790,22	0,8772	0,2514
-1031	359,29	358,61	368,97	316,62	258,67	790,22	0,8728	0,3432
-1030	360,65	358,61	368,97	316,62	258,67	790,22	0,6228	0,4350
-1029	362,00	358,61	368,97	316,62	258,67	790,22	0,3728	0,5267
-1028	363,35	358,61	368,97	408,71	258,67	790,22	0,1228	0,6185
-1027	364,70	369,42	368,97	408,71	258,67	790,22	0,1272	0,7103
-1026	366,05	369,42	368,97	408,71	258,67	790,22	0,3772	0,8020
-1025	367,40	369,42	368,97	408,71	258,67	790,22	0,6272	0,8938
-1024	368,76	369,42	368,97	408,71	258,67	790,22	0,8772	0,9855
-1023	370,11	369,42	368,97	408,71	258,67	790,22	0,8728	0,9227
-1022	371,46	369,42	368,97	408,71	258,67	790,22	0,6228	0,8309
-1021	372,81	369,42	368,97	408,71	258,67	790,22	0,3728	0,7392
-1020	374,16	369,42	368,97	408,71	258,67	790,22	0,1228	0,6474
-1019	375,51	380,23	368,97	408,71	258,67	790,22	0,1272	0,5556
-1018	376,86	380,23	368,97	408,71	258,67	790,22	0,3772	0,4639

Table 5. Page 1b

A	J	K	L	M	N	O	P	Q	R
Nr	LGS-M.	DC-M.	OL-M.	Total	Scale	Cycle	Year	Rel.	Aver.
								20,2	
								28,6	
								37,0	
								45,4	
-1040	0,3373	0,2843	0,2075	2,1889	4,518	-130,000	347	48,4	34,6
-1039	0,3079	0,2733	0,2099	2,0549	4,518	-129,875	348	45,5	34,3
-1038	0,2786	0,2624	0,2124	1,6753	4,518	-129,750	350	37,1	33,7
-1037	0,2492	0,2515	0,2148	1,2957	4,518	-129,625	351	28,7	32,9
-1036	0,2199	0,2405	0,2172	0,9160	4,518	-129,500	353	20,3	31,9
-1035	0,1905	0,2296	0,2196	0,7908	4,518	-129,375	354	17,5	30,7
-1034	0,1612	0,2187	0,2220	1,0470	4,518	-129,250	355	23,2	29,4
-1033	0,1318	0,2077	0,2244	1,3509	4,518	-129,125	357	29,9	28,5
-1032	0,1025	0,1968	0,2269	1,6547	4,518	-129,000	358	36,6	28,1
-1031	0,0731	0,1859	0,2293	1,7043	4,518	-128,875	359	37,7	29,0
-1030	0,0438	0,1749	0,2317	1,5082	4,518	-128,750	361	33,4	31,0
-1029	0,0144	0,1640	0,2341	1,3121	4,518	-128,625	362	29,0	33,3
-1028	0,0149	0,1530	0,2365	1,1458	4,518	-128,500	363	25,4	35,8
-1027	0,0443	0,1421	0,2389	1,2628	4,518	-128,375	365	27,9	37,4
-1026	0,0736	0,1312	0,2414	1,6254	4,518	-128,250	366	36,0	38,1
-1025	0,1030	0,1202	0,2438	1,9880	4,518	-128,125	367	44,0	38,4
-1024	0,1324	0,1093	0,2462	2,3506	4,518	-128,000	369	52,0	38,5
-1023	0,1617	0,0984	0,2486	2,3042	4,518	-127,875	370	51,0	38,8
-1022	0,1911	0,0874	0,2510	1,9833	4,518	-127,750	371	43,9	39,3
-1021	0,2204	0,0765	0,2534	1,6624	4,518	-127,625	373	36,8	39,3
-1020	0,2498	0,0656	0,2559	1,3414	4,518	-127,500	374	29,7	38,9
-1019	0,2791	0,0546	0,2583	1,2749	4,518	-127,375	376	28,2	37,4
-1018	0,3085	0,0437	0,2607	1,4539	4,518	-127,250	377	32,2	35,2

Table 5. Page 2a

A	B	C	D	E	F	G	H	I
-1017	378,22	380,23	368,97	408,71	258,67	790,22	0,6272	0,3721
-1016	379,57	380,23	368,97	408,71	258,67	790,22	0,8772	0,2804
-1015	380,92	380,23	368,97	408,71	258,67	790,22	0,8728	0,1886
-1014	382,27	380,23	368,97	408,71	505,86	790,22	0,6228	0,0968
-1013	383,62	380,23	368,97	408,71	505,86	790,22	0,3728	0,0051
-1012	384,97	380,23	398,43	408,71	505,86	790,22	0,1228	0,0867
-1011	386,33	391,04	398,43	408,71	505,86	790,22	0,1272	0,1785
-1010	387,68	391,04	398,43	408,71	505,86	790,22	0,3772	0,2702
-1009	389,03	391,04	398,43	408,71	505,86	790,22	0,6272	0,3620
-1008	390,38	391,04	398,43	408,71	505,86	790,22	0,8772	0,4537
-1007	391,73	391,04	398,43	408,71	505,86	790,22	0,8728	0,5455
-1006	393,08	391,04	398,43	408,71	505,86	790,22	0,6228	0,6373
-1005	394,43	391,04	398,43	408,71	505,86	790,22	0,3728	0,7290
-1004	395,79	391,04	398,43	408,71	505,86	790,22	0,1228	0,8208
-1003	397,14	401,86	398,43	408,71	505,86	790,22	0,1272	0,9126
-1002	398,49	401,86	398,43	408,71	505,86	790,22	0,3772	0,9957
-1001	399,84	401,86	398,43	408,71	505,86	790,22	0,6272	0,9039
-1000	401,19	401,86	398,43	408,71	505,86	790,22	0,8772	0,8122
-999	402,54	401,86	398,43	408,71	505,86	790,22	0,8728	0,7204
-998	403,90	401,86	398,43	408,71	505,86	790,22	0,6228	0,6286
-997	405,25	401,86	398,43	408,71	505,86	790,22	0,3728	0,5369
-996	406,60	401,86	398,43	408,71	505,86	790,22	0,1228	0,4451
-995	407,95	412,67	398,43	408,71	505,86	790,22	0,1272	0,3533
-994	409,30	412,67	398,43	408,71	505,86	790,22	0,3772	0,2616
-993	410,65	412,67	398,43	408,71	505,86	790,22	0,6272	0,1698
-992	412,01	412,67	398,43	408,71	505,86	790,22	0,8772	0,0781
-991	413,36	412,67	427,88	408,71	505,86	790,22	0,8728	0,0137
-990	414,71	412,67	427,88	408,71	505,86	790,22	0,6228	0,1055
-989	416,06	412,67	427,88	408,71	505,86	790,22	0,3728	0,1972
-988	417,41	412,67	427,88	408,71	505,86	790,22	0,1228	0,2890

Table 5. Page 2b

A	J	K	L	M	N	O	P	Q	R
-1017	0,3378	0,0328	0,2631	1,6330	4,518	-127,125	378	36,1	33,1
-1016	0,3672	0,0218	0,2655	1,8121	4,518	-127,000	380	40,1	31,4
-1015	0,3965	0,0109	0,2680	1,7368	4,518	-126,875	381	38,4	30,9
-1014	0,4259	0,0000	0,2704	1,4160	4,518	-126,750	382	31,3	31,5
-1013	0,4552	0,0110	0,2728	1,1169	4,518	-126,625	384	24,7	32,6
-1012	0,4846	0,0219	0,2752	0,9912	4,518	-126,500	385	21,9	34,2
-1011	0,5139	0,0329	0,2776	1,1301	4,518	-126,375	386	25,0	35,7
-1010	0,5433	0,0438	0,2800	1,5145	4,518	-126,250	388	33,5	37,0
-1009	0,5727	0,0547	0,2825	1,8990	4,518	-126,125	389	42,0	38,9
-1008	0,6020	0,0657	0,2849	2,2835	4,518	-126,000	390	50,5	41,3
-1007	0,6314	0,0766	0,2873	2,4136	4,518	-125,875	392	53,4	44,3
-1006	0,6607	0,0875	0,2897	2,2980	4,518	-125,750	393	50,9	47,8
-1005	0,6901	0,0985	0,2921	2,1825	4,518	-125,625	394	48,3	50,9
-1004	0,7194	0,1094	0,2945	2,0670	4,518	-125,500	396	45,7	53,6
-1003	0,7488	0,1203	0,2970	2,2058	4,518	-125,375	397	48,8	55,2
-1002	0,7781	0,1313	0,2994	2,5816	4,518	-125,250	398	57,1	55,7
-1001	0,8075	0,1422	0,3018	2,7826	4,518	-125,125	400	61,6	55,8
-1000	0,8368	0,1531	0,3042	2,9835	4,518	-125,000	401	66,0	55,4
-999	0,8662	0,1641	0,3066	2,9301	4,518	-124,875	403	64,9	55,3
-998	0,8955	0,1750	0,3090	2,6311	4,518	-124,750	404	58,2	55,1
-997	0,9249	0,1859	0,3115	2,3320	4,518	-124,625	405	51,6	54,5
-996	0,9542	0,1969	0,3139	2,0329	4,518	-124,500	407	45,0	53,6
-995	0,9836	0,2078	0,3163	1,9882	4,518	-124,375	408	44,0	52,1
-994	0,9870	0,2188	0,3187	2,1633	4,518	-124,250	409	47,9	50,3
-993	0,9577	0,2297	0,3211	2,3055	4,518	-124,125	411	51,0	48,8
-992	0,9283	0,2406	0,3236	2,4478	4,518	-124,000	412	54,2	47,6
-991	0,8990	0,2516	0,3260	2,3630	4,518	-123,875	413	52,3	47,3
-990	0,8696	0,2625	0,3284	2,1888	4,518	-123,750	415	48,4	47,9
-989	0,8403	0,2734	0,3308	2,0146	4,518	-123,625	416	44,6	48,9
-988	0,8109	0,2844	0,3332	1,8403	4,518	-123,500	417	40,7	50,4

Table 5. Page 3a

A	B	C	D	E	F	G	H	I
-987	418,76	423,48	427,88	408,71	505,86	790,22	0,1272	0,3808
-986	420,11	423,48	427,88	408,71	505,86	790,22	0,3772	0,4725
-985	421,47	423,48	427,88	408,71	505,86	790,22	0,6272	0,5643
-984	422,82	423,48	427,88	408,71	505,86	790,22	0,8772	0,6560
-983	424,17	423,48	427,88	408,71	505,86	790,22	0,8728	0,7478
-982	425,52	423,48	427,88	408,71	505,86	790,22	0,6228	0,8396
-981	426,87	423,48	427,88	408,71	505,86	790,22	0,3728	0,9313
-980	428,22	423,48	427,88	408,71	505,86	790,22	0,1228	0,9769
-979	429,58	434,29	427,88	408,71	505,86	790,22	0,1272	0,8852
-978	430,93	434,29	427,88	408,71	505,86	790,22	0,3772	0,7934
-977	432,28	434,29	427,88	408,71	505,86	790,22	0,6272	0,7016
-976	433,63	434,29	427,88	408,71	505,86	790,22	0,8772	0,6099
-975	434,98	434,29	427,88	408,71	505,86	790,22	0,8728	0,5181
-974	436,33	434,29	427,88	408,71	505,86	790,22	0,6228	0,4263
-973	437,69	434,29	427,88	408,71	505,86	790,22	0,3728	0,3346
-972	439,04	434,29	427,88	408,71	505,86	790,22	0,1228	0,2428
-971	440,39	445,11	427,88	408,71	505,86	790,22	0,1272	0,1511
-970	441,74	445,11	427,88	408,71	505,86	790,22	0,3772	0,0593
-969	443,09	445,11	457,34	408,71	505,86	790,22	0,6272	0,0325
-968	444,44	445,11	457,34	408,71	505,86	790,22	0,8772	0,1242
-967	445,79	445,11	457,34	408,71	505,86	790,22	0,8728	0,2160
-966	447,15	445,11	457,34	408,71	505,86	790,22	0,6228	0,3078
-965	448,50	445,11	457,34	408,71	505,86	790,22	0,3728	0,3995
-964	449,85	445,11	457,34	408,71	505,86	790,22	0,1228	0,4913
-963	451,20	455,92	457,34	408,71	505,86	790,22	0,1272	0,5830
-962	452,55	455,92	457,34	408,71	505,86	790,22	0,3772	0,6748
-961	453,90	455,92	457,34	408,71	505,86	790,22	0,6272	0,7666
-960	455,26	455,92	457,34	500,80	505,86	790,22	0,8772	0,8583
-959	456,61	455,92	457,34	500,80	505,86	790,22	0,8728	0,9501
-958	457,96	455,92	457,34	500,80	505,86	790,22	0,6228	0,9581

Table 5. Page 3b

A	J	K	L	M	N	O	P	Q	R
-987	0,7816	0,2953	0,3356	1,9204	4,518	-123,375	419	42,5	51,7
-986	0,7522	0,3062	0,3381	2,2462	4,518	-123,250	420	49,7	52,7
-985	0,7229	0,3172	0,3405	2,5720	4,518	-123,125	421	56,9	53,8
-984	0,6935	0,3281	0,3429	2,8977	4,518	-123,000	423	64,1	54,7
-983	0,6642	0,3390	0,3453	2,9691	4,518	-122,875	424	65,7	55,9
-982	0,6348	0,3500	0,3477	2,7949	4,518	-122,750	426	61,9	57,1
-981	0,6055	0,3609	0,3501	2,6207	4,518	-122,625	427	58,0	58,0
-980	0,5761	0,3719	0,3526	2,4002	4,518	-122,500	428	53,1	58,3
-979	0,5467	0,3828	0,3550	2,2968	4,518	-122,375	430	50,8	57,6
-978	0,5174	0,3937	0,3574	2,4391	4,518	-122,250	431	54,0	55,9
-977	0,4880	0,4047	0,3598	2,5813	4,518	-122,125	432	57,1	53,7
-976	0,4587	0,4156	0,3622	2,7236	4,518	-122,000	434	60,3	51,0
-975	0,4293	0,4265	0,3646	2,6114	4,518	-121,875	435	57,8	48,6
-974	0,4000	0,4375	0,3671	2,2537	4,518	-121,750	436	49,9	46,9
-973	0,3706	0,4484	0,3695	1,8959	4,518	-121,625	438	42,0	45,2
-972	0,3413	0,4593	0,3719	1,5381	4,518	-121,500	439	34,0	44,1
-971	0,3119	0,4703	0,3743	1,4347	4,518	-121,375	440	31,8	42,8
-970	0,2826	0,4812	0,3767	1,5770	4,518	-121,250	442	34,9	41,3
-969	0,2532	0,4921	0,3792	1,7842	4,518	-121,125	443	39,5	40,2
-968	0,2239	0,5031	0,3816	2,1099	4,518	-121,000	444	46,7	39,7
-967	0,1945	0,5140	0,3840	2,1813	4,518	-120,875	446	48,3	40,1
-966	0,1652	0,5249	0,3864	2,0071	4,518	-120,750	447	44,4	41,7
-965	0,1358	0,5359	0,3888	1,8328	4,518	-120,625	448	40,6	43,7
-964	0,1064	0,5468	0,3912	1,6586	4,518	-120,500	450	36,7	46,0
-963	0,0771	0,5578	0,3937	1,7387	4,518	-120,375	451	38,5	47,9
-962	0,0477	0,5687	0,3961	2,0645	4,518	-120,250	453	45,7	49,1
-961	0,0184	0,5796	0,3985	2,3903	4,518	-120,125	454	52,9	50,0
-960	0,0110	0,5906	0,4009	2,7379	4,518	-120,000	455	60,6	50,6
-959	0,0403	0,6015	0,4033	2,8681	4,518	-119,875	457	63,5	51,5
-958	0,0697	0,6124	0,4057	2,6688	4,518	-119,750	458	59,1	52,7

Table 5. Page 4a

A	B	C	D	E	F	G	H	I
-957	459,31	455,92	457,34	500,80	505,86	790,22	0,3728	0,8664
-956	460,66	455,92	457,34	500,80	505,86	790,22	0,1228	0,7746
-955	462,01	466,73	457,34	500,80	505,86	790,22	0,1272	0,6829
-954	463,36	466,73	457,34	500,80	505,86	790,22	0,3772	0,5911
-953	464,72	466,73	457,34	500,80	505,86	790,22	0,6272	0,4993
-952	466,07	466,73	457,34	500,80	505,86	790,22	0,8772	0,4076
-951	467,42	466,73	457,34	500,80	505,86	790,22	0,8728	0,3158
-950	468,77	466,73	457,34	500,80	505,86	790,22	0,6228	0,2240
-949	470,12	466,73	457,34	500,80	505,86	790,22	0,3728	0,1323
-948	471,47	466,73	457,34	500,80	505,86	790,22	0,1228	0,0405
-947	472,83	477,54	486,80	500,80	505,86	790,22	0,1272	0,0512
-946	474,18	477,54	486,80	500,80	505,86	790,22	0,3772	0,1430
-945	475,53	477,54	486,80	500,80	505,86	790,22	0,6272	0,2348
-944	476,88	477,54	486,80	500,80	505,86	790,22	0,8772	0,3265
-943	478,23	477,54	486,80	500,80	505,86	790,22	0,8728	0,4183
-942	479,58	477,54	486,80	500,80	505,86	790,22	0,6228	0,5101
-941	480,94	477,54	486,80	500,80	505,86	790,22	0,3728	0,6018
-940	482,29	477,54	486,80	500,80	505,86	790,22	0,1228	0,6936
-939	483,64	488,36	486,80	500,80	505,86	790,22	0,1272	0,7853
-938	484,99	488,36	486,80	500,80	505,86	790,22	0,3772	0,8771
-937	486,34	488,36	486,80	500,80	505,86	790,22	0,6272	0,9689
-936	487,69	488,36	486,80	500,80	505,86	790,22	0,8772	0,9394
-935	489,04	488,36	486,80	500,80	505,86	790,22	0,8728	0,8476
-934	490,40	488,36	486,80	500,80	505,86	790,22	0,6228	0,7558
-933	491,75	488,36	486,80	500,80	505,86	790,22	0,3728	0,6641
-932	493,10	488,36	486,80	500,80	505,86	790,22	0,1228	0,5723
-931	494,45	499,17	486,80	500,80	505,86	790,22	0,1272	0,4806
-930	495,80	499,17	486,80	500,80	505,86	790,22	0,3772	0,3888
-929	497,15	499,17	486,80	500,80	505,86	790,22	0,6272	0,2970
-928	498,51	499,17	486,80	500,80	505,86	790,22	0,8772	0,2053

Table 5. Page 4b

A	J	K	L	M	N	O	P	Q	R
-957	0,0990	0,6234	0,4082	2,3698	4,518	-119,625	459	52,4	53,6
-956	0,1284	0,6343	0,4106	2,0707	4,518	-119,500	461	45,8	54,2
-955	0,1577	0,6452	0,4130	2,0260	4,518	-119,375	462	44,8	53,8
-954	0,1871	0,6562	0,4154	2,2269	4,518	-119,250	463	49,3	52,3
-953	0,2164	0,6671	0,4178	2,4279	4,518	-119,125	465	53,7	50,6
-952	0,2458	0,6780	0,4202	2,6288	4,518	-119,000	466	58,2	48,9
-951	0,2751	0,6890	0,4227	2,5754	4,518	-118,875	467	57,0	48,1
-950	0,3045	0,6999	0,4251	2,2764	4,518	-118,750	469	50,4	48,3
-949	0,3339	0,7109	0,4275	1,9773	4,518	-118,625	470	43,8	49,0
-948	0,3632	0,7218	0,4299	1,6782	4,518	-118,500	471	37,1	50,1
-947	0,3926	0,7327	0,4323	1,7360	4,518	-118,375	473	38,4	51,1
-946	0,4219	0,7437	0,4347	2,1205	4,518	-118,250	474	46,9	51,9
-945	0,4513	0,7546	0,4372	2,5050	4,518	-118,125	476	55,4	53,2
-944	0,4806	0,7655	0,4396	2,8894	4,518	-118,000	477	64,0	54,9
-943	0,5100	0,7765	0,4420	3,0196	4,518	-117,875	478	66,8	57,7
-942	0,5393	0,7874	0,4444	2,9040	4,518	-117,750	480	64,3	61,3
-941	0,5687	0,7983	0,4468	2,7885	4,518	-117,625	481	61,7	64,8
-940	0,5980	0,8093	0,4493	2,6730	4,518	-117,500	482	59,2	68,1
-939	0,6274	0,8202	0,4517	2,8118	4,518	-117,375	484	62,2	70,4
-938	0,6567	0,8311	0,4541	3,1963	4,518	-117,250	485	70,7	71,5
-937	0,6861	0,8421	0,4565	3,5807	4,518	-117,125	486	79,3	72,2
-936	0,7154	0,8530	0,4589	3,8439	4,518	-117,000	488	85,1	72,5
-935	0,7448	0,8639	0,4613	3,7905	4,518	-116,875	489	83,9	72,9
-934	0,7742	0,8749	0,4638	3,4915	4,518	-116,750	490	77,3	73,5
-933	0,8035	0,8858	0,4662	3,1924	4,518	-116,625	492	70,7	73,6
-932	0,8329	0,8968	0,4686	2,8933	4,518	-116,500	493	64,0	73,3
-931	0,8622	0,9077	0,4710	2,8487	4,518	-116,375	494	63,0	72,2
-930	0,8916	0,9186	0,4734	3,0496	4,518	-116,250	496	67,5	70,5
-929	0,9209	0,9296	0,4758	3,2505	4,518	-116,125	497	71,9	68,9
-928	0,9503	0,9405	0,4783	3,4515	4,518	-116,000	499	76,4	67,7

Table 5. Page 5a

A	B	C	D	E	F	G	H	I
-927	499,86	499,17	486,80	500,80	505,86	790,22	0,8728	0,1135
-926	501,21	499,17	486,80	500,80	505,86	790,22	0,6228	0,0217
-925	502,56	499,17	516,26	500,80	505,86	790,22	0,3728	0,0700
-924	503,91	499,17	516,26	500,80	505,86	790,22	0,1228	0,1618
-923	505,26	509,98	516,26	500,80	505,86	790,22	0,1272	0,2535
-922	506,61	509,98	516,26	500,80	505,86	790,22	0,3772	0,3453
-921	507,97	509,98	516,26	500,80	505,86	790,22	0,6272	0,4371
-920	509,32	509,98	516,26	500,80	505,86	790,22	0,8772	0,5288
-919	510,67	509,98	516,26	500,80	505,86	790,22	0,8728	0,6206
-918	512,02	509,98	516,26	500,80	505,86	790,22	0,6228	0,7124
-917	513,37	509,98	516,26	500,80	505,86	790,22	0,3728	0,8041
-916	514,72	509,98	516,26	500,80	505,86	790,22	0,1228	0,8959
-915	516,08	520,79	516,26	500,80	505,86	790,22	0,1272	0,9876
-914	517,43	520,79	516,26	500,80	505,86	790,22	0,3772	0,9206
-913	518,78	520,79	516,26	500,80	505,86	790,22	0,6272	0,8288
-912	520,13	520,79	516,26	500,80	505,86	790,22	0,8772	0,7371
-911	521,48	520,79	516,26	500,80	505,86	790,22	0,8728	0,6453
-910	522,83	520,79	516,26	500,80	505,86	790,22	0,6228	0,5535
-909	524,19	520,79	516,26	500,80	505,86	790,22	0,3728	0,4618
-908	525,54	520,79	516,26	500,80	505,86	790,22	0,1228	0,3700
-907	526,89	531,61	516,26	500,80	505,86	790,22	0,1272	0,2783
-906	528,24	531,61	516,26	500,80	505,86	790,22	0,3772	0,1865
-905	529,59	531,61	516,26	500,80	505,86	790,22	0,6272	0,0947
-904	530,94	531,61	516,26	500,80	505,86	790,22	0,8772	0,0030
-903	532,29	531,61	545,72	500,80	505,86	790,22	0,8728	0,0888
-902	533,65	531,61	545,72	500,80	505,86	790,22	0,6228	0,1805
-901	535,00	531,61	545,72	500,80	505,86	790,22	0,3728	0,2723
-900	536,35	531,61	545,72	500,80	505,86	790,22	0,1228	0,3641
-899	537,70	542,42	545,72	500,80	505,86	790,22	0,1272	0,4558
-898	539,05	542,42	545,72	500,80	505,86	790,22	0,3772	0,5476

Table 5. Page 5b

A	J	K	L	M	N	O	P	Q	R
-927	0,9796	0,9514	0,4807	3,3981	4,518	-115,875	500	75,2	67,4
-926	0,9910	0,9624	0,4831	3,0810	4,518	-115,750	501	68,2	68,0
-925	0,9617	0,9733	0,4855	2,8633	4,518	-115,625	503	63,4	68,8
-924	0,9323	0,9842	0,4879	2,6891	4,518	-115,500	504	59,5	69,9
-923	0,9030	0,9952	0,4903	2,7692	4,518	-115,375	505	61,3	70,6
-922	0,8736	0,9939	0,4928	3,0827	4,518	-115,250	507	68,2	70,9
-921	0,8443	0,9830	0,4952	3,3866	4,518	-115,125	508	75,0	71,6
-920	0,8149	0,9720	0,4976	3,6905	4,518	-115,000	509	81,7	72,3
-919	0,7855	0,9611	0,5000	3,7401	4,518	-114,875	511	82,8	73,6
-918	0,7562	0,9501	0,5024	3,5440	4,518	-114,750	512	78,4	75,0
-917	0,7268	0,9392	0,5049	3,3478	4,518	-114,625	513	74,1	76,0
-916	0,6975	0,9283	0,5073	3,1517	4,518	-114,500	515	69,8	76,5
-915	0,6681	0,9173	0,5097	3,2100	4,518	-114,375	516	71,0	75,9
-914	0,6388	0,9064	0,5121	3,3551	4,518	-114,250	517	74,3	74,3
-913	0,6094	0,8955	0,5145	3,4754	4,518	-114,125	519	76,9	72,3
-912	0,5801	0,8845	0,5169	3,5958	4,518	-114,000	520	79,6	69,7
-911	0,5507	0,8736	0,5194	3,4618	4,518	-113,875	521	76,6	67,4
-910	0,5214	0,8627	0,5218	3,0822	4,518	-113,750	523	68,2	65,2
-909	0,4920	0,8517	0,5242	2,7025	4,518	-113,625	524	59,8	62,9
-908	0,4627	0,8408	0,5266	2,3229	4,518	-113,500	526	51,4	60,7
-907	0,4333	0,8299	0,5290	2,1976	4,518	-113,375	527	48,6	58,2
-906	0,4040	0,8189	0,5314	2,3180	4,518	-113,250	528	51,3	55,6
-905	0,3746	0,8080	0,5339	2,4384	4,518	-113,125	530	54,0	53,5
-904	0,3452	0,7971	0,5363	2,5587	4,518	-113,000	531	56,6	51,8
-903	0,3159	0,7861	0,5387	2,6023	4,518	-112,875	532	57,6	51,2
-902	0,2865	0,7752	0,5411	2,4062	4,518	-112,750	534	53,3	51,6
-901	0,2572	0,7642	0,5435	2,2101	4,518	-112,625	535	48,9	52,5
-900	0,2278	0,7533	0,5459	2,0140	4,518	-112,500	536	44,6	53,9
-899	0,1985	0,7424	0,5484	2,0722	4,518	-112,375	538	45,9	55,0
-898	0,1691	0,7314	0,5508	2,3761	4,518	-112,250	539	52,6	55,6

Table 5. Page 6a

A	B	C	D	E	F	G	H	I
-897	540,40	542,42	545,72	500,80	505,86	790,22	0,6272	0,6394
-896	541,76	542,42	545,72	500,80	505,86	790,22	0,8772	0,7311
-895	543,11	542,42	545,72	500,80	505,86	790,22	0,8728	0,8229
-894	544,46	542,42	545,72	500,80	505,86	790,22	0,6228	0,9146
-893	545,81	542,42	545,72	500,80	505,86	790,22	0,3728	0,9936
-892	547,16	542,42	545,72	592,88	505,86	790,22	0,1228	0,9018
-891	548,51	553,23	545,72	592,88	505,86	790,22	0,1272	0,8101
-890	549,87	553,23	545,72	592,88	505,86	790,22	0,3772	0,7183
-889	551,22	553,23	545,72	592,88	505,86	790,22	0,6272	0,6265
-888	552,57	553,23	545,72	592,88	505,86	790,22	0,8772	0,5348
-887	553,92	553,23	545,72	592,88	505,86	790,22	0,8728	0,4430
-886	555,27	553,23	545,72	592,88	505,86	790,22	0,6228	0,3513
-885	556,62	553,23	545,72	592,88	505,86	790,22	0,3728	0,2595
-884	557,97	553,23	545,72	592,88	505,86	790,22	0,1228	0,1677
-883	559,33	564,04	545,72	592,88	505,86	790,22	0,1272	0,0760
-882	560,68	564,04	575,17	592,88	505,86	790,22	0,3772	0,0158
-881	562,03	564,04	575,17	592,88	505,86	790,22	0,6272	0,1076
-880	563,38	564,04	575,17	592,88	505,86	790,22	0,8772	0,1993
-879	564,73	564,04	575,17	592,88	505,86	790,22	0,8728	0,2911
-878	566,08	564,04	575,17	592,88	505,86	790,22	0,6228	0,3828
-877	567,44	564,04	575,17	592,88	505,86	790,22	0,3728	0,4746
-876	568,79	564,04	575,17	592,88	505,86	790,22	0,1228	0,5664
-875	570,14	574,86	575,17	592,88	505,86	790,22	0,1272	0,6581
-874	571,49	574,86	575,17	592,88	505,86	790,22	0,3772	0,7499
-873	572,84	574,86	575,17	592,88	505,86	790,22	0,6272	0,8417
-872	574,19	574,86	575,17	592,88	505,86	790,22	0,8772	0,9334
-871	575,54	574,86	575,17	592,88	505,86	790,22	0,8728	0,9748
-870	576,90	574,86	575,17	592,88	505,86	790,22	0,6228	0,8831
-869	578,25	574,86	575,17	592,88	505,86	790,22	0,3728	0,7913
-868	579,60	574,86	575,17	592,88	505,86	790,22	0,1228	0,6995

Table 5. Page 6b

A	J	K	L	M	N	O	P	Q	R
-897	0,1398	0,7205	0,5532	2,6800	4,518	-112,125	540	59,3	56,2
-896	0,1104	0,7096	0,5556	2,9839	4,518	-112,000	542	66,0	56,3
-895	0,0811	0,6986	0,5580	3,0334	4,518	-111,875	543	67,1	56,7
-894	0,0517	0,6877	0,5605	2,8373	4,518	-111,750	544	62,8	57,5
-893	0,0224	0,6768	0,5629	2,6284	4,518	-111,625	546	58,2	57,9
-892	0,0070	0,6658	0,5653	2,2628	4,518	-111,500	547	50,1	58,0
-891	0,0363	0,6549	0,5677	2,1962	4,518	-111,375	549	48,6	57,2
-890	0,0657	0,6440	0,5701	2,3753	4,518	-111,250	550	52,6	55,5
-889	0,0951	0,6330	0,5725	2,5543	4,518	-111,125	551	56,5	53,5
-888	0,1244	0,6221	0,5750	2,7334	4,518	-111,000	553	60,5	51,2
-887	0,1538	0,6112	0,5774	2,6581	4,518	-110,875	554	58,8	49,7
-886	0,1831	0,6002	0,5798	2,3372	4,518	-110,750	555	51,7	48,8
-885	0,2125	0,5893	0,5822	2,0163	4,518	-110,625	557	44,6	48,4
-884	0,2418	0,5783	0,5846	1,6953	4,518	-110,500	558	37,5	48,4
-883	0,2712	0,5674	0,5870	1,6288	4,518	-110,375	559	36,0	48,2
-882	0,3005	0,5565	0,5895	1,8394	4,518	-110,250	561	40,7	47,9
-881	0,3299	0,5455	0,5919	2,2020	4,518	-110,125	562	48,7	48,1
-880	0,3592	0,5346	0,5943	2,5646	4,518	-110,000	563	56,8	48,7
-879	0,3886	0,5237	0,5967	2,6729	4,518	-109,875	565	59,2	50,4
-878	0,4179	0,5127	0,5991	2,5355	4,518	-109,750	566	56,1	53,1
-877	0,4473	0,5018	0,6015	2,3981	4,518	-109,625	567	53,1	56,2
-876	0,4766	0,4909	0,6040	2,2607	4,518	-109,500	569	50,0	59,3
-875	0,5060	0,4799	0,6064	2,3776	4,518	-109,375	570	52,6	61,7
-874	0,5354	0,4690	0,6088	2,7402	4,518	-109,250	571	60,6	63,0
-873	0,5647	0,4581	0,6112	3,1028	4,518	-109,125	573	68,7	63,8
-872	0,5941	0,4471	0,6136	3,4654	4,518	-109,000	574	76,7	64,2
-871	0,6234	0,4362	0,6160	3,5233	4,518	-108,875	576	78,0	64,8
-870	0,6528	0,4252	0,6185	3,2024	4,518	-108,750	577	70,9	65,5
-869	0,6821	0,4143	0,6209	2,8814	4,518	-108,625	578	63,8	65,8
-868	0,7115	0,4034	0,6233	2,5605	4,518	-108,500	580	56,7	65,6

Table 5. Page 7a

A	B	C	D	E	F	G	H	I
-867	580,95	585,67	575,17	592,88	505,86	790,22	0,1272	0,6078
-866	582,30	585,67	575,17	592,88	505,86	790,22	0,3772	0,5160
-865	583,65	585,67	575,17	592,88	505,86	790,22	0,6272	0,4242
-864	585,01	585,67	575,17	592,88	505,86	790,22	0,8772	0,3325
-863	586,36	585,67	575,17	592,88	505,86	790,22	0,8728	0,2407
-862	587,71	585,67	575,17	592,88	505,86	790,22	0,6228	0,1490
-861	589,06	585,67	575,17	592,88	505,86	790,22	0,3728	0,0572
-860	590,41	585,67	604,63	592,88	505,86	790,22	0,1228	0,0346
-859	591,76	596,48	604,63	592,88	505,86	790,22	0,1272	0,1263
-858	593,12	596,48	604,63	592,88	505,86	790,22	0,3772	0,2181
-857	594,47	596,48	604,63	592,88	505,86	790,22	0,6272	0,3099
-856	595,82	596,48	604,63	592,88	505,86	790,22	0,8772	0,4016
-855	597,17	596,48	604,63	592,88	505,86	790,22	0,8728	0,4934
-854	598,52	596,48	604,63	592,88	505,86	790,22	0,6228	0,5851
-853	599,87	596,48	604,63	592,88	505,86	790,22	0,3728	0,6769
-852	601,22	596,48	604,63	592,88	505,86	790,22	0,1228	0,7687
-851	602,58	607,29	604,63	592,88	505,86	790,22	0,1272	0,8604
-850	603,93	607,29	604,63	592,88	505,86	790,22	0,3772	0,9522
-849	605,28	607,29	604,63	592,88	505,86	790,22	0,6272	0,9560
-848	606,63	607,29	604,63	592,88	505,86	790,22	0,8772	0,8643
-847	607,98	607,29	604,63	592,88	505,86	790,22	0,8728	0,7725
-846	609,33	607,29	604,63	592,88	505,86	790,22	0,6228	0,6808
-845	610,69	607,29	604,63	592,88	505,86	790,22	0,3728	0,5890
-844	612,04	607,29	604,63	592,88	505,86	790,22	0,1228	0,4972
-843	613,39	618,11	604,63	592,88	505,86	790,22	0,1272	0,4055
-842	614,74	618,11	604,63	592,88	505,86	790,22	0,3772	0,3137
-841	616,09	618,11	604,63	592,88	505,86	790,22	0,6272	0,2219
-840	617,44	618,11	604,63	592,88	505,86	790,22	0,8772	0,1302
-839	618,80	618,11	604,63	592,88	505,86	790,22	0,8728	0,0384
-838	620,15	618,11	634,09	592,88	505,86	790,22	0,6228	0,0533

Table 5. Page 7b

A	J	K	L	M	N	O	P	Q	R
-867	0,7408	0,3924	0,6257	2,4939	4,518	-108,375	581	55,2	64,4
-866	0,7702	0,3815	0,6281	2,6730	4,518	-108,250	582	59,2	62,2
-865	0,7995	0,3706	0,6306	2,8521	4,518	-108,125	584	63,1	60,0
-864	0,8289	0,3596	0,6330	3,0312	4,518	-108,000	585	67,1	58,0
-863	0,8582	0,3487	0,6354	2,9559	4,518	-107,875	586	65,4	57,0
-862	0,8876	0,3378	0,6378	2,6349	4,518	-107,750	588	58,3	57,1
-861	0,9169	0,3268	0,6402	2,3140	4,518	-107,625	589	51,2	57,5
-860	0,9463	0,3159	0,6426	2,0622	4,518	-107,500	590	45,6	58,2
-859	0,9757	0,3050	0,6451	2,1792	4,518	-107,375	592	48,2	58,6
-858	0,9950	0,2940	0,6475	2,5318	4,518	-107,250	593	56,0	58,7
-857	0,9656	0,2831	0,6499	2,8357	4,518	-107,125	594	62,8	59,1
-856	0,9363	0,2722	0,6523	3,1395	4,518	-107,000	596	69,5	59,8
-855	0,9069	0,2612	0,6547	3,1891	4,518	-106,875	597	70,6	61,3
-854	0,8776	0,2503	0,6571	2,9930	4,518	-106,750	599	66,2	63,2
-853	0,8482	0,2393	0,6596	2,7969	4,518	-106,625	600	61,9	64,8
-852	0,8189	0,2284	0,6620	2,6008	4,518	-106,500	601	57,6	66,0
-851	0,7895	0,2175	0,6644	2,6590	4,518	-106,375	603	58,9	66,0
-850	0,7602	0,2065	0,6668	2,9629	4,518	-106,250	604	65,6	65,0
-849	0,7308	0,1956	0,6692	3,1789	4,518	-106,125	605	70,4	63,6
-848	0,7015	0,1847	0,6716	3,2992	4,518	-106,000	607	73,0	61,7
-847	0,6721	0,1737	0,6741	3,1652	4,518	-105,875	608	70,1	60,0
-846	0,6428	0,1628	0,6765	2,7856	4,518	-105,750	609	61,7	58,4
-845	0,6134	0,1519	0,6789	2,4060	4,518	-105,625	611	53,3	56,4
-844	0,5840	0,1409	0,6813	2,0263	4,518	-105,500	612	44,8	54,1
-843	0,5547	0,1300	0,6837	1,9011	4,518	-105,375	613	42,1	51,2
-842	0,5253	0,1191	0,6862	2,0214	4,518	-105,250	615	44,7	48,0
-841	0,4960	0,1081	0,6886	2,1418	4,518	-105,125	616	47,4	45,3
-840	0,4666	0,0972	0,6910	2,2622	4,518	-105,000	617	50,1	42,9
-839	0,4373	0,0862	0,6934	2,1282	4,518	-104,875	619	47,1	41,7
-838	0,4079	0,0753	0,6958	1,8552	4,518	-104,750	620	41,1	41,5

Table 5. Page 8a

A	B	C	D	E	F	G	H	I
-837	621,50	618,11	634,09	592,88	505,86	790,22	0,3728	0,1451
-836	622,85	618,11	634,09	592,88	505,86	790,22	0,1228	0,2369
-835	624,20	628,92	634,09	592,88	505,86	790,22	0,1272	0,3286
-834	625,55	628,92	634,09	592,88	505,86	790,22	0,3772	0,4204
-833	626,90	628,92	634,09	592,88	505,86	790,22	0,6272	0,5122
-832	628,26	628,92	634,09	592,88	505,86	790,22	0,8772	0,6039
-831	629,61	628,92	634,09	592,88	753,05	790,22	0,8728	0,6957
-830	630,96	628,92	634,09	592,88	753,05	790,22	0,6228	0,7874
-829	632,31	628,92	634,09	592,88	753,05	790,22	0,3728	0,8792
-828	633,66	628,92	634,09	592,88	753,05	790,22	0,1228	0,9710
-827	635,01	639,73	634,09	592,88	753,05	790,22	0,1272	0,9373
-826	636,37	639,73	634,09	592,88	753,05	790,22	0,3772	0,8455
-825	637,72	639,73	634,09	592,88	753,05	790,22	0,6272	0,7538
-824	639,07	639,73	634,09	684,97	753,05	790,22	0,8772	0,6620
-823	640,42	639,73	634,09	684,97	753,05	790,22	0,8728	0,5702
-822	641,77	639,73	634,09	684,97	753,05	790,22	0,6228	0,4785
-821	643,12	639,73	634,09	684,97	753,05	790,22	0,3728	0,3867
-820	644,47	639,73	634,09	684,97	753,05	790,22	0,1228	0,2949
-819	645,83	650,55	634,09	684,97	753,05	790,22	0,1272	0,2032
-818	647,18	650,55	634,09	684,97	753,05	790,22	0,3772	0,1114
-817	648,53	650,55	634,09	684,97	753,05	790,22	0,6272	0,0197
-816	649,88	650,55	663,55	684,97	753,05	790,22	0,8772	0,0721
-815	651,23	650,55	663,55	684,97	753,05	790,22	0,8728	0,1639
-814	652,58	650,55	663,55	684,97	753,05	790,22	0,6228	0,2556
-813	653,94	650,55	663,55	684,97	753,05	790,22	0,3728	0,3474
-812	655,29	650,55	663,55	684,97	753,05	790,22	0,1228	0,4392
-811	656,64	661,36	663,55	684,97	753,05	790,22	0,1272	0,5309
-810	657,99	661,36	663,55	684,97	753,05	790,22	0,3772	0,6227
-809	659,34	661,36	663,55	684,97	753,05	790,22	0,6272	0,7144
-808	660,69	661,36	663,55	684,97	753,05	790,22	0,8772	0,8062

Table 5. Page 8b

A	J	K	L	M	N	O	P	Q	R
-837	0,3786	0,0644	0,6982	1,6591	4,518	-104,625	621	36,7	41,8
-836	0,3492	0,0534	0,7007	1,4630	4,518	-104,500	623	32,4	42,5
-835	0,3199	0,0425	0,7031	1,5213	4,518	-104,375	624	33,7	43,0
-834	0,2905	0,0316	0,7055	1,8251	4,518	-104,250	626	40,4	43,5
-833	0,2612	0,0206	0,7079	2,1290	4,518	-104,125	627	47,1	44,2
-832	0,2318	0,0097	0,7103	2,4329	4,518	-104,000	628	53,8	44,9
-831	0,2025	0,0012	0,7127	2,4849	4,518	-103,875	630	55,0	46,0
-830	0,1731	0,0122	0,7152	2,3107	4,518	-103,750	631	51,1	47,4
-829	0,1437	0,0231	0,7176	2,1365	4,518	-103,625	632	47,3	48,3
-828	0,1144	0,0340	0,7200	1,9622	4,518	-103,500	634	43,4	48,8
-827	0,0850	0,0450	0,7224	1,9169	4,518	-103,375	635	42,4	48,5
-826	0,0557	0,0559	0,7248	2,0591	4,518	-103,250	636	45,6	47,3
-825	0,0263	0,0668	0,7272	2,2014	4,518	-103,125	638	48,7	45,8
-824	0,0030	0,0778	0,7297	2,3496	4,518	-103,000	639	52,0	44,0
-823	0,0324	0,0887	0,7321	2,2962	4,518	-102,875	640	50,8	42,5
-822	0,0617	0,0997	0,7345	1,9972	4,518	-102,750	642	44,2	41,6
-821	0,0911	0,1106	0,7369	1,6981	4,518	-102,625	643	37,6	40,8
-820	0,1204	0,1215	0,7393	1,3990	4,518	-102,500	644	31,0	40,6
-819	0,1498	0,1325	0,7418	1,3544	4,518	-102,375	646	30,0	40,3
-818	0,1791	0,1434	0,7442	1,5553	4,518	-102,250	647	34,4	39,9
-817	0,2085	0,1543	0,7466	1,7562	4,518	-102,125	649	38,9	39,9
-816	0,2378	0,1653	0,7490	2,1014	4,518	-102,000	650	46,5	40,3
-815	0,2672	0,1762	0,7514	2,2315	4,518	-101,875	651	49,4	41,9
-814	0,2966	0,1871	0,7538	2,1160	4,518	-101,750	653	46,8	44,5
-813	0,3259	0,1981	0,7563	2,0005	4,518	-101,625	654	44,3	47,5
-812	0,3553	0,2090	0,7587	1,8849	4,518	-101,500	655	41,7	51,0
-811	0,3846	0,2199	0,7611	2,0237	4,518	-101,375	657	44,8	54,0
-810	0,4140	0,2309	0,7635	2,4082	4,518	-101,250	658	53,3	56,3
-809	0,4433	0,2418	0,7659	2,7927	4,518	-101,125	659	61,8	58,3
-808	0,4727	0,2528	0,7683	3,1772	4,518	-101,000	661	70,3	59,8

Table 5. Page 9a

A	B	C	D	E	F	G	H	I
-807	662,05	661,36	663,55	684,97	753,05	790,22	0,8728	0,8980
-806	663,40	661,36	663,55	684,97	753,05	790,22	0,6228	0,9897
-805	664,75	661,36	663,55	684,97	753,05	790,22	0,3728	0,9185
-804	666,10	661,36	663,55	684,97	753,05	790,22	0,1228	0,8267
-803	667,45	672,17	663,55	684,97	753,05	790,22	0,1272	0,7350
-802	668,80	672,17	663,55	684,97	753,05	790,22	0,3772	0,6432
-801	670,15	672,17	663,55	684,97	753,05	790,22	0,6272	0,5515
-800	671,51	672,17	663,55	684,97	753,05	790,22	0,8772	0,4597
-799	672,86	672,17	663,55	684,97	753,05	790,22	0,8728	0,3679
-798	674,21	672,17	663,55	684,97	753,05	790,22	0,6228	0,2762
-797	675,56	672,17	663,55	684,97	753,05	790,22	0,3728	0,1844
-796	676,91	672,17	663,55	684,97	753,05	790,22	0,1228	0,0926
-795	678,26	682,98	663,55	684,97	753,05	790,22	0,1272	0,0009
-794	679,62	682,98	693,01	684,97	753,05	790,22	0,3772	0,0909
-793	680,97	682,98	693,01	684,97	753,05	790,22	0,6272	0,1826
-792	682,32	682,98	693,01	684,97	753,05	790,22	0,8772	0,2744
-791	683,67	682,98	693,01	684,97	753,05	790,22	0,8728	0,3662
-790	685,02	682,98	693,01	684,97	753,05	790,22	0,6228	0,4579
-789	686,37	682,98	693,01	684,97	753,05	790,22	0,3728	0,5497
-788	687,73	682,98	693,01	684,97	753,05	790,22	0,1228	0,6415
-787	689,08	693,80	693,01	684,97	753,05	790,22	0,1272	0,7332
-786	690,43	693,80	693,01	684,97	753,05	790,22	0,3772	0,8250
-785	691,78	693,80	693,01	684,97	753,05	790,22	0,6272	0,9167
-784	693,13	693,80	693,01	684,97	753,05	790,22	0,8772	0,9915
-783	694,48	693,80	693,01	684,97	753,05	790,22	0,8728	0,8997
-782	695,83	693,80	693,01	684,97	753,05	790,22	0,6228	0,8080
-781	697,19	693,80	693,01	684,97	753,05	790,22	0,3728	0,7162
-780	698,54	693,80	693,01	684,97	753,05	790,22	0,1228	0,6244
-779	699,89	704,61	693,01	684,97	753,05	790,22	0,1272	0,5327
-778	701,24	704,61	693,01	684,97	753,05	790,22	0,3772	0,4409

Table 5. Page 9b

A	J	K	L	M	N	O	P	Q	R
-807	0,5020	0,2637	0,7708	3,3073	4,518	-100,875	662	73,2	61,5
-806	0,5314	0,2746	0,7732	3,1917	4,518	-100,750	663	70,6	63,3
-805	0,5607	0,2856	0,7756	2,9132	4,518	-100,625	665	64,5	64,7
-804	0,5901	0,2965	0,7780	2,6141	4,518	-100,500	666	57,9	65,6
-803	0,6194	0,3074	0,7804	2,5695	4,518	-100,375	667	56,9	65,5
-802	0,6488	0,3184	0,7828	2,7704	4,518	-100,250	669	61,3	64,3
-801	0,6781	0,3293	0,7853	2,9713	4,518	-100,125	670	65,8	62,6
-800	0,7075	0,3402	0,7877	3,1723	4,518	-100,000	672	70,2	60,9
-799	0,7369	0,3512	0,7901	3,1189	4,518	-99,875	673	69,0	59,9
-798	0,7662	0,3621	0,7925	2,8198	4,518	-99,750	674	62,4	59,8
-797	0,7956	0,3730	0,7949	2,5208	4,518	-99,625	676	55,8	60,3
-796	0,8249	0,3840	0,7973	2,2217	4,518	-99,500	677	49,2	61,1
-795	0,8543	0,3949	0,7998	2,1770	4,518	-99,375	678	48,2	61,8
-794	0,8836	0,4058	0,8022	2,5597	4,518	-99,250	680	56,7	62,4
-793	0,9130	0,4168	0,8046	2,9442	4,518	-99,125	681	65,2	63,2
-792	0,9423	0,4277	0,8070	3,3286	4,518	-99,000	682	73,7	64,4
-791	0,9717	0,4387	0,8094	3,4588	4,518	-98,875	684	76,6	66,5
-790	0,9990	0,4496	0,8119	3,3412	4,518	-98,750	685	73,9	69,5
-789	0,9696	0,4605	0,8143	3,1669	4,518	-98,625	686	70,1	72,4
-788	0,9403	0,4715	0,8167	2,9927	4,518	-98,500	688	66,2	75,0
-787	0,9109	0,4824	0,8191	3,0728	4,518	-98,375	689	68,0	76,5
-786	0,8816	0,4933	0,8215	3,3986	4,518	-98,250	690	75,2	76,8
-785	0,8522	0,5043	0,8239	3,7243	4,518	-98,125	692	82,4	76,4
-784	0,8228	0,5152	0,8264	4,0331	4,518	-98,000	693	89,3	75,6
-783	0,7935	0,5261	0,8288	3,9210	4,518	-97,875	694	86,8	75,0
-782	0,7641	0,5371	0,8312	3,5632	4,518	-97,750	696	78,9	74,6
-781	0,7348	0,5480	0,8336	3,2054	4,518	-97,625	697	70,9	73,7
-780	0,7054	0,5589	0,8360	2,8477	4,518	-97,500	699	63,0	72,3
-779	0,6761	0,5699	0,8384	2,7443	4,518	-97,375	700	60,7	69,9
-778	0,6467	0,5808	0,8409	2,8865	4,518	-97,250	701	63,9	66,9

Table 5. Page 10a

A	B	C	D	E	F	G	H	I
-777	702,59	704,61	693,01	684,97	753,05	790,22	0,6272	0,3492
-776	703,94	704,61	693,01	684,97	753,05	790,22	0,8772	0,2574
-775	705,30	704,61	693,01	684,97	753,05	790,22	0,8728	0,1656
-774	706,65	704,61	693,01	684,97	753,05	790,22	0,6228	0,0739
-773	708,00	704,61	722,46	684,97	753,05	790,22	0,3728	0,0179
-772	709,35	704,61	722,46	684,97	753,05	790,22	0,1228	0,1097
-771	710,70	715,42	722,46	684,97	753,05	790,22	0,1272	0,2014
-770	712,05	715,42	722,46	684,97	753,05	790,22	0,3772	0,2932
-769	713,40	715,42	722,46	684,97	753,05	790,22	0,6272	0,3849
-768	714,76	715,42	722,46	684,97	753,05	790,22	0,8772	0,4767
-767	716,11	715,42	722,46	684,97	753,05	790,22	0,8728	0,5685
-766	717,46	715,42	722,46	684,97	753,05	790,22	0,6228	0,6602
-765	718,81	715,42	722,46	684,97	753,05	790,22	0,3728	0,7520
-764	720,16	715,42	722,46	684,97	753,05	790,22	0,1228	0,8438
-763	721,51	726,23	722,46	684,97	753,05	790,22	0,1272	0,9355
-762	722,87	726,23	722,46	684,97	753,05	790,22	0,3772	0,9727
-761	724,22	726,23	722,46	684,97	753,05	790,22	0,6272	0,8810
-760	725,57	726,23	722,46	684,97	753,05	790,22	0,8772	0,7892
-759	726,92	726,23	722,46	684,97	753,05	790,22	0,8728	0,6974
-758	728,27	726,23	722,46	684,97	753,05	790,22	0,6228	0,6057
-757	729,62	726,23	722,46	684,97	753,05	790,22	0,3728	0,5139
-756	730,98	726,23	722,46	684,97	753,05	790,22	0,1228	0,4221
-755	732,33	737,05	722,46	777,06	753,05	790,22	0,1272	0,3304
-754	733,68	737,05	722,46	777,06	753,05	790,22	0,3772	0,2386
-753	735,03	737,05	722,46	777,06	753,05	790,22	0,6272	0,1469
-752	736,38	737,05	722,46	777,06	753,05	790,22	0,8772	0,0551
-751	737,73	737,05	751,92	777,06	753,05	790,22	0,8728	0,0367
-750	739,08	737,05	751,92	777,06	753,05	790,22	0,6228	0,1284
-749	740,44	737,05	751,92	777,06	753,05	790,22	0,3728	0,2202
-748	741,79	737,05	751,92	777,06	753,05	790,22	0,1228	0,3119

Table 5. Page 10b

A	J	K	L	M	N	O	P	Q	R
-777	0,6174	0,5917	0,8433	3,0287	4,518	-97,125	703	67,0	64,0
-776	0,5880	0,6027	0,8457	3,1710	4,518	-97,000	704	70,2	61,5
-775	0,5587	0,6136	0,8481	3,0589	4,518	-96,875	705	67,7	60,1
-774	0,5293	0,6246	0,8505	2,7011	4,518	-96,750	707	59,8	59,8
-773	0,5000	0,6355	0,8529	2,3791	4,518	-96,625	708	52,7	59,9
-772	0,4706	0,6464	0,8554	2,2049	4,518	-96,500	709	48,8	60,5
-771	0,4413	0,6574	0,8578	2,2850	4,518	-96,375	711	50,6	60,9
-770	0,4119	0,6683	0,8602	2,6108	4,518	-96,250	712	57,8	61,2
-769	0,3825	0,6792	0,8626	2,9365	4,518	-96,125	713	65,0	61,9
-768	0,3532	0,6902	0,8650	3,2623	4,518	-96,000	715	72,2	62,9
-767	0,3238	0,7011	0,8675	3,3337	4,518	-95,875	716	73,8	64,6
-766	0,2945	0,7120	0,8699	3,1594	4,518	-95,750	717	69,9	66,8
-765	0,2651	0,7230	0,8723	2,9852	4,518	-95,625	719	66,1	68,5
-764	0,2358	0,7339	0,8747	2,8110	4,518	-95,500	720	62,2	69,7
-763	0,2064	0,7448	0,8771	2,8911	4,518	-95,375	722	64,0	69,9
-762	0,1771	0,7558	0,8795	3,1623	4,518	-95,250	723	70,0	69,0
-761	0,1477	0,7667	0,8820	3,3045	4,518	-95,125	724	73,1	67,7
-760	0,1184	0,7777	0,8844	3,4468	4,518	-95,000	726	76,3	65,9
-759	0,0890	0,7886	0,8868	3,3347	4,518	-94,875	727	73,8	64,5
-758	0,0597	0,7995	0,8892	2,9769	4,518	-94,750	728	65,9	63,3
-757	0,0303	0,8105	0,8916	2,6191	4,518	-94,625	730	58,0	61,9
-756	0,0010	0,8214	0,8940	2,2614	4,518	-94,500	731	50,0	60,7
-755	0,0284	0,8323	0,8965	2,2148	4,518	-94,375	732	49,0	59,3
-754	0,0578	0,8433	0,8989	2,4157	4,518	-94,250	734	53,5	57,7
-753	0,0871	0,8542	0,9013	2,6166	4,518	-94,125	735	57,9	56,8
-752	0,1165	0,8651	0,9037	2,8176	4,518	-94,000	736	62,4	56,5
-751	0,1458	0,8761	0,9061	2,8375	4,518	-93,875	738	62,8	57,4
-750	0,1752	0,8870	0,9085	2,7220	4,518	-93,750	739	60,2	59,4
-749	0,2045	0,8979	0,9110	2,6064	4,518	-93,625	740	57,7	61,8
-748	0,2339	0,9089	0,9134	2,4909	4,518	-93,500	742	55,1	64,7

Table 5. Page 11a

A	B	C	D	E	F	G	H	I
-747	743,14	747,86	751,92	777,06	753,05	790,22	0,1272	0,4037
-746	744,49	747,86	751,92	777,06	753,05	790,22	0,3772	0,4955
-745	745,84	747,86	751,92	777,06	753,05	790,22	0,6272	0,5872
-744	747,19	747,86	751,92	777,06	753,05	790,22	0,8772	0,6790
-743	748,55	747,86	751,92	777,06	753,05	790,22	0,8728	0,7708
-742	749,90	747,86	751,92	777,06	753,05	790,22	0,6228	0,8625
-741	751,25	747,86	751,92	777,06	753,05	790,22	0,3728	0,9543
-740	752,60	747,86	751,92	777,06	753,05	790,22	0,1228	0,9540
-739	753,95	758,67	751,92	777,06	753,05	790,22	0,1272	0,8622
-738	755,30	758,67	751,92	777,06	753,05	790,22	0,3772	0,7704
-737	756,65	758,67	751,92	777,06	753,05	790,22	0,6272	0,6787
-736	758,01	758,67	751,92	777,06	753,05	790,22	0,8772	0,5869
-735	759,36	758,67	751,92	777,06	753,05	790,22	0,8728	0,4951
-734	760,71	758,67	751,92	777,06	753,05	790,22	0,6228	0,4034
-733	762,06	758,67	751,92	777,06	753,05	790,22	0,3728	0,3116
-732	763,41	758,67	751,92	777,06	753,05	790,22	0,1228	0,2199
-731	764,76	769,48	751,92	777,06	753,05	790,22	0,1272	0,1281
-730	766,12	769,48	751,92	777,06	753,05	790,22	0,3772	0,0363
-729	767,47	769,48	781,38	777,06	753,05	790,22	0,6272	0,0554
-728	768,82	769,48	781,38	777,06	753,05	790,22	0,8772	0,1472
-727	770,17	769,48	781,38	777,06	753,05	790,22	0,8728	0,2390
-726	771,52	769,48	781,38	777,06	753,05	790,22	0,6228	0,3307
-725	772,87	769,48	781,38	777,06	753,05	790,22	0,3728	0,4225
-724	774,23	769,48	781,38	777,06	753,05	790,22	0,1228	0,5142
-723	775,58	780,30	781,38	777,06	753,05	790,22	0,1272	0,6060
-722	776,93	780,30	781,38	777,06	753,05	790,22	0,3772	0,6978
-721	778,28	780,30	781,38	777,06	753,05	790,22	0,6272	0,7895
-720	779,63	780,30	781,38	777,06	753,05	790,22	0,8772	0,8813
-719	780,98	780,30	781,38	777,06	753,05	790,22	0,8728	0,9731
-718	782,33	780,30	781,38	777,06	753,05	790,22	0,6228	0,9352

Table 5. Page 11b

A	J	K	L	M	N	O	P	Q	R
-747	0,2632	0,9198	0,9158	2,6297	4,518	-93,375	743	58,2	67,4
-746	0,2926	0,9307	0,9182	3,0142	4,518	-93,250	744	66,7	69,7
-745	0,3219	0,9417	0,9206	3,3987	4,518	-93,125	746	75,2	72,1
-744	0,3513	0,9526	0,9231	3,7831	4,518	-93,000	747	83,7	74,2
-743	0,3806	0,9636	0,9255	3,9132	4,518	-92,875	749	86,6	76,5
-742	0,4100	0,9745	0,9279	3,7977	4,518	-92,750	750	84,1	78,9
-741	0,4393	0,9854	0,9303	3,6822	4,518	-92,625	751	81,5	80,7
-740	0,4687	0,9964	0,9327	3,4746	4,518	-92,500	753	76,9	82,1
-739	0,4981	0,9927	0,9351	3,4153	4,518	-92,375	754	75,6	82,3
-738	0,5274	0,9818	0,9376	3,5943	4,518	-92,250	755	79,6	81,5
-737	0,5568	0,9708	0,9400	3,7734	4,518	-92,125	757	83,5	80,1
-736	0,5861	0,9599	0,9424	3,9525	4,518	-92,000	758	87,5	78,2
-735	0,6155	0,9490	0,9448	3,8772	4,518	-91,875	759	85,8	76,6
-734	0,6448	0,9380	0,9472	3,5563	4,518	-91,750	761	78,7	75,7
-733	0,6742	0,9271	0,9496	3,2353	4,518	-91,625	762	71,6	75,0
-732	0,7035	0,9162	0,9521	2,9144	4,518	-91,500	763	64,5	74,8
-731	0,7329	0,9052	0,9545	2,8478	4,518	-91,375	765	63,0	74,4
-730	0,7622	0,8943	0,9569	3,0269	4,518	-91,250	766	67,0	73,8
-729	0,7916	0,8833	0,9593	3,3169	4,518	-91,125	767	73,4	73,7
-728	0,8209	0,8724	0,9617	3,6795	4,518	-91,000	769	81,4	74,1
-727	0,8503	0,8615	0,9641	3,7877	4,518	-90,875	770	83,8	75,5
-726	0,8796	0,8505	0,9666	3,6503	4,518	-90,750	772	80,8	77,9
-725	0,9090	0,8396	0,9690	3,5129	4,518	-90,625	773	77,7	80,7
-724	0,9383	0,8287	0,9714	3,3755	4,518	-90,500	774	74,7	83,6
-723	0,9677	0,8177	0,9738	3,4924	4,518	-90,375	776	77,3	85,6
-722	0,9971	0,8068	0,9762	3,8550	4,518	-90,250	777	85,3	86,6
-721	0,9736	0,7959	0,9787	4,1648	4,518	-90,125	778	92,2	87,0
-720	0,9442	0,7849	0,9811	4,4687	4,518	-90,000	780	98,9	86,8
-719	0,9149	0,7740	0,9835	4,5182	4,518	-89,875	781	100,0	86,7
-718	0,8855	0,7631	0,9859	4,1925	4,518	-89,750	782	92,8	86,5

Table 5. Page 12a

A	B	C	D	E	F	G	H	I
-717	783,69	780,30	781,38	777,06	753,05	790,22	0,3728	0,8434
-716	785,04	780,30	781,38	777,06	753,05	790,22	0,1228	0,7517
-715	786,39	791,11	781,38	777,06	753,05	790,22	0,1272	0,6599
-714	787,74	791,11	781,38	777,06	753,05	790,22	0,3772	0,5681
-713	789,09	791,11	781,38	777,06	753,05	790,22	0,6272	0,4764
-712	790,44	791,11	781,38	**790,22**	753,05	790,22	0,8772	0,3846
-711	791,80	791,11	781,38	790,22	753,05	790,22	0,8728	0,2928
-710	793,15	791,11	781,38	790,22	753,05	790,22	0,6228	0,2011
-709	794,50	791,11	781,38	790,22	753,05	790,22	0,3728	0,1093
-708	795,85	791,11	781,38	790,22	753,05	790,22	0,1228	0,0176
-707	797,20	801,92	810,84	790,22	753,05	790,22	0,1272	0,0742
-706	798,55	801,92	810,84	790,22	753,05	790,22	0,3772	0,1660
-705	799,91	801,92	810,84	790,22	753,05	790,22	0,6272	0,2577
-704	801,26	801,92	810,84	790,22	753,05	790,22	0,8772	0,3495
-703	802,61	801,92	810,84	790,22	753,05	790,22	0,8728	0,4413
-702	803,96	801,92	810,84	790,22	753,05	790,22	0,6228	0,5330
-701	805,31	801,92	810,84	790,22	753,05	790,22	0,3728	0,6248
-700	806,66	801,92	810,84	790,22	753,05	790,22	0,1228	0,7165
-699	808,01	812,73	810,84	790,22	753,05	790,22	0,1272	0,8083
-698	809,37	812,73	810,84	790,22	753,05	790,22	0,3772	0,9001
-697	810,72	812,73	810,84	790,22	753,05	790,22	0,6272	0,9918
-696	812,07	812,73	810,84	790,22	753,05	790,22	0,8772	0,9164
-695	813,42	812,73	810,84	790,22	753,05	790,22	0,8728	0,8246
-694	814,77	812,73	810,84	790,22	753,05	790,22	0,6228	0,7329
-693	816,12	812,73	810,84	790,22	753,05	790,22	0,3728	0,6411
-692	817,48	812,73	810,84	790,22	753,05	790,22	0,1228	0,5494
-691	818,83	823,55	810,84	790,22	753,05	790,22	0,1272	0,4576
-690	820,18	823,55	810,84	790,22	753,05	790,22	0,3772	0,3658
-689	821,53	823,55	810,84	790,22	753,05	790,22	0,6272	0,2741
-688	822,88	823,55	810,84	790,22	753,05	790,22	0,8772	0,1823

Table 5. Page 12b

A	J	K	L	M	N	O	P	Q	R
-717	0,8562	0,7521	0,9883	3,8129	4,518	-89,625	784	84,4	85,8
-716	0,8268	0,7412	0,9907	3,4332	4,518	-89,500	785	76,0	85,2
-715	0,7975	0,7303	0,9932	3,3079	4,518	-89,375	786	73,2	83,6
-714	0,7681	0,7193	0,9956	3,4283	4,518	-89,250	788	75,9	81,0
-713	0,7388	0,7084	0,9980	3,5487	4,518	-89,125	789	78,5	78,1
-712	0,9951	0,6974	0,9996	3,9539	4,518	-89,000	790	87,5	75,3
-711	0,9657	0,6865	0,9972	3,8151	4,518	-88,875	792	84,4	73,5
-710	0,9364	0,6756	0,9948	3,4306	4,518	-88,750	793	75,9	72,7
-709	0,9070	0,6646	0,9923	3,0461	4,518	-88,625	794	67,4	72,3
-708	0,8777	0,6537	0,9899	2,6617	4,518	-88,500	796	58,9	72,4
-707	0,8483	0,6428	0,9875	2,6800	4,518	-88,375	797	59,3	71,5
-706	0,8189	0,6318	0,9851	2,9790	4,518	-88,250	799	65,9	70,6
-705	0,7896	0,6209	0,9827	3,2781	4,518	-88,125	800	72,6	70,0
-704	0,7602	0,6100	0,9803	3,5771	4,518	-88,000	801	79,2	70,0
-703	0,7309	0,5990	0,9778	3,6218	4,518	-87,875	803	80,2	71,0
-702	0,7015	0,5881	0,9754	3,4209	4,518	-87,750	804	75,7	72,7
-701	0,6722	0,5772	0,9730	3,2199	4,518	-87,625	805	71,3	74,4
-700	0,6428	0,5662	0,9706	3,0190	4,518	-87,500	807	66,8	75,7
-699	0,6135	0,5553	0,9682	3,0724	4,518	-87,375	808	68,0	75,9
-698	0,5841	0,5443	0,9658	3,3715	4,518	-87,250	809	74,6	75,1
-697	0,5548	0,5334	0,9633	3,6705	4,518	-87,125	811	81,2	73,8
-696	0,5254	0,5225	0,9609	3,8024	4,518	-87,000	812	84,2	72,0
-695	0,4961	0,5115	0,9585	3,6636	4,518	-86,875	813	81,1	70,4
-694	0,4667	0,5006	0,9561	3,2791	4,518	-86,750	815	72,6	69,0
-693	0,4374	0,4897	0,9537	2,8946	4,518	-86,625	816	64,1	67,2
-692	0,4080	0,4787	0,9512	2,5102	4,518	-86,500	817	55,6	64,8
-691	0,3786	0,4678	0,9488	2,3801	4,518	-86,375	819	52,7	61,8
-690	0,3493	0,4569	0,9464	2,4956	4,518	-86,250	820	55,2	58,3
-689	0,3199	0,4459	0,9440	2,6111	4,518	-86,125	822	57,8	55,1
-688	0,2906	0,4350	0,9416	2,7266	4,518	-86,000	823	60,3	52,4

Table 5. Page 13a

A	B	C	D	E	F	G	H	I
-687	824,23	823,55	810,84	790,22	753,05	790,22	0,8728	0,0905
-686	825,58	823,55	840,30	790,22	753,05	790,22	0,6228	0,0012
-685	826,94	823,55	840,30	790,22	753,05	790,22	0,3728	0,0930
-684	828,29	823,55	840,30	790,22	753,05	790,22	0,1228	0,1847
-683	829,64	834,36	840,30	790,22	753,05	790,22	0,1272	0,2765
-682	830,99	834,36	840,30	790,22	753,05	790,22	0,3772	0,3683
-681	832,34	834,36	840,30	790,22	753,05	790,22	0,6272	0,4600
-680	833,69	834,36	840,30	790,22	753,05	790,22	0,8772	0,5518
-679	835,05	834,36	840,30	790,22	753,05	790,22	0,8728	0,6436
-678	836,40	834,36	840,30	882,31	753,05	790,22	0,6228	0,7353
-677	837,75	834,36	840,30	882,31	753,05	790,22	0,3728	0,8271
-676	839,10	834,36	840,30	882,31	753,05	790,22	0,1228	0,9188
-675	840,45	845,17	840,30	882,31	753,05	790,22	0,1272	0,9894
-674	841,80	845,17	840,30	882,31	753,05	790,22	0,3772	0,8976
-673	843,16	845,17	840,30	882,31	753,05	790,22	0,6272	0,8059
-672	844,51	845,17	840,30	882,31	753,05	790,22	0,8772	0,7141
-671	845,86	845,17	840,30	882,31	753,05	790,22	0,8728	0,6223
-670	847,21	845,17	840,30	882,31	753,05	790,22	0,6228	0,5306
-669	848,56	845,17	840,30	882,31	753,05	790,22	0,3728	0,4388
-668	849,91	845,17	840,30	882,31	753,05	790,22	0,1228	0,3471
-667	851,26	855,98	840,30	882,31	753,05	790,22	0,1272	0,2553
-666	852,62	855,98	840,30	882,31	753,05	790,22	0,3772	0,1635
-665	853,97	855,98	840,30	882,31	753,05	790,22	0,6272	0,0718
-664	855,32	855,98	869,75	882,31	753,05	790,22	0,8772	0,0200
-663	856,67	855,98	869,75	882,31	753,05	790,22	0,8728	0,1117
-662	858,02	855,98	869,75	882,31	753,05	790,22	0,6228	0,2035
-661	859,37	855,98	869,75	882,31	753,05	790,22	0,3728	0,2953
-660	860,73	855,98	869,75	882,31	753,05	790,22	0,1228	0,3870
-659	862,08	866,80	869,75	882,31	753,05	790,22	0,1272	0,4788
-658	863,43	866,80	869,75	882,31	753,05	790,22	0,3772	0,5706

Table 5. Page 13b

A	J	K	L	M	N	O	P	Q	R
-687	0,2612	0,4241	0,9392	2,5878	4,518	-85,875	824	57,3	50,8
-686	0,2319	0,4131	0,9367	2,2058	4,518	-85,750	826	48,8	50,3
-685	0,2025	0,4022	0,9343	2,0048	4,518	-85,625	827	44,4	50,2
-684	0,1732	0,3913	0,9319	1,8039	4,518	-85,500	828	39,9	50,5
-683	0,1438	0,3803	0,9295	1,8573	4,518	-85,375	830	41,1	50,7
-682	0,1145	0,3694	0,9271	2,1564	4,518	-85,250	831	47,7	50,8
-681	0,0851	0,3584	0,9247	2,4554	4,518	-85,125	832	54,3	51,4
-680	0,0558	0,3475	0,9222	2,7545	4,518	-85,000	834	61,0	52,2
-679	0,0264	0,3366	0,9198	2,7992	4,518	-84,875	835	62,0	53,7
-678	0,0029	0,3256	0,9174	2,6041	4,518	-84,750	836	57,6	55,4
-677	0,0323	0,3147	0,9150	2,4619	4,518	-84,625	838	54,5	56,9
-676	0,0617	0,3038	0,9126	2,3197	4,518	-84,500	839	51,3	58,1
-675	0,0910	0,2928	0,9102	2,4106	4,518	-84,375	840	53,4	58,3
-674	0,1204	0,2819	0,9077	2,5848	4,518	-84,250	842	57,2	57,7
-673	0,1497	0,2710	0,9053	2,7590	4,518	-84,125	843	61,1	56,7
-672	0,1791	0,2600	0,9029	2,9333	4,518	-84,000	845	64,9	55,2
-671	0,2084	0,2491	0,9005	2,8532	4,518	-83,875	846	63,1	54,0
-670	0,2378	0,2382	0,8981	2,5274	4,518	-83,750	847	55,9	52,9
-669	0,2671	0,2272	0,8956	2,2016	4,518	-83,625	849	48,7	51,9
-668	0,2965	0,2163	0,8932	1,8759	4,518	-83,500	850	41,5	50,9
-667	0,3258	0,2054	0,8908	1,8045	4,518	-83,375	851	39,9	49,8
-666	0,3552	0,1944	0,8884	1,9787	4,518	-83,250	853	43,8	48,5
-665	0,3845	0,1835	0,8860	2,1530	4,518	-83,125	854	47,7	47,6
-664	0,4139	0,1725	0,8836	2,3672	4,518	-83,000	855	52,4	47,2
-663	0,4432	0,1616	0,8811	2,4706	4,518	-82,875	857	54,7	47,9
-662	0,4726	0,1507	0,8787	2,3283	4,518	-82,750	858	51,5	49,7
-661	0,5020	0,1397	0,8763	2,1861	4,518	-82,625	859	48,4	51,9
-660	0,5313	0,1288	0,8739	2,0439	4,518	-82,500	861	45,2	54,5
-659	0,5607	0,1179	0,8715	2,1560	4,518	-82,375	862	47,7	56,9
-658	0,5900	0,1069	0,8691	2,5137	4,518	-82,250	863	55,6	58,7

Table 5. Page 14a

A	B	C	D	E	F	G	H	I
-657	864,78	866,80	869,75	882,31	753,05	790,22	0,6272	0,6623
-656	866,13	866,80	869,75	882,31	753,05	790,22	0,8772	0,7541
-655	867,48	866,80	869,75	882,31	753,05	790,22	0,8728	0,8458
-654	868,84	866,80	869,75	882,31	753,05	790,22	0,6228	0,9376
-653	870,19	866,80	869,75	882,31	753,05	790,22	0,3728	0,9706
-652	871,54	866,80	869,75	882,31	753,05	790,22	0,1228	0,8789
-651	872,89	877,61	869,75	882,31	753,05	790,22	0,1272	0,7871
-650	874,24	877,61	869,75	882,31	753,05	790,22	0,3772	0,6953
-649	875,59	877,61	869,75	882,31	753,05	790,22	0,6272	0,6036
-648	876,94	877,61	869,75	882,31	1000,24	790,22	0,8772	0,5118
-647	878,30	877,61	869,75	882,31	1000,24	790,22	0,8728	0,4201
-646	879,65	877,61	869,75	882,31	1000,24	790,22	0,6228	0,3283
-645	881,00	877,61	869,75	882,31	1000,24	790,22	0,3728	0,2365
-644	882,35	877,61	869,75	882,31	1000,24	790,22	0,1228	0,1448
-643	883,70	888,42	869,75	882,31	1000,24	790,22	0,1272	0,0530
-642	885,05	888,42	899,21	882,31	1000,24	790,22	0,3772	0,0388
-641	886,41	888,42	899,21	882,31	1000,24	790,22	0,6272	0,1305
-640	887,76	888,42	899,21	882,31	1000,24	790,22	0,8772	0,2223
-639	889,11	888,42	899,21	882,31	1000,24	790,22	0,8728	0,3140
-638	890,46	888,42	899,21	882,31	1000,24	790,22	0,6228	0,4058
-637	891,81	888,42	899,21	882,31	1000,24	790,22	0,3728	0,4976
-636	893,16	888,42	899,21	882,31	1000,24	790,22	0,1228	0,5893
-635	894,51	899,23	899,21	882,31	1000,24	790,22	0,1272	0,6811
-634	895,87	899,23	899,21	882,31	1000,24	790,22	0,3772	0,7729
-633	897,22	899,23	899,21	882,31	1000,24	790,22	0,6272	0,8646
-632	898,57	899,23	899,21	882,31	1000,24	790,22	0,8772	0,9564
-631	899,92	899,23	899,21	882,31	1000,24	790,22	0,8728	0,9519
-630	901,27	899,23	899,21	882,31	1000,24	790,22	0,6228	0,8601
-629	902,62	899,23	899,21	882,31	1000,24	790,22	0,3728	0,7683
-628	903,98	899,23	899,21	882,31	1000,24	790,22	0,1228	0,6766

Table 5. Page 14b

A	J	K	L	M	N	O	P	Q	R
-657	0,6194	0,0960	0,8666	2,8715	4,518	-82,125	865	63,6	60,3
-656	0,6487	0,0851	0,8642	3,2293	4,518	-82,000	866	71,5	61,5
-655	0,6781	0,0741	0,8618	3,3327	4,518	-81,875	867	73,8	62,8
-654	0,7074	0,0632	0,8594	3,1904	4,518	-81,750	869	70,6	64,3
-653	0,7368	0,0523	0,8570	2,9895	4,518	-81,625	870	66,2	65,4
-652	0,7661	0,0413	0,8546	2,6637	4,518	-81,500	872	59,0	66,0
-651	0,7955	0,0304	0,8521	2,5923	4,518	-81,375	873	57,4	65,6
-650	0,8248	0,0194	0,8497	2,7665	4,518	-81,250	874	61,2	64,1
-649	0,8542	0,0085	0,8473	2,9408	4,518	-81,125	876	65,1	62,3
-648	0,8835	0,0024	0,8449	3,1198	4,518	-81,000	877	69,1	60,3
-647	0,9129	0,0134	0,8425	3,0616	4,518	-80,875	878	67,8	58,7
-646	0,9423	0,0243	0,8400	2,7577	4,518	-80,750	880	61,0	57,9
-645	0,9716	0,0352	0,8376	2,4538	4,518	-80,625	881	54,3	57,4
-644	0,9990	0,0462	0,8352	2,1480	4,518	-80,500	882	47,5	57,3
-643	0,9697	0,0571	0,8328	2,0398	4,518	-80,375	884	45,1	56,9
-642	0,9403	0,0680	0,8304	2,2547	4,518	-80,250	885	49,9	56,2
-641	0,9110	0,0790	0,8280	2,5756	4,518	-80,125	886	57,0	55,9
-640	0,8816	0,0899	0,8255	2,8965	4,518	-80,000	888	64,1	55,8
-639	0,8523	0,1008	0,8231	2,9631	4,518	-79,875	889	65,6	56,7
-638	0,8229	0,1118	0,8207	2,7840	4,518	-79,750	890	61,6	58,6
-637	0,7936	0,1227	0,8183	2,6050	4,518	-79,625	892	57,7	60,8
-636	0,7642	0,1336	0,8159	2,4259	4,518	-79,500	893	53,7	63,0
-635	0,7349	0,1446	0,8135	2,5012	4,518	-79,375	895	55,4	64,3
-634	0,7055	0,1555	0,8110	2,8221	4,518	-79,250	896	62,5	64,6
-633	0,6762	0,1665	0,8086	3,1430	4,518	-79,125	897	69,6	64,4
-632	0,6468	0,1774	0,8062	3,4640	4,518	-79,000	899	76,7	63,7
-631	0,6174	0,1883	0,8038	3,4342	4,518	-78,875	900	76,0	63,3
-630	0,5881	0,1993	0,8014	3,0716	4,518	-78,750	901	68,0	63,0
-629	0,5587	0,2102	0,7990	2,7090	4,518	-78,625	903	60,0	62,2
-628	0,5294	0,2211	0,7965	2,3464	4,518	-78,500	904	51,9	61,0

Table 5. Page 15a

A	B	C	D	E	F	G	H	I
-627	905,33	910,05	899,21	882,31	1000,24	790,22	0,1272	0,5848
-626	906,68	910,05	899,21	882,31	1000,24	790,22	0,3772	0,4930
-625	908,03	910,05	899,21	882,31	1000,24	790,22	0,6272	0,4013
-624	909,38	910,05	899,21	882,31	1000,24	790,22	0,8772	0,3095
-623	910,73	910,05	899,21	882,31	1000,24	790,22	0,8728	0,2178
-622	912,09	910,05	899,21	882,31	1000,24	790,22	0,6228	0,1260
-621	913,44	910,05	899,21	882,31	1000,24	790,22	0,3728	0,0342
-620	914,79	910,05	928,67	882,31	1000,24	790,22	0,1228	0,0575
-619	916,14	920,86	928,67	882,31	1000,24	790,22	0,1272	0,1493
-618	917,49	920,86	928,67	882,31	1000,24	790,22	0,3772	0,2411
-617	918,84	920,86	928,67	882,31	1000,24	790,22	0,6272	0,3328
-616	920,19	920,86	928,67	882,31	1000,24	790,22	0,8772	0,4246
-615	921,55	920,86	928,67	882,31	1000,24	790,22	0,8728	0,5163
-614	922,90	920,86	928,67	882,31	1000,24	790,22	0,6228	0,6081
-613	924,25	920,86	928,67	882,31	1000,24	790,22	0,3728	0,6999
-612	925,60	920,86	928,67	882,31	1000,24	790,22	0,1228	0,7916
-611	926,95	931,67	928,67	882,31	1000,24	790,22	0,1272	0,8834
-610	928,30	931,67	928,67	882,31	1000,24	790,22	0,3772	0,9752
-609	929,66	931,67	928,67	974,40	1000,24	790,22	0,6272	0,9331
-608	931,01	931,67	928,67	974,40	1000,24	790,22	0,8772	0,8413
-607	932,36	931,67	928,67	974,40	1000,24	790,22	0,8728	0,7496
-606	933,71	931,67	928,67	974,40	1000,24	790,22	0,6228	0,6578
-605	935,06	931,67	928,67	974,40	1000,24	790,22	0,3728	0,5660
-604	936,41	931,67	928,67	974,40	1000,24	790,22	0,1228	0,4743
-603	937,76	942,48	928,67	974,40	1000,24	790,22	0,1272	0,3825
-602	939,12	942,48	928,67	974,40	1000,24	790,22	0,3772	0,2907
-601	940,47	942,48	928,67	974,40	1000,24	790,22	0,6272	0,1990
-600	941,82	942,48	928,67	974,40	1000,24	790,22	0,8772	0,1072
-599	943,17	942,48	928,67	974,40	1000,24	790,22	0,8728	0,0155
-598	944,52	942,48	958,13	974,40	1000,24	790,22	0,6228	0,0763

Table 5. Page 15b

A	J	K	L	M	N	O	P	Q	R
-627	0,5000	0,2321	0,7941	2,2382	4,518	-78,375	905	49,5	58,7
-626	0,4707	0,2430	0,7917	2,3756	4,518	-78,250	907	52,6	55,6
-625	0,4413	0,2539	0,7893	2,5130	4,518	-78,125	908	55,6	52,5
-624	0,4120	0,2649	0,7869	2,6504	4,518	-78,000	909	58,7	49,7
-623	0,3826	0,2758	0,7845	2,5335	4,518	-77,875	911	56,1	47,9
-622	0,3533	0,2867	0,7820	2,1709	4,518	-77,750	912	48,0	47,2
-621	0,3239	0,2977	0,7796	1,8083	4,518	-77,625	913	40,0	47,0
-620	0,2946	0,3086	0,7772	1,5607	4,518	-77,500	915	34,5	47,2
-619	0,2652	0,3196	0,7748	1,6360	4,518	-77,375	916	36,2	47,2
-618	0,2359	0,3305	0,7724	1,9569	4,518	-77,250	917	43,3	47,1
-617	0,2065	0,3414	0,7699	2,2779	4,518	-77,125	919	50,4	47,5
-616	0,1771	0,3524	0,7675	2,5988	4,518	-77,000	920	57,5	48,2
-615	0,1478	0,3633	0,7651	2,6654	4,518	-76,875	922	59,0	49,8
-614	0,1184	0,3742	0,7627	2,4863	4,518	-76,750	923	55,0	52,0
-613	0,0891	0,3852	0,7603	2,3072	4,518	-76,625	924	51,1	54,0
-612	0,0597	0,3961	0,7579	2,1281	4,518	-76,500	926	47,1	55,7
-611	0,0304	0,4070	0,7554	2,2034	4,518	-76,375	927	48,8	56,4
-610	0,0010	0,4180	0,7530	2,5244	4,518	-76,250	928	55,9	56,3
-609	0,0283	0,4289	0,7506	2,7681	4,518	-76,125	930	61,3	55,8
-608	0,0577	0,4398	0,7482	2,9642	4,518	-76,000	931	65,6	55,1
-607	0,0870	0,4508	0,7458	2,9060	4,518	-75,875	932	64,3	54,6
-606	0,1164	0,4617	0,7434	2,6021	4,518	-75,750	934	57,6	54,5
-605	0,1457	0,4726	0,7409	2,2982	4,518	-75,625	935	50,9	54,0
-604	0,1751	0,4836	0,7385	1,9943	4,518	-75,500	936	44,1	53,4
-603	0,2044	0,4945	0,7361	1,9448	4,518	-75,375	938	43,0	52,2
-602	0,2338	0,5055	0,7337	2,1409	4,518	-75,250	939	47,4	50,8
-601	0,2632	0,5164	0,7313	2,3370	4,518	-75,125	940	51,7	49,8
-600	0,2925	0,5273	0,7289	2,5331	4,518	-75,000	942	56,1	49,3
-599	0,3219	0,5383	0,7264	2,4748	4,518	-74,875	943	54,8	49,8
-598	0,3512	0,5492	0,7240	2,3235	4,518	-74,750	945	51,4	51,4

Table 5. Page 16a

A	B	C	D	E	F	G	H	I
-597	945,87	942,48	958,13	974,40	1000,24	790,22	0,3728	0,1681
-596	947,23	942,48	958,13	974,40	1000,24	790,22	0,1228	0,2598
-595	948,58	953,30	958,13	974,40	1000,24	790,22	0,1272	0,3516
-594	949,93	953,30	958,13	974,40	1000,24	790,22	0,3772	0,4434
-593	951,28	953,30	958,13	974,40	1000,24	790,22	0,6272	0,5351
-592	952,63	953,30	958,13	974,40	1000,24	790,22	0,8772	0,6269
-591	953,98	953,30	958,13	974,40	1000,24	790,22	0,8728	0,7186
-590	955,34	953,30	958,13	974,40	1000,24	790,22	0,6228	0,8104
-589	956,69	953,30	958,13	974,40	1000,24	790,22	0,3728	0,9022
-588	958,04	953,30	958,13	974,40	1000,24	790,22	0,1228	0,9939
-587	959,39	964,11	958,13	974,40	1000,24	790,22	0,1272	0,9143
-586	960,74	964,11	958,13	974,40	1000,24	790,22	0,3772	0,8226
-585	962,09	964,11	958,13	974,40	1000,24	790,22	0,6272	0,7308
-584	963,44	964,11	958,13	974,40	1000,24	790,22	0,8772	0,6390
-583	964,80	964,11	958,13	974,40	1000,24	790,22	0,8728	0,5473
-582	966,15	964,11	958,13	974,40	1000,24	790,22	0,6228	0,4555
-581	967,50	964,11	958,13	974,40	1000,24	790,22	0,3728	0,3637
-580	968,85	964,11	958,13	974,40	1000,24	790,22	0,1228	0,2720
-579	970,20	974,92	958,13	974,40	1000,24	790,22	0,1272	0,1802
-578	971,55	974,92	958,13	974,40	1000,24	790,22	0,3772	0,0885
-577	972,91	974,92	987,59	974,40	1000,24	790,22	0,6272	0,0033
-576	974,26	974,92	987,59	974,40	1000,24	790,22	0,8772	0,0951
-575	975,61	974,92	987,59	974,40	1000,24	790,22	0,8728	0,1868
-574	976,96	974,92	987,59	974,40	1000,24	790,22	0,6228	0,2786
-573	978,31	974,92	987,59	974,40	1000,24	790,22	0,3728	0,3704
-572	979,66	974,92	987,59	974,40	1000,24	790,22	0,1228	0,4621
-571	981,02	985,73	987,59	974,40	1000,24	790,22	0,1272	0,5539
-570	982,37	985,73	987,59	974,40	1000,24	790,22	0,3772	0,6456
-569	983,72	985,73	987,59	974,40	1000,24	790,22	0,6272	0,7374
-568	985,07	985,73	987,59	974,40	1000,24	790,22	0,8772	0,8292

Table 5. Page 16b

A	J	K	L	M	N	O	P	Q	R
-597	0,3806	0,5601	0,7216	2,2032	4,518	-74,625	946	48,8	53,5
-596	0,4099	0,5711	0,7192	2,0828	4,518	-74,500	947	46,1	56,0
-595	0,4393	0,5820	0,7168	2,2168	4,518	-74,375	949	49,1	58,3
-594	0,4686	0,5929	0,7143	2,5964	4,518	-74,250	950	57,5	60,5
-593	0,4980	0,6039	0,7119	2,9761	4,518	-74,125	951	65,9	62,7
-592	0,5273	0,6148	0,7095	3,3557	4,518	-74,000	953	74,3	65,0
-591	0,5567	0,6257	0,7071	3,4810	4,518	-73,875	954	77,0	67,5
-590	0,5860	0,6367	0,7047	3,3606	4,518	-73,750	955	74,4	70,1
-589	0,6154	0,6476	0,7023	3,2402	4,518	-73,625	957	71,7	72,2
-588	0,6447	0,6586	0,6998	3,1199	4,518	-73,500	958	69,1	73,9
-587	0,6741	0,6695	0,6974	3,0825	4,518	-73,375	959	68,2	74,6
-586	0,7035	0,6804	0,6950	3,2786	4,518	-73,250	961	72,6	74,1
-585	0,7328	0,6914	0,6926	3,4747	4,518	-73,125	962	76,9	73,3
-584	0,7622	0,7023	0,6902	3,6708	4,518	-73,000	963	81,2	71,9
-583	0,7915	0,7132	0,6878	3,6126	4,518	-72,875	965	80,0	70,8
-582	0,8209	0,7242	0,6853	3,3087	4,518	-72,750	966	73,2	70,2
-581	0,8502	0,7351	0,6829	3,0048	4,518	-72,625	967	66,5	69,6
-580	0,8796	0,7460	0,6805	2,7009	4,518	-72,500	969	59,8	69,5
-579	0,9089	0,7570	0,6781	2,6514	4,518	-72,375	970	58,7	69,1
-578	0,9383	0,7679	0,6757	2,8475	4,518	-72,250	972	63,0	68,4
-577	0,9676	0,7788	0,6733	3,0502	4,518	-72,125	973	67,5	68,0
-576	0,9970	0,7898	0,6708	3,4298	4,518	-72,000	974	75,9	67,9
-575	0,9737	0,8007	0,6684	3,5024	4,518	-71,875	976	77,5	68,7
-574	0,9443	0,8116	0,6660	3,3234	4,518	-71,750	977	73,6	70,5
-573	0,9150	0,8226	0,6636	3,1443	4,518	-71,625	978	69,6	72,5
-572	0,8856	0,8335	0,6612	2,9652	4,518	-71,500	980	65,6	74,9
-571	0,8562	0,8445	0,6587	3,0405	4,518	-71,375	981	67,3	76,5
-570	0,8269	0,8554	0,6563	3,3614	4,518	-71,250	982	74,4	77,4
-569	0,7975	0,8663	0,6539	3,6824	4,518	-71,125	984	81,5	77,8
-568	0,7682	0,8773	0,6515	4,0033	4,518	-71,000	985	88,6	77,8

Table 5. Page 17a

A	B	C	D	E	F	G	H	I
-567	986,42	985,73	987,59	974,40	1000,24	790,22	0,8728	0,9209
-566	987,77	985,73	987,59	974,40	1000,24	790,22	0,6228	0,9873
-565	989,12	985,73	987,59	974,40	1000,24	790,22	0,3728	0,8955
-564	990,48	985,73	987,59	974,40	1000,24	790,22	0,1228	0,8038
-563	991,83	996,55	987,59	974,40	1000,24	790,22	0,1272	0,7120
-562	993,18	996,55	987,59	974,40	1000,24	790,22	0,3772	0,6203
-561	994,53	996,55	987,59	974,40	1000,24	790,22	0,6272	0,5285
-560	995,88	996,55	987,59	974,40	1000,24	790,22	0,8772	0,4367
-559	997,23	996,55	987,59	974,40	1000,24	790,22	0,8728	0,3450
-558	998,59	996,55	987,59	974,40	1000,24	790,22	0,6228	0,2532
-557	999,94	996,55	987,59	974,40	1000,24	790,22	0,3728	0,1614
-556	1001,29	996,55	987,59	974,40	1000,24	790,22	0,1228	0,0697
-555	1002,64	1007,36	1017,04	974,40	1000,24	790,22	0,1272	0,0221
-554	1003,99	1007,36	1017,04	974,40	1000,24	790,22	0,3772	0,1138
-553	1005,34	1007,36	1017,04	974,40	1000,24	790,22	0,6272	0,2056
-552	1006,69	1007,36	1017,04	974,40	1000,24	790,22	0,8772	0,2974
-551	1008,05	1007,36	1017,04	974,40	1000,24	790,22	0,8728	0,3891
-550	1009,40	1007,36	1017,04	974,40	1000,24	790,22	0,6228	0,4809
-549	1010,75	1007,36	1017,04	974,40	1000,24	790,22	0,3728	0,5727
-548	1012,10	1007,36	1017,04	974,40	1000,24	790,22	0,1228	0,6644
-547	1013,45	1018,17	1017,04	974,40	1000,24	790,22	0,1272	0,7562
-546	1014,80	1018,17	1017,04	974,40	1000,24	790,22	0,3772	0,8479
-545	1016,16	1018,17	1017,04	974,40	1000,24	790,22	0,6272	0,9397
-544	1017,51	1018,17	1017,04	974,40	1000,24	790,22	0,8772	0,9685
-543	1018,86	1018,17	1017,04	974,40	1000,24	790,22	0,8728	0,8768
-542	1020,21	1018,17	1017,04	974,40	1000,24	790,22	0,6228	0,7850
-541	1021,56	1018,17	1017,04	1066,49	1000,24	790,22	0,3728	0,6932
-540	1022,91	1018,17	1017,04	1066,49	1000,24	790,22	0,1228	0,6015
-539	1024,27	1028,98	1017,04	1066,49	1000,24	790,22	0,1272	0,5097
-538	1025,62	1028,98	1017,04	1066,49	1000,24	790,22	0,3772	0,4180

Table 5. Page 17b

A	J	K	L	M	N	O	P	Q	R
-567	0,7388	0,8882	0,6491	4,0699	4,518	-70,875	986	90,1	78,0
-566	0,7095	0,8991	0,6467	3,8654	4,518	-70,750	988	85,6	78,3
-565	0,6801	0,9101	0,6442	3,5028	4,518	-70,625	989	77,5	78,1
-564	0,6508	0,9210	0,6418	3,1402	4,518	-70,500	990	69,5	77,5
-563	0,6214	0,9319	0,6394	3,0320	4,518	-70,375	992	67,1	75,9
-562	0,5921	0,9429	0,6370	3,1694	4,518	-70,250	993	70,1	73,2
-561	0,5627	0,9538	0,6346	3,3068	4,518	-70,125	995	73,2	70,1
-560	0,5334	0,9647	0,6322	3,4442	4,518	-70,000	996	76,2	66,9
-559	0,5040	0,9757	0,6297	3,3272	4,518	-69,875	997	73,6	64,4
-558	0,4747	0,9866	0,6273	2,9646	4,518	-69,750	999	65,6	63,0
-557	0,4453	0,9975	0,6249	2,6020	4,518	-69,625	1000	57,6	61,9
-556	0,4159	0,9915	0,6225	2,2225	4,518	-69,500	1001	49,2	61,2
-555	0,3866	0,9806	0,6201	2,1365	4,518	-69,375	1003	47,3	60,3
-554	0,3572	0,9696	0,6177	2,4356	4,518	-69,250	1004	53,9	59,2
-553	0,3279	0,9587	0,6152	2,7346	4,518	-69,125	1005	60,5	58,5
-552	0,2985	0,9478	0,6128	3,0337	4,518	-69,000	1007	67,1	58,2
-551	0,2692	0,9368	0,6104	3,0784	4,518	-68,875	1008	68,1	59,0
-550	0,2398	0,9259	0,6080	2,8774	4,518	-68,750	1009	63,7	60,7
-549	0,2105	0,9150	0,6056	2,6765	4,518	-68,625	1011	59,2	62,4
-548	0,1811	0,9040	0,6032	2,4755	4,518	-68,500	1012	54,8	63,9
-547	0,1518	0,8931	0,6007	2,5290	4,518	-68,375	1013	56,0	64,4
-546	0,1224	0,8822	0,5983	2,8280	4,518	-68,250	1015	62,6	63,8
-545	0,0931	0,8712	0,5959	3,1271	4,518	-68,125	1016	69,2	62,9
-544	0,0637	0,8603	0,5935	3,3632	4,518	-68,000	1018	74,4	61,7
-543	0,0344	0,8494	0,5911	3,2244	4,518	-67,875	1019	71,4	60,7
-542	0,0050	0,8384	0,5886	2,8399	4,518	-67,750	1020	62,9	60,1
-541	0,0243	0,8275	0,5862	2,5041	4,518	-67,625	1022	55,4	59,2
-540	0,0537	0,8165	0,5838	2,1784	4,518	-67,500	1023	48,2	58,0
-539	0,0831	0,8056	0,5814	2,1070	4,518	-67,375	1024	46,6	56,0
-538	0,1124	0,7947	0,5790	2,2812	4,518	-67,250	1026	50,5	53,5

Table 5. Page 18a

A	B	C	D	E	F	G	H	I
-537	1026,97	1028,98	1017,04	1066,49	1000,24	790,22	0,6272	0,3262
-536	1028,32	1028,98	1017,04	1066,49	1000,24	790,22	0,8772	0,2344
-535	1029,67	1028,98	1017,04	1066,49	1000,24	790,22	0,8728	0,1427
-534	1031,02	1028,98	1017,04	1066,49	1000,24	790,22	0,6228	0,0509
-533	1032,37	1028,98	1046,50	1066,49	1000,24	790,22	0,3728	0,0409
-532	1033,73	1028,98	1046,50	1066,49	1000,24	790,22	0,1228	0,1326
-531	1035,08	1039,80	1046,50	1066,49	1000,24	790,22	0,1272	0,2244
-530	1036,43	1039,80	1046,50	1066,49	1000,24	790,22	0,3772	0,3161
-529	1037,78	1039,80	1046,50	1066,49	1000,24	790,22	0,6272	0,4079
-528	1039,13	1039,80	1046,50	1066,49	1000,24	790,22	0,8772	0,4997
-527	1040,48	1039,80	1046,50	1066,49	1000,24	790,22	0,8728	0,5914
-526	1041,84	1039,80	1046,50	1066,49	1000,24	790,22	0,6228	0,6832
-525	1043,19	1039,80	1046,50	1066,49	1000,24	790,22	0,3728	0,7750
-524	1044,54	1039,80	1046,50	1066,49	1000,24	790,22	0,1228	0,8667
-523	1045,89	1050,61	1046,50	1066,49	1000,24	790,22	0,1272	0,9585
-522	1047,24	1050,61	1046,50	1066,49	1000,24	790,22	0,3772	0,9498
-521	1048,59	1050,61	1046,50	1066,49	1000,24	790,22	0,6272	0,8580
-520	1049,95	1050,61	1046,50	1066,49	1000,24	790,22	0,8772	0,7662
-519	1051,30	1050,61	1046,50	1066,49	1000,24	790,22	0,8728	0,6745
-518	1052,65	1050,61	1046,50	1066,49	1000,24	790,22	0,6228	0,5827
-517	1054,00	1050,61	1046,50	1066,49	1000,24	790,22	0,3728	0,4909
-516	1055,35	1050,61	1046,50	1066,49	1000,24	790,22	0,1228	0,3992
-515	1056,70	1061,42	1046,50	1066,49	1000,24	790,22	0,1272	0,3074
-514	1058,05	1061,42	1046,50	1066,49	1000,24	790,22	0,3772	0,2157
-513	1059,41	1061,42	1046,50	1066,49	1000,24	790,22	0,6272	0,1239
-512	1060,76	1061,42	1046,50	1066,49	1000,24	790,22	0,8772	0,0321
-511	1062,11	1061,42	1075,96	1066,49	1000,24	790,22	0,8728	0,0596
-510	1063,46	1061,42	1075,96	1066,49	1000,24	790,22	0,6228	0,1514
-509	1064,81	1061,42	1075,96	1066,49	1000,24	790,22	0,3728	0,2431
-508	1066,16	1061,42	1075,96	1066,49	1000,24	790,22	0,1228	0,3349

Table 5. Page 18b

A	J	K	L	M	N	O	P	Q	R
-537	0,1418	0,7837	0,5766	2,4554	4,518	-67,125	1027	54,3	51,4
-536	0,1711	0,7728	0,5741	2,6297	4,518	-67,000	1028	58,2	49,8
-535	0,2005	0,7619	0,5717	2,5496	4,518	-66,875	1030	56,4	49,2
-534	0,2298	0,7509	0,5693	2,2238	4,518	-66,750	1031	49,2	49,7
-533	0,2592	0,7400	0,5669	1,9797	4,518	-66,625	1032	43,8	50,7
-532	0,2885	0,7291	0,5645	1,8375	4,518	-66,500	1034	40,7	52,0
-531	0,3179	0,7181	0,5621	1,9496	4,518	-66,375	1035	43,2	53,3
-530	0,3472	0,7072	0,5596	2,3074	4,518	-66,250	1036	51,1	54,3
-529	0,3766	0,6963	0,5572	2,6652	4,518	-66,125	1038	59,0	55,9
-528	0,4059	0,6853	0,5548	3,0229	4,518	-66,000	1039	66,9	57,6
-527	0,4353	0,6744	0,5524	3,1263	4,518	-65,875	1040	69,2	60,0
-526	0,4646	0,6635	0,5500	2,9841	4,518	-65,750	1042	66,0	62,8
-525	0,4940	0,6525	0,5476	2,8418	4,518	-65,625	1043	62,9	65,1
-524	0,5234	0,6416	0,5451	2,6996	4,518	-65,500	1045	59,7	66,9
-523	0,5527	0,6306	0,5427	2,8117	4,518	-65,375	1046	62,2	67,7
-522	0,5821	0,6197	0,5403	3,0690	4,518	-65,250	1047	67,9	67,4
-521	0,6114	0,6088	0,5379	3,2433	4,518	-65,125	1049	71,8	66,7
-520	0,6408	0,5978	0,5355	3,4175	4,518	-65,000	1050	75,6	65,5
-519	0,6701	0,5869	0,5330	3,3374	4,518	-64,875	1051	73,9	64,5
-518	0,6995	0,5760	0,5306	3,0116	4,518	-64,750	1053	66,7	63,6
-517	0,7288	0,5650	0,5282	2,6858	4,518	-64,625	1054	59,4	62,6
-516	0,7582	0,5541	0,5258	2,3601	4,518	-64,500	1055	52,2	61,5
-515	0,7875	0,5432	0,5234	2,2887	4,518	-64,375	1057	50,7	60,1
-514	0,8169	0,5322	0,5210	2,4629	4,518	-64,250	1058	54,5	58,6
-513	0,8462	0,5213	0,5185	2,6372	4,518	-64,125	1059	58,4	57,5
-512	0,8756	0,5104	0,5161	2,8114	4,518	-64,000	1061	62,2	56,8
-511	0,9049	0,4994	0,5137	2,8505	4,518	-63,875	1062	63,1	57,2
-510	0,9343	0,4885	0,5113	2,7083	4,518	-63,750	1063	59,9	58,4
-509	0,9637	0,4775	0,5089	2,5660	4,518	-63,625	1065	56,8	59,9
-508	0,9930	0,4666	0,5065	2,4238	4,518	-63,500	1066	53,6	61,8

Table 5. Page 19a

A	B	C	D	E	F	G	H	I
-507	1067,52	1072,23	1075,96	1066,49	1000,24	790,22	0,1272	0,4267
-506	1068,87	1072,23	1075,96	1066,49	1000,24	790,22	0,3772	0,5184
-505	1070,22	1072,23	1075,96	1066,49	1000,24	790,22	0,6272	0,6102
-504	1071,57	1072,23	1075,96	1066,49	1000,24	790,22	0,8772	0,7020
-503	1072,92	1072,23	1075,96	1066,49	1000,24	790,22	0,8728	0,7937
-502	1074,27	1072,23	1075,96	1066,49	1000,24	790,22	0,6228	0,8855
-501	1075,62	1072,23	1075,96	1066,49	1000,24	790,22	0,3728	0,9772
-500	1076,98	1072,23	1075,96	1066,49	1000,24	790,22	0,1228	0,9310
-499	1078,33	1083,05	1075,96	1066,49	1000,24	790,22	0,1272	0,8392
-498	1079,68	1083,05	1075,96	1066,49	1000,24	790,22	0,3772	0,7475
-497	1081,03	1083,05	1075,96	1066,49	1000,24	790,22	0,6272	0,6557
-496	1082,38	1083,05	1075,96	1066,49	1000,24	790,22	0,8772	0,5639
-495	1083,73	1083,05	1075,96	1066,49	1000,24	790,22	0,8728	0,4722
-494	1085,09	1083,05	1075,96	1066,49	1000,24	790,22	0,6228	0,3804
-493	1086,44	1083,05	1075,96	1066,49	1000,24	790,22	0,3728	0,2887
-492	1087,79	1083,05	1075,96	1066,49	1000,24	790,22	0,1228	0,1969
-491	1089,14	1093,86	1075,96	1066,49	1000,24	790,22	0,1272	0,1051
-490	1090,49	1093,86	1075,96	1066,49	1000,24	790,22	0,3772	0,0134
-489	1091,84	1093,86	1105,42	1066,49	1000,24	790,22	0,6272	0,0784
-488	1093,20	1093,86	1105,42	1066,49	1000,24	790,22	0,8772	0,1702
-487	1094,55	1093,86	1105,42	1066,49	1000,24	790,22	0,8728	0,2619
-486	1095,90	1093,86	1105,42	1066,49	1000,24	790,22	0,6228	0,3537
-485	1097,25	1093,86	1105,42	1066,49	1000,24	790,22	0,3728	0,4454
-484	1098,60	1093,86	1105,42	1066,49	1000,24	790,22	0,1228	0,5372
-483	1099,95	1104,67	1105,42	1066,49	1000,24	790,22	0,1272	0,6290
-482	1101,30	1104,67	1105,42	1066,49	1000,24	790,22	0,3772	0,7207
-481	1102,66	1104,67	1105,42	1066,49	1000,24	790,22	0,6272	0,8125
-480	1104,01	1104,67	1105,42	1066,49	1000,24	790,22	0,8772	0,9043
-479	1105,36	1104,67	1105,42	1066,49	1000,24	790,22	0,8728	0,9960
-478	1106,71	1104,67	1105,42	1066,49	1000,24	790,22	0,6228	0,9122

Table 5. Page 19b

A	J	K	L	M	N	O	P	Q	R
-507	0,9776	0,4557	0,5040	2,4912	4,518	-63,375	1068	55,1	63,3
-506	0,9483	0,4447	0,5016	2,7903	4,518	-63,250	1069	61,8	64,2
-505	0,9189	0,4338	0,4992	3,0893	4,518	-63,125	1070	68,4	65,0
-504	0,8896	0,4229	0,4968	3,3884	4,518	-63,000	1072	75,0	65,3
-503	0,8602	0,4119	0,4944	3,4331	4,518	-62,875	1073	76,0	65,7
-502	0,8309	0,4010	0,4920	3,2321	4,518	-62,750	1074	71,5	66,1
-501	0,8015	0,3901	0,4895	3,0312	4,518	-62,625	1076	67,1	66,1
-500	0,7722	0,3791	0,4871	2,6922	4,518	-62,500	1077	59,6	65,7
-499	0,7428	0,3682	0,4847	2,5621	4,518	-62,375	1078	56,7	64,2
-498	0,7135	0,3573	0,4823	2,6776	4,518	-62,250	1080	59,3	61,6
-497	0,6841	0,3463	0,4799	2,7932	4,518	-62,125	1081	61,8	58,6
-496	0,6548	0,3354	0,4774	2,9087	4,518	-62,000	1082	64,4	55,1
-495	0,6254	0,3245	0,4750	2,7699	4,518	-61,875	1084	61,3	52,1
-494	0,5960	0,3135	0,4726	2,3854	4,518	-61,750	1085	52,8	49,8
-493	0,5667	0,3026	0,4702	2,0009	4,518	-61,625	1086	44,3	47,8
-492	0,5373	0,2916	0,4678	1,6165	4,518	-61,500	1088	35,8	46,3
-491	0,5080	0,2807	0,4654	1,4864	4,518	-61,375	1089	32,9	44,6
-490	0,4786	0,2698	0,4629	1,6019	4,518	-61,250	1090	35,5	42,7
-489	0,4493	0,2588	0,4605	1,8742	4,518	-61,125	1092	41,5	41,3
-488	0,4199	0,2479	0,4581	2,1733	4,518	-61,000	1093	48,1	40,4
-487	0,3906	0,2370	0,4557	2,2180	4,518	-60,875	1095	49,1	40,5
-486	0,3612	0,2260	0,4533	2,0170	4,518	-60,750	1096	44,6	41,7
-485	0,3319	0,2151	0,4509	1,8161	4,518	-60,625	1097	40,2	43,3
-484	0,3025	0,2042	0,4484	1,6151	4,518	-60,500	1099	35,7	45,0
-483	0,2732	0,1932	0,4460	1,6686	4,518	-60,375	1100	36,9	46,1
-482	0,2438	0,1823	0,4436	1,9676	4,518	-60,250	1101	43,5	46,1
-481	0,2145	0,1714	0,4412	2,2667	4,518	-60,125	1103	50,2	45,7
-480	0,1851	0,1604	0,4388	2,5657	4,518	-60,000	1104	56,8	44,9
-479	0,1557	0,1495	0,4364	2,6104	4,518	-59,875	1105	57,8	44,2
-478	0,1264	0,1385	0,4339	2,2339	4,518	-59,750	1107	49,4	43,6

Table 5. Page 20a

A	B	C	D	E	F	G	H	I
-477	1108,06	1104,67	1105,42	1066,49	1000,24	790,22	0,3728	0,8205
-476	1109,41	1104,67	1105,42	1066,49	1000,24	790,22	0,1228	0,7287
-475	1110,77	1115,48	1105,42	1066,49	1000,24	790,22	0,1272	0,6369
-474	1112,12	1115,48	1105,42	1066,49	1000,24	790,22	0,3772	0,5452
-473	1113,47	1115,48	1105,42	1158,58	1000,24	790,22	0,6272	0,4534
-472	1114,82	1115,48	1105,42	1158,58	1000,24	790,22	0,8772	0,3616
-471	1116,17	1115,48	1105,42	1158,58	1000,24	790,22	0,8728	0,2699
-470	1117,52	1115,48	1105,42	1158,58	1000,24	790,22	0,6228	0,1781
-469	1118,88	1115,48	1105,42	1158,58	1000,24	790,22	0,3728	0,0864
-468	1120,23	1115,48	1134,88	1158,58	1000,24	790,22	0,1228	0,0054
-467	1121,58	1126,30	1134,88	1158,58	1000,24	790,22	0,1272	0,0972
-466	1122,93	1126,30	1134,88	1158,58	1000,24	790,22	0,3772	0,1889
-465	1124,28	1126,30	1134,88	1158,58	1247,43	790,22	0,6272	0,2807
-464	1125,63	1126,30	1134,88	1158,58	1247,43	790,22	0,8772	0,3725
-463	1126,98	1126,30	1134,88	1158,58	1247,43	790,22	0,8728	0,4642
-462	1128,34	1126,30	1134,88	1158,58	1247,43	790,22	0,6228	0,5560
-461	1129,69	1126,30	1134,88	1158,58	1247,43	790,22	0,3728	0,6477
-460	1131,04	1126,30	1134,88	1158,58	1247,43	790,22	0,1228	0,7395
-459	1132,39	1137,11	1134,88	1158,58	1247,43	790,22	0,1272	0,8313
-458	1133,74	1137,11	1134,88	1158,58	1247,43	790,22	0,3772	0,9230
-457	1135,09	1137,11	1134,88	1158,58	1247,43	790,22	0,6272	0,9852
-456	1136,45	1137,11	1134,88	1158,58	1247,43	790,22	0,8772	0,8934
-455	1137,80	1137,11	1134,88	1158,58	1247,43	790,22	0,8728	0,8017
-454	1139,15	1137,11	1134,88	1158,58	1247,43	790,22	0,6228	0,7099
-453	1140,50	1137,11	1134,88	1158,58	1247,43	790,22	0,3728	0,6182
-452	1141,85	1137,11	1134,88	1158,58	1247,43	790,22	0,1228	0,5264
-451	1143,20	1147,92	1134,88	1158,58	1247,43	790,22	0,1272	0,4346
-450	1144,55	1147,92	1134,88	1158,58	1247,43	790,22	0,3772	0,3429
-449	1145,91	1147,92	1134,88	1158,58	1247,43	790,22	0,6272	0,2511
-448	1147,26	1147,92	1134,88	1158,58	1247,43	790,22	0,8772	0,1593

Table 5. Page 20b

A	J	K	L	M	N	O	P	Q	R
-477	0,0970	0,1276	0,4315	1,8494	4,518	-59,625	1108	40,9	42,7
-476	0,0677	0,1167	0,4291	1,4650	4,518	-59,500	1109	32,4	41,6
-475	0,0383	0,1057	0,4267	1,3349	4,518	-59,375	1111	29,5	39,4
-474	0,0090	0,0948	0,4243	1,4504	4,518	-59,250	1112	32,1	36,4
-473	0,0204	0,0839	0,4218	1,6067	4,518	-59,125	1113	35,6	33,5
-472	0,0497	0,0729	0,4194	1,7809	4,518	-59,000	1115	39,4	30,7
-471	0,0791	0,0620	0,4170	1,7008	4,518	-58,875	1116	37,6	29,2
-470	0,1084	0,0511	0,4146	1,3750	4,518	-58,750	1118	30,4	28,9
-469	0,1378	0,0401	0,4122	1,0493	4,518	-58,625	1119	23,2	29,2
-468	0,1671	0,0292	0,4098	0,7343	4,518	-58,500	1120	16,3	30,0
-467	0,1965	0,0183	0,4073	0,8464	4,518	-58,375	1122	18,7	30,7
-466	0,2258	0,0073	0,4049	1,2042	4,518	-58,250	1123	26,7	31,4
-465	0,2552	0,0036	0,4025	1,5692	4,518	-58,125	1124	34,7	32,5
-464	0,2846	0,0145	0,4001	1,9488	4,518	-58,000	1126	43,1	34,1
-463	0,3139	0,0255	0,3977	2,0741	4,518	-57,875	1127	45,9	36,9
-462	0,3433	0,0364	0,3953	1,9537	4,518	-57,750	1128	43,2	40,3
-461	0,3726	0,0474	0,3928	1,8334	4,518	-57,625	1130	40,6	43,6
-460	0,4020	0,0583	0,3904	1,7130	4,518	-57,500	1131	37,9	46,6
-459	0,4313	0,0692	0,3880	1,8470	4,518	-57,375	1132	40,9	48,5
-458	0,4607	0,0802	0,3856	2,2266	4,518	-57,250	1134	49,3	49,3
-457	0,4900	0,0911	0,3832	2,5767	4,518	-57,125	1135	57,0	49,7
-456	0,5194	0,1020	0,3808	2,7728	4,518	-57,000	1136	61,4	49,6
-455	0,5487	0,1130	0,3783	2,7145	4,518	-56,875	1138	60,1	49,7
-454	0,5781	0,1239	0,3759	2,4107	4,518	-56,750	1139	53,4	50,0
-453	0,6074	0,1348	0,3735	2,1068	4,518	-56,625	1141	46,6	49,8
-452	0,6368	0,1458	0,3711	1,8029	4,518	-56,500	1142	39,9	49,2
-451	0,6661	0,1567	0,3687	1,7533	4,518	-56,375	1143	38,8	48,0
-450	0,6955	0,1676	0,3663	1,9494	4,518	-56,250	1145	43,1	46,3
-449	0,7249	0,1786	0,3638	2,1456	4,518	-56,125	1146	47,5	45,0
-448	0,7542	0,1895	0,3614	2,3417	4,518	-56,000	1147	51,8	44,3

Table 5. Page 21a

A	B	C	D	E	F	G	H	I
-447	1148,61	1147,92	1134,88	1158,58	1247,43	790,22	0,8728	0,0676
-446	1149,96	1147,92	1164,33	1158,58	1247,43	790,22	0,6228	0,0242
-445	1151,31	1147,92	1164,33	1158,58	1247,43	790,22	0,3728	0,1159
-444	1152,66	1147,92	1164,33	1158,58	1247,43	790,22	0,1228	0,2077
-443	1154,02	1158,73	1164,33	1158,58	1247,43	790,22	0,1272	0,2995
-442	1155,37	1158,73	1164,33	1158,58	1247,43	790,22	0,3772	0,3912
-441	1156,72	1158,73	1164,33	1158,58	1247,43	790,22	0,6272	0,4830
-440	1158,07	1158,73	1164,33	1158,58	1247,43	790,22	0,8772	0,5748
-439	1159,42	1158,73	1164,33	1158,58	1247,43	790,22	0,8728	0,6665
-438	1160,77	1158,73	1164,33	1158,58	1247,43	790,22	0,6228	0,7583
-437	1162,13	1158,73	1164,33	1158,58	1247,43	790,22	0,3728	0,8500
-436	1163,48	1158,73	1164,33	1158,58	1247,43	790,22	0,1228	0,9418
-435	1164,83	1169,55	1164,33	1158,58	1247,43	790,22	0,1272	0,9664
-434	1166,18	1169,55	1164,33	1158,58	1247,43	790,22	0,3772	0,8747
-433	1167,53	1169,55	1164,33	1158,58	1247,43	790,22	0,6272	0,7829
-432	1168,88	1169,55	1164,33	1158,58	1247,43	790,22	0,8772	0,6912
-431	1170,23	1169,55	1164,33	1158,58	1247,43	790,22	0,8728	0,5994
-430	1171,59	1169,55	1164,33	1158,58	1247,43	790,22	0,6228	0,5076
-429	1172,94	1169,55	1164,33	1158,58	1247,43	790,22	0,3728	0,4159
-428	1174,29	1169,55	1164,33	1158,58	1247,43	790,22	0,1228	0,3241
-427	1175,64	1180,36	1164,33	1158,58	1247,43	790,22	0,1272	0,2323
-426	1176,99	1180,36	1164,33	1158,58	1247,43	790,22	0,3772	0,1406
-425	1178,34	1180,36	1164,33	1158,58	1247,43	790,22	0,6272	0,0488
-424	1179,70	1180,36	1193,79	1158,58	1247,43	790,22	0,8772	0,0429
-423	1181,05	1180,36	1193,79	1158,58	1247,43	790,22	0,8728	0,1347
-422	1182,40	1180,36	1193,79	1158,58	1247,43	790,22	0,6228	0,2265
-421	1183,75	1180,36	1193,79	1158,58	1247,43	790,22	0,3728	0,3182
-420	1185,10	1180,36	1193,79	1158,58	1247,43	790,22	0,1228	0,4100
-419	1186,45	1191,17	1193,79	1158,58	1247,43	790,22	0,1272	0,5018
-418	1187,80	1191,17	1193,79	1158,58	1247,43	790,22	0,3772	0,5935

Table 5. Page 21b

A	J	K	L	M	N	O	P	Q	R
-447	0,7836	0,2004	0,3590	2,2834	4,518	-55,875	1149	50,5	44,6
-446	0,8129	0,2114	0,3566	2,0279	4,518	-55,750	1150	44,9	45,9
-445	0,8423	0,2223	0,3542	1,9075	4,518	-55,625	1151	42,2	47,7
-444	0,8716	0,2333	0,3517	1,7871	4,518	-55,500	1153	39,6	49,9
-443	0,9010	0,2442	0,3493	1,9211	4,518	-55,375	1154	42,5	51,9
-442	0,9303	0,2551	0,3469	2,3008	4,518	-55,250	1155	50,9	53,6
-441	0,9597	0,2661	0,3445	2,6804	4,518	-55,125	1157	59,3	55,5
-440	0,9890	0,2770	0,3421	3,0600	4,518	-55,000	1158	67,7	57,2
-439	0,9816	0,2879	0,3397	3,1485	4,518	-54,875	1159	69,7	59,3
-438	0,9523	0,2989	0,3372	2,9695	4,518	-54,750	1161	65,7	61,3
-437	0,9229	0,3098	0,3348	2,7904	4,518	-54,625	1162	61,8	62,8
-436	0,8936	0,3207	0,3324	2,6113	4,518	-54,500	1163	57,8	63,6
-435	0,8642	0,3317	0,3300	2,6195	4,518	-54,375	1165	58,0	63,3
-434	0,8348	0,3426	0,3276	2,7569	4,518	-54,250	1166	61,0	61,8
-433	0,8055	0,3535	0,3252	2,8943	4,518	-54,125	1168	64,1	59,9
-432	0,7761	0,3645	0,3227	3,0317	4,518	-54,000	1169	67,1	57,5
-431	0,7468	0,3754	0,3203	2,9147	4,518	-53,875	1170	64,5	55,3
-430	0,7174	0,3864	0,3179	2,5521	4,518	-53,750	1172	56,5	53,5
-429	0,6881	0,3973	0,3155	2,1895	4,518	-53,625	1173	48,5	51,6
-428	0,6587	0,4082	0,3131	1,8269	4,518	-53,500	1174	40,4	49,9
-427	0,6294	0,4192	0,3107	1,7187	4,518	-53,375	1176	38,0	48,1
-426	0,6000	0,4301	0,3082	1,8561	4,518	-53,250	1177	41,1	46,1
-425	0,5707	0,4410	0,3058	1,9935	4,518	-53,125	1178	44,1	44,5
-424	0,5413	0,4520	0,3034	2,2168	4,518	-53,000	1180	49,1	43,5
-423	0,5120	0,4629	0,3010	2,2834	4,518	-52,875	1181	50,5	43,4
-422	0,4826	0,4738	0,2986	2,1043	4,518	-52,750	1182	46,6	44,5
-421	0,4533	0,4848	0,2961	1,9252	4,518	-52,625	1184	42,6	46,0
-420	0,4239	0,4957	0,2937	1,7462	4,518	-52,500	1185	38,6	47,9
-419	0,3945	0,5066	0,2913	1,8214	4,518	-52,375	1186	40,3	49,5
-418	0,3652	0,5176	0,2889	2,1424	4,518	-52,250	1188	47,4	50,4

Table 5. Page 22a

A	B	C	D	E	F	G	H	I
-417	1189,16	1191,17	1193,79	1158,58	1247,43	790,22	0,6272	0,6853
-416	1190,51	1191,17	1193,79	1158,58	1247,43	790,22	0,8772	0,7770
-415	1191,86	1191,17	1193,79	1158,58	1247,43	790,22	0,8728	0,8688
-414	1193,21	1191,17	1193,79	1158,58	1247,43	790,22	0,6228	0,9606
-413	1194,56	1191,17	1193,79	1158,58	1247,43	790,22	0,3728	0,9477
-412	1195,91	1191,17	1193,79	1158,58	1247,43	790,22	0,1228	0,8559
-411	1197,27	1201,98	1193,79	1158,58	1247,43	790,22	0,1272	0,7641
-410	1198,62	1201,98	1193,79	1158,58	1247,43	790,22	0,3772	0,6724
-409	1199,97	1201,98	1193,79	1158,58	1247,43	790,22	0,6272	0,5806
-408	1201,32	1201,98	1193,79	1158,58	1247,43	790,22	0,8772	0,4889
-407	1202,67	1201,98	1193,79	1158,58	1247,43	790,22	0,8728	0,3971
-406	1204,02	1201,98	1193,79	1158,58	1247,43	790,22	0,6228	0,3053
-405	1205,38	1201,98	1193,79	1250,67	1247,43	790,22	0,3728	0,2136
-404	1206,73	1201,98	1193,79	1250,67	1247,43	790,22	0,1228	0,1218
-403	1208,08	1212,80	1193,79	1250,67	1247,43	790,22	0,1272	0,0300
-402	1209,43	1212,80	1223,25	1250,67	1247,43	790,22	0,3772	0,0617
-401	1210,78	1212,80	1223,25	1250,67	1247,43	790,22	0,6272	0,1535
-400	1212,13	1212,80	1223,25	1250,67	1247,43	790,22	0,8772	0,2452
-399	1213,48	1212,80	1223,25	1250,67	1247,43	790,22	0,8728	0,3370
-398	1214,84	1212,80	1223,25	1250,67	1247,43	790,22	0,6228	0,4288
-397	1216,19	1212,80	1223,25	1250,67	1247,43	790,22	0,3728	0,5205
-396	1217,54	1212,80	1223,25	1250,67	1247,43	790,22	0,1228	0,6123
-395	1218,89	1223,61	1223,25	1250,67	1247,43	790,22	0,1272	0,7041
-394	1220,24	1223,61	1223,25	1250,67	1247,43	790,22	0,3772	0,7958
-393	1221,59	1223,61	1223,25	1250,67	1247,43	790,22	0,6272	0,8876
-392	1222,95	1223,61	1223,25	1250,67	1247,43	790,22	0,8772	0,9793
-391	1224,30	1223,61	1223,25	1250,67	1247,43	790,22	0,8728	0,9289
-390	1225,65	1223,61	1223,25	1250,67	1247,43	790,22	0,6228	0,8371
-389	1227,00	1223,61	1223,25	1250,67	1247,43	790,22	0,3728	0,7454
-388	1228,35	1223,61	1223,25	1250,67	1247,43	790,22	0,1228	0,6536

Table 5. Page 22b

A	J	K	L	M	N	O	P	Q	R
-417	0,3358	0,5285	0,2865	2,4633	4,518	-52,125	1189	54,5	51,1
-416	0,3065	0,5394	0,2841	2,7842	4,518	-52,000	1191	61,6	51,4
-415	0,2771	0,5504	0,2816	2,8508	4,518	-51,875	1192	63,1	51,8
-414	0,2478	0,5613	0,2792	2,6717	4,518	-51,750	1193	59,1	52,4
-413	0,2184	0,5723	0,2768	2,3880	4,518	-51,625	1195	52,9	52,5
-412	0,1891	0,5832	0,2744	2,0254	4,518	-51,500	1196	44,8	52,2
-411	0,1597	0,5941	0,2720	1,9171	4,518	-51,375	1197	42,4	50,8
-410	0,1304	0,6051	0,2696	2,0545	4,518	-51,250	1199	45,5	48,3
-409	0,1010	0,6160	0,2671	2,1919	4,518	-51,125	1200	48,5	45,5
-408	0,0717	0,6269	0,2647	2,3293	4,518	-51,000	1201	51,6	42,6
-407	0,0423	0,6379	0,2623	2,2124	4,518	-50,875	1203	49,0	40,5
-406	0,0130	0,6488	0,2599	1,8498	4,518	-50,750	1204	40,9	39,4
-405	0,0164	0,6597	0,2575	1,5200	4,518	-50,625	1205	33,6	38,9
-404	0,0458	0,6707	0,2551	1,2161	4,518	-50,500	1207	26,9	39,1
-403	0,0751	0,6816	0,2526	1,1666	4,518	-50,375	1208	25,8	39,2
-402	0,1045	0,6925	0,2502	1,4861	4,518	-50,250	1209	32,9	39,3
-401	0,1338	0,7035	0,2478	1,8658	4,518	-50,125	1211	41,3	40,0
-400	0,1632	0,7144	0,2454	2,2454	4,518	-50,000	1212	49,7	41,2
-399	0,1925	0,7254	0,2430	2,3707	4,518	-49,875	1213	52,5	43,4
-398	0,2219	0,7363	0,2405	2,2503	4,518	-49,750	1215	49,8	46,8
-397	0,2512	0,7472	0,2381	2,1299	4,518	-49,625	1216	47,1	50,3
-396	0,2806	0,7582	0,2357	2,0096	4,518	-49,500	1218	44,5	53,8
-395	0,3099	0,7691	0,2333	2,1436	4,518	-49,375	1219	47,4	56,3
-394	0,3393	0,7800	0,2309	2,5232	4,518	-49,250	1220	55,8	57,7
-393	0,3686	0,7910	0,2285	2,9028	4,518	-49,125	1222	64,2	58,7
-392	0,3980	0,8019	0,2260	3,2825	4,518	-49,000	1223	72,6	59,3
-391	0,4273	0,8128	0,2236	3,2655	4,518	-48,875	1224	72,3	60,0
-390	0,4567	0,8238	0,2212	2,9616	4,518	-48,750	1226	65,5	60,9
-389	0,4861	0,8347	0,2188	2,6577	4,518	-48,625	1227	58,8	61,3
-388	0,5154	0,8456	0,2164	2,3539	4,518	-48,500	1228	52,1	61,3

Table 5. Page 23a

A	B	C	D	E	F	G	H	I
-387	1229,70	1234,42	1223,25	1250,67	1247,43	790,22	0,1272	0,5618
-386	1231,06	1234,42	1223,25	1250,67	1247,43	790,22	0,3772	0,4701
-385	1232,41	1234,42	1223,25	1250,67	1247,43	790,22	0,6272	0,3783
-384	1233,76	1234,42	1223,25	1250,67	1247,43	790,22	0,8772	0,2866
-383	1235,11	1234,42	1223,25	1250,67	1247,43	790,22	0,8728	0,1948
-382	1236,46	1234,42	1223,25	1250,67	1247,43	790,22	0,6228	0,1030
-381	1237,81	1234,42	1223,25	1250,67	1247,43	790,22	0,3728	0,0113
-380	1239,16	1234,42	1252,71	1250,67	1247,43	790,22	0,1228	0,0805
-379	1240,52	1245,23	1252,71	1250,67	1247,43	790,22	0,1272	0,1723
-378	1241,87	1245,23	1252,71	1250,67	1247,43	790,22	0,3772	0,2640
-377	1243,22	1245,23	1252,71	1250,67	1247,43	790,22	0,6272	0,3558
-376	1244,57	1245,23	1252,71	1250,67	1247,43	790,22	0,8772	0,4475
-375	1245,92	1245,23	1252,71	1250,67	1247,43	790,22	0,8728	0,5393
-374	1247,27	1245,23	1252,71	1250,67	1247,43	790,22	0,6228	0,6311
-373	1248,63	1245,23	1252,71	1250,67	1247,43	790,22	0,3728	0,7228
-372	1249,98	1245,23	1252,71	1250,67	1247,43	790,22	0,1228	0,8146
-371	1251,33	1256,05	1252,71	1250,67	1247,43	790,22	0,1272	0,9064
-370	1252,68	1256,05	1252,71	1250,67	1247,43	790,22	0,3772	0,9981
-369	1254,03	1256,05	1252,71	1250,67	1247,43	790,22	0,6272	0,9101
-368	1255,38	1256,05	1252,71	1250,67	1247,43	790,22	0,8772	0,8184
-367	1256,73	1256,05	1252,71	1250,67	1247,43	790,22	0,8728	0,7266
-366	1258,09	1256,05	1252,71	1250,67	1247,43	790,22	0,6228	0,6348
-365	1259,44	1256,05	1252,71	1250,67	1247,43	790,22	0,3728	0,5431
-364	1260,79	1256,05	1252,71	1250,67	1247,43	790,22	0,1228	0,4513
-363	1262,14	1266,86	1252,71	1250,67	1247,43	790,22	0,1272	0,3595
-362	1263,49	1266,86	1252,71	1250,67	1247,43	790,22	0,3772	0,2678
-361	1264,84	1266,86	1252,71	1250,67	1247,43	790,22	0,6272	0,1760
-360	1266,20	1266,86	1252,71	1250,67	1247,43	790,22	0,8772	0,0843
-359	1267,55	1266,86	1282,17	1250,67	1247,43	790,22	0,8728	0,0075
-358	1268,90	1266,86	1282,17	1250,67	1247,43	790,22	0,6228	0,0993

Table 5. Page 23b

A	J	K	L	M	N	O	P	Q	R
-387	0,5448	0,8566	0,2140	2,3043	4,518	-48,375	1230	51,0	60,2
-386	0,5741	0,8675	0,2115	2,5004	4,518	-48,250	1231	55,3	58,4
-385	0,6035	0,8784	0,2091	2,6965	4,518	-48,125	1232	59,7	56,6
-384	0,6328	0,8894	0,2067	2,8926	4,518	-48,000	1234	64,0	55,1
-383	0,6622	0,9003	0,2043	2,8344	4,518	-47,875	1235	62,7	54,8
-382	0,6915	0,9113	0,2019	2,5305	4,518	-47,750	1236	56,0	55,5
-381	0,7209	0,9222	0,1995	2,2266	4,518	-47,625	1238	49,3	56,7
-380	0,7502	0,9331	0,1970	2,0837	4,518	-47,500	1239	46,1	58,3
-379	0,7796	0,9441	0,1946	2,2177	4,518	-47,375	1241	49,1	59,8
-378	0,8089	0,9550	0,1922	2,5973	4,518	-47,250	1242	57,5	61,1
-377	0,8383	0,9659	0,1898	2,9770	4,518	-47,125	1243	65,9	62,8
-376	0,8676	0,9769	0,1874	3,3566	4,518	-47,000	1245	74,3	64,9
-375	0,8970	0,9878	0,1850	3,4819	4,518	-46,875	1246	77,1	67,5
-374	0,9264	0,9987	0,1825	3,3615	4,518	-46,750	1247	74,4	70,6
-373	0,9557	0,9903	0,1801	3,2218	4,518	-46,625	1249	71,3	73,0
-372	0,9851	0,9794	0,1777	3,0796	4,518	-46,500	1250	68,2	74,8
-371	0,9856	0,9685	0,1753	3,1629	4,518	-46,375	1251	70,0	75,3
-370	0,9562	0,9575	0,1729	3,4619	4,518	-46,250	1253	76,6	74,5
-369	0,9269	0,9466	0,1704	3,5812	4,518	-46,125	1254	79,3	73,1
-368	0,8975	0,9356	0,1680	3,6967	4,518	-46,000	1255	81,8	71,1
-367	0,8682	0,9247	0,1656	3,5579	4,518	-45,875	1257	78,7	69,1
-366	0,8388	0,9138	0,1632	3,1735	4,518	-45,750	1258	70,2	67,2
-365	0,8095	0,9028	0,1608	2,7890	4,518	-45,625	1259	61,7	64,9
-364	0,7801	0,8919	0,1584	2,4045	4,518	-45,500	1261	53,2	62,5
-363	0,7508	0,8810	0,1559	2,2744	4,518	-45,375	1262	50,3	59,5
-362	0,7214	0,8700	0,1535	2,3899	4,518	-45,250	1263	52,9	56,4
-361	0,6921	0,8591	0,1511	2,5055	4,518	-45,125	1265	55,5	53,8
-360	0,6627	0,8482	0,1487	2,6210	4,518	-45,000	1266	58,0	51,6
-359	0,6333	0,8372	0,1463	2,4972	4,518	-44,875	1268	55,3	50,5
-358	0,6040	0,8263	0,1439	2,2962	4,518	-44,750	1269	50,8	50,4

Table 5. Page 24a

A	B	C	D	E	F	G	H	I
-357	1270,25	1266,86	1282,17	1250,67	1247,43	790,22	0,3728	0,1910
-356	1271,60	1266,86	1282,17	1250,67	1247,43	790,22	0,1228	0,2828
-355	1272,95	1277,67	1282,17	1250,67	1247,43	790,22	0,1272	0,3745
-354	1274,31	1277,67	1282,17	1250,67	1247,43	790,22	0,3772	0,4663
-353	1275,66	1277,67	1282,17	1250,67	1247,43	790,22	0,6272	0,5581
-352	1277,01	1277,67	1282,17	1250,67	1247,43	790,22	0,8772	0,6498
-351	1278,36	1277,67	1282,17	1250,67	1247,43	790,22	0,8728	0,7416
-350	1279,71	1277,67	1282,17	1250,67	1247,43	790,22	0,6228	0,8334
-349	1281,06	1277,67	1282,17	1250,67	1247,43	790,22	0,3728	0,9251
-348	1282,41	1277,67	1282,17	1250,67	1247,43	790,22	0,1228	0,9831
-347	1283,77	1288,48	1282,17	1250,67	1247,43	790,22	0,1272	0,8914
-346	1285,12	1288,48	1282,17	1250,67	1247,43	790,22	0,3772	0,7996
-345	1286,47	1288,48	1282,17	1250,67	1247,43	790,22	0,6272	0,7078
-344	1287,82	1288,48	1282,17	1250,67	1247,43	790,22	0,8772	0,6161
-343	1289,17	1288,48	1282,17	1250,67	1247,43	790,22	0,8728	0,5243
-342	1290,52	1288,48	1282,17	1250,67	1247,43	790,22	0,6228	0,4325
-341	1291,88	1288,48	1282,17	1250,67	1247,43	790,22	0,3728	0,3408
-340	1293,23	1288,48	1282,17	1250,67	1247,43	790,22	0,1228	0,2490
-339	1294,58	1299,30	1282,17	1250,67	1247,43	790,22	0,1272	0,1573
-338	1295,93	1299,30	1282,17	1250,67	1247,43	790,22	0,3772	0,0655
-337	1297,28	1299,30	1311,62	1342,75	1247,43	790,22	0,6272	0,0263
-336	1298,63	1299,30	1311,62	1342,75	1247,43	790,22	0,8772	0,1180
-335	1299,99	1299,30	1311,62	1342,75	1247,43	790,22	0,8728	0,2098
-334	1301,34	1299,30	1311,62	1342,75	1247,43	790,22	0,6228	0,3016
-333	1302,69	1299,30	1311,62	1342,75	1247,43	790,22	0,3728	0,3933
-332	1304,04	1299,30	1311,62	1342,75	1247,43	790,22	0,1228	0,4851
-331	1305,39	1310,11	1311,62	1342,75	1247,43	790,22	0,1272	0,5768
-330	1306,74	1310,11	1311,62	1342,75	1247,43	790,22	0,3772	0,6686
-329	1308,09	1310,11	1311,62	1342,75	1247,43	790,22	0,6272	0,7604
-328	1309,45	1310,11	1311,62	1342,75	1247,43	790,22	0,8772	0,8521

Table 5. Page 24b

A	J	K	L	M	N	O	P	Q	R
-357	0,5746	0,8154	0,1414	2,0953	4,518	-44,625	1270	46,4	50,8
-356	0,5453	0,8044	0,1390	1,8943	4,518	-44,500	1272	41,9	51,6
-355	0,5159	0,7935	0,1366	1,9478	4,518	-44,375	1273	43,1	52,3
-354	0,4866	0,7826	0,1342	2,2468	4,518	-44,250	1274	49,7	52,7
-353	0,4572	0,7716	0,1318	2,5459	4,518	-44,125	1276	56,3	53,2
-352	0,4279	0,7607	0,1294	2,8449	4,518	-44,000	1277	63,0	53,6
-351	0,3985	0,7497	0,1269	2,8896	4,518	-43,875	1278	64,0	54,2
-350	0,3692	0,7388	0,1245	2,6887	4,518	-43,750	1280	59,5	54,9
-349	0,3398	0,7279	0,1221	2,4877	4,518	-43,625	1281	55,1	55,1
-348	0,3105	0,7169	0,1197	2,2530	4,518	-43,500	1282	49,9	55,0
-347	0,2811	0,7060	0,1173	2,1229	4,518	-43,375	1284	47,0	53,7
-346	0,2518	0,6951	0,1148	2,2384	4,518	-43,250	1285	49,5	51,4
-345	0,2224	0,6841	0,1124	2,3540	4,518	-43,125	1286	52,1	48,6
-344	0,1930	0,6732	0,1100	2,4695	4,518	-43,000	1288	54,7	45,4
-343	0,1637	0,6623	0,1076	2,3307	4,518	-42,875	1289	51,6	42,4
-342	0,1343	0,6513	0,1052	1,9462	4,518	-42,750	1291	43,1	40,1
-341	0,1050	0,6404	0,1028	1,5617	4,518	-42,625	1292	34,6	37,9
-340	0,0756	0,6295	0,1003	1,1773	4,518	-42,500	1293	26,1	36,3
-339	0,0463	0,6185	0,0979	1,0472	4,518	-42,375	1295	23,2	34,7
-338	0,0169	0,6076	0,0955	1,1627	4,518	-42,250	1296	25,7	33,1
-337	0,0124	0,5967	0,0931	1,3556	4,518	-42,125	1297	30,0	32,1
-336	0,0418	0,5857	0,0907	1,7134	4,518	-42,000	1299	37,9	31,6
-335	0,0711	0,5748	0,0883	1,8168	4,518	-41,875	1300	40,2	32,4
-334	0,1005	0,5638	0,0858	1,6745	4,518	-41,750	1301	37,1	34,4
-333	0,1298	0,5529	0,0834	1,5323	4,518	-41,625	1303	33,9	37,0
-332	0,1592	0,5420	0,0810	1,3901	4,518	-41,500	1304	30,8	40,0
-331	0,1885	0,5310	0,0786	1,5022	4,518	-41,375	1305	33,2	42,4
-330	0,2179	0,5201	0,0762	1,8600	4,518	-41,250	1307	41,2	44,0
-329	0,2473	0,5092	0,0738	2,2177	4,518	-41,125	1308	49,1	45,2
-328	0,2766	0,4982	0,0713	2,5755	4,518	-41,000	1309	57,0	45,8

Table 5. Page 25a

A	B	C	D	E	F	G	H	I
-327	1310,80	1310,11	1311,62	1342,75	1247,43	790,22	0,8728	0,9439
-326	1312,15	1310,11	1311,62	1342,75	1247,43	790,22	0,6228	0,9643
-325	1313,50	1310,11	1311,62	1342,75	1247,43	790,22	0,3728	0,8726
-324	1314,85	1310,11	1311,62	1342,75	1247,43	790,22	0,1228	0,7808
-323	1316,20	1320,92	1311,62	1342,75	1247,43	790,22	0,1272	0,6891
-322	1317,56	1320,92	1311,62	1342,75	1247,43	790,22	0,3772	0,5973
-321	1318,91	1320,92	1311,62	1342,75	1247,43	790,22	0,6272	0,5055
-320	1320,26	1320,92	1311,62	1342,75	1247,43	790,22	0,8772	0,4138
-319	1321,61	1320,92	1311,62	1342,75	1247,43	790,22	0,8728	0,3220
-318	1322,96	1320,92	1311,62	1342,75	1247,43	790,22	0,6228	0,2302
-317	1324,31	1320,92	1311,62	1342,75	1247,43	790,22	0,3728	0,1385
-316	1325,66	1320,92	1311,62	1342,75	1247,43	790,22	0,1228	0,0467
-315	1327,02	1331,74	1341,08	1342,75	1247,43	790,22	0,1272	0,0450
-314	1328,37	1331,74	1341,08	1342,75	1247,43	790,22	0,3772	0,1368
-313	1329,72	1331,74	1341,08	1342,75	1247,43	790,22	0,6272	0,2286
-312	1331,07	1331,74	1341,08	1342,75	1247,43	790,22	0,8772	0,3203
-311	1332,42	1331,74	1341,08	1342,75	1247,43	790,22	0,8728	0,4121
-310	1333,77	1331,74	1341,08	1342,75	1247,43	790,22	0,6228	0,5039
-309	1335,13	1331,74	1341,08	1342,75	1247,43	790,22	0,3728	0,5956
-308	1336,48	1331,74	1341,08	1342,75	1247,43	790,22	0,1228	0,6874
-307	1337,83	1342,55	1341,08	1342,75	1247,43	790,22	0,1272	0,7791
-306	1339,18	1342,55	1341,08	1342,75	1247,43	790,22	0,3772	0,8709
-305	1340,53	1342,55	1341,08	1342,75	1247,43	790,22	0,6272	0,9627
-304	1341,88	1342,55	1341,08	1342,75	1247,43	790,22	0,8772	0,9456
-303	1343,24	1342,55	1341,08	1342,75	1247,43	790,22	0,8728	0,8538
-302	1344,59	1342,55	1341,08	1342,75	1247,43	790,22	0,6228	0,7620
-301	1345,94	1342,55	1341,08	1342,75	1247,43	790,22	0,3728	0,6703
-300	1347,29	1342,55	1341,08	1342,75	1247,43	790,22	0,1228	0,5785
-299	1348,64	1353,36	1341,08	1342,75	1247,43	790,22	0,1272	0,4868
-298	1349,99	1353,36	1341,08	1342,75	1247,43	1908,45	0,3772	0,3950

Table 5. Page 25b

A	J	K	L	M	N	O	P	Q	R
-327	0,3060	0,4873	0,0689	2,6789	4,518	-40,875	1311	59,3	46,7
-326	0,3353	0,4764	0,0665	2,4653	4,518	-40,750	1312	54,6	47,7
-325	0,3647	0,4654	0,0641	2,1396	4,518	-40,625	1314	47,4	48,3
-324	0,3940	0,4545	0,0617	1,8138	4,518	-40,500	1315	40,1	48,4
-323	0,4234	0,4436	0,0592	1,7424	4,518	-40,375	1316	38,6	47,5
-322	0,4527	0,4326	0,0568	1,9166	4,518	-40,250	1318	42,4	45,4
-321	0,4821	0,4217	0,0544	2,0909	4,518	-40,125	1319	46,3	43,1
-320	0,5114	0,4107	0,0520	2,2651	4,518	-40,000	1320	50,1	40,9
-319	0,5408	0,3998	0,0496	2,1850	4,518	-39,875	1322	48,4	39,4
-318	0,5701	0,3889	0,0472	1,8592	4,518	-39,750	1323	41,1	39,0
-317	0,5995	0,3779	0,0447	1,5335	4,518	-39,625	1324	33,9	39,1
-316	0,6288	0,3670	0,0423	1,2077	4,518	-39,500	1326	26,7	39,6
-315	0,6582	0,3561	0,0399	1,2264	4,518	-39,375	1327	27,1	39,9
-314	0,6876	0,3451	0,0375	1,5842	4,518	-39,250	1328	35,1	40,1
-313	0,7169	0,3342	0,0351	1,9419	4,518	-39,125	1330	43,0	40,8
-312	0,7463	0,3233	0,0327	2,2997	4,518	-39,000	1331	50,9	41,9
-311	0,7756	0,3123	0,0302	2,4031	4,518	-38,875	1332	53,2	44,0
-310	0,8050	0,3014	0,0278	2,2609	4,518	-38,750	1334	50,0	47,0
-309	0,8343	0,2905	0,0254	2,1186	4,518	-38,625	1335	46,9	50,0
-308	0,8637	0,2795	0,0230	1,9764	4,518	-38,500	1336	43,7	52,8
-307	0,8930	0,2686	0,0206	2,0885	4,518	-38,375	1338	46,2	54,4
-306	0,9224	0,2577	0,0182	2,4463	4,518	-38,250	1339	54,1	54,8
-305	0,9517	0,2467	0,0157	2,8040	4,518	-38,125	1341	62,1	54,6
-304	0,9811	0,2358	0,0133	3,0529	4,518	-38,000	1342	67,6	53,8
-303	0,9896	0,2248	0,0109	2,9519	4,518	-37,875	1343	65,3	53,0
-302	0,9602	0,2139	0,0085	2,5675	4,518	-37,750	1345	56,8	52,3
-301	0,9309	0,2030	0,0061	2,1830	4,518	-37,625	1346	48,3	51,0
-300	0,9015	0,1920	0,0037	1,7985	4,518	-37,500	1347	39,8	49,0
-299	0,8721	0,1811	0,0012	1,6684	4,518	-37,375	1349	36,9	46,2
-298	0,8428	0,1702	0,0012	1,7863	4,518	-37,250	1350	39,5	42,7

Table 5. Page 26a

A	B	C	D	E	F	G	H	I
-297	1351,34	1353,36	1341,08	1342,75	1247,43	1908,45	0,6272	0,3032
-296	1352,70	1353,36	1341,08	1342,75	1247,43	1908,45	0,8772	0,2115
-295	1354,05	1353,36	1341,08	1342,75	1247,43	1908,45	0,8728	0,1197
-294	1355,40	1353,36	1341,08	1342,75	1247,43	1908,45	0,6228	0,0279
-293	1356,75	1353,36	1370,54	1342,75	1247,43	1908,45	0,3728	0,0638
-292	1358,10	1353,36	1370,54	1342,75	1247,43	1908,45	0,1228	0,1556
-291	1359,45	1364,17	1370,54	1342,75	1247,43	1908,45	0,1272	0,2473
-290	1360,81	1364,17	1370,54	1342,75	1247,43	1908,45	0,3772	0,3391
-289	1362,16	1364,17	1370,54	1342,75	1247,43	1908,45	0,6272	0,4309
-288	1363,51	1364,17	1370,54	1342,75	1247,43	1908,45	0,8772	0,5226
-287	1364,86	1364,17	1370,54	1342,75	1247,43	1908,45	0,8728	0,6144
-286	1366,21	1364,17	1370,54	1342,75	1247,43	1908,45	0,6228	0,7062
-285	1367,56	1364,17	1370,54	1342,75	1247,43	1908,45	0,3728	0,7979
-284	1368,92	1364,17	1370,54	1342,75	1247,43	1908,45	0,1228	0,8897
-283	1370,27	1374,99	1370,54	1342,75	1247,43	1908,45	0,1272	0,9814
-282	1371,62	1374,99	1370,54	1342,75	1494,62	1908,45	0,3772	0,9268
-281	1372,97	1374,99	1370,54	1342,75	1494,62	1908,45	0,6272	0,8350
-280	1374,32	1374,99	1370,54	1342,75	1494,62	1908,45	0,8772	0,7433
-279	1375,67	1374,99	1370,54	1342,75	1494,62	1908,45	0,8728	0,6515
-278	1377,02	1374,99	1370,54	1342,75	1494,62	1908,45	0,6228	0,5598
-277	1378,38	1374,99	1370,54	1342,75	1494,62	1908,45	0,3728	0,4680
-276	1379,73	1374,99	1370,54	1342,75	1494,62	1908,45	0,1228	0,3762
-275	1381,08	1385,80	1370,54	1342,75	1494,62	1908,45	0,1272	0,2845
-274	1382,43	1385,80	1370,54	1342,75	1494,62	1908,45	0,3772	0,1927
-273	1383,78	1385,80	1370,54	1342,75	1494,62	1908,45	0,6272	0,1009
-272	1385,13	1385,80	1370,54	1342,75	1494,62	1908,45	0,8772	0,0092
-271	1386,49	1385,80	1400,00	1342,75	1494,62	1908,45	0,8728	0,0826
-270	1387,84	1385,80	1400,00	1342,75	1494,62	1908,45	0,6228	0,1743
-269	1389,19	1385,80	1400,00	1434,84	1494,62	1908,45	0,3728	0,2661
-268	1390,54	1385,80	1400,00	1434,84	1494,62	1908,45	0,1228	0,3579

Table 5. Page 26b

A	J	K	L	M	N	O	P	Q	R
-297	0,8134	0,1592	0,0036	1,9067	4,518	-37,125	1351	42,2	39,4
-296	0,7841	0,1483	0,0060	2,0271	4,518	-37,000	1353	44,9	36,7
-295	0,7547	0,1374	0,0084	1,8931	4,518	-36,875	1354	41,9	35,0
-294	0,7254	0,1264	0,0109	1,5134	4,518	-36,750	1355	33,5	34,4
-293	0,6960	0,1155	0,0133	1,2614	4,518	-36,625	1357	27,9	34,3
-292	0,6667	0,1046	0,0157	1,0653	4,518	-36,500	1358	23,6	34,6
-291	0,6373	0,0936	0,0181	1,1236	4,518	-36,375	1359	24,9	34,8
-290	0,6080	0,0827	0,0205	1,4275	4,518	-36,250	1361	31,6	34,8
-289	0,5786	0,0717	0,0229	1,7313	4,518	-36,125	1362	38,3	35,2
-288	0,5493	0,0608	0,0254	2,0352	4,518	-36,000	1364	45,0	35,8
-287	0,5199	0,0499	0,0278	2,0848	4,518	-35,875	1365	46,1	37,0
-286	0,4906	0,0389	0,0302	1,8887	4,518	-35,750	1366	41,8	38,4
-285	0,4612	0,0280	0,0326	1,6926	4,518	-35,625	1368	37,5	39,5
-284	0,4318	0,0171	0,0350	1,4964	4,518	-35,500	1369	33,1	40,2
-283	0,4025	0,0061	0,0374	1,5547	4,518	-35,375	1370	34,4	39,8
-282	0,3731	0,0048	0,0399	1,7218	4,518	-35,250	1372	38,1	38,5
-281	0,3438	0,0157	0,0423	1,8640	4,518	-35,125	1373	41,3	36,8
-280	0,3144	0,0267	0,0447	2,0063	4,518	-35,000	1374	44,4	34,6
-279	0,2851	0,0376	0,0471	1,8941	4,518	-34,875	1376	41,9	32,7
-278	0,2557	0,0485	0,0495	1,5364	4,518	-34,750	1377	34,0	31,0
-277	0,2264	0,0595	0,0519	1,1786	4,518	-34,625	1378	26,1	29,2
-276	0,1970	0,0704	0,0544	0,8208	4,518	-34,500	1380	18,2	27,4
-275	0,1677	0,0813	0,0568	0,7174	4,518	-34,375	1381	15,9	25,5
-274	0,1383	0,0923	0,0592	0,8597	4,518	-34,250	1382	19,0	23,3
-273	0,1090	0,1032	0,0616	1,0019	4,518	-34,125	1384	22,2	21,7
-272	0,0796	0,1142	0,0640	1,1442	4,518	-34,000	1385	25,3	20,6
-271	0,0503	0,1251	0,0665	1,1972	4,518	-33,875	1386	26,5	20,8
-270	0,0209	0,1360	0,0689	1,0230	4,518	-33,750	1388	22,6	22,1
-269	0,0085	0,1470	0,0713	0,8656	4,518	-33,625	1389	19,2	24,1
-268	0,0378	0,1579	0,0737	0,7501	4,518	-33,500	1391	16,6	26,7

Table 5. Page 27a

A	B	C	D	E	F	G	H	I
-267	1391,89	1396,61	1400,00	1434,84	1494,62	1908,45	0,1272	0,4496
-266	1393,24	1396,61	1400,00	1434,84	1494,62	1908,45	0,3772	0,5414
-265	1394,59	1396,61	1400,00	1434,84	1494,62	1908,45	0,6272	0,6332
-264	1395,95	1396,61	1400,00	1434,84	1494,62	1908,45	0,8772	0,7249
-263	1397,30	1396,61	1400,00	1434,84	1494,62	1908,45	0,8728	0,8167
-262	1398,65	1396,61	1400,00	1434,84	1494,62	1908,45	0,6228	0,9084
-261	1400,00	1396,61	1400,00	1434,84	1494,62	1908,45	0,3728	0,9998
-260	1401,35	1396,61	1400,00	1434,84	1494,62	1908,45	0,1228	0,9080
-259	1402,70	1407,42	1400,00	1434,84	1494,62	1908,45	0,1272	0,8163
-258	1404,06	1407,42	1400,00	1434,84	1494,62	1908,45	0,3772	0,7245
-257	1405,41	1407,42	1400,00	1434,84	1494,62	1908,45	0,6272	0,6327
-256	1406,76	1407,42	1400,00	1434,84	1494,62	1908,45	0,8772	0,5410
-255	1408,11	1407,42	1400,00	1434,84	1494,62	1908,45	0,8728	0,4492
-254	1409,46	1407,42	1400,00	1434,84	1494,62	1908,45	0,6228	0,3575
-253	1410,81	1407,42	1400,00	1434,84	1494,62	1908,45	0,3728	0,2657
-252	1412,17	1407,42	1400,00	1434,84	1494,62	1908,45	0,1228	0,1739
-251	1413,52	1418,24	1400,00	1434,84	1494,62	1908,45	0,1272	0,0822
-250	1414,87	1418,24	1429,46	1434,84	1494,62	1908,45	0,3772	0,0096
-249	1416,22	1418,24	1429,46	1434,84	1494,62	1908,45	0,6272	0,1014
-248	1417,57	1418,24	1429,46	1434,84	1494,62	1908,45	0,8772	0,1931
-247	1418,92	1418,24	1429,46	1434,84	1494,62	1908,45	0,8728	0,2849
-246	1420,27	1418,24	1429,46	1434,84	1494,62	1908,45	0,6228	0,3766
-245	1421,63	1418,24	1429,46	1434,84	1494,62	1908,45	0,3728	0,4684
-244	1422,98	1418,24	1429,46	1434,84	1494,62	1908,45	0,1228	0,5602
-243	1424,33	1429,05	1429,46	1434,84	1494,62	1908,45	0,1272	0,6519
-242	1425,68	1429,05	1429,46	1434,84	1494,62	1908,45	0,3772	0,7437
-241	1427,03	1429,05	1429,46	1434,84	1494,62	1908,45	0,6272	0,8355
-240	1428,38	1429,05	1429,46	1434,84	1494,62	1908,45	0,8772	0,9272
-239	1429,74	1429,05	1429,46	1434,84	1494,62	1908,45	0,8728	0,9810
-238	1431,09	1429,05	1429,46	1434,84	1494,62	1908,45	0,6228	0,8893

Table 5. Page 27b

A	J	K	L	M	N	O	P	Q	R
-267	0,0672	0,1688	0,0761	0,8889	4,518	-33,375	1392	19,7	29,2
-266	0,0965	0,1798	0,0785	1,2734	4,518	-33,250	1393	28,2	31,3
-265	0,1259	0,1907	0,0810	1,6579	4,518	-33,125	1395	36,7	33,6
-264	0,1552	0,2016	0,0834	2,0423	4,518	-33,000	1396	45,2	35,5
-263	0,1846	0,2126	0,0858	2,1724	4,518	-32,875	1397	48,1	37,6
-262	0,2139	0,2235	0,0882	2,0569	4,518	-32,750	1399	45,5	39,8
-261	0,2433	0,2344	0,0906	1,9410	4,518	-32,625	1400	43,0	41,6
-260	0,2726	0,2454	0,0930	1,6419	4,518	-32,500	1401	36,3	42,9
-259	0,3020	0,2563	0,0955	1,5972	4,518	-32,375	1403	35,4	43,2
-258	0,3313	0,2673	0,0979	1,7981	4,518	-32,250	1404	39,8	42,4
-257	0,3607	0,2782	0,1003	1,9991	4,518	-32,125	1405	44,2	41,1
-256	0,3900	0,2891	0,1027	2,2000	4,518	-32,000	1407	48,7	39,4
-255	0,4194	0,3001	0,1051	2,1466	4,518	-31,875	1408	47,5	38,3
-254	0,4488	0,3110	0,1075	1,8476	4,518	-31,750	1409	40,9	37,9
-253	0,4781	0,3219	0,1100	1,5485	4,518	-31,625	1411	34,3	37,9
-252	0,5075	0,3329	0,1124	1,2495	4,518	-31,500	1412	27,7	38,4
-251	0,5368	0,3438	0,1148	1,2048	4,518	-31,375	1414	26,7	38,7
-250	0,5662	0,3547	0,1172	1,4249	4,518	-31,250	1415	31,5	38,9
-249	0,5955	0,3657	0,1196	1,8094	4,518	-31,125	1416	40,0	39,5
-248	0,6249	0,3766	0,1221	2,1938	4,518	-31,000	1418	48,6	40,5
-247	0,6542	0,3875	0,1245	2,3239	4,518	-30,875	1419	51,4	42,7
-246	0,6836	0,3985	0,1269	2,2084	4,518	-30,750	1420	48,9	45,9
-245	0,7129	0,4094	0,1293	2,0929	4,518	-30,625	1422	46,3	49,4
-244	0,7423	0,4203	0,1317	1,9773	4,518	-30,500	1423	43,8	53,0
-243	0,7716	0,4313	0,1341	2,1162	4,518	-30,375	1424	46,8	55,9
-242	0,8010	0,4422	0,1366	2,5006	4,518	-30,250	1426	55,3	57,7
-241	0,8303	0,4532	0,1390	2,8851	4,518	-30,125	1427	63,9	59,1
-240	0,8597	0,4641	0,1414	3,2696	4,518	-30,000	1428	72,4	60,0
-239	0,8891	0,4750	0,1438	3,3617	4,518	-29,875	1430	74,4	61,1
-238	0,9184	0,4860	0,1462	3,0627	4,518	-29,750	1431	67,8	62,1

Table 5. Page 28a

A	B	C	D	E	F	G	H	I
-237	1432,44	1429,05	1429,46	1434,84	1494,62	1908,45	0,3728	0,7975
-236	1433,79	1429,05	1429,46	1434,84	1494,62	1908,45	0,1228	0,7057
-235	1435,14	1439,86	1429,46	1434,84	1494,62	1908,45	0,1272	0,6140
-234	1436,49	1439,86	1429,46	1434,84	1494,62	1908,45	0,3772	0,5222
-233	1437,84	1439,86	1429,46	1434,84	1494,62	1908,45	0,6272	0,4304
-232	1439,20	1439,86	1429,46	1434,84	1494,62	1908,45	0,8772	0,3387
-231	1440,55	1439,86	1429,46	1434,84	1494,62	1908,45	0,8728	0,2469
-230	1441,90	1439,86	1429,46	1434,84	1494,62	1908,45	0,6228	0,1552
-229	1443,25	1439,86	1429,46	1434,84	1494,62	1908,45	0,3728	0,0634
-228	1444,60	1439,86	1458,91	1434,84	1494,62	1908,45	0,1228	0,0284
-227	1445,95	1450,67	1458,91	1434,84	1494,62	1908,45	0,1272	0,1201
-226	1447,31	1450,67	1458,91	1434,84	1494,62	1908,45	0,3772	0,2119
-225	1448,66	1450,67	1458,91	1434,84	1494,62	1908,45	0,6272	0,3037
-224	1450,01	1450,67	1458,91	1434,84	1494,62	1908,45	0,8772	0,3954
-223	1451,36	1450,67	1458,91	1434,84	1494,62	1908,45	0,8728	0,4872
-222	1452,71	1450,67	1458,91	1434,84	1494,62	1908,45	0,6228	0,5789
-221	1454,06	1450,67	1458,91	1434,84	1494,62	1908,45	0,3728	0,6707
-220	1455,42	1450,67	1458,91	1434,84	1494,62	1908,45	0,1228	0,7625
-219	1456,77	1461,49	1458,91	1434,84	1494,62	1908,45	0,1272	0,8542
-218	1458,12	1461,49	1458,91	1434,84	1494,62	1908,45	0,3772	0,9460
-217	1459,47	1461,49	1458,91	1434,84	1494,62	1908,45	0,6272	0,9622
-216	1460,82	1461,49	1458,91	1434,84	1494,62	1908,45	0,8772	0,8705
-215	1462,17	1461,49	1458,91	1434,84	1494,62	1908,45	0,8728	0,7787
-214	1463,52	1461,49	1458,91	1434,84	1494,62	1908,45	0,6228	0,6870
-213	1464,88	1461,49	1458,91	1434,84	1494,62	1908,45	0,3728	0,5952
-212	1466,23	1461,49	1458,91	1434,84	1494,62	1908,45	0,1228	0,5034
-211	1467,58	1472,30	1458,91	1434,84	1494,62	1908,45	0,1272	0,4117
-210	1468,93	1472,30	1458,91	1434,84	1494,62	1908,45	0,3772	0,3199
-209	1470,28	1472,30	1458,91	1434,84	1494,62	1908,45	0,6272	0,2281
-208	1471,63	1472,30	1458,91	1434,84	1494,62	1908,45	0,8772	0,1364

Table 5. Page 28b

A	J	K	L	M	N	O	P	Q	R
-237	0,9478	0,4969	0,1486	2,7636	4,518	-29,625	1432	61,2	62,6
-236	0,9771	0,5078	0,1511	2,4646	4,518	-29,500	1434	54,5	62,5
-235	0,9935	0,5188	0,1535	2,4069	4,518	-29,375	1435	53,3	61,1
-234	0,9642	0,5297	0,1559	2,5492	4,518	-29,250	1436	56,4	58,7
-233	0,9348	0,5406	0,1583	2,6914	4,518	-29,125	1438	59,6	56,1
-232	0,9055	0,5516	0,1607	2,8336	4,518	-29,000	1439	62,7	53,5
-231	0,8761	0,5625	0,1631	2,7215	4,518	-28,875	1441	60,2	51,8
-230	0,8468	0,5734	0,1656	2,3638	4,518	-28,750	1442	52,3	51,1
-229	0,8174	0,5844	0,1680	2,0060	4,518	-28,625	1443	44,4	50,8
-228	0,7881	0,5953	0,1704	1,7050	4,518	-28,500	1445	37,7	51,0
-227	0,7587	0,6062	0,1728	1,7851	4,518	-28,375	1446	39,5	51,0
-226	0,7294	0,6172	0,1752	2,1108	4,518	-28,250	1447	46,7	50,8
-225	0,7000	0,6281	0,1776	2,4366	4,518	-28,125	1449	53,9	51,1
-224	0,6706	0,6391	0,1801	2,7624	4,518	-28,000	1450	61,1	51,9
-223	0,6413	0,6500	0,1825	2,8338	4,518	-27,875	1451	62,7	53,6
-222	0,6119	0,6609	0,1849	2,6595	4,518	-27,750	1453	58,9	55,8
-221	0,5826	0,6719	0,1873	2,4853	4,518	-27,625	1454	55,0	57,9
-220	0,5532	0,6828	0,1897	2,3111	4,518	-27,500	1455	51,1	59,6
-219	0,5239	0,6937	0,1922	2,3912	4,518	-27,375	1457	52,9	60,2
-218	0,4945	0,7047	0,1946	2,7169	4,518	-27,250	1458	60,1	59,7
-217	0,4652	0,7156	0,1970	2,9672	4,518	-27,125	1459	65,7	58,8
-216	0,4358	0,7265	0,1994	3,1094	4,518	-27,000	1461	68,8	57,4
-215	0,4065	0,7375	0,2018	2,9973	4,518	-26,875	1462	66,3	56,2
-214	0,3771	0,7484	0,2042	2,6395	4,518	-26,750	1464	58,4	55,1
-213	0,3478	0,7593	0,2067	2,2818	4,518	-26,625	1465	50,5	53,6
-212	0,3184	0,7703	0,2091	1,9240	4,518	-26,500	1466	42,6	51,9
-211	0,2891	0,7812	0,2115	1,8206	4,518	-26,375	1468	40,3	49,5
-210	0,2597	0,7922	0,2139	1,9629	4,518	-26,250	1469	43,4	46,7
-209	0,2303	0,8031	0,2163	2,1051	4,518	-26,125	1470	46,6	44,4
-208	0,2010	0,8140	0,2187	2,2473	4,518	-26,000	1472	49,7	42,5

Table 5. Page 29a

A	B	C	D	E	F	G	H	I
-207	1472,99	1472,30	1458,91	1434,84	1494,62	1908,45	0,8728	0,0446
-206	1474,34	1472,30	1488,37	1434,84	1494,62	1908,45	0,6228	0,0471
-205	1475,69	1472,30	1488,37	1434,84	1494,62	1908,45	0,3728	0,1389
-204	1477,04	1472,30	1488,37	1434,84	1494,62	1908,45	0,1228	0,2307
-203	1478,39	1483,11	1488,37	1434,84	1494,62	1908,45	0,1272	0,3224
-202	1479,74	1483,11	1488,37	1434,84	1494,62	1908,45	0,3772	0,4142
-201	1481,10	1483,11	1488,37	1526,93	1494,62	1908,45	0,6272	0,5059
-200	1482,45	1483,11	1488,37	1526,93	1494,62	1908,45	0,8772	0,5977
-199	1483,80	1483,11	1488,37	1526,93	1494,62	1908,45	0,8728	0,6895
-198	1485,15	1483,11	1488,37	1526,93	1494,62	1908,45	0,6228	0,7812
-197	1486,50	1483,11	1488,37	1526,93	1494,62	1908,45	0,3728	0,8730
-196	1487,85	1483,11	1488,37	1526,93	1494,62	1908,45	0,1228	0,9648
-195	1489,20	1493,92	1488,37	1526,93	1494,62	1908,45	0,1272	0,9435
-194	1490,56	1493,92	1488,37	1526,93	1494,62	1908,45	0,3772	0,8517
-193	1491,91	1493,92	1488,37	1526,93	1494,62	1908,45	0,6272	0,7600
-192	1493,26	1493,92	1488,37	1526,93	1494,62	1908,45	0,8772	0,6682
-191	1494,61	1493,92	1488,37	1526,93	1494,62	1908,45	0,8728	0,5764
-190	1495,96	1493,92	1488,37	1526,93	1494,62	1908,45	0,6228	0,4847
-189	1497,31	1493,92	1488,37	1526,93	1494,62	1908,45	0,3728	0,3929
-188	1498,67	1493,92	1488,37	1526,93	1494,62	1908,45	0,1228	0,3011
-187	1500,02	1504,74	1488,37	1526,93	1494,62	1908,45	0,1272	0,2094
-186	1501,37	1504,74	1488,37	1526,93	1494,62	1908,45	0,3772	0,1176
-185	1502,72	1504,74	1488,37	1526,93	1494,62	1908,45	0,6272	0,0259
-184	1504,07	1504,74	1517,83	1526,93	1494,62	1908,45	0,8772	0,0659
-183	1505,42	1504,74	1517,83	1526,93	1494,62	1908,45	0,8728	0,1577
-182	1506,77	1504,74	1517,83	1526,93	1494,62	1908,45	0,6228	0,2494
-181	1508,13	1504,74	1517,83	1526,93	1494,62	1908,45	0,3728	0,3412
-180	1509,48	1504,74	1517,83	1526,93	1494,62	1908,45	0,1228	0,4330
-179	1510,83	1515,55	1517,83	1526,93	1494,62	1908,45	0,1272	0,5247
-178	1512,18	1515,55	1517,83	1526,93	1494,62	1908,45	0,3772	0,6165

Table 5. Page 29b

A	J	K	L	M	N	O	P	Q	R
-207	0,1716	0,8250	0,2212	2,1352	4,518	-25,875	1473	47,3	41,7
-206	0,1423	0,8359	0,2236	1,8717	4,518	-25,750	1474	41,4	42,0
-205	0,1129	0,8468	0,2260	1,6975	4,518	-25,625	1476	37,6	42,7
-204	0,0836	0,8578	0,2284	1,5232	4,518	-25,500	1477	33,7	44,1
-203	0,0542	0,8687	0,2308	1,6034	4,518	-25,375	1478	35,5	45,4
-202	0,0249	0,8796	0,2332	1,9291	4,518	-25,250	1480	42,7	46,7
-201	0,0045	0,8906	0,2357	2,2638	4,518	-25,125	1481	50,1	48,3
-200	0,0338	0,9015	0,2381	2,6483	4,518	-25,000	1482	58,6	50,1
-199	0,0632	0,9124	0,2405	2,7784	4,518	-24,875	1484	61,5	52,4
-198	0,0925	0,9234	0,2429	2,6629	4,518	-24,750	1485	58,9	55,0
-197	0,1219	0,9343	0,2453	2,5474	4,518	-24,625	1487	56,4	57,3
-196	0,1512	0,9452	0,2478	2,4318	4,518	-24,500	1488	53,8	59,3
-195	0,1806	0,9562	0,2502	2,4576	4,518	-24,375	1489	54,4	60,2
-194	0,2099	0,9671	0,2526	2,6586	4,518	-24,250	1491	58,8	59,9
-193	0,2393	0,9781	0,2550	2,8595	4,518	-24,125	1492	63,3	59,2
-192	0,2687	0,9890	0,2574	3,0604	4,518	-24,000	1493	67,7	58,0
-191	0,2980	0,9999	0,2598	3,0070	4,518	-23,875	1495	66,6	56,8
-190	0,3274	0,9891	0,2623	2,6862	4,518	-23,750	1496	59,5	56,1
-189	0,3567	0,9782	0,2647	2,3653	4,518	-23,625	1497	52,4	55,3
-188	0,3861	0,9673	0,2671	2,0444	4,518	-23,500	1499	45,2	54,8
-187	0,4154	0,9563	0,2695	1,9778	4,518	-23,375	1500	43,8	54,0
-186	0,4448	0,9454	0,2719	2,1569	4,518	-23,250	1501	47,7	53,1
-185	0,4741	0,9345	0,2743	2,3360	4,518	-23,125	1503	51,7	52,6
-184	0,5035	0,9235	0,2768	2,6469	4,518	-23,000	1504	58,6	52,5
-183	0,5328	0,9126	0,2792	2,7551	4,518	-22,875	1505	61,0	53,5
-182	0,5622	0,9017	0,2816	2,6177	4,518	-22,750	1507	57,9	55,6
-181	0,5915	0,8907	0,2840	2,4803	4,518	-22,625	1508	54,9	58,1
-180	0,6209	0,8798	0,2864	2,3429	4,518	-22,500	1509	51,9	61,1
-179	0,6502	0,8688	0,2888	2,4598	4,518	-22,375	1511	54,4	63,6
-178	0,6796	0,8579	0,2913	2,8224	4,518	-22,250	1512	62,5	65,5

Table 5. Page 30a

A	B	C	D	E	F	G	H	I
-177	1513,53	1515,55	1517,83	1526,93	1494,62	1908,45	0,6272	0,7082
-176	1514,88	1515,55	1517,83	1526,93	1494,62	1908,45	0,8772	0,8000
-175	1516,24	1515,55	1517,83	1526,93	1494,62	1908,45	0,8728	0,8918
-174	1517,59	1515,55	1517,83	1526,93	1494,62	1908,45	0,6228	0,9835
-173	1518,94	1515,55	1517,83	1526,93	1494,62	1908,45	0,3728	0,9247
-172	1520,29	1515,55	1517,83	1526,93	1494,62	1908,45	0,1228	0,8329
-171	1521,64	1526,36	1517,83	1526,93	1494,62	1908,45	0,1272	0,7412
-170	1522,99	1526,36	1517,83	1526,93	1494,62	1908,45	0,3772	0,6494
-169	1524,35	1526,36	1517,83	1526,93	1494,62	1908,45	0,6272	0,5577
-168	1525,70	1526,36	1517,83	1526,93	1494,62	1908,45	0,8772	0,4659
-167	1527,05	1526,36	1517,83	1526,93	1494,62	1908,45	0,8728	0,3741
-166	1528,40	1526,36	1517,83	1526,93	1494,62	1908,45	0,6228	0,2824
-165	1529,75	1526,36	1517,83	1526,93	1494,62	1908,45	0,3728	0,1906
-164	1531,10	1526,36	1517,83	1526,93	1494,62	1908,45	0,1228	0,0988
-163	1532,45	1537,17	1517,83	1526,93	1494,62	1908,45	0,1272	0,0071
-162	1533,81	1537,17	1547,29	1526,93	1494,62	1908,45	0,3772	0,0847
-161	1535,16	1537,17	1547,29	1526,93	1494,62	1908,45	0,6272	0,1764
-160	1536,51	1537,17	1547,29	1526,93	1494,62	1908,45	0,8772	0,2682
-159	1537,86	1537,17	1547,29	1526,93	1494,62	1908,45	0,8728	0,3600
-158	1539,21	1537,17	1547,29	1526,93	1494,62	1908,45	0,6228	0,4517
-157	1540,56	1537,17	1547,29	1526,93	1494,62	1908,45	0,3728	0,5435
-156	1541,92	1537,17	1547,29	1526,93	1494,62	1908,45	0,1228	0,6353
-155	1543,27	1547,99	1547,29	1526,93	1494,62	1908,45	0,1272	0,7270
-154	1544,62	1547,99	1547,29	1526,93	1494,62	1908,45	0,3772	0,8188
-153	1545,97	1547,99	1547,29	1526,93	1494,62	1908,45	0,6272	0,9105
-152	1547,32	1547,99	1547,29	1526,93	1494,62	1908,45	0,8772	0,9977
-151	1548,67	1547,99	1547,29	1526,93	1494,62	1908,45	0,8728	0,9059
-150	1550,03	1547,99	1547,29	1526,93	1494,62	1908,45	0,6228	0,8142
-149	1551,38	1547,99	1547,29	1526,93	1494,62	1908,45	0,3728	0,7224
-148	1552,73	1547,99	1547,29	1526,93	1494,62	1908,45	0,1228	0,6306

Table 5. Page 30b

A	J	K	L	M	N	O	P	Q	R
-177	0,7090	0,8470	0,2937	3,1850	4,518	-22,125	1514	70,5	67,0
-176	0,7383	0,8360	0,2961	3,5476	4,518	-22,000	1515	78,5	68,1
-175	0,7677	0,8251	0,2985	3,6559	4,518	-21,875	1516	80,9	69,3
-174	0,7970	0,8142	0,3009	3,5185	4,518	-21,750	1518	77,9	70,7
-173	0,8264	0,8032	0,3034	3,2305	4,518	-21,625	1519	71,5	71,6
-172	0,8557	0,7923	0,3058	2,9096	4,518	-21,500	1520	64,4	72,1
-171	0,8851	0,7814	0,3082	2,8430	4,518	-21,375	1522	62,9	71,5
-170	0,9144	0,7704	0,3106	3,0221	4,518	-21,250	1523	66,9	69,7
-169	0,9438	0,7595	0,3130	3,2011	4,518	-21,125	1524	70,8	67,3
-168	0,9731	0,7486	0,3154	3,3802	4,518	-21,000	1526	74,8	64,6
-167	0,9975	0,7376	0,3179	3,2999	4,518	-20,875	1527	73,0	62,5
-166	0,9682	0,7267	0,3203	2,9203	4,518	-20,750	1528	64,6	61,2
-165	0,9388	0,7158	0,3227	2,5407	4,518	-20,625	1530	56,2	60,2
-164	0,9095	0,7048	0,3251	2,1610	4,518	-20,500	1531	47,8	59,6
-163	0,8801	0,6939	0,3275	2,0358	4,518	-20,375	1532	45,1	58,6
-162	0,8507	0,6829	0,3299	2,3255	4,518	-20,250	1534	51,5	57,3
-161	0,8214	0,6720	0,3324	2,6294	4,518	-20,125	1535	58,2	56,5
-160	0,7920	0,6611	0,3348	2,9333	4,518	-20,000	1537	64,9	56,2
-159	0,7627	0,6501	0,3372	2,9828	4,518	-19,875	1538	66,0	56,9
-158	0,7333	0,6392	0,3396	2,7867	4,518	-19,750	1539	61,7	58,7
-157	0,7040	0,6283	0,3420	2,5906	4,518	-19,625	1541	57,3	60,5
-156	0,6746	0,6173	0,3444	2,3945	4,518	-19,500	1542	53,0	62,3
-155	0,6453	0,6064	0,3469	2,4527	4,518	-19,375	1543	54,3	63,0
-154	0,6159	0,5955	0,3493	2,7566	4,518	-19,250	1545	61,0	62,6
-153	0,5866	0,5845	0,3517	3,0605	4,518	-19,125	1546	67,7	61,9
-152	0,5572	0,5736	0,3541	3,3598	4,518	-19,000	1547	74,4	60,6
-151	0,5279	0,5627	0,3565	3,2258	4,518	-18,875	1549	71,4	59,6
-150	0,4985	0,5517	0,3590	2,8462	4,518	-18,750	1550	63,0	58,6
-149	0,4692	0,5408	0,3614	2,4665	4,518	-18,625	1551	54,6	57,3
-148	0,4398	0,5298	0,3638	2,0869	4,518	-18,500	1553	46,2	55,5

Table 5. Page 31a

A	B	C	D	E	F	G	H	I
-147	1554,08	1558,80	1547,29	1526,93	1494,62	1908,45	0,1272	0,5389
-146	1555,43	1558,80	1547,29	1526,93	1494,62	1908,45	0,3772	0,4471
-145	1556,78	1558,80	1547,29	1526,93	1494,62	1908,45	0,6272	0,3554
-144	1558,13	1558,80	1547,29	1526,93	1494,62	1908,45	0,8772	0,2636
-143	1559,49	1558,80	1547,29	1526,93	1494,62	1908,45	0,8728	0,1718
-142	1560,84	1558,80	1547,29	1526,93	1494,62	1908,45	0,6228	0,0801
-141	1562,19	1558,80	1576,75	1526,93	1494,62	1908,45	0,3728	0,0117
-140	1563,54	1558,80	1576,75	1526,93	1494,62	1908,45	0,1228	0,1035
-139	1564,89	1569,61	1576,75	1526,93	1494,62	1908,45	0,1272	0,1952
-138	1566,24	1569,61	1576,75	1526,93	1494,62	1908,45	0,3772	0,2870
-137	1567,60	1569,61	1576,75	1526,93	1494,62	1908,45	0,6272	0,3787
-136	1568,95	1569,61	1576,75	1526,93	1494,62	1908,45	0,8772	0,4705
-135	1570,30	1569,61	1576,75	1526,93	1494,62	1908,45	0,8728	0,5623
-134	1571,65	1569,61	1576,75	1526,93	1494,62	1908,45	0,6228	0,6540
-133	1573,00	1569,61	1576,75	1619,02	1494,62	1908,45	0,3728	0,7458
-132	1574,35	1569,61	1576,75	1619,02	1494,62	1908,45	0,1228	0,8376
-131	1575,70	1580,42	1576,75	1619,02	1494,62	1908,45	0,1272	0,9293
-130	1577,06	1580,42	1576,75	1619,02	1494,62	1908,45	0,3772	0,9789
-129	1578,41	1580,42	1576,75	1619,02	1494,62	1908,45	0,6272	0,8872
-128	1579,76	1580,42	1576,75	1619,02	1494,62	1908,45	0,8772	0,7954
-127	1581,11	1580,42	1576,75	1619,02	1494,62	1908,45	0,8728	0,7036
-126	1582,46	1580,42	1576,75	1619,02	1494,62	1908,45	0,6228	0,6119
-125	1583,81	1580,42	1576,75	1619,02	1494,62	1908,45	0,3728	0,5201
-124	1585,17	1580,42	1576,75	1619,02	1494,62	1908,45	0,1228	0,4284
-123	1586,52	1591,24	1576,75	1619,02	1494,62	1908,45	0,1272	0,3366
-122	1587,87	1591,24	1576,75	1619,02	1494,62	1908,45	0,3772	0,2448
-121	1589,22	1591,24	1576,75	1619,02	1494,62	1908,45	0,6272	0,1531
-120	1590,57	1591,24	1576,75	1619,02	1494,62	1908,45	0,8772	0,0613
-119	1591,92	1591,24	1606,20	1619,02	1494,62	1908,45	0,8728	0,0305
-118	1593,28	1591,24	1606,20	1619,02	1494,62	1908,45	0,6228	0,1222

Table 5. Page 31b

A	J	K	L	M	N	O	P	Q	R
-147	0,4104	0,5189	0,3662	1,9616	4,518	-18,375	1554	43,4	52,6
-146	0,3811	0,5080	0,3686	2,0820	4,518	-18,250	1555	46,1	49,1
-145	0,3517	0,4970	0,3710	2,2024	4,518	-18,125	1557	48,7	45,7
-144	0,3224	0,4861	0,3735	2,3227	4,518	-18,000	1558	51,4	42,7
-143	0,2930	0,4752	0,3759	2,1887	4,518	-17,875	1559	48,4	40,8
-142	0,2637	0,4642	0,3783	1,8091	4,518	-17,750	1561	40,0	40,0
-141	0,2343	0,4533	0,3807	1,4528	4,518	-17,625	1562	32,2	39,6
-140	0,2050	0,4424	0,3831	1,2567	4,518	-17,500	1564	27,8	39,6
-139	0,1756	0,4314	0,3855	1,3150	4,518	-17,375	1565	29,1	39,5
-138	0,1463	0,4205	0,3880	1,6189	4,518	-17,250	1566	35,8	39,2
-137	0,1169	0,4096	0,3904	1,9228	4,518	-17,125	1568	42,6	39,4
-136	0,0876	0,3986	0,3928	2,2267	4,518	-17,000	1569	49,3	40,2
-135	0,0582	0,3877	0,3952	2,2762	4,518	-16,875	1570	50,4	41,6
-134	0,0289	0,3768	0,3976	2,0801	4,518	-16,750	1572	46,0	43,8
-133	0,0005	0,3658	0,4000	1,8850	4,518	-16,625	1573	41,7	45,6
-132	0,0299	0,3549	0,4025	1,7476	4,518	-16,500	1574	38,7	47,1
-131	0,0592	0,3439	0,4049	1,8645	4,518	-16,375	1576	41,3	47,7
-130	0,0886	0,3330	0,4073	2,1850	4,518	-16,250	1577	48,4	47,4
-129	0,1179	0,3221	0,4097	2,3640	4,518	-16,125	1578	52,3	46,8
-128	0,1473	0,3111	0,4121	2,5431	4,518	-16,000	1580	56,3	45,9
-127	0,1766	0,3002	0,4145	2,4678	4,518	-15,875	1581	54,6	45,1
-126	0,2060	0,2893	0,4170	2,1469	4,518	-15,750	1582	47,5	44,5
-125	0,2353	0,2783	0,4194	1,8260	4,518	-15,625	1584	40,4	43,5
-124	0,2647	0,2674	0,4218	1,5051	4,518	-15,500	1585	33,3	42,6
-123	0,2940	0,2565	0,4242	1,4385	4,518	-15,375	1587	31,8	41,2
-122	0,3234	0,2455	0,4266	1,6176	4,518	-15,250	1588	35,8	39,6
-121	0,3527	0,2346	0,4291	1,7966	4,518	-15,125	1589	39,8	38,4
-120	0,3821	0,2237	0,4315	1,9757	4,518	-15,000	1591	43,7	37,8
-119	0,4114	0,2127	0,4339	1,9613	4,518	-14,875	1592	43,4	38,2
-118	0,4408	0,2018	0,4363	1,8239	4,518	-14,750	1593	40,4	39,6

Table 5. Page 32a

A	B	C	D	E	F	G	H	I
-117	1594,63	1591,24	1606,20	1619,02	1494,62	1908,45	0,3728	0,2140
-116	1595,98	1591,24	1606,20	1619,02	1494,62	1908,45	0,1228	0,3057
-115	1597,33	1602,05	1606,20	1619,02	1494,62	1908,45	0,1272	0,3975
-114	1598,68	1602,05	1606,20	1619,02	1494,62	1908,45	0,3772	0,4893
-113	1600,03	1602,05	1606,20	1619,02	1494,62	1908,45	0,6272	0,5810
-112	1601,38	1602,05	1606,20	1619,02	1494,62	1908,45	0,8772	0,6728
-111	1602,74	1602,05	1606,20	1619,02	1494,62	1908,45	0,8728	0,7646
-110	1604,09	1602,05	1606,20	1619,02	1494,62	1908,45	0,6228	0,8563
-109	1605,44	1602,05	1606,20	1619,02	1494,62	1908,45	0,3728	0,9481
-108	1606,79	1602,05	1606,20	1619,02	1494,62	1908,45	0,1228	0,9602
-107	1608,14	1612,86	1606,20	1619,02	1494,62	1908,45	0,1272	0,8684
-106	1609,49	1612,86	1606,20	1619,02	1494,62	1908,45	0,3772	0,7766
-105	1610,85	1612,86	1606,20	1619,02	1494,62	1908,45	0,6272	0,6849
-104	1612,20	1612,86	1606,20	1619,02	1494,62	1908,45	0,8772	0,5931
-103	1613,55	1612,86	1606,20	1619,02	1494,62	1908,45	0,8728	0,5013
-102	1614,90	1612,86	1606,20	1619,02	1494,62	1908,45	0,6228	0,4096
-101	1616,25	1612,86	1606,20	1619,02	1494,62	1908,45	0,3728	0,3178
-100	1617,60	1612,86	1606,20	1619,02	1494,62	1908,45	0,1228	0,2261
-99	1618,96	1623,67	1606,20	1619,02	1741,81	1908,45	0,1272	0,1343
-98	1620,31	1623,67	1606,20	1619,02	1741,81	1908,45	0,3772	0,0425
-97	1621,66	1623,67	1635,66	1619,02	1741,81	1908,45	0,6272	0,0492
-96	1623,01	1623,67	1635,66	1619,02	1741,81	1908,45	0,8772	0,1410
-95	1624,36	1623,67	1635,66	1619,02	1741,81	1908,45	0,8728	0,2328
-94	1625,71	1623,67	1635,66	1619,02	1741,81	1908,45	0,6228	0,3245
-93	1627,06	1623,67	1635,66	1619,02	1741,81	1908,45	0,3728	0,4163
-92	1628,42	1623,67	1635,66	1619,02	1741,81	1908,45	0,1228	0,5080
-91	1629,77	1634,49	1635,66	1619,02	1741,81	1908,45	0,1272	0,5998
-90	1631,12	1634,49	1635,66	1619,02	1741,81	1908,45	0,3772	0,6916
-89	1632,47	1634,49	1635,66	1619,02	1741,81	1908,45	0,6272	0,7833
-88	1633,82	1634,49	1635,66	1619,02	1741,81	1908,45	0,8772	0,8751

Table 5. Page 32b

A	J	K	L	M	N	O	P	Q	R
-117	0,4702	0,1909	0,4387	1,6865	4,518	-14,625	1595	37,3	41,5
-116	0,4995	0,1799	0,4411	1,5491	4,518	-14,500	1596	34,3	43,9
-115	0,5289	0,1690	0,4436	1,6661	4,518	-14,375	1597	36,9	46,0
-114	0,5582	0,1580	0,4460	2,0287	4,518	-14,250	1599	44,9	47,9
-113	0,5876	0,1471	0,4484	2,3913	4,518	-14,125	1600	52,9	49,8
-112	0,6169	0,1362	0,4508	2,7539	4,518	-14,000	1601	61,0	51,5
-111	0,6463	0,1252	0,4532	2,8621	4,518	-13,875	1603	63,3	53,3
-110	0,6756	0,1143	0,4556	2,7247	4,518	-13,750	1604	60,3	55,3
-109	0,7050	0,1034	0,4581	2,5873	4,518	-13,625	1605	57,3	56,9
-108	0,7343	0,0924	0,4605	2,3702	4,518	-13,500	1607	52,5	58,0
-107	0,7637	0,0815	0,4629	2,3037	4,518	-13,375	1608	51,0	58,0
-106	0,7930	0,0706	0,4653	2,4827	4,518	-13,250	1609	54,9	57,0
-105	0,8224	0,0596	0,4677	2,6618	4,518	-13,125	1611	58,9	55,5
-104	0,8517	0,0487	0,4701	2,8409	4,518	-13,000	1612	62,9	53,6
-103	0,8811	0,0378	0,4726	2,7656	4,518	-12,875	1614	61,2	52,1
-102	0,9105	0,0268	0,4750	2,4447	4,518	-12,750	1615	54,1	51,1
-101	0,9398	0,0159	0,4774	2,1237	4,518	-12,625	1616	47,0	50,2
-100	0,9692	0,0049	0,4798	1,8028	4,518	-12,500	1618	39,9	49,7
-99	0,9985	0,0060	0,4822	1,7482	4,518	-12,375	1619	38,7	48,9
-98	0,9721	0,0169	0,4847	1,8934	4,518	-12,250	1620	41,9	47,9
-97	0,9428	0,0279	0,4871	2,1341	4,518	-12,125	1622	47,2	47,3
-96	0,9134	0,0388	0,4895	2,4599	4,518	-12,000	1623	54,4	47,0
-95	0,8841	0,0497	0,4919	2,5313	4,518	-11,875	1624	56,0	47,7
-94	0,8547	0,0607	0,4943	2,3570	4,518	-11,750	1626	52,2	49,4
-93	0,8254	0,0716	0,4967	2,1828	4,518	-11,625	1627	48,3	51,4
-92	0,7960	0,0825	0,4992	2,0086	4,518	-11,500	1628	44,5	53,7
-91	0,7667	0,0935	0,5016	2,0887	4,518	-11,375	1630	46,2	55,4
-90	0,7373	0,1044	0,5040	2,4145	4,518	-11,250	1631	53,4	56,2
-89	0,7080	0,1153	0,5064	2,7402	4,518	-11,125	1632	60,6	56,5
-88	0,6786	0,1263	0,5088	3,0660	4,518	-11,000	1634	67,9	56,4

Table 5. Page 33a

A	B	C	D	E	F	G	H	I
-87	1635,17	1634,49	1635,66	1619,02	1741,81	1908,45	0,8728	0,9669
-86	1636,53	1634,49	1635,66	1619,02	1741,81	1908,45	0,6228	0,9414
-85	1637,88	1634,49	1635,66	1619,02	1741,81	1908,45	0,3728	0,8496
-84	1639,23	1634,49	1635,66	1619,02	1741,81	1908,45	0,1228	0,7579
-83	1640,58	1645,30	1635,66	1619,02	1741,81	1908,45	0,1272	0,6661
-82	1641,93	1645,30	1635,66	1619,02	1741,81	1908,45	0,3772	0,5743
-81	1643,28	1645,30	1635,66	1619,02	1741,81	1908,45	0,6272	0,4826
-80	1644,63	1645,30	1635,66	1619,02	1741,81	1908,45	0,8772	0,3908
-79	1645,99	1645,30	1635,66	1619,02	1741,81	1908,45	0,8728	0,2990
-78	1647,34	1645,30	1635,66	1619,02	1741,81	1908,45	0,6228	0,2073
-77	1648,69	1645,30	1635,66	1619,02	1741,81	1908,45	0,3728	0,1155
-76	1650,04	1645,30	1635,66	1619,02	1741,81	1908,45	0,1228	0,0238
-75	1651,39	1656,11	1665,12	1619,02	1741,81	1908,45	0,1272	0,0680
-74	1652,74	1656,11	1665,12	1619,02	1741,81	1908,45	0,3772	0,1598
-73	1654,10	1656,11	1665,12	1619,02	1741,81	1908,45	0,6272	0,2515
-72	1655,45	1656,11	1665,12	1619,02	1741,81	1908,45	0,8772	0,3433
-71	1656,80	1656,11	1665,12	1619,02	1741,81	1908,45	0,8728	0,4351
-70	1658,15	1656,11	1665,12	1619,02	1741,81	1908,45	0,6228	0,5268
-69	1659,50	1656,11	1665,12	1619,02	1741,81	1908,45	0,3728	0,6186
-68	1660,85	1656,11	1665,12	1619,02	1741,81	1908,45	0,1228	0,7103
-67	1662,21	1666,92	1665,12	1619,02	1741,81	1908,45	0,1272	0,8021
-66	1663,56	1666,92	1665,12	1619,02	1741,81	1908,45	0,3772	0,8939
-65	1664,91	1666,92	1665,12	1619,02	1741,81	1908,45	0,6272	0,9856
-64	1666,26	1666,92	1665,12	1711,11	1741,81	1908,45	0,8772	0,9226
-63	1667,61	1666,92	1665,12	1711,11	1741,81	1908,45	0,8728	0,8308
-62	1668,96	1666,92	1665,12	1711,11	1741,81	1908,45	0,6228	0,7391
-61	1670,31	1666,92	1665,12	1711,11	1741,81	1908,45	0,3728	0,6473
-60	1671,67	1666,92	1665,12	1711,11	1741,81	1908,45	0,1228	0,5556
-59	1673,02	1677,74	1665,12	1711,11	1741,81	1908,45	0,1272	0,4638
-58	1674,37	1677,74	1665,12	1711,11	1741,81	1908,45	0,3772	0,3720

Table 5. Page 33b

A	J	K	L	M	N	O	P	Q	R
-87	0,6492	0,1372	0,5112	3,1374	4,518	-10,875	1635	69,4	56,4
-86	0,6199	0,1481	0,5137	2,8459	4,518	-10,750	1637	63,0	56,6
-85	0,5905	0,1591	0,5161	2,4881	4,518	-10,625	1638	55,1	56,4
-84	0,5612	0,1700	0,5185	2,1304	4,518	-10,500	1639	47,2	55,6
-83	0,5318	0,1810	0,5209	2,0270	4,518	-10,375	1641	44,9	53,9
-82	0,5025	0,1919	0,5233	2,1692	4,518	-10,250	1642	48,0	51,0
-81	0,4731	0,2028	0,5257	2,3114	4,518	-10,125	1643	51,2	48,0
-80	0,4438	0,2138	0,5282	2,4537	4,518	-10,000	1645	54,3	45,0
-79	0,4144	0,2247	0,5306	2,3416	4,518	-9,875	1646	51,8	43,0
-78	0,3851	0,2356	0,5330	1,9838	4,518	-9,750	1647	43,9	42,0
-77	0,3557	0,2466	0,5354	1,6260	4,518	-9,625	1649	36,0	41,5
-76	0,3264	0,2575	0,5378	1,2683	4,518	-9,500	1650	28,1	41,4
-75	0,2970	0,2684	0,5403	1,3009	4,518	-9,375	1651	28,8	41,1
-74	0,2677	0,2794	0,5427	1,6266	4,518	-9,250	1653	36,0	40,7
-73	0,2383	0,2903	0,5451	1,9524	4,518	-9,125	1654	43,2	40,8
-72	0,2089	0,3012	0,5475	2,2782	4,518	-9,000	1655	50,4	41,3
-71	0,1796	0,3122	0,5499	2,3496	4,518	-8,875	1657	52,0	42,8
-70	0,1502	0,3231	0,5523	2,1753	4,518	-8,750	1658	48,1	45,1
-69	0,1209	0,3341	0,5548	2,0011	4,518	-8,625	1660	44,3	47,4
-68	0,0915	0,3450	0,5572	1,8269	4,518	-8,500	1661	40,4	49,5
-67	0,0622	0,3559	0,5596	1,9070	4,518	-8,375	1662	42,2	50,6
-66	0,0328	0,3669	0,5620	2,2327	4,518	-8,250	1664	49,4	50,8
-65	0,0035	0,3778	0,5644	2,5585	4,518	-8,125	1665	56,6	50,6
-64	0,0259	0,3887	0,5668	2,7812	4,518	-8,000	1666	61,6	50,2
-63	0,0552	0,3997	0,5693	2,7278	4,518	-7,875	1668	60,4	50,1
-62	0,0846	0,4106	0,5717	2,4288	4,518	-7,750	1669	53,8	50,3
-61	0,1139	0,4215	0,5741	2,1297	4,518	-7,625	1670	47,1	50,2
-60	0,1433	0,4325	0,5765	1,8307	4,518	-7,500	1672	40,5	49,8
-59	0,1726	0,4434	0,5789	1,7860	4,518	-7,375	1673	39,5	48,7
-58	0,2020	0,4543	0,5813	1,9869	4,518	-7,250	1674	44,0	47,0

Table 5. Page 34a

A	B	C	D	E	F	G	H	I
-57	1675,72	1677,74	1665,12	1711,11	1741,81	1908,45	0,6272	0,2803
-56	1677,07	1677,74	1665,12	1711,11	1741,81	1908,45	0,8772	0,1885
-55	1678,42	1677,74	1665,12	1711,11	1741,81	1908,45	0,8728	0,0967
-54	1679,78	1677,74	1665,12	1711,11	1741,81	1908,45	0,6228	0,0050
-53	1681,13	1677,74	1694,58	1711,11	1741,81	1908,45	0,3728	0,0868
-52	1682,48	1677,74	1694,58	1711,11	1741,81	1908,45	0,1228	0,1785
-51	1683,83	1688,55	1694,58	1711,11	1741,81	1908,45	0,1272	0,2703
-50	1685,18	1688,55	1694,58	1711,11	1741,81	1908,45	0,3772	0,3621
-49	1686,53	1688,55	1694,58	1711,11	1741,81	1908,45	0,6272	0,4538
-48	1687,88	1688,55	1694,58	1711,11	1741,81	1908,45	0,8772	0,5456
-47	1689,24	1688,55	1694,58	1711,11	1741,81	1908,45	0,8728	0,6373
-46	1690,59	1688,55	1694,58	1711,11	1741,81	1908,45	0,6228	0,7291
-45	1691,94	1688,55	1694,58	1711,11	1741,81	1908,45	0,3728	0,8209
-44	1693,29	1688,55	1694,58	1711,11	1741,81	1908,45	0,1228	0,9126
-43	1694,64	1699,36	1694,58	1711,11	1741,81	1908,45	0,1272	0,9956
-42	1695,99	1699,36	1694,58	1711,11	1741,81	1908,45	0,3772	0,9038
-41	1697,35	1699,36	1694,58	1711,11	1741,81	1908,45	0,6272	0,8121
-40	1698,70	1699,36	1694,58	1711,11	1741,81	1908,45	0,8772	0,7203
-39	1700,05	1699,36	1694,58	1711,11	1741,81	1908,45	0,8728	0,6286
-38	1701,40	1699,36	1694,58	1711,11	1741,81	1908,45	0,6228	0,5368
-37	1702,75	1699,36	1694,58	1711,11	1741,81	1908,45	0,3728	0,4450
-36	1704,10	1699,36	1694,58	1711,11	1741,81	1908,45	0,1228	0,3533
-35	1705,46	1710,17	1694,58	1711,11	1741,81	1908,45	0,1272	0,2615
-34	1706,81	1710,17	1694,58	1711,11	1741,81	1908,45	0,3772	0,1697
-33	1708,16	1710,17	1694,58	1711,11	1741,81	1908,45	0,6272	0,0780
-32	1709,51	1710,17	1724,04	1711,11	1741,81	1908,45	0,8772	0,0138
-31	1710,86	1710,17	1724,04	1711,11	1741,81	1908,45	0,8728	0,1055
-30	1712,21	1710,17	1724,04	1711,11	1741,81	1908,45	0,6228	0,1973
-29	1713,56	1710,17	1724,04	1711,11	1741,81	1908,45	0,3728	0,2891
-28	1714,92	1710,17	1724,04	1711,11	1741,81	1908,45	0,1228	0,3808

Table 5. Page 34b

A	J	K	L	M	N	O	P	Q	R
-57	0,2314	0,4653	0,5838	2,1878	4,518	-7,125	1676	48,4	45,7
-56	0,2607	0,4762	0,5862	2,3888	4,518	-7,000	1677	52,9	44,9
-55	0,2901	0,4871	0,5886	2,3354	4,518	-6,875	1678	51,7	45,2
-54	0,3194	0,4981	0,5910	2,0363	4,518	-6,750	1680	45,1	46,5
-53	0,3488	0,5090	0,5934	1,9108	4,518	-6,625	1681	42,3	48,2
-52	0,3781	0,5200	0,5958	1,7953	4,518	-6,500	1682	39,7	50,4
-51	0,4075	0,5309	0,5983	1,9341	4,518	-6,375	1684	42,8	52,5
-50	0,4368	0,5418	0,6007	2,3186	4,518	-6,250	1685	51,3	54,4
-49	0,4662	0,5528	0,6031	2,7030	4,518	-6,125	1687	59,8	56,7
-48	0,4955	0,5637	0,6055	3,0875	4,518	-6,000	1688	68,3	59,1
-47	0,5249	0,5746	0,6079	3,2176	4,518	-5,875	1689	71,2	62,0
-46	0,5542	0,5856	0,6104	3,1021	4,518	-5,750	1691	68,7	65,1
-45	0,5836	0,5965	0,6128	2,9866	4,518	-5,625	1692	66,1	67,8
-44	0,6129	0,6074	0,6152	2,8710	4,518	-5,500	1693	63,5	70,0
-43	0,6423	0,6184	0,6176	3,0011	4,518	-5,375	1695	66,4	71,2
-42	0,6717	0,6293	0,6200	3,2020	4,518	-5,250	1696	70,9	71,2
-41	0,7010	0,6402	0,6224	3,4029	4,518	-5,125	1697	75,3	70,9
-40	0,7304	0,6512	0,6249	3,6039	4,518	-5,000	1699	79,8	70,1
-39	0,7597	0,6621	0,6273	3,5505	4,518	-4,875	1700	78,6	69,4
-38	0,7891	0,6731	0,6297	3,2514	4,518	-4,750	1701	72,0	68,9
-37	0,8184	0,6840	0,6321	2,9524	4,518	-4,625	1703	65,3	68,5
-36	0,8478	0,6949	0,6345	2,6533	4,518	-4,500	1704	58,7	68,1
-35	0,8771	0,7059	0,6369	2,6086	4,518	-4,375	1705	57,7	67,5
-34	0,9065	0,7168	0,6394	2,8096	4,518	-4,250	1707	62,2	66,6
-33	0,9358	0,7277	0,6418	3,0105	4,518	-4,125	1708	66,6	66,1
-32	0,9652	0,7387	0,6442	3,2390	4,518	-4,000	1710	71,7	65,9
-31	0,9945	0,7496	0,6466	3,3691	4,518	-3,875	1711	74,6	66,6
-30	0,9761	0,7605	0,6490	3,2058	4,518	-3,750	1712	71,0	68,2
-29	0,9468	0,7715	0,6514	3,0316	4,518	-3,625	1714	67,1	70,1
-28	0,9174	0,7824	0,6539	2,8573	4,518	-3,500	1715	63,2	72,3

Table 5. Page 35a

A	B	C	D	E	F	G	H	I
-27	1716,27	1720,99	1724,04	1711,11	1741,81	1908,45	0,1272	0,4726
-26	1717,62	1720,99	1724,04	1711,11	1741,81	1908,45	0,3772	0,5644
-25	1718,97	1720,99	1724,04	1711,11	1741,81	1908,45	0,6272	0,6561
-24	1720,32	1720,99	1724,04	1711,11	1741,81	1908,45	0,8772	0,7479
-23	1721,67	1720,99	1724,04	1711,11	1741,81	1908,45	0,8728	0,8396
-22	1723,03	1720,99	1724,04	1711,11	1741,81	1908,45	0,6228	0,9314
-21	1724,38	1720,99	1724,04	1711,11	1741,81	1908,45	0,3728	0,9768
-20	1725,73	1720,99	1724,04	1711,11	1741,81	1908,45	0,1228	0,8851
-19	1727,08	1731,80	1724,04	1711,11	1741,81	1908,45	0,1272	0,7933
-18	1728,43	1731,80	1724,04	1711,11	1741,81	1908,45	0,3772	0,7015
-17	1729,78	1731,80	1724,04	1711,11	1741,81	1908,45	0,6272	0,6098
-16	1731,14	1731,80	1724,04	1711,11	1741,81	1908,45	0,8772	0,5180
-15	1732,49	1731,80	1724,04	1711,11	1741,81	1908,45	0,8728	0,4263
-14	1733,84	1731,80	1724,04	1711,11	1741,81	1908,45	0,6228	0,3345
-13	1735,19	1731,80	1724,04	1711,11	1741,81	1908,45	0,3728	0,2427
-12	1736,54	1731,80	1724,04	1711,11	1741,81	1908,45	0,1228	0,1510
-11	1737,89	1742,61	1724,04	1711,11	1741,81	1908,45	0,1272	0,0592
-10	1739,24	1742,61	1753,49	1711,11	1741,81	1908,45	0,3772	0,0326
-9	1740,60	1742,61	1753,49	1711,11	1741,81	1908,45	0,6272	0,1243
-8	1741,95	1742,61	1753,49	1711,11	1741,81	1908,45	0,8772	0,2161
-7	1743,30	1742,61	1753,49	1711,11	1741,81	1908,45	0,8728	0,3078
-6	1744,65	1742,61	1753,49	1711,11	1741,81	1908,45	0,6228	0,3996
-5	1746,00	1742,61	1753,49	1711,11	1741,81	1908,45	0,3728	0,4914
-4	1747,35	1742,61	1753,49	1711,11	1741,81	1908,45	0,1228	0,5831
-3	1748,71	1753,42	1753,49	1711,11	1741,81	1908,45	0,1272	0,6749
-2	1750,06	1753,42	1753,49	1711,11	1741,81	1908,45	0,3772	0,7667
-1	1751,41	1753,42	1753,49	1711,11	1741,81	1908,45	0,6272	0,8584
0	1752,76	1753,42	1753,49	1711,11	1741,81	1908,45	0,8772	0,9502
1	1754,11	1753,42	1753,49	1711,11	1741,81	1908,45	0,8728	0,9581
2	1755,46	1753,42	1753,49	1711,11	1741,81	1908,45	0,6228	0,8663

Table 5. Page 35b

A	J	K	L	M	N	O	P	Q	R
-27	0,8880	0,7933	0,6563	2,9374	4,518	-3,375	1716	65,0	74,2
-26	0,8587	0,8043	0,6587	3,2632	4,518	-3,250	1718	72,2	75,2
-25	0,8293	0,8152	0,6611	3,5890	4,518	-3,125	1719	79,4	76,2
-24	0,8000	0,8261	0,6635	3,9147	4,518	-3,000	1720	86,6	76,7
-23	0,7706	0,8371	0,6660	3,9861	4,518	-2,875	1722	88,2	77,4
-22	0,7413	0,8480	0,6684	3,8119	4,518	-2,750	1723	84,4	78,2
-21	0,7119	0,8590	0,6708	3,5913	4,518	-2,625	1724	79,5	78,6
-20	0,6826	0,8699	0,6732	3,2336	4,518	-2,500	1726	71,6	78,5
-19	0,6532	0,8808	0,6756	3,1301	4,518	-2,375	1727	69,3	77,3
-18	0,6239	0,8918	0,6780	3,2724	4,518	-2,250	1728	72,4	75,1
-17	0,5945	0,9027	0,6805	3,4146	4,518	-2,125	1730	75,6	72,4
-16	0,5652	0,9136	0,6829	3,5569	4,518	-2,000	1731	78,7	69,4
-15	0,5358	0,9246	0,6853	3,4447	4,518	-1,875	1732	76,2	67,1
-14	0,5065	0,9355	0,6877	3,0870	4,518	-1,750	1734	68,3	65,5
-13	0,4771	0,9464	0,6901	2,7292	4,518	-1,625	1735	60,4	64,3
-12	0,4477	0,9574	0,6925	2,3715	4,518	-1,500	1737	52,5	63,6
-11	0,4184	0,9683	0,6950	2,2680	4,518	-1,375	1738	50,2	62,6
-10	0,3890	0,9792	0,6974	2,4754	4,518	-1,250	1739	54,8	61,5
-9	0,3597	0,9902	0,6998	2,8012	4,518	-1,125	1741	62,0	60,8
-8	0,3303	0,9989	0,7022	3,1247	4,518	-1,000	1742	69,2	60,4
-7	0,3010	0,9880	0,7046	3,1742	4,518	-0,875	1743	70,3	61,1
-6	0,2716	0,9770	0,7070	2,9781	4,518	-0,750	1745	65,9	62,7
-5	0,2423	0,9661	0,7095	2,7820	4,518	-0,625	1746	61,6	64,7
-4	0,2129	0,9551	0,7119	2,5859	4,518	-0,500	1747	57,2	66,5
-3	0,1836	0,9442	0,7143	2,6441	4,518	-0,375	1749	58,5	67,5
-2	0,1542	0,9333	0,7167	2,9480	4,518	-0,250	1750	65,2	67,4
-1	0,1249	0,9223	0,7191	3,2519	4,518	-0,125	1751	72,0	66,9
0	0,0955	0,9114	0,7216	3,5558	4,518	0,000	1753	78,7	66,0
1	0,0662	0,9005	0,7240	3,5215	4,518	0,125	1754	77,9	65,4
2	0,0368	0,8895	0,7264	3,1418	4,518	0,250	1755	69,5	65,2

Table 5. Page 36a

A	B	C	D	E	F	G	H	I
3	1756,81	1753,42	1753,49	1711,11	1741,81	1908,45	0,3728	0,7745
4	1758,17	1753,42	1753,49	1803,20	1741,81	1908,45	0,1228	0,6828
5	1759,52	1764,24	1753,49	1803,20	1741,81	1908,45	0,1272	0,5910
6	1760,87	1764,24	1753,49	1803,20	1741,81	1908,45	0,3772	0,4992
7	1762,22	1764,24	1753,49	1803,20	1741,81	1908,45	0,6272	0,4075
8	1763,57	1764,24	1753,49	1803,20	1741,81	1908,45	0,8772	0,3157
9	1764,92	1764,24	1753,49	1803,20	1741,81	1908,45	0,8728	0,2240
10	1766,28	1764,24	1753,49	1803,20	1741,81	1908,45	0,6228	0,1322
11	1767,63	1764,24	1753,49	1803,20	1741,81	1908,45	0,3728	0,0404
12	1768,98	1764,24	1782,95	1803,20	1741,81	1908,45	0,1228	0,0513
13	1770,33	1775,05	1782,95	1803,20	1741,81	1908,45	0,1272	0,1431
14	1771,68	1775,05	1782,95	1803,20	1741,81	1908,45	0,3772	0,2349
15	1773,03	1775,05	1782,95	1803,20	1741,81	1908,45	0,6272	0,3266
16	1774,39	1775,05	1782,95	1803,20	1741,81	1908,45	0,8772	0,4184
17	1775,74	1775,05	1782,95	1803,20	1741,81	1908,45	0,8728	0,5101
18	1777,09	1775,05	1782,95	1803,20	1741,81	1908,45	0,6228	0,6019
19	1778,44	1775,05	1782,95	1803,20	1741,81	1908,45	0,3728	0,6937
20	1779,79	1775,05	1782,95	1803,20	1741,81	1908,45	0,1228	0,7854
21	1781,14	1785,86	1782,95	1803,20	1741,81	1908,45	0,1272	0,8772
22	1782,49	1785,86	1782,95	1803,20	1741,81	1908,45	0,3772	0,9690
23	1783,85	1785,86	1782,95	1803,20	1741,81	1908,45	0,6272	0,9393
24	1785,20	1785,86	1782,95	1803,20	1741,81	1908,45	0,8772	0,8475
25	1786,55	1785,86	1782,95	1803,20	1741,81	1908,45	0,8728	0,7558
26	1787,90	1785,86	1782,95	1803,20	1741,81	1908,45	0,6228	0,6640
27	1789,25	1785,86	1782,95	1803,20	1741,81	1908,45	0,3728	0,5722
28	1790,60	1785,86	1782,95	1803,20	1741,81	1908,45	0,1228	0,4805
29	1791,96	1796,67	1782,95	1803,20	1741,81	1908,45	0,1272	0,3887
30	1793,31	1796,67	1782,95	1803,20	1741,81	1908,45	0,3772	0,2969
31	1794,66	1796,67	1782,95	1803,20	1741,81	1908,45	0,6272	0,2052
32	1796,01	1796,67	1782,95	1803,20	1741,81	1908,45	0,8772	0,1134

Table 5. Page 36b

A	J	K	L	M	N	O	P	Q	R
3	0,0074	0,8786	0,7288	2,7622	4,518	0,375	1757	61,1	64,6
4	0,0219	0,8677	0,7312	2,4264	4,518	0,500	1758	53,7	63,7
5	0,0513	0,8567	0,7336	2,3598	4,518	0,625	1760	52,2	61,9
6	0,0806	0,8458	0,7361	2,5389	4,518	0,750	1761	56,2	59,4
7	0,1100	0,8349	0,7385	2,7180	4,518	0,875	1762	60,2	57,1
8	0,1393	0,8239	0,7409	2,8970	4,518	1,000	1764	64,1	55,1
9	0,1687	0,8130	0,7433	2,8217	4,518	1,125	1765	62,5	54,2
10	0,1980	0,8020	0,7457	2,5008	4,518	1,250	1766	55,3	54,4
11	0,2274	0,7911	0,7481	2,1799	4,518	1,375	1768	48,2	55,1
12	0,2567	0,7802	0,7506	1,9616	4,518	1,500	1769	43,4	56,2
13	0,2861	0,7692	0,7530	2,0786	4,518	1,625	1770	46,0	57,1
14	0,3154	0,7583	0,7554	2,4412	4,518	1,750	1772	54,0	57,9
15	0,3448	0,7474	0,7578	2,8038	4,518	1,875	1773	62,1	59,1
16	0,3741	0,7364	0,7602	3,1664	4,518	2,000	1774	70,1	60,8
17	0,4035	0,7255	0,7626	3,2746	4,518	2,125	1776	72,5	63,3
18	0,4329	0,7146	0,7651	3,1372	4,518	2,250	1777	69,4	66,4
19	0,4622	0,7036	0,7675	2,9998	4,518	2,375	1778	66,4	69,2
20	0,4916	0,6927	0,7699	2,8624	4,518	2,500	1780	63,4	71,6
21	0,5209	0,6818	0,7723	2,9794	4,518	2,625	1781	65,9	72,9
22	0,5503	0,6708	0,7747	3,3420	4,518	2,750	1782	74,0	73,1
23	0,5796	0,6599	0,7771	3,5831	4,518	2,875	1784	79,3	72,9
24	0,6090	0,6490	0,7796	3,7622	4,518	3,000	1785	83,3	72,2
25	0,6383	0,6380	0,7820	3,6869	4,518	3,125	1787	81,6	71,7
26	0,6677	0,6271	0,7844	3,3660	4,518	3,250	1788	74,5	71,3
27	0,6970	0,6161	0,7868	3,0451	4,518	3,375	1789	67,4	70,5
28	0,7264	0,6052	0,7892	2,7241	4,518	3,500	1791	60,3	69,6
29	0,7557	0,5943	0,7917	2,6576	4,518	3,625	1792	58,8	68,0
30	0,7851	0,5833	0,7941	2,8366	4,518	3,750	1793	62,8	66,1
31	0,8144	0,5724	0,7965	3,0157	4,518	3,875	1795	66,7	64,8
32	0,8438	0,5615	0,7989	3,1948	4,518	4,000	1796	70,7	63,8

Table 5. Page 37a

A	B	C	D	E	F	G	H	I
33	1797,36	1796,67	1782,95	1803,20	1741,81	1908,45	0,8728	0,0217
34	1798,71	1796,67	1812,41	1803,20	1741,81	1908,45	0,6228	0,0701
35	1800,07	1796,67	1812,41	1803,20	1741,81	1908,45	0,3728	0,1619
36	1801,42	1796,67	1812,41	1803,20	1741,81	1908,45	0,1228	0,2536
37	1802,77	1807,49	1812,41	1803,20	1741,81	1908,45	0,1272	0,3454
38	1804,12	1807,49	1812,41	1803,20	1741,81	1908,45	0,3772	0,4371
39	1805,47	1807,49	1812,41	1803,20	1741,81	1908,45	0,6272	0,5289
40	1806,82	1807,49	1812,41	1803,20	1741,81	1908,45	0,8772	0,6207
41	1808,17	1807,49	1812,41	1803,20	1741,81	1908,45	0,8728	0,7124
42	1809,53	1807,49	1812,41	1803,20	1741,81	1908,45	0,6228	0,8042
43	1810,88	1807,49	1812,41	1803,20	1741,81	1908,45	0,3728	0,8960
44	1812,23	1807,49	1812,41	1803,20	1741,81	1908,45	0,1228	0,9877
45	1813,58	1818,30	1812,41	1803,20	1741,81	1908,45	0,1272	0,9205
46	1814,93	1818,30	1812,41	1803,20	1741,81	1908,45	0,3772	0,8288
47	1816,28	1818,30	1812,41	1803,20	1741,81	1908,45	0,6272	0,7370
48	1817,64	1818,30	1812,41	1803,20	1741,81	1908,45	0,8772	0,6452
49	1818,99	1818,30	1812,41	1803,20	1741,81	1908,45	0,8728	0,5535
50	1820,34	1818,30	1812,41	1803,20	1741,81	1908,45	0,6228	0,4617
51	1821,69	1818,30	1812,41	1803,20	1741,81	1908,45	0,3728	0,3699
52	1823,04	1818,30	1812,41	1803,20	1741,81	1908,45	0,1228	0,2782
53	1824,39	1829,11	1812,41	1803,20	1741,81	1908,45	0,1272	0,1864
54	1825,74	1829,11	1812,41	1803,20	1741,81	1908,45	0,3772	0,0947
55	1827,10	1829,11	1812,41	1803,20	1741,81	1908,45	0,6272	0,0029
56	1828,45	1829,11	1841,87	1803,20	1741,81	1908,45	0,8772	0,0889
57	1829,80	1829,11	1841,87	1803,20	1741,81	1908,45	0,8728	0,1806
58	1831,15	1829,11	1841,87	1803,20	1741,81	1908,45	0,6228	0,2724
59	1832,50	1829,11	1841,87	1803,20	1741,81	1908,45	0,3728	0,3642
60	1833,85	1829,11	1841,87	1803,20	1741,81	1908,45	0,1228	0,4559
61	1835,21	1839,92	1841,87	1803,20	1741,81	1908,45	0,1272	0,5477
62	1836,56	1839,92	1841,87	1803,20	1741,81	1908,45	0,3772	0,6394

Table 5. Page 37b

A	J	K	L	M	N	O	P	Q	R
33	0,8732	0,5505	0,8013	3,1195	4,518	4,125	1797	69,0	64,0
34	0,9025	0,5396	0,8037	2,9388	4,518	4,250	1799	65,0	65,1
35	0,9319	0,5287	0,8062	2,8014	4,518	4,375	1800	62,0	66,5
36	0,9612	0,5177	0,8086	2,6640	4,518	4,500	1801	59,0	68,2
37	0,9906	0,5068	0,8110	2,7809	4,518	4,625	1803	61,5	69,6
38	0,9801	0,4959	0,8134	3,1037	4,518	4,750	1804	68,7	70,7
39	0,9507	0,4849	0,8158	3,4076	4,518	4,875	1805	75,4	71,7
40	0,9214	0,4740	0,8182	3,7115	4,518	5,000	1807	82,1	72,6
41	0,8920	0,4630	0,8207	3,7610	4,518	5,125	1808	83,2	73,6
42	0,8627	0,4521	0,8231	3,5649	4,518	5,250	1810	78,9	74,6
43	0,8333	0,4412	0,8255	3,3688	4,518	5,375	1811	74,6	75,2
44	0,8040	0,4302	0,8279	3,1727	4,518	5,500	1812	70,2	75,2
45	0,7746	0,4193	0,8303	3,0719	4,518	5,625	1814	68,0	74,2
46	0,7453	0,4084	0,8327	3,1923	4,518	5,750	1815	70,7	72,1
47	0,7159	0,3974	0,8352	3,3127	4,518	5,875	1816	73,3	69,6
48	0,6865	0,3865	0,8376	3,4330	4,518	6,000	1818	76,0	66,6
49	0,6572	0,3756	0,8400	3,2990	4,518	6,125	1819	73,0	63,8
50	0,6278	0,3646	0,8424	2,9194	4,518	6,250	1820	64,6	61,6
51	0,5985	0,3537	0,8448	2,5398	4,518	6,375	1822	56,2	59,3
52	0,5691	0,3428	0,8473	2,1601	4,518	6,500	1823	47,8	57,5
53	0,5398	0,3318	0,8497	2,0349	4,518	6,625	1824	45,0	55,5
54	0,5104	0,3209	0,8521	2,1552	4,518	6,750	1826	47,7	53,4
55	0,4811	0,3100	0,8545	2,2756	4,518	6,875	1827	50,4	51,7
56	0,4517	0,2990	0,8569	2,5737	4,518	7,000	1828	57,0	50,5
57	0,4224	0,2881	0,8593	2,6232	4,518	7,125	1830	58,1	50,3
58	0,3930	0,2771	0,8618	2,4271	4,518	7,250	1831	53,7	51,2
59	0,3637	0,2662	0,8642	2,2310	4,518	7,375	1833	49,4	52,5
60	0,3343	0,2553	0,8666	2,0349	4,518	7,500	1834	45,0	54,3
61	0,3050	0,2443	0,8690	2,0932	4,518	7,625	1835	46,3	55,5
62	0,2756	0,2334	0,8714	2,3971	4,518	7,750	1837	53,1	56,0

Table 5. Page 38a

A	B	C	D	E	F	G	H	I
63	1837,91	1839,92	1841,87	1803,20	1741,81	1908,45	0,6272	0,7312
64	1839,26	1839,92	1841,87	1803,20	1741,81	1908,45	0,8772	0,8230
65	1840,61	1839,92	1841,87	1803,20	1741,81	1908,45	0,8728	0,9147
66	1841,96	1839,92	1841,87	1803,20	1741,81	1908,45	0,6228	0,9935
67	1843,32	1839,92	1841,87	1803,20	1741,81	1908,45	0,3728	0,9017
68	1844,67	1839,92	1841,87	1803,20	1741,81	1908,45	0,1228	0,8100
69	1846,02	1850,74	1841,87	1803,20	1741,81	1908,45	0,1272	0,7182
70	1847,37	1850,74	1841,87	1803,20	1741,81	1908,45	0,3772	0,6265
71	1848,72	1850,74	1841,87	1803,20	1741,81	1908,45	0,6272	0,5347
72	1850,07	1850,74	1841,87	1895,29	1741,81	1908,45	0,8772	0,4429
73	1851,42	1850,74	1841,87	1895,29	1741,81	1908,45	0,8728	0,3512
74	1852,78	1850,74	1841,87	1895,29	1741,81	1908,45	0,6228	0,2594
75	1854,13	1850,74	1841,87	1895,29	1741,81	1908,45	0,3728	0,1676
76	1855,48	1850,74	1841,87	1895,29	1741,81	1908,45	0,1228	0,0759
77	1856,83	1861,55	1871,33	1895,29	1741,81	1908,45	0,1272	0,0159
78	1858,18	1861,55	1871,33	1895,29	1741,81	1908,45	0,3772	0,1076
79	1859,53	1861,55	1871,33	1895,29	1741,81	1908,45	0,6272	0,1994
80	1860,89	1861,55	1871,33	1895,29	1741,81	1908,45	0,8772	0,2912
81	1862,24	1861,55	1871,33	1895,29	1741,81	1908,45	0,8728	0,3829
82	1863,59	1861,55	1871,33	1895,29	1741,81	1908,45	0,6228	0,4747
83	1864,94	1861,55	1871,33	1895,29	1741,81	1908,45	0,3728	0,5665
84	1866,29	1861,55	1871,33	1895,29	1989,00	1908,45	0,1228	0,6582
85	1867,64	1872,36	1871,33	1895,29	1989,00	1908,45	0,1272	0,7500
86	1869,00	1872,36	1871,33	1895,29	1989,00	1908,45	0,3772	0,8417
87	1870,35	1872,36	1871,33	1895,29	1989,00	1908,45	0,6272	0,9335
88	1871,70	1872,36	1871,33	1895,29	1989,00	1908,45	0,8772	0,9747
89	1873,05	1872,36	1871,33	1895,29	1989,00	1908,45	0,8728	0,8830
90	1874,40	1872,36	1871,33	1895,29	1989,00	1908,45	0,6228	0,7912
91	1875,75	1872,36	1871,33	1895,29	1989,00	1908,45	0,3728	0,6994
92	1877,10	1872,36	1871,33	1895,29	1989,00	1908,45	0,1228	0,6077

Table 5. Page 38b

A	J	K	L	M	N	O	P	Q	R
63	0,2462	0,2225	0,8738	2,7009	4,518	7,875	1838	59,8	56,1
64	0,2169	0,2115	0,8763	3,0048	4,518	8,000	1839	66,5	55,8
65	0,1875	0,2006	0,8787	3,0544	4,518	8,125	1841	67,6	55,6
66	0,1582	0,1897	0,8811	2,8453	4,518	8,250	1842	63,0	55,6
67	0,1288	0,1787	0,8835	2,4656	4,518	8,375	1843	54,6	55,1
68	0,0995	0,1678	0,8859	2,0860	4,518	8,500	1845	46,2	54,2
69	0,0701	0,1569	0,8883	1,9607	4,518	8,625	1846	43,4	52,5
70	0,0408	0,1459	0,8908	2,0811	4,518	8,750	1847	46,1	49,8
71	0,0114	0,1350	0,8932	2,2015	4,518	8,875	1849	48,7	46,8
72	0,0179	0,1240	0,8956	2,3577	4,518	9,000	1850	52,2	44,0
73	0,0473	0,1131	0,8980	2,2824	4,518	9,125	1851	50,5	42,0
74	0,0766	0,1022	0,9004	1,9615	4,518	9,250	1853	43,4	41,3
75	0,1060	0,0912	0,9029	1,6406	4,518	9,375	1854	36,3	41,1
76	0,1353	0,0803	0,9053	1,3196	4,518	9,500	1855	29,2	41,5
77	0,1647	0,0694	0,9077	1,2848	4,518	9,625	1857	28,4	41,8
78	0,1941	0,0584	0,9101	1,6474	4,518	9,750	1858	36,5	42,0
79	0,2234	0,0475	0,9125	2,0100	4,518	9,875	1860	44,5	42,6
80	0,2528	0,0366	0,9149	2,3726	4,518	10,000	1861	52,5	43,6
81	0,2821	0,0256	0,9174	2,4808	4,518	10,125	1862	54,9	45,9
82	0,3115	0,0147	0,9198	2,3434	4,518	10,250	1864	51,9	49,1
83	0,3408	0,0038	0,9222	2,2060	4,518	10,375	1865	48,8	52,4
84	0,3702	0,0072	0,9246	2,0830	4,518	10,500	1866	46,1	55,6
85	0,3995	0,0181	0,9270	2,2218	4,518	10,625	1868	49,2	57,9
86	0,4289	0,0290	0,9294	2,6063	4,518	10,750	1869	57,7	59,1
87	0,4582	0,0400	0,9319	2,9908	4,518	10,875	1870	66,2	59,9
88	0,4876	0,0509	0,9343	3,3247	4,518	11,000	1872	73,6	60,3
89	0,5169	0,0619	0,9367	3,2713	4,518	11,125	1873	72,4	60,9
90	0,5463	0,0728	0,9391	2,9722	4,518	11,250	1874	65,8	61,7
91	0,5756	0,0837	0,9415	2,6732	4,518	11,375	1876	59,2	62,0
92	0,6050	0,0947	0,9439	2,3741	4,518	11,500	1877	52,5	61,8

Table 5. Page 39a

A	B	C	D	E	F	G	H	I
93	1878,46	1883,17	1871,33	1895,29	1989,00	1908,45	0,1272	0,5159
94	1879,81	1883,17	1871,33	1895,29	1989,00	1908,45	0,3772	0,4242
95	1881,16	1883,17	1871,33	1895,29	1989,00	1908,45	0,6272	0,3324
96	1882,51	1883,17	1871,33	1895,29	1989,00	1908,45	0,8772	0,2406
97	1883,86	1883,17	1871,33	1895,29	1989,00	1908,45	0,8728	0,1489
98	1885,21	1883,17	1871,33	1895,29	1989,00	1908,45	0,6228	0,0571
99	1886,57	1883,17	1900,78	1895,29	1989,00	1908,45	0,3728	0,0347
100	1887,92	1883,17	1900,78	1895,29	1989,00	1908,45	0,1228	0,1264
101	1889,27	1893,99	1900,78	1895,29	1989,00	1908,45	0,1272	0,2182
102	1890,62	1893,99	1900,78	1895,29	1989,00	1908,45	0,3772	0,3099
103	1891,97	1893,99	1900,78	1895,29	1989,00	1908,45	0,6272	0,4017
104	1893,32	1893,99	1900,78	1895,29	1989,00	1908,45	0,8772	0,4935
105	1894,67	1893,99	1900,78	1895,29	1989,00	1908,45	0,8728	0,5852
106	1896,03	1893,99	1900,78	1895,29	1989,00	1908,45	0,6228	0,6770
107	1897,38	1893,99	1900,78	1895,29	1989,00	1908,45	0,3728	0,7688
108	1898,73	1893,99	1900,78	1895,29	1989,00	1908,45	0,1228	0,8605
109	1900,08	1904,80	1900,78	1895,29	1989,00	1908,45	0,1272	0,9523
110	1901,43	1904,80	1900,78	1895,29	1989,00	1908,45	0,3772	0,9560
111	1902,78	1904,80	1900,78	1895,29	1989,00	1908,45	0,6272	0,8642
112	1904,14	1904,80	1900,78	1895,29	1989,00	1908,45	0,8772	0,7724
113	1905,49	1904,80	1900,78	1895,29	1989,00	1908,45	0,8728	0,6807
114	1906,84	1904,80	1900,78	1895,29	1989,00	1908,45	0,6228	0,5889
115	1908,19	1904,80	1900,78	1895,29	1989,00	1908,45	0,3728	0,4972
116	1909,54	1904,80	1900,78	**1908,45**	1989,00	1908,45	0,1228	0,4054
117	1910,89	1915,61	1900,78	1908,45	1989,00	1908,45	0,1272	0,3136
118	1912,25	1915,61	1900,78	1908,45	1989,00	1908,45	0,3772	0,2219
119	1913,60	1915,61	1900,78	1908,45	1989,00	1908,45	0,6272	0,1301
120	1914,95	1915,61	1900,78	1908,45	1989,00	1908,45	0,8772	0,0383
121	1916,30	1915,61	1930,24	1908,45	1989,00	1908,45	0,8728	0,0534
122	1917,65	1915,61	1930,24	1908,45	1989,00	1908,45	0,6228	0,1452

Table 5. Page 39b

A	J	K	L	M	N	O	P	Q	R
93	0,6344	0,1056	0,9464	2,3294	4,518	11,625	1878	51,6	60,7
94	0,6637	0,1165	0,9488	2,5304	4,518	11,750	1880	56,0	59,0
95	0,6931	0,1275	0,9512	2,7313	4,518	11,875	1881	60,5	57,5
96	0,7224	0,1384	0,9536	2,9322	4,518	12,000	1883	64,9	56,4
97	0,7518	0,1493	0,9560	2,8788	4,518	12,125	1884	63,7	56,4
98	0,7811	0,1603	0,9585	2,5798	4,518	12,250	1885	57,1	57,5
99	0,8105	0,1712	0,9609	2,3500	4,518	12,375	1887	52,0	59,0
100	0,8398	0,1821	0,9633	2,2345	4,518	12,500	1888	49,5	60,9
101	0,8692	0,1931	0,9657	2,3733	4,518	12,625	1889	52,5	62,7
102	0,8985	0,2040	0,9681	2,7578	4,518	12,750	1891	61,0	64,3
103	0,9279	0,2149	0,9705	3,1423	4,518	12,875	1892	69,5	66,1
104	0,9572	0,2259	0,9730	3,5267	4,518	13,000	1893	78,1	68,1
105	0,9866	0,2368	0,9754	3,6568	4,518	13,125	1895	80,9	70,6
106	0,9841	0,2478	0,9778	3,5094	4,518	13,250	1896	77,7	73,3
107	0,9547	0,2587	0,9802	3,3352	4,518	13,375	1897	73,8	75,4
108	0,9253	0,2696	0,9826	3,1609	4,518	13,500	1899	70,0	77,0
109	0,8960	0,2806	0,9850	3,2411	4,518	13,625	1900	71,7	77,3
110	0,8666	0,2915	0,9875	3,4787	4,518	13,750	1901	77,0	76,4
111	0,8373	0,3024	0,9899	3,6210	4,518	13,875	1903	80,1	75,0
112	0,8079	0,3134	0,9923	3,7632	4,518	14,000	1904	83,3	73,8
113	0,7786	0,3243	0,9947	3,6511	4,518	14,125	1905	80,8	72,8
114	0,7492	0,3352	0,9971	3,2933	4,518	14,250	1907	72,9	71,9
115	0,7199	0,3462	0,9995	2,9356	4,518	14,375	1908	65,0	70,8
116	0,9762	0,3571	0,9980	2,8595	4,518	14,500	1910	63,3	69,7
117	0,9468	0,3680	0,9956	2,7513	4,518	14,625	1911	60,9	68,2
118	0,9175	0,3790	0,9932	2,8887	4,518	14,750	1912	63,9	66,5
119	0,8881	0,3899	0,9908	3,0261	4,518	14,875	1914	67,0	65,3
120	0,8588	0,4009	0,9884	3,1635	4,518	15,000	1915	70,0	64,5
121	0,8294	0,4118	0,9860	3,1534	4,518	15,125	1916	69,8	64,1
122	0,8001	0,4227	0,9835	2,9743	4,518	15,250	1918	65,8	64,7

Table 5. Page 40a

A	B	C	D	E	F	G	H	I
123	1919,00	1915,61	1930,24	1908,45	1989,00	1908,45	0,3728	0,2369
124	1920,35	1915,61	1930,24	1908,45	1989,00	1908,45	0,1228	0,3287
125	1921,71	1926,42	1930,24	1908,45	1989,00	1908,45	0,1272	0,4205
126	1923,06	1926,42	1930,24	1908,45	1989,00	1908,45	0,3772	0,5122
127	1924,41	1926,42	1930,24	1908,45	1989,00	1908,45	0,6272	0,6040
128	1925,76	1926,42	1930,24	1908,45	1989,00	1908,45	0,8772	0,6958
129	1927,11	1926,42	1930,24	1908,45	1989,00	1908,45	0,8728	0,7875
130	1928,46	1926,42	1930,24	1908,45	1989,00	1908,45	0,6228	0,8793
131	1929,82	1926,42	1930,24	1908,45	1989,00	1908,45	0,3728	0,9710
132	1931,17	1926,42	1930,24	1908,45	1989,00	1908,45	0,1228	0,9372
133	1932,52	1937,24	1930,24	1908,45	1989,00	1908,45	0,1272	0,8454
134	1933,87	1937,24	1930,24	1908,45	1989,00	1908,45	0,3772	0,7537
135	1935,22	1937,24	1930,24	1908,45	1989,00	1908,45	0,6272	0,6619
136	1936,57	1937,24	1930,24	1908,45	1989,00	1908,45	0,8772	0,5701
137	1937,92	1937,24	1930,24	1908,45	1989,00	1908,45	0,8728	0,4784
138	1939,28	1937,24	1930,24	1908,45	1989,00	1908,45	0,6228	0,3866
139	1940,63	1937,24	1930,24	1908,45	1989,00	1908,45	0,3728	0,2949
140	1941,98	1937,24	1930,24	1908,45	1989,00	1908,45	0,1228	0,2031
141	1943,33	1948,05	1930,24	1908,45	1989,00	1908,45	0,1272	0,1113
142	1944,68	1948,05	1930,24	1908,45	1989,00	1908,45	0,3772	0,0196
143	1946,03	1948,05	1959,70	1908,45	1989,00	1908,45	0,6272	0,0722
144	1947,39	1948,05	1959,70	1908,45	1989,00	1908,45	0,8772	0,1640
145	1948,74	1948,05	1959,70	1908,45	1989,00	1908,45	0,8728	0,2557
146	1950,09	1948,05	1959,70	1908,45	1989,00	1908,45	0,6228	0,3475
147	1951,44	1948,05	1959,70	1908,45	1989,00	1908,45	0,3728	0,4392
148	1952,79	1948,05	1959,70	1908,45	1989,00	1908,45	0,1228	0,5310
149	1954,14	1958,86	1959,70	1908,45	1989,00	1908,45	0,1272	0,6228
150	1955,50	1958,86	1959,70	2000,53	1989,00	1908,45	0,3772	0,7145
151	1956,85	1958,86	1959,70	2000,53	1989,00	1908,45	0,6272	0,8063
152	1958,20	1958,86	1959,70	2000,53	1989,00	1908,45	0,8772	0,8981

Table 5. Page 40b

A	J	K	L	M	N	O	P	Q	R
123	0,7707	0,4337	0,9811	2,7952	4,518	15,375	1919	61,9	65,8
124	0,7413	0,4446	0,9787	2,6162	4,518	15,500	1920	57,9	67,4
125	0,7120	0,4555	0,9763	2,6915	4,518	15,625	1922	59,6	68,7
126	0,6826	0,4665	0,9739	3,0124	4,518	15,750	1923	66,7	69,7
127	0,6533	0,4774	0,9714	3,3333	4,518	15,875	1924	73,8	70,6
128	0,6239	0,4883	0,9690	3,6542	4,518	16,000	1926	80,9	71,3
129	0,5946	0,4993	0,9666	3,7208	4,518	16,125	1927	82,4	72,1
130	0,5652	0,5102	0,9642	3,5417	4,518	16,250	1928	78,4	73,1
131	0,5359	0,5211	0,9618	3,3627	4,518	16,375	1930	74,4	73,6
132	0,5065	0,5321	0,9594	3,0580	4,518	16,500	1931	67,7	73,7
133	0,4772	0,5430	0,9569	2,9497	4,518	16,625	1933	65,3	72,7
134	0,4478	0,5539	0,9545	3,0871	4,518	16,750	1934	68,3	70,6
135	0,4185	0,5649	0,9521	3,2245	4,518	16,875	1935	71,4	68,1
136	0,3891	0,5758	0,9497	3,3619	4,518	17,000	1937	74,4	65,1
137	0,3598	0,5868	0,9473	3,2450	4,518	17,125	1938	71,8	62,7
138	0,3304	0,5977	0,9449	2,8824	4,518	17,250	1939	63,8	60,8
139	0,3010	0,6086	0,9424	2,5198	4,518	17,375	1941	55,8	59,3
140	0,2717	0,6196	0,9400	2,1572	4,518	17,500	1942	47,7	58,2
141	0,2423	0,6305	0,9376	2,0490	4,518	17,625	1943	45,3	56,9
142	0,2130	0,6414	0,9352	2,1864	4,518	17,750	1945	48,4	55,5
143	0,1836	0,6524	0,9328	2,4681	4,518	17,875	1946	54,6	54,6
144	0,1543	0,6633	0,9304	2,7891	4,518	18,000	1947	61,7	54,1
145	0,1249	0,6742	0,9279	2,8556	4,518	18,125	1949	63,2	54,7
146	0,0956	0,6852	0,9255	2,6766	4,518	18,250	1950	59,2	56,4
147	0,0662	0,6961	0,9231	2,4975	4,518	18,375	1951	55,3	58,8
148	0,0369	0,7070	0,9207	2,3184	4,518	18,500	1953	51,3	61,3
149	0,0075	0,7180	0,9183	2,3937	4,518	18,625	1954	53,0	63,4
150	0,0218	0,7289	0,9158	2,7583	4,518	18,750	1955	61,0	64,7
151	0,0512	0,7399	0,9134	3,1379	4,518	18,875	1957	69,5	65,6
152	0,0805	0,7508	0,9110	3,5176	4,518	19,000	1958	77,9	66,2

Table 5. Page 41a

A	B	C	D	E	F	G	H	I
153	1959,55	1958,86	1959,70	2000,53	1989,00	1908,45	0,8728	0,9898
154	1960,90	1958,86	1959,70	2000,53	1989,00	1908,45	0,6228	0,9184
155	1962,25	1958,86	1959,70	2000,53	1989,00	1908,45	0,3728	0,8267
156	1963,60	1958,86	1959,70	2000,53	1989,00	1908,45	0,1228	0,7349
157	1964,96	1969,68	1959,70	2000,53	1989,00	1908,45	0,1272	0,6431
158	1966,31	1969,68	1959,70	2000,53	1989,00	1908,45	0,3772	0,5514
159	1967,66	1969,68	1959,70	2000,53	1989,00	1908,45	0,6272	0,4596
160	1969,01	1969,68	1959,70	2000,53	1989,00	1908,45	0,8772	0,3678
161	1970,36	1969,68	1959,70	2000,53	1989,00	1908,45	0,8728	0,2761
162	1971,71	1969,68	1959,70	2000,53	1989,00	1908,45	0,6228	0,1843
163	1973,07	1969,68	1959,70	2000,53	1989,00	1908,45	0,3728	0,0926
164	1974,42	1969,68	1959,70	2000,53	1989,00	1908,45	0,1228	0,0008
165	1975,77	1980,49	1989,16	2000,53	1989,00	1908,45	0,1272	0,0910
166	1977,12	1980,49	1989,16	2000,53	1989,00	1908,45	0,3772	0,1827
167	1978,47	1980,49	1989,16	2000,53	1989,00	1908,45	0,6272	0,2745
168	1979,82	1980,49	1989,16	2000,53	1989,00	1908,45	0,8772	0,3663
169	1981,18	1980,49	1989,16	2000,53	1989,00	1908,45	0,8728	0,4580
170	1982,53	1980,49	1989,16	2000,53	1989,00	1908,45	0,6228	0,5498
171	1983,88	1980,49	1989,16	2000,53	1989,00	1908,45	0,3728	0,6415
172	1985,23	1980,49	1989,16	2000,53	1989,00	1908,45	0,1228	0,7333
173	1986,58	1991,30	1989,16	2000,53	1989,00	1908,45	0,1272	0,8251
174	1987,93	1991,30	1989,16	2000,53	1989,00	1908,45	0,3772	0,9168
175	1989,28	1991,30	1989,16	2000,53	1989,00	1908,45	0,6272	0,9914
176	1990,64	1991,30	1989,16	2000,53	1989,00	1908,45	0,8772	0,8996
177	1991,99	1991,30	1989,16	2000,53	1989,00	1908,45	0,8728	0,8079
178	1993,34	1991,30	1989,16	2000,53	1989,00	1908,45	0,6228	0,7161
179	1994,69	1991,30	1989,16	2000,53	1989,00	1908,45	0,3728	0,6244
180	1996,04	1991,30	1989,16	2000,53	1989,00	1908,45	0,1228	0,5326
181	1997,39	2002,11	1989,16	2000,53	1989,00	1908,45	0,1272	0,4408
182	1998,75	2002,11	1989,16	2000,53	1989,00	1908,45	0,3772	0,3491

Table 5. Page 41b

A	J	K	L	M	N	O	P	Q	R
153	0,1099	0,7617	0,9086	3,6429	4,518	19,125	1960	80,6	67,2
154	0,1393	0,7727	0,9062	3,3593	4,518	19,250	1961	74,4	68,4
155	0,1686	0,7836	0,9038	3,0554	4,518	19,375	1962	67,6	69,2
156	0,1980	0,7945	0,9013	2,7515	4,518	19,500	1964	60,9	69,6
157	0,2273	0,8055	0,8989	2,7020	4,518	19,625	1965	59,8	68,9
158	0,2567	0,8164	0,8965	2,8981	4,518	19,750	1966	64,1	67,2
159	0,2860	0,8273	0,8941	3,0942	4,518	19,875	1968	68,5	65,4
160	0,3154	0,8383	0,8917	3,2903	4,518	20,000	1969	72,8	63,5
161	0,3447	0,8492	0,8893	3,2321	4,518	20,125	1970	71,5	62,8
162	0,3741	0,8601	0,8868	2,9282	4,518	20,250	1972	64,8	63,1
163	0,4034	0,8711	0,8844	2,6243	4,518	20,375	1973	58,1	63,9
164	0,4328	0,8820	0,8820	2,3204	4,518	20,500	1974	51,4	65,1
165	0,4621	0,8929	0,8796	2,4528	4,518	20,625	1976	54,3	66,2
166	0,4915	0,9039	0,8772	2,8325	4,518	20,750	1977	62,7	67,1
167	0,5208	0,9148	0,8748	3,2121	4,518	20,875	1978	71,1	68,4
168	0,5502	0,9258	0,8723	3,5917	4,518	21,000	1980	79,5	70,2
169	0,5796	0,9367	0,8699	3,7170	4,518	21,125	1981	82,3	73,1
170	0,6089	0,9476	0,8675	3,5966	4,518	21,250	1983	79,6	76,6
171	0,6383	0,9586	0,8651	3,4763	4,518	21,375	1984	76,9	80,0
172	0,6676	0,9695	0,8627	3,3559	4,518	21,500	1985	74,3	82,9
173	0,6970	0,9804	0,8602	3,4899	4,518	21,625	1987	77,2	84,7
174	0,7263	0,9914	0,8578	3,8695	4,518	21,750	1988	85,6	85,4
175	0,7557	0,9977	0,8554	4,2274	4,518	21,875	1989	93,6	85,6
176	0,7850	0,9868	0,8530	4,4016	4,518	22,000	1991	97,4	85,3
177	0,8144	0,9758	0,8506	4,3215	4,518	22,125	1992	95,6	85,1
178	0,8437	0,9649	0,8482	3,9957	4,518	22,250	1993	88,4	85,0
179	0,8731	0,9540	0,8457	3,6700	4,518	22,375	1995	81,2	84,4
180	0,9024	0,9430	0,8433	3,3442	4,518	22,500	1996	74,0	83,2
181	0,9318	0,9321	0,8409	3,2728	4,518	22,625	1997	72,4	81,3
182	0,9611	0,9211	0,8385	3,4470	4,518	22,750	1999	76,3	78,7

Table 5. Page 42a

A	B	C	D	E	F	G	H	I
183	2000,10	2002,11	1989,16	2000,53	1989,00	1908,45	0,6272	0,2573
184	2001,45	2002,11	1989,16	2000,53	1989,00	1908,45	0,8772	0,1655
185	2002,80	2002,11	1989,16	2000,53	1989,00	1908,45	0,8728	0,0738
186	2004,15	2002,11	2018,62	2000,53	1989,00	1908,45	0,6228	0,0180
187	2005,50	2002,11	2018,62	2000,53	1989,00	1908,45	0,3728	0,1097
188	2006,85	2002,11	2018,62	2000,53	1989,00	1908,45	0,1228	0,2015
189	2008,21	2012,93	2018,62	2000,53	1989,00	1908,45	0,1272	0,2933
190	2009,56	2012,93	2018,62	2000,53	1989,00	1908,45	0,3772	0,3850
191	2010,91	2012,93	2018,62	2000,53	1989,00	1908,45	0,6272	0,4768
192	2012,26	2012,93	2018,62	2000,53	1989,00	1908,45	0,8772	0,5685
193	2013,61	2012,93	2018,62	2000,53	1989,00	1908,45	0,8728	0,6603
194	2014,96	2012,93	2018,62	2000,53	1989,00	1908,45	0,6228	0,7521
195	2016,32	2012,93	2018,62	2000,53	1989,00	1908,45	0,3728	0,8438
196	2017,67	2012,93	2018,62	2000,53	1989,00	1908,45	0,1228	0,9356
197	2019,02	2023,74	2018,62	2000,53	1989,00	1908,45	0,1272	0,9726
198	2020,37	2023,74	2018,62	2000,53	1989,00	1908,45	0,3772	0,8809
199	2021,72	2023,74	2018,62	2000,53	1989,00	1908,45	0,6272	0,7891
200	2023,07	2023,74	2018,62	2000,53	1989,00	1908,45	0,8772	0,6974
201	2024,43	2023,74	2018,62	2000,53	1989,00	1908,45	0,8728	0,6056
202	2025,78	2023,74	2018,62	2000,53	1989,00	1908,45	0,6228	0,5138
203	2027,13	2023,74	2018,62	2000,53	1989,00	1908,45	0,3728	0,4221
204	2028,48	2023,74	2018,62	2000,53	1989,00	1908,45	0,1228	0,3303
205	2029,83	2034,55	2018,62	2000,53	1989,00	1908,45	0,1272	0,2385
206	2031,18	2034,55	2018,62	2000,53	1989,00	1908,45	0,3772	0,1468
207	2032,53	2034,55	2018,62	2000,53	1989,00	1908,45	0,6272	0,0550
208	2033,89	2034,55	2048,07	2000,53	1989,00	1908,45	0,8772	0,0367
209	2035,24	2034,55	2048,07	2000,53	1989,00	1908,45	0,8728	0,1285
210	2036,59	2034,55	2048,07	2000,53	1989,00	1908,45	0,6228	0,2203
211	2037,94	2034,55	2048,07	2000,53	1989,00	1908,45	0,3728	0,3120
212	2039,29	2034,55	2048,07	2000,53	1989,00	1908,45	0,1228	0,4038

Table 5. Page 42b

A	J	K	L	M	N	O	P	Q	R
183	0,9905	0,9102	0,8361	3,6213	4,518	22,875	2000	80,1	76,4
184	0,9801	0,8993	0,8337	3,7558	4,518	23,000	2001	83,1	74,4
185	0,9508	0,8883	0,8312	3,6170	4,518	23,125	2003	80,1	73,4
186	0,9214	0,8774	0,8288	3,2685	4,518	23,250	2004	72,3	73,2
187	0,8921	0,8665	0,8264	3,0675	4,518	23,375	2006	67,9	73,4
188	0,8627	0,8555	0,8240	2,8666	4,518	23,500	2007	63,4	73,9
189	0,8334	0,8446	0,8216	2,9200	4,518	23,625	2008	64,6	74,2
190	0,8040	0,8337	0,8192	3,2191	4,518	23,750	2010	71,2	74,3
191	0,7747	0,8227	0,8167	3,5181	4,518	23,875	2011	77,9	74,7
192	0,7453	0,8118	0,8143	3,8172	4,518	24,000	2012	84,5	75,2
193	0,7160	0,8009	0,8119	3,8619	4,518	24,125	2014	85,5	76,2
194	0,6866	0,7899	0,8095	3,6609	4,518	24,250	2015	81,0	77,3
195	0,6573	0,7790	0,8071	3,4600	4,518	24,375	2016	76,6	77,9
196	0,6279	0,7681	0,8047	3,2590	4,518	24,500	2018	72,1	78,2
197	0,5986	0,7571	0,8022	3,2577	4,518	24,625	2019	72,1	77,3
198	0,5692	0,7462	0,7998	3,3733	4,518	24,750	2020	74,7	75,4
199	0,5398	0,7352	0,7974	3,4888	4,518	24,875	2022	77,2	73,0
200	0,5105	0,7243	0,7950	3,6043	4,518	25,000	2023	79,8	70,2
201	0,4811	0,7134	0,7926	3,4655	4,518	25,125	2024	76,7	67,5
202	0,4518	0,7024	0,7901	3,0810	4,518	25,250	2026	68,2	65,2
203	0,4224	0,6915	0,7877	2,6966	4,518	25,375	2027	59,7	62,8
204	0,3931	0,6806	0,7853	2,3121	4,518	25,500	2028	51,2	60,6
205	0,3637	0,6696	0,7829	2,1820	4,518	25,625	2030	48,3	58,3
206	0,3344	0,6587	0,7805	2,2975	4,518	25,750	2031	50,8	55,8
207	0,3050	0,6478	0,7781	2,4130	4,518	25,875	2033	53,4	53,7
208	0,2757	0,6368	0,7756	2,6021	4,518	26,000	2034	57,6	52,1
209	0,2463	0,6259	0,7732	2,6468	4,518	26,125	2035	58,6	51,6
210	0,2170	0,6150	0,7708	2,4458	4,518	26,250	2037	54,1	52,1
211	0,1876	0,6040	0,7684	2,2449	4,518	26,375	2038	49,7	53,1
212	0,1583	0,5931	0,7660	2,0439	4,518	26,500	2039	45,2	54,5

Table 5. Page 43a

A	B	C	D	E	F	G	H	I
213	2040,64	2045,36	2048,07	2000,53	1989,00	1908,45	0,1272	0,4956
214	2042,00	2045,36	2048,07	2000,53	1989,00	1908,45	0,3772	0,5873
215	2043,35	2045,36	2048,07	2000,53	1989,00	1908,45	0,6272	0,6791
216	2044,70	2045,36	2048,07	2000,53	1989,00	1908,45	0,8772	0,7708
217	2046,05	2045,36	2048,07	2000,53	1989,00	1908,45	0,8728	0,8626
218	2047,40	2045,36	2048,07	2092,62	1989,00	1908,45	0,6228	0,9544
219	2048,75	2045,36	2048,07	2092,62	1989,00	1908,45	0,3728	0,9539
220	2050,11	2045,36	2048,07	2092,62	1989,00	1908,45	0,1228	0,8621
221	2051,46	2056,18	2048,07	2092,62	1989,00	1908,45	0,1272	0,7703
222	2052,81	2056,18	2048,07	2092,62	1989,00	1908,45	0,3772	0,6786
223	2054,16	2056,18	2048,07	2092,62	1989,00	1908,45	0,6272	0,5868
224	2055,51	2056,18	2048,07	2092,62	1989,00	1908,45	0,8772	0,4951
225	2056,86	2056,18	2048,07	2092,62	1989,00	1908,45	0,8728	0,4033
226	2058,21	2056,18	2048,07	2092,62	1989,00	1908,45	0,6228	0,3115
227	2059,57	2056,18	2048,07	2092,62	1989,00	1908,45	0,3728	0,2198
228	2060,92	2056,18	2048,07	2092,62	1989,00	1908,45	0,1228	0,1280
229	2062,27	2066,99	2048,07	2092,62	1989,00	1908,45	0,1272	0,0362
230	2063,62	2066,99	2077,53	2092,62	1989,00	1908,45	0,3772	0,0555
231	2064,97	2066,99	2077,53	2092,62	1989,00	1908,45	0,6272	0,1473
232	2066,32	2066,99	2077,53	2092,62	1989,00	1908,45	0,8772	0,2390
233	2067,68	2066,99	2077,53	2092,62	1989,00	1908,45	0,8728	0,3308
234	2069,03	2066,99	2077,53	2092,62	1989,00	1908,45	0,6228	0,4226
235	2070,38	2066,99	2077,53	2092,62	1989,00	1908,45	0,3728	0,5143
236	2071,73	2066,99	2077,53	2092,62	1989,00	1908,45	0,1228	0,6061
237	2073,08	2077,80	2077,53	2092,62	1989,00	1908,45	0,1272	0,6979
238	2074,43	2077,80	2077,53	2092,62	1989,00	1908,45	0,3772	0,7896
239	2075,78	2077,80	2077,53	2092,62	1989,00	1908,45	0,6272	0,8814
240	2077,14	2077,80	2077,53	2092,62	1989,00	1908,45	0,8772	0,9731
241	2078,49	2077,80	2077,53	2092,62	1989,00	1908,45	0,8728	0,9351
242	2079,84	2077,80	2077,53	2092,62	1989,00	1908,45	0,6228	0,8433

Table 5. Page 43b

A	J	K	L	M	N	O	P	Q	R
213	0,1289	0,5822	0,7636	2,0973	4,518	26,625	2041	46,4	55,6
214	0,0995	0,5712	0,7611	2,3964	4,518	26,750	2042	53,0	56,1
215	0,0702	0,5603	0,7587	2,6955	4,518	26,875	2043	59,7	56,6
216	0,0408	0,5493	0,7563	2,9945	4,518	27,000	2045	66,3	56,8
217	0,0115	0,5384	0,7539	3,0392	4,518	27,125	2046	67,3	57,3
218	0,0179	0,5275	0,7515	2,8740	4,518	27,250	2047	63,6	58,1
219	0,0472	0,5165	0,7491	2,6395	4,518	27,375	2049	58,4	58,5
220	0,0766	0,5056	0,7466	2,3137	4,518	27,500	2050	51,2	58,7
221	0,1059	0,4947	0,7442	2,2423	4,518	27,625	2051	49,6	58,0
222	0,1353	0,4837	0,7418	2,4166	4,518	27,750	2053	53,5	56,3
223	0,1646	0,4728	0,7394	2,5908	4,518	27,875	2054	57,3	54,2
224	0,1940	0,4619	0,7370	2,7650	4,518	28,000	2056	61,2	51,9
225	0,2233	0,4509	0,7345	2,6849	4,518	28,125	2057	59,4	50,3
226	0,2527	0,4400	0,7321	2,3592	4,518	28,250	2058	52,2	49,5
227	0,2820	0,4291	0,7297	2,0334	4,518	28,375	2060	45,0	49,1
228	0,3114	0,4181	0,7273	1,7076	4,518	28,500	2061	37,8	49,2
229	0,3407	0,4072	0,7249	1,6362	4,518	28,625	2062	36,2	49,2
230	0,3701	0,3962	0,7225	1,9215	4,518	28,750	2064	42,5	49,0
231	0,3995	0,3853	0,7200	2,2793	4,518	28,875	2065	50,4	49,2
232	0,4288	0,3744	0,7176	2,6370	4,518	29,000	2066	58,4	49,9
233	0,4582	0,3634	0,7152	2,7404	4,518	29,125	2068	60,7	51,7
234	0,4875	0,3525	0,7128	2,5982	4,518	29,250	2069	57,5	54,5
235	0,5169	0,3416	0,7104	2,4560	4,518	29,375	2070	54,4	57,5
236	0,5462	0,3306	0,7080	2,3137	4,518	29,500	2072	51,2	60,5
237	0,5756	0,3197	0,7055	2,4259	4,518	29,625	2073	53,7	62,5
238	0,6049	0,3088	0,7031	2,7836	4,518	29,750	2074	61,6	63,5
239	0,6343	0,2978	0,7007	3,1414	4,518	29,875	2076	69,5	64,1
240	0,6636	0,2869	0,6983	3,4991	4,518	30,000	2077	77,4	64,2
241	0,6930	0,2760	0,6959	3,4727	4,518	30,125	2078	76,9	64,5
242	0,7223	0,2650	0,6935	3,1470	4,518	30,250	2080	69,7	64,9

Table 5. Page 44a

A	B	C	D	E	F	G	H	I
243	2081,19	2077,80	2077,53	2092,62	1989,00	1908,45	0,3728	0,7516
244	2082,54	2077,80	2077,53	2092,62	1989,00	1908,45	0,1228	0,6598
245	2083,89	2088,61	2077,53	2092,62	1989,00	1908,45	0,1272	0,5680
246	2085,25	2088,61	2077,53	2092,62	1989,00	1908,45	0,3772	0,4763
247	2086,60	2088,61	2077,53	2092,62	1989,00	1908,45	0,6272	0,3845
248	2087,95	2088,61	2077,53	2092,62	1989,00	1908,45	0,8772	0,2928
249	2089,30	2088,61	2077,53	2092,62	1989,00	1908,45	0,8728	0,2010
250	2090,65	2088,61	2077,53	2092,62	1989,00	1908,45	0,6228	0,1092
251	2092,00	2088,61	2077,53	2092,62	1989,00	1908,45	0,3728	0,0175
252	2093,36	2088,61	2106,99	2092,62	1989,00	1908,45	0,1228	0,0743
253	2094,71	2099,43	2106,99	2092,62	1989,00	1908,45	0,1272	0,1661
254	2096,06	2099,43	2106,99	2092,62	1989,00	1908,45	0,3772	0,2578
255	2097,41	2099,43	2106,99	2092,62	1989,00	1908,45	0,6272	0,3496
256	2098,76	2099,43	2106,99	2092,62	1989,00	1908,45	0,8772	0,4413
257	2100,11	2099,43	2106,99	2092,62	1989,00	1908,45	0,8728	0,5331
258	2101,46	2099,43	2106,99	2092,62	1989,00	1908,45	0,6228	0,6249
259	2102,82	2099,43	2106,99	2092,62	1989,00	1908,45	0,3728	0,7166
260	2104,17	2099,43	2106,99	2092,62	1989,00	1908,45	0,1228	0,8084
261	2105,52	2110,24	2106,99	2092,62	1989,00	1908,45	0,1272	0,9002
262	2106,87	2110,24	2106,99	2092,62	1989,00	1908,45	0,3772	0,9919
263	2108,22	2110,24	2106,99	2092,62	1989,00	1908,45	0,6272	0,9163
264	2109,57	2110,24	2106,99	2092,62	1989,00	1908,45	0,8772	0,8246
265	2110,93	2110,24	2106,99	2092,62	1989,00	1908,45	0,8728	0,7328
266	2112,28	2110,24	2106,99	2092,62	1989,00	1908,45	0,6228	0,6410
267	2113,63	2110,24	2106,99	2092,62	2236,19	1908,45	0,3728	0,5493
268	2114,98	2110,24	2106,99	2092,62	2236,19	1908,45	0,1228	0,4575
269	2116,33	2121,05	2106,99	2092,62	2236,19	1908,45	0,1272	0,3658
270	2117,68	2121,05	2106,99	2092,62	2236,19	1908,45	0,3772	0,2740
271	2119,03	2121,05	2106,99	2092,62	2236,19	1908,45	0,6272	0,1822
272	2120,39	2121,05	2106,99	2092,62	2236,19	1908,45	0,8772	0,0905

Table 5. Page 44b

A	J	K	L	M	N	O	P	Q	R
243	0,7517	0,2541	0,6910	2,8212	4,518	30,375	2081	62,4	64,9
244	0,7810	0,2432	0,6886	2,4954	4,518	30,500	2083	55,2	64,4
245	0,8104	0,2322	0,6862	2,4240	4,518	30,625	2084	53,7	62,8
246	0,8398	0,2213	0,6838	2,5983	4,518	30,750	2085	57,5	60,5
247	0,8691	0,2103	0,6814	2,7725	4,518	30,875	2087	61,4	58,2
248	0,8985	0,1994	0,6789	2,9468	4,518	31,000	2088	65,2	56,2
249	0,9278	0,1885	0,6765	2,8666	4,518	31,125	2089	63,4	55,2
250	0,9572	0,1775	0,6741	2,5409	4,518	31,250	2091	56,2	55,0
251	0,9865	0,1666	0,6717	2,2151	4,518	31,375	2092	49,0	55,1
252	0,9841	0,1557	0,6693	2,0062	4,518	31,500	2093	44,4	55,6
253	0,9548	0,1447	0,6669	2,0596	4,518	31,625	2095	45,6	55,7
254	0,9254	0,1338	0,6644	2,3587	4,518	31,750	2096	52,2	55,6
255	0,8961	0,1229	0,6620	2,6577	4,518	31,875	2097	58,8	55,7
256	0,8667	0,1119	0,6596	2,9568	4,518	32,000	2099	65,4	56,2
257	0,8374	0,1010	0,6572	3,0015	4,518	32,125	2100	66,4	57,3
258	0,8080	0,0901	0,6548	2,8005	4,518	32,250	2101	62,0	59,0
259	0,7787	0,0791	0,6524	2,5996	4,518	32,375	2103	57,5	60,3
260	0,7493	0,0682	0,6499	2,3986	4,518	32,500	2104	53,1	61,1
261	0,7199	0,0572	0,6475	2,4520	4,518	32,625	2106	54,3	60,8
262	0,6906	0,0463	0,6451	2,7511	4,518	32,750	2107	60,9	59,6
263	0,6612	0,0354	0,6427	2,8828	4,518	32,875	2108	63,8	57,9
264	0,6319	0,0244	0,6403	2,9983	4,518	33,000	2110	66,4	55,7
265	0,6025	0,0135	0,6379	2,8595	4,518	33,125	2111	63,3	53,9
266	0,5732	0,0026	0,6354	2,4750	4,518	33,250	2112	54,8	52,2
267	0,5438	0,0084	0,6330	2,1073	4,518	33,375	2114	46,6	50,1
268	0,5145	0,0193	0,6306	1,7447	4,518	33,500	2115	38,6	48,1
269	0,4851	0,0302	0,6282	1,6365	4,518	33,625	2116	36,2	45,5
270	0,4558	0,0412	0,6258	1,7739	4,518	33,750	2118	39,3	42,8
271	0,4264	0,0521	0,6234	1,9113	4,518	33,875	2119	42,3	40,5
272	0,3971	0,0630	0,6209	2,0487	4,518	34,000	2120	45,3	38,8

Table 5. Page 45a

A	B	C	D	E	F	G	H	I
273	2121,74	2121,05	2136,45	2092,62	2236,19	1908,45	0,8728	0,0013
274	2123,09	2121,05	2136,45	2092,62	2236,19	1908,45	0,6228	0,0931
275	2124,44	2121,05	2136,45	2092,62	2236,19	1908,45	0,3728	0,1848
276	2125,79	2121,05	2136,45	2092,62	2236,19	1908,45	0,1228	0,2766
277	2127,14	2131,86	2136,45	2092,62	2236,19	1908,45	0,1272	0,3683
278	2128,50	2131,86	2136,45	2092,62	2236,19	1908,45	0,3772	0,4601
279	2129,85	2131,86	2136,45	2092,62	2236,19	1908,45	0,6272	0,5519
280	2131,20	2131,86	2136,45	2092,62	2236,19	1908,45	0,8772	0,6436
281	2132,55	2131,86	2136,45	2092,62	2236,19	1908,45	0,8728	0,7354
282	2133,90	2131,86	2136,45	2092,62	2236,19	1908,45	0,6228	0,8272
283	2135,25	2131,86	2136,45	2092,62	2236,19	1908,45	0,3728	0,9189
284	2136,61	2131,86	2136,45	2092,62	2236,19	1908,45	0,1228	0,9893
285	2137,96	2142,68	2136,45	2092,62	2236,19	1908,45	0,1272	0,8976
286	2139,31	2142,68	2136,45	2184,71	2236,19	1908,45	0,3772	0,8058
287	2140,66	2142,68	2136,45	2184,71	2236,19	1908,45	0,6272	0,7140
288	2142,01	2142,68	2136,45	2184,71	2236,19	1908,45	0,8772	0,6223
289	2143,36	2142,68	2136,45	2184,71	2236,19	1908,45	0,8728	0,5305
290	2144,71	2142,68	2136,45	2184,71	2236,19	1908,45	0,6228	0,4387
291	2146,07	2142,68	2136,45	2184,71	2236,19	1908,45	0,3728	0,3470
292	2147,42	2142,68	2136,45	2184,71	2236,19	1908,45	0,1228	0,2552
293	2148,77	2153,49	2136,45	2184,71	2236,19	1908,45	0,1272	0,1635
294	2150,12	2153,49	2136,45	2184,71	2236,19	1908,45	0,3772	0,0717
295	2151,47	2153,49	2165,91	2184,71	2236,19	1908,45	0,6272	0,0201
296	2152,82	2153,49	2165,91	2184,71	2236,19	1908,45	0,8772	0,1118
297	2154,18	2153,49	2165,91	2184,71	2236,19	1908,45	0,8728	0,2036
298	2155,53	2153,49	2165,91	2184,71	2236,19	1908,45	0,6228	0,2954
299	2156,88	2153,49	2165,91	2184,71	2236,19	1908,45	0,3728	0,3871
300	2158,23	2153,49	2165,91	2184,71	2236,19	1908,45	0,1228	0,4789
301	2159,58	2164,30	2165,91	2184,71	2236,19	1908,45	0,1272	0,5706
302	2160,93	2164,30	2165,91	2184,71	2236,19	1908,45	0,3772	0,6624

Table 5. Page 45b

A	J	K	L	M	N	O	P	Q	R
273	0,3677	0,0740	0,6185	1,9343	4,518	34,125	2122	42,8	38,1
274	0,3384	0,0849	0,6161	1,7552	4,518	34,250	2123	38,8	38,5
275	0,3090	0,0958	0,6137	1,5762	4,518	34,375	2124	34,9	39,4
276	0,2796	0,1068	0,6113	1,3971	4,518	34,500	2126	30,9	40,6
277	0,2503	0,1177	0,6088	1,4724	4,518	34,625	2127	32,6	41,8
278	0,2209	0,1287	0,6064	1,7933	4,518	34,750	2128	39,7	42,7
279	0,1916	0,1396	0,6040	2,1142	4,518	34,875	2130	46,8	43,7
280	0,1622	0,1505	0,6016	2,4352	4,518	35,000	2131	53,9	44,6
281	0,1329	0,1615	0,5992	2,5017	4,518	35,125	2133	55,4	45,6
282	0,1035	0,1724	0,5968	2,3227	4,518	35,250	2134	51,4	46,9
283	0,0742	0,1833	0,5943	2,1436	4,518	35,375	2135	47,4	47,9
284	0,0448	0,1943	0,5919	1,9431	4,518	35,500	2137	43,0	48,6
285	0,0155	0,2052	0,5895	1,8349	4,518	35,625	2138	40,6	48,4
286	0,0139	0,2161	0,5871	2,0001	4,518	35,750	2139	44,3	47,2
287	0,0432	0,2271	0,5847	2,1962	4,518	35,875	2141	48,6	45,7
288	0,0726	0,2380	0,5823	2,3923	4,518	36,000	2142	52,9	44,0
289	0,1019	0,2489	0,5798	2,3341	4,518	36,125	2143	51,7	42,6
290	0,1313	0,2599	0,5774	2,0302	4,518	36,250	2145	44,9	41,9
291	0,1607	0,2708	0,5750	1,7263	4,518	36,375	2146	38,2	41,4
292	0,1900	0,2818	0,5726	1,4224	4,518	36,500	2147	31,5	41,4
293	0,2194	0,2927	0,5702	1,3729	4,518	36,625	2149	30,4	41,2
294	0,2487	0,3036	0,5678	1,5690	4,518	36,750	2150	34,7	40,8
295	0,2781	0,3146	0,5653	1,8052	4,518	36,875	2151	40,0	40,9
296	0,3074	0,3255	0,5629	2,1848	4,518	37,000	2153	48,4	41,5
297	0,3368	0,3364	0,5605	2,3101	4,518	37,125	2154	51,1	43,1
298	0,3661	0,3474	0,5581	2,1898	4,518	37,250	2156	48,5	45,8
299	0,3955	0,3583	0,5557	2,0694	4,518	37,375	2157	45,8	48,9
300	0,4248	0,3692	0,5532	1,9490	4,518	37,500	2158	43,1	52,4
301	0,4542	0,3802	0,5508	2,0830	4,518	37,625	2160	46,1	55,3
302	0,4835	0,3911	0,5484	2,4626	4,518	37,750	2161	54,5	57,4

Table 5. Page 46a

A	B	C	D	E	F	G	H	I
303	2162,29	2164,30	2165,91	2184,71	2236,19	1908,45	0,6272	0,7542
304	2163,64	2164,30	2165,91	2184,71	2236,19	1908,45	0,8772	0,8459
305	2164,99	2164,30	2165,91	2184,71	2236,19	1908,45	0,8728	0,9377
306	2166,34	2164,30	2165,91	2184,71	2236,19	1908,45	0,6228	0,9705
307	2167,69	2164,30	2165,91	2184,71	2236,19	1908,45	0,3728	0,8788
308	2169,04	2164,30	2165,91	2184,71	2236,19	1908,45	0,1228	0,7870
309	2170,39	2175,11	2165,91	2184,71	2236,19	1908,45	0,1272	0,6953
310	2171,75	2175,11	2165,91	2184,71	2236,19	1908,45	0,3772	0,6035
311	2173,10	2175,11	2165,91	2184,71	2236,19	1908,45	0,6272	0,5117
312	2174,45	2175,11	2165,91	2184,71	2236,19	1908,45	0,8772	0,4200
313	2175,80	2175,11	2165,91	2184,71	2236,19	1908,45	0,8728	0,3282
314	2177,15	2175,11	2165,91	2184,71	2236,19	1908,45	0,6228	0,2364
315	2178,50	2175,11	2165,91	2184,71	2236,19	1908,45	0,3728	0,1447
316	2179,86	2175,11	2165,91	2184,71	2236,19	1908,45	0,1228	0,0529
317	2181,21	2185,93	2195,36	2184,71	2236,19	1908,45	0,1272	0,0388
318	2182,56	2185,93	2195,36	2184,71	2236,19	1908,45	0,3772	0,1306
319	2183,91	2185,93	2195,36	2184,71	2236,19	1908,45	0,6272	0,2224
320	2185,26	2185,93	2195,36	2184,71	2236,19	1908,45	0,8772	0,3141
321	2186,61	2185,93	2195,36	2184,71	2236,19	1908,45	0,8728	0,4059
322	2187,96	2185,93	2195,36	2184,71	2236,19	1908,45	0,6228	0,4977
323	2189,32	2185,93	2195,36	2184,71	2236,19	1908,45	0,3728	0,5894
324	2190,67	2185,93	2195,36	2184,71	2236,19	1908,45	0,1228	0,6812
325	2192,02	2196,74	2195,36	2184,71	2236,19	1908,45	0,1272	0,7729
326	2193,37	2196,74	2195,36	2184,71	2236,19	1908,45	0,3772	0,8647
327	2194,72	2196,74	2195,36	2184,71	2236,19	1908,45	0,6272	0,9565
328	2196,07	2196,74	2195,36	2184,71	2236,19	1908,45	0,8772	0,9518
329	2197,43	2196,74	2195,36	2184,71	2236,19	1908,45	0,8728	0,8600
330	2198,78	2196,74	2195,36	2184,71	2236,19	1908,45	0,6228	0,7682
331	2200,13	2196,74	2195,36	2184,71	2236,19	1908,45	0,3728	0,6765
332	2201,48	2196,74	2195,36	2184,71	2236,19	1908,45	0,1228	0,5847

Table 5. Page 46b

A	J	K	L	M	N	O	P	Q	R
303	0,5129	0,4020	0,5460	2,8423	4,518	37,875	2162	62,9	59,0
304	0,5422	0,4130	0,5436	3,2219	4,518	38,000	2164	71,3	60,2
305	0,5716	0,4239	0,5412	3,3472	4,518	38,125	2165	74,1	61,6
306	0,6010	0,4348	0,5387	3,1679	4,518	38,250	2166	70,1	63,2
307	0,6303	0,4458	0,5363	2,8640	4,518	38,375	2168	63,4	64,2
308	0,6597	0,4567	0,5339	2,5601	4,518	38,500	2169	56,7	64,9
309	0,6890	0,4677	0,5315	2,5106	4,518	38,625	2170	55,6	64,4
310	0,7184	0,4786	0,5291	2,7067	4,518	38,750	2172	59,9	62,9
311	0,7477	0,4895	0,5267	2,9028	4,518	38,875	2173	64,2	61,1
312	0,7771	0,5005	0,5242	3,0989	4,518	39,000	2174	68,6	59,3
313	0,8064	0,5114	0,5218	3,0407	4,518	39,125	2176	67,3	58,3
314	0,8358	0,5223	0,5194	2,7368	4,518	39,250	2177	60,6	58,4
315	0,8651	0,5333	0,5170	2,4329	4,518	39,375	2179	53,8	58,9
316	0,8945	0,5442	0,5146	2,1290	4,518	39,500	2180	47,1	59,8
317	0,9238	0,5551	0,5122	2,1572	4,518	39,625	2181	47,7	60,4
318	0,9532	0,5661	0,5097	2,5368	4,518	39,750	2183	56,1	60,7
319	0,9825	0,5770	0,5073	2,9164	4,518	39,875	2184	64,5	61,3
320	0,9881	0,5879	0,5049	3,2723	4,518	40,000	2185	72,4	62,2
321	0,9587	0,5989	0,5025	3,3388	4,518	40,125	2187	73,9	64,0
322	0,9294	0,6098	0,5001	3,1597	4,518	40,250	2188	69,9	66,6
323	0,9000	0,6207	0,4976	2,9807	4,518	40,375	2189	66,0	69,0
324	0,8707	0,6317	0,4952	2,8016	4,518	40,500	2191	62,0	71,0
325	0,8413	0,6426	0,4928	2,8769	4,518	40,625	2192	63,7	71,9
326	0,8120	0,6536	0,4904	3,1978	4,518	40,750	2193	70,8	71,7
327	0,7826	0,6645	0,4880	3,5187	4,518	40,875	2195	77,9	71,1
328	0,7533	0,6754	0,4856	3,7432	4,518	41,000	2196	82,8	70,0
329	0,7239	0,6864	0,4831	3,6263	4,518	41,125	2197	80,3	69,1
330	0,6946	0,6973	0,4807	3,2637	4,518	41,250	2199	72,2	68,3
331	0,6652	0,7082	0,4783	2,9011	4,518	41,375	2200	64,2	67,1
332	0,6359	0,7192	0,4759	2,5385	4,518	41,500	2201	56,2	65,5

Table 5. Page 47a

A	B	C	D	E	F	G	H	I
333	2202,83	2207,55	2195,36	2184,71	2236,19	1908,45	0,1272	0,4930
334	2204,18	2207,55	2195,36	2184,71	2236,19	1908,45	0,3772	0,4012
335	2205,54	2207,55	2195,36	2184,71	2236,19	1908,45	0,6272	0,3094
336	2206,89	2207,55	2195,36	2184,71	2236,19	1908,45	0,8772	0,2177
337	2208,24	2207,55	2195,36	2184,71	2236,19	1908,45	0,8728	0,1259
338	2209,59	2207,55	2195,36	2184,71	2236,19	1908,45	0,6228	0,0341
339	2210,94	2207,55	2224,82	2184,71	2236,19	1908,45	0,3728	0,0576
340	2212,29	2207,55	2224,82	2184,71	2236,19	1908,45	0,1228	0,1494
341	2213,64	2218,36	2224,82	2184,71	2236,19	1908,45	0,1272	0,2411
342	2215,00	2218,36	2224,82	2184,71	2236,19	1908,45	0,3772	0,3329
343	2216,35	2218,36	2224,82	2184,71	2236,19	1908,45	0,6272	0,4247
344	2217,70	2218,36	2224,82	2184,71	2236,19	1908,45	0,8772	0,5164
345	2219,05	2218,36	2224,82	2184,71	2236,19	1908,45	0,8728	0,6082
346	2220,40	2218,36	2224,82	2184,71	2236,19	1908,45	0,6228	0,6999
347	2221,75	2218,36	2224,82	2184,71	2236,19	1908,45	0,3728	0,7917
348	2223,11	2218,36	2224,82	2184,71	2236,19	1908,45	0,1228	0,8835
349	2224,46	2229,18	2224,82	2184,71	2236,19	1908,45	0,1272	0,9752
350	2225,81	2229,18	2224,82	2184,71	2236,19	1908,45	0,3772	0,9330
351	2227,16	2229,18	2224,82	2184,71	2236,19	1908,45	0,6272	0,8412
352	2228,51	2229,18	2224,82	2184,71	2236,19	1908,45	0,8772	0,7495
353	2229,86	2229,18	2224,82	2184,71	2236,19	1908,45	0,8728	0,6577
354	2231,22	2229,18	2224,82	2276,80	2236,19	1908,45	0,6228	0,5660
355	2232,57	2229,18	2224,82	2276,80	2236,19	1908,45	0,3728	0,4742
356	2233,92	2229,18	2224,82	2276,80	2236,19	1908,45	0,1228	0,3824
357	2235,27	2239,99	2224,82	2276,80	2236,19	1908,45	0,1272	0,2907
358	2236,62	2239,99	2224,82	2276,80	2236,19	1908,45	0,3772	0,1989
359	2237,97	2239,99	2224,82	2276,80	2236,19	1908,45	0,6272	0,1071
360	2239,32	2239,99	2224,82	2276,80	2236,19	1908,45	0,8772	0,0154
361	2240,68	2239,99	2254,28	2276,80	2236,19	1908,45	0,8728	0,0764
362	2242,03	2239,99	2254,28	2276,80	2236,19	1908,45	0,6228	0,1681

Table 5. Page 47b

A	J	K	L	M	N	O	P	Q	R
333	0,6065	0,7301	0,4735	2,4302	4,518	41,625	2203	53,8	63,0
334	0,5772	0,7410	0,4711	2,5676	4,518	41,750	2204	56,8	59,8
335	0,5478	0,7520	0,4686	2,7050	4,518	41,875	2206	59,9	57,0
336	0,5184	0,7629	0,4662	2,8424	4,518	42,000	2207	62,9	54,7
337	0,4891	0,7738	0,4638	2,7255	4,518	42,125	2208	60,3	53,4
338	0,4597	0,7848	0,4614	2,3629	4,518	42,250	2210	52,3	53,1
339	0,4304	0,7957	0,4590	2,1155	4,518	42,375	2211	46,8	53,3
340	0,4010	0,8067	0,4566	1,9364	4,518	42,500	2212	42,9	54,0
341	0,3717	0,8176	0,4541	2,0117	4,518	42,625	2214	44,5	54,5
342	0,3423	0,8285	0,4517	2,3326	4,518	42,750	2215	51,6	54,8
343	0,3130	0,8395	0,4493	2,6536	4,518	42,875	2216	58,7	55,6
344	0,2836	0,8504	0,4469	2,9745	4,518	43,000	2218	65,8	56,6
345	0,2543	0,8613	0,4445	3,0411	4,518	43,125	2219	67,3	58,1
346	0,2249	0,8723	0,4421	2,8620	4,518	43,250	2220	63,3	60,0
347	0,1956	0,8832	0,4396	2,6829	4,518	43,375	2222	59,4	61,4
348	0,1662	0,8941	0,4372	2,5039	4,518	43,500	2223	55,4	62,3
349	0,1369	0,9051	0,4348	2,5791	4,518	43,625	2224	57,1	62,2
350	0,1075	0,9160	0,4324	2,7661	4,518	43,750	2226	61,2	61,1
351	0,0781	0,9269	0,4300	2,9035	4,518	43,875	2227	64,3	59,7
352	0,0488	0,9379	0,4275	3,0409	4,518	44,000	2229	67,3	57,9
353	0,0194	0,9488	0,4251	2,9239	4,518	44,125	2230	64,7	56,5
354	0,0099	0,9597	0,4227	2,5811	4,518	44,250	2231	57,1	55,3
355	0,0393	0,9707	0,4203	2,2773	4,518	44,375	2233	50,4	54,2
356	0,0686	0,9816	0,4179	1,9734	4,518	44,500	2234	43,7	53,1
357	0,0980	0,9926	0,4155	1,9238	4,518	44,625	2235	42,6	51,8
358	0,1273	0,9965	0,4130	2,1130	4,518	44,750	2237	46,8	50,5
359	0,1567	0,9856	0,4106	2,2872	4,518	44,875	2238	50,6	49,7
360	0,1860	0,9746	0,4082	2,4614	4,518	45,000	2239	54,5	49,3
361	0,2154	0,9637	0,4058	2,5341	4,518	45,125	2241	56,1	49,9
362	0,2447	0,9528	0,4034	2,3918	4,518	45,250	2242	52,9	51,5

Table 5. Page 48a

A	B	C	D	E	F	G	H	I
363	2243,38	2239,99	2254,28	2276,80	2236,19	1908,45	0,3728	0,2599
364	2244,73	2239,99	2254,28	2276,80	2236,19	1908,45	0,1228	0,3517
365	2246,08	2250,80	2254,28	2276,80	2236,19	1908,45	0,1272	0,4434
366	2247,43	2250,80	2254,28	2276,80	2236,19	1908,45	0,3772	0,5352
367	2248,79	2250,80	2254,28	2276,80	2236,19	1908,45	0,6272	0,6270
368	2250,14	2250,80	2254,28	2276,80	2236,19	1908,45	0,8772	0,7187
369	2251,49	2250,80	2254,28	2276,80	2236,19	1908,45	0,8728	0,8105
370	2252,84	2250,80	2254,28	2276,80	2236,19	1908,45	0,6228	0,9022
371	2254,19	2250,80	2254,28	2276,80	2236,19	1908,45	0,3728	0,9940
372	2255,54	2250,80	2254,28	2276,80	2236,19	1908,45	0,1228	0,9142
373	2256,89	2261,61	2254,28	2276,80	2236,19	1908,45	0,1272	0,8225
374	2258,25	2261,61	2254,28	2276,80	2236,19	1908,45	0,3772	0,7307
375	2259,60	2261,61	2254,28	2276,80	2236,19	1908,45	0,6272	0,6389
376	2260,95	2261,61	2254,28	2276,80	2236,19	1908,45	0,8772	0,5472
377	2262,30	2261,61	2254,28	2276,80	2236,19	1908,45	0,8728	0,4554
378	2263,65	2261,61	2254,28	2276,80	2236,19	1908,45	0,6228	0,3637
379	2265,00	2261,61	2254,28	2276,80	2236,19	1908,45	0,3728	0,2719
380	2266,36	2261,61	2254,28	2276,80	2236,19	1908,45	0,1228	0,1801
381	2267,71	2272,43	2254,28	2276,80	2236,19	1908,45	0,1272	0,0884
382	2269,06	2272,43	2283,74	2276,80	2236,19	1908,45	0,3772	0,0034
383	2270,41	2272,43	2283,74	2276,80	2236,19	1908,45	0,6272	0,0952
384	2271,76	2272,43	2283,74	2276,80	2236,19	1908,45	0,8772	0,1869
385	2273,11	2272,43	2283,74	2276,80	2236,19	1908,45	0,8728	0,2787
386	2274,47	2272,43	2283,74	2276,80	2236,19	1908,45	0,6228	0,3704
387	2275,82	2272,43	2283,74	2276,80	2236,19	1908,45	0,3728	0,4622
388	2277,17	2272,43	2283,74	2276,80	2236,19	1908,45	0,1228	0,5540
389	2278,52	2283,24	2283,74	2276,80	2236,19	1908,45	0,1272	0,6457
390	2279,87	2283,24	2283,74	2276,80	2236,19	1908,45	0,3772	0,7375
391	2281,22	2283,24	2283,74	2276,80	2236,19	1908,45	0,6272	0,8293
392	2282,57	2283,24	2283,74	2276,80	2236,19	1908,45	0,8772	0,9210

Table 5. Page 48b

A	J	K	L	M	N	O	P	Q	R
363	0,2741	0,9418	0,4010	2,2496	4,518	45,375	2243	49,8	53,5
364	0,3034	0,9309	0,3985	2,1074	4,518	45,500	2245	46,6	56,0
365	0,3328	0,9200	0,3961	2,2195	4,518	45,625	2246	49,1	58,3
366	0,3622	0,9090	0,3937	2,5773	4,518	45,750	2247	57,0	60,1
367	0,3915	0,8981	0,3913	2,9350	4,518	45,875	2249	65,0	61,8
368	0,4209	0,8872	0,3889	3,2928	4,518	46,000	2250	72,9	63,2
369	0,4502	0,8762	0,3865	3,3962	4,518	46,125	2251	75,2	64,7
370	0,4796	0,8653	0,3840	3,2540	4,518	46,250	2253	72,0	66,4
371	0,5089	0,8543	0,3816	3,1117	4,518	46,375	2254	68,9	67,6
372	0,5383	0,8434	0,3792	2,7979	4,518	46,500	2256	61,9	68,4
373	0,5676	0,8325	0,3768	2,7265	4,518	46,625	2257	60,3	68,1
374	0,5970	0,8215	0,3744	2,9008	4,518	46,750	2258	64,2	66,7
375	0,6263	0,8106	0,3719	3,0750	4,518	46,875	2260	68,1	64,9
376	0,6557	0,7997	0,3695	3,2492	4,518	47,000	2261	71,9	62,6
377	0,6850	0,7887	0,3671	3,1691	4,518	47,125	2262	70,1	61,0
378	0,7144	0,7778	0,3647	2,8434	4,518	47,250	2264	62,9	59,9
379	0,7437	0,7669	0,3623	2,5176	4,518	47,375	2265	55,7	59,3
380	0,7731	0,7559	0,3599	2,1918	4,518	47,500	2266	48,5	59,2
381	0,8025	0,7450	0,3574	2,1204	4,518	47,625	2268	46,9	58,9
382	0,8318	0,7341	0,3550	2,3015	4,518	47,750	2269	50,9	58,4
383	0,8612	0,7231	0,3526	2,6592	4,518	47,875	2270	58,9	58,4
384	0,8905	0,7122	0,3502	3,0170	4,518	48,000	2272	66,8	58,8
385	0,9199	0,7013	0,3478	3,1204	4,518	48,125	2273	69,1	60,1
386	0,9492	0,6903	0,3454	2,9782	4,518	48,250	2274	65,9	62,3
387	0,9786	0,6794	0,3429	2,8359	4,518	48,375	2276	62,8	64,9
388	0,9921	0,6684	0,3405	2,6778	4,518	48,500	2277	59,3	67,3
389	0,9627	0,6575	0,3381	2,7312	4,518	48,625	2279	60,4	68,8
390	0,9334	0,6466	0,3357	3,0303	4,518	48,750	2280	67,1	69,2
391	0,9040	0,6356	0,3333	3,3294	4,518	48,875	2281	73,7	68,9
392	0,8747	0,6247	0,3309	3,6284	4,518	49,000	2283	80,3	68,1

Table 5. Page 49a

A	B	C	D	E	F	G	H	I
393	2283,93	2283,24	2283,74	2276,80	2236,19	1908,45	0,8728	0,9872
394	2285,28	2283,24	2283,74	2276,80	2236,19	1908,45	0,6228	0,8955
395	2286,63	2283,24	2283,74	2276,80	2236,19	1908,45	0,3728	0,8037
396	2287,98	2283,24	2283,74	2276,80	2236,19	1908,45	0,1228	0,7119
397	2289,33	2294,05	2283,74	2276,80	2236,19	1908,45	0,1272	0,6202
398	2290,68	2294,05	2283,74	2276,80	2236,19	1908,45	0,3772	0,5284
399	2292,04	2294,05	2283,74	2276,80	2236,19	1908,45	0,6272	0,4366
400	2293,39	2294,05	2283,74	2276,80	2236,19	1908,45	0,8772	0,3449
401	2294,74	2294,05	2283,74	2276,80	2236,19	1908,45	0,8728	0,2531
402	2296,09	2294,05	2283,74	2276,80	2236,19	1908,45	0,6228	0,1614
403	2297,44	2294,05	2283,74	2276,80	2236,19	1908,45	0,3728	0,0696
404	2298,79	2294,05	2313,20	2276,80	2236,19	1908,45	0,1228	0,0222
405	2300,15	2304,86	2313,20	2276,80	2236,19	1908,45	0,1272	0,1139
406	2301,50	2304,86	2313,20	2276,80	2236,19	1908,45	0,3772	0,2057
407	2302,85	2304,86	2313,20	2276,80	2236,19	1908,45	0,6272	0,2975
408	2304,20	2304,86	2313,20	2276,80	2236,19	1908,45	0,8772	0,3892
409	2305,55	2304,86	2313,20	2276,80	2236,19	1908,45	0,8728	0,4810
410	2306,90	2304,86	2313,20	2276,80	2236,19	1908,45	0,6228	0,5727
411	2308,25	2304,86	2313,20	2276,80	2236,19	1908,45	0,3728	0,6645
412	2309,61	2304,86	2313,20	2276,80	2236,19	1908,45	0,1228	0,7563
413	2310,96	2315,68	2313,20	2276,80	2236,19	1908,45	0,1272	0,8480
414	2312,31	2315,68	2313,20	2276,80	2236,19	1908,45	0,3772	0,9398
415	2313,66	2315,68	2313,20	2276,80	2236,19	1908,45	0,6272	0,9684
416	2315,01	2315,68	2313,20	2276,80	2236,19	1908,45	0,8772	0,8767
417	2316,36	2315,68	2313,20	2276,80	2236,19	1908,45	0,8728	0,7849
418	2317,72	2315,68	2313,20	2276,80	2236,19	1908,45	0,6228	0,6932
419	2319,07	2315,68	2313,20	2276,80	2236,19	1908,45	0,3728	0,6014
420	2320,42	2315,68	2313,20	2276,80	2236,19	1908,45	0,1228	0,5096
421	2321,77	2326,49	2313,20	2276,80	2236,19	1908,45	0,1272	0,4179
422	2323,12	2326,49	2313,20	2368,89	2236,19	1908,45	0,3772	0,3261

Table 5. Page 49b

A	J	K	L	M	N	O	P	Q	R
393	0,8453	0,6138	0,3284	3,6476	4,518	49,125	2284	80,7	67,3
394	0,8160	0,6028	0,3260	3,2631	4,518	49,250	2285	72,2	66,7
395	0,7866	0,5919	0,3236	2,8786	4,518	49,375	2287	63,7	65,6
396	0,7572	0,5810	0,3212	2,4941	4,518	49,500	2288	55,2	64,1
397	0,7279	0,5700	0,3188	2,3640	4,518	49,625	2289	52,3	61,5
398	0,6985	0,5591	0,3163	2,4796	4,518	49,750	2291	54,9	57,9
399	0,6692	0,5482	0,3139	2,5951	4,518	49,875	2292	57,4	54,3
400	0,6398	0,5372	0,3115	2,7106	4,518	50,000	2293	60,0	50,8
401	0,6105	0,5263	0,3091	2,5718	4,518	50,125	2295	56,9	48,4
402	0,5811	0,5153	0,3067	2,1873	4,518	50,250	2296	48,4	47,1
403	0,5518	0,5044	0,3043	1,8029	4,518	50,375	2297	39,9	46,2
404	0,5224	0,4935	0,3018	1,4627	4,518	50,500	2299	32,4	45,7
405	0,4931	0,4825	0,2994	1,5161	4,518	50,625	2300	33,6	45,1
406	0,4637	0,4716	0,2970	1,8152	4,518	50,750	2301	40,2	44,3
407	0,4344	0,4607	0,2946	2,1143	4,518	50,875	2303	46,8	44,0
408	0,4050	0,4497	0,2922	2,4133	4,518	51,000	2304	53,4	44,1
409	0,3757	0,4388	0,2898	2,4580	4,518	51,125	2306	54,4	45,2
410	0,3463	0,4279	0,2873	2,2571	4,518	51,250	2307	50,0	46,9
411	0,3169	0,4169	0,2849	2,0561	4,518	51,375	2308	45,5	48,5
412	0,2876	0,4060	0,2825	1,8552	4,518	51,500	2310	41,1	49,6
413	0,2582	0,3951	0,2801	1,9086	4,518	51,625	2311	42,2	49,6
414	0,2289	0,3841	0,2777	2,2077	4,518	51,750	2312	48,9	48,6
415	0,1995	0,3732	0,2753	2,4436	4,518	51,875	2314	54,1	47,1
416	0,1702	0,3623	0,2728	2,5591	4,518	52,000	2315	56,6	45,1
417	0,1408	0,3513	0,2704	2,4203	4,518	52,125	2316	53,6	43,4
418	0,1115	0,3404	0,2680	2,0358	4,518	52,250	2318	45,1	41,8
419	0,0821	0,3294	0,2656	1,6514	4,518	52,375	2319	36,5	39,9
420	0,0528	0,3185	0,2632	1,2669	4,518	52,500	2320	28,0	37,8
421	0,0234	0,3076	0,2607	1,1368	4,518	52,625	2322	25,2	35,3
422	0,0059	0,2966	0,2583	1,2642	4,518	52,750	2323	28,0	32,5

Table 5. Page 50a

A	B	C	D	E	F	G	H	I
423	2324,47	2326,49	2313,20	2368,89	2236,19	1908,45	0,6272	0,2344
424	2325,82	2326,49	2313,20	2368,89	2236,19	1908,45	0,8772	0,1426
425	2327,18	2326,49	2313,20	2368,89	2236,19	1908,45	0,8728	0,0508
426	2328,53	2326,49	2342,65	2368,89	2236,19	1908,45	0,6228	0,0409
427	2329,88	2326,49	2342,65	2368,89	2236,19	1908,45	0,3728	0,1327
428	2331,23	2326,49	2342,65	2368,89	2236,19	1908,45	0,1228	0,2245
429	2332,58	2337,30	2342,65	2368,89	2236,19	1908,45	0,1272	0,3162
430	2333,93	2337,30	2342,65	2368,89	2236,19	1908,45	0,3772	0,4080
431	2335,29	2337,30	2342,65	2368,89	2236,19	1908,45	0,6272	0,4997
432	2336,64	2337,30	2342,65	2368,89	2236,19	1908,45	0,8772	0,5915
433	2337,99	2337,30	2342,65	2368,89	2236,19	1908,45	0,8728	0,6833
434	2339,34	2337,30	2342,65	2368,89	2236,19	1908,45	0,6228	0,7750
435	2340,69	2337,30	2342,65	2368,89	2236,19	1908,45	0,3728	0,8668
436	2342,04	2337,30	2342,65	2368,89	2236,19	1908,45	0,1228	0,9586
437	2343,40	2348,11	2342,65	2368,89	2236,19	1908,45	0,1272	0,9497
438	2344,75	2348,11	2342,65	2368,89	2236,19	1908,45	0,3772	0,8579
439	2346,10	2348,11	2342,65	2368,89	2236,19	1908,45	0,6272	0,7662
440	2347,45	2348,11	2342,65	2368,89	2236,19	1908,45	0,8772	0,6744
441	2348,80	2348,11	2342,65	2368,89	2236,19	1908,45	0,8728	0,5826
442	2350,15	2348,11	2342,65	2368,89	2236,19	1908,45	0,6228	0,4909
443	2351,50	2348,11	2342,65	2368,89	2236,19	1908,45	0,3728	0,3991
444	2352,86	2348,11	2342,65	2368,89	2236,19	1908,45	0,1228	0,3073
445	2354,21	2358,93	2342,65	2368,89	2236,19	1908,45	0,1272	0,2156
446	2355,56	2358,93	2342,65	2368,89	2236,19	1908,45	0,3772	0,1238
447	2356,91	2358,93	2342,65	2368,89	2236,19	1908,45	0,6272	0,0321
448	2358,26	2358,93	2372,11	2368,89	2236,19	1908,45	0,8772	0,0597
449	2359,61	2358,93	2372,11	2368,89	2236,19	1908,45	0,8728	0,1515
450	2360,97	2358,93	2372,11	2368,89	2483,38	1908,45	0,6228	0,2432
451	2362,32	2358,93	2372,11	2368,89	2483,38	1908,45	0,3728	0,3350
452	2363,67	2358,93	2372,11	2368,89	2483,38	1908,45	0,1228	0,4268

Table 5. Page 50b

A	J	K	L	M	N	O	P	Q	R
423	0,0353	0,2857	0,2559	1,4384	4,518	52,875	2324	31,8	30,3
424	0,0646	0,2748	0,2535	1,6127	4,518	53,000	2326	35,7	28,7
425	0,0940	0,2638	0,2511	1,5326	4,518	53,125	2327	33,9	28,4
426	0,1234	0,2529	0,2487	1,2887	4,518	53,250	2329	28,5	29,2
427	0,1527	0,2420	0,2462	1,1464	4,518	53,375	2330	25,4	30,6
428	0,1821	0,2310	0,2438	1,0042	4,518	53,500	2331	22,2	32,5
429	0,2114	0,2201	0,2414	1,1163	4,518	53,625	2333	24,7	34,1
430	0,2408	0,2092	0,2390	1,4741	4,518	53,750	2334	32,6	35,6
431	0,2701	0,1982	0,2366	1,8318	4,518	53,875	2335	40,5	37,4
432	0,2995	0,1873	0,2342	2,1896	4,518	54,000	2337	48,5	39,2
433	0,3288	0,1764	0,2317	2,2930	4,518	54,125	2338	50,8	41,3
434	0,3582	0,1654	0,2293	2,1508	4,518	54,250	2339	47,6	43,6
435	0,3875	0,1545	0,2269	2,0085	4,518	54,375	2341	44,5	45,5
436	0,4169	0,1435	0,2245	1,8663	4,518	54,500	2342	41,3	46,9
437	0,4462	0,1326	0,2221	1,8778	4,518	54,625	2343	41,6	47,2
438	0,4756	0,1217	0,2197	2,0520	4,518	54,750	2345	45,4	46,5
439	0,5049	0,1107	0,2172	2,2263	4,518	54,875	2346	49,3	45,3
440	0,5343	0,0998	0,2148	2,4005	4,518	55,000	2347	53,1	43,6
441	0,5637	0,0889	0,2124	2,3204	4,518	55,125	2349	51,4	42,2
442	0,5930	0,0779	0,2100	1,9946	4,518	55,250	2350	44,1	41,1
443	0,6224	0,0670	0,2076	1,6688	4,518	55,375	2352	36,9	40,1
444	0,6517	0,0561	0,2052	1,3431	4,518	55,500	2353	29,7	39,3
445	0,6811	0,0451	0,2027	1,2717	4,518	55,625	2354	28,1	38,4
446	0,7104	0,0342	0,2003	1,4459	4,518	55,750	2356	32,0	37,3
447	0,7398	0,0233	0,1979	1,6202	4,518	55,875	2357	35,9	36,8
448	0,7691	0,0123	0,1955	1,9138	4,518	56,000	2358	42,4	36,7
449	0,7985	0,0014	0,1931	2,0172	4,518	56,125	2360	44,6	37,8
450	0,8278	0,0096	0,1906	1,8941	4,518	56,250	2361	41,9	40,0
451	0,8572	0,0205	0,1882	1,7737	4,518	56,375	2362	39,3	42,7
452	0,8865	0,0314	0,1858	1,6534	4,518	56,500	2364	36,6	45,9

Table 5. Page 51a

A	B	C	D	E	F	G	H	I
453	2365,02	2369,74	2372,11	2368,89	2483,38	1908,45	0,1272	0,5185
454	2366,37	2369,74	2372,11	2368,89	2483,38	1908,45	0,3772	0,6103
455	2367,72	2369,74	2372,11	2368,89	2483,38	1908,45	0,6272	0,7020
456	2369,07	2369,74	2372,11	2368,89	2483,38	1908,45	0,8772	0,7938
457	2370,43	2369,74	2372,11	2368,89	2483,38	1908,45	0,8728	0,8856
458	2371,78	2369,74	2372,11	2368,89	2483,38	1908,45	0,6228	0,9773
459	2373,13	2369,74	2372,11	2368,89	2483,38	1908,45	0,3728	0,9309
460	2374,48	2369,74	2372,11	2368,89	2483,38	1908,45	0,1228	0,8391
461	2375,83	2380,55	2372,11	2368,89	2483,38	1908,45	0,1272	0,7474
462	2377,18	2380,55	2372,11	2368,89	2483,38	1908,45	0,3772	0,6556
463	2378,54	2380,55	2372,11	2368,89	2483,38	1908,45	0,6272	0,5639
464	2379,89	2380,55	2372,11	2368,89	2483,38	1908,45	0,8772	0,4721
465	2381,24	2380,55	2372,11	2368,89	2483,38	1908,45	0,8728	0,3803
466	2382,59	2380,55	2372,11	2368,89	2483,38	1908,45	0,6228	0,2886
467	2383,94	2380,55	2372,11	2368,89	2483,38	1908,45	0,3728	0,1968
468	2385,29	2380,55	2372,11	2368,89	2483,38	1908,45	0,1228	0,1050
469	2386,65	2391,36	2372,11	2368,89	2483,38	1908,45	0,1272	0,0133
470	2388,00	2391,36	2401,57	2368,89	2483,38	1908,45	0,3772	0,0785
471	2389,35	2391,36	2401,57	2368,89	2483,38	1908,45	0,6272	0,1702
472	2390,70	2391,36	2401,57	2368,89	2483,38	1908,45	0,8772	0,2620
473	2392,05	2391,36	2401,57	2368,89	2483,38	1908,45	0,8728	0,3538
474	2393,40	2391,36	2401,57	2368,89	2483,38	1908,45	0,6228	0,4455
475	2394,75	2391,36	2401,57	2368,89	2483,38	1908,45	0,3728	0,5373
476	2396,11	2391,36	2401,57	2368,89	2483,38	1908,45	0,1228	0,6291
477	2397,46	2402,18	2401,57	2368,89	2483,38	1908,45	0,1272	0,7208
478	2398,81	2402,18	2401,57	2368,89	2483,38	1908,45	0,3772	0,8126
479	2400,16	2402,18	2401,57	2368,89	2483,38	1908,45	0,6272	0,9043
480	2401,51	2402,18	2401,57	2368,89	2483,38	1908,45	0,8772	0,9961
481	2402,86	2402,18	2401,57	2368,89	2483,38	1908,45	0,8728	0,9121
482	2404,22	2402,18	2401,57	2368,89	2483,38	1908,45	0,6228	0,8204

Table 5. Page 51b

A	J	K	L	M	N	O	P	Q	R
453	0,9159	0,0424	0,1834	1,7873	4,518	56,625	2365	39,6	48,6
454	0,9452	0,0533	0,1810	2,1670	4,518	56,750	2366	48,0	50,5
455	0,9746	0,0642	0,1786	2,5466	4,518	56,875	2368	56,4	52,0
456	0,9960	0,0752	0,1761	2,9183	4,518	57,000	2369	64,6	52,8
457	0,9667	0,0861	0,1737	2,9849	4,518	57,125	2370	66,1	53,7
458	0,9373	0,0970	0,1713	2,8058	4,518	57,250	2372	62,1	54,6
459	0,9080	0,1080	0,1689	2,4886	4,518	57,375	2373	55,1	54,9
460	0,8786	0,1189	0,1665	2,1260	4,518	57,500	2374	47,1	54,6
461	0,8493	0,1298	0,1641	2,0177	4,518	57,625	2376	44,7	53,2
462	0,8199	0,1408	0,1616	2,1551	4,518	57,750	2377	47,7	50,6
463	0,7906	0,1517	0,1592	2,2925	4,518	57,875	2379	50,7	47,6
464	0,7612	0,1626	0,1568	2,4299	4,518	58,000	2380	53,8	44,5
465	0,7319	0,1736	0,1544	2,3130	4,518	58,125	2381	51,2	42,0
466	0,7025	0,1845	0,1520	1,9504	4,518	58,250	2383	43,2	40,5
467	0,6732	0,1955	0,1496	1,5878	4,518	58,375	2384	35,1	39,5
468	0,6438	0,2064	0,1471	1,2252	4,518	58,500	2385	27,1	38,9
469	0,6145	0,2173	0,1447	1,1170	4,518	58,625	2387	24,7	38,1
470	0,5851	0,2283	0,1423	1,4113	4,518	58,750	2388	31,2	37,2
471	0,5557	0,2392	0,1399	1,7322	4,518	58,875	2389	38,3	36,8
472	0,5264	0,2501	0,1375	2,0532	4,518	59,000	2391	45,4	36,7
473	0,4970	0,2611	0,1350	2,1197	4,518	59,125	2392	46,9	37,8
474	0,4677	0,2720	0,1326	1,9407	4,518	59,250	2393	43,0	39,9
475	0,4383	0,2829	0,1302	1,7616	4,518	59,375	2395	39,0	42,1
476	0,4090	0,2939	0,1278	1,5825	4,518	59,500	2396	35,0	44,3
477	0,3796	0,3048	0,1254	1,6578	4,518	59,625	2397	36,7	45,4
478	0,3503	0,3157	0,1230	1,9787	4,518	59,750	2399	43,8	45,5
479	0,3209	0,3267	0,1205	2,2997	4,518	59,875	2400	50,9	45,1
480	0,2916	0,3376	0,1181	2,6206	4,518	60,000	2402	58,0	44,3
481	0,2622	0,3486	0,1157	2,5114	4,518	60,125	2403	55,6	43,6
482	0,2329	0,3595	0,1133	2,1488	4,518	60,250	2404	47,6	43,1

Table 5. Page 52a

A	B	C	D	E	F	G	H	I
483	2405,57	2402,18	2401,57	2368,89	2483,38	1908,45	0,3728	0,7286
484	2406,92	2402,18	2401,57	2368,89	2483,38	1908,45	0,1228	0,6368
485	2408,27	2412,99	2401,57	2368,89	2483,38	1908,45	0,1272	0,5451
486	2409,62	2412,99	2401,57	2368,89	2483,38	1908,45	0,3772	0,4533
487	2410,97	2412,99	2401,57	2368,89	2483,38	1908,45	0,6272	0,3616
488	2412,33	2412,99	2401,57	2368,89	2483,38	1908,45	0,8772	0,2698
489	2413,68	2412,99	2401,57	2368,89	2483,38	1908,45	0,8728	0,1780
490	2415,03	2412,99	2401,57	2460,98	2483,38	1908,45	0,6228	0,0863
491	2416,38	2412,99	2431,03	2460,98	2483,38	1908,45	0,3728	0,0055
492	2417,73	2412,99	2431,03	2460,98	2483,38	1908,45	0,1228	0,0973
493	2419,08	2423,80	2431,03	2460,98	2483,38	1908,45	0,1272	0,1890
494	2420,43	2423,80	2431,03	2460,98	2483,38	1908,45	0,3772	0,2808
495	2421,79	2423,80	2431,03	2460,98	2483,38	1908,45	0,6272	0,3725
496	2423,14	2423,80	2431,03	2460,98	2483,38	1908,45	0,8772	0,4643
497	2424,49	2423,80	2431,03	2460,98	2483,38	1908,45	0,8728	0,5561
498	2425,84	2423,80	2431,03	2460,98	2483,38	1908,45	0,6228	0,6478
499	2427,19	2423,80	2431,03	2460,98	2483,38	1908,45	0,3728	0,7396
500	2428,54	2423,80	2431,03	2460,98	2483,38	1908,45	0,1228	0,8313
501	2429,90	2434,61	2431,03	2460,98	2483,38	1908,45	0,1272	0,9231
502	2431,25	2434,61	2431,03	2460,98	2483,38	1908,45	0,3772	0,9851
503	2432,60	2434,61	2431,03	2460,98	2483,38	1908,45	0,6272	0,8934
504	2433,95	2434,61	2431,03	2460,98	2483,38	1908,45	0,8772	0,8016
505	2435,30	2434,61	2431,03	2460,98	2483,38	1908,45	0,8728	0,7098
506	2436,65	2434,61	2431,03	2460,98	2483,38	1908,45	0,6228	0,6181
507	2438,00	2434,61	2431,03	2460,98	2483,38	1908,45	0,3728	0,5263
508	2439,36	2434,61	2431,03	2460,98	2483,38	1908,45	0,1228	0,4346
509	2440,71	2445,43	2431,03	2460,98	2483,38	1908,45	0,1272	0,3428
510	2442,06	2445,43	2431,03	2460,98	2483,38	1908,45	0,3772	0,2510
511	2443,41	2445,43	2431,03	2460,98	2483,38	1908,45	0,6272	0,1593
512	2444,76	2445,43	2431,03	2460,98	2483,38	1908,45	0,8772	0,0675

Table 5. Page 52b

A	J	K	L	M	N	O	P	Q	R
483	0,2035	0,3704	0,1109	1,7862	4,518	60,375	2406	39,5	42,2
484	0,1742	0,3814	0,1085	1,4236	4,518	60,500	2407	31,5	40,8
485	0,1448	0,3923	0,1060	1,3154	4,518	60,625	2408	29,1	38,3
486	0,1154	0,4032	0,1036	1,4528	4,518	60,750	2410	32,2	35,2
487	0,0861	0,4142	0,1012	1,5902	4,518	60,875	2411	35,2	32,3
488	0,0567	0,4251	0,0988	1,7276	4,518	61,000	2412	38,2	29,9
489	0,0274	0,4360	0,0964	1,6107	4,518	61,125	2414	35,6	28,8
490	0,0020	0,4470	0,0940	1,2520	4,518	61,250	2415	27,7	28,9
491	0,0313	0,4579	0,0915	0,9591	4,518	61,375	2416	21,2	29,6
492	0,0607	0,4688	0,0891	0,8387	4,518	61,500	2418	18,6	30,9
493	0,0900	0,4798	0,0867	0,9727	4,518	61,625	2419	21,5	32,1
494	0,1194	0,4907	0,0843	1,3523	4,518	61,750	2420	29,9	33,4
495	0,1487	0,5016	0,0819	1,7320	4,518	61,875	2422	38,3	35,2
496	0,1781	0,5126	0,0794	2,1116	4,518	62,000	2423	46,7	37,5
497	0,2074	0,5235	0,0770	2,2369	4,518	62,125	2424	49,5	40,3
498	0,2368	0,5345	0,0746	2,1165	4,518	62,250	2426	46,8	43,8
499	0,2661	0,5454	0,0722	1,9961	4,518	62,375	2427	44,2	46,7
500	0,2955	0,5563	0,0698	1,8758	4,518	62,500	2429	41,5	49,2
501	0,3249	0,5673	0,0674	2,0098	4,518	62,625	2430	44,5	50,6
502	0,3542	0,5782	0,0649	2,3597	4,518	62,750	2431	52,2	51,0
503	0,3836	0,5891	0,0625	2,5558	4,518	62,875	2433	56,6	50,9
504	0,4129	0,6001	0,0601	2,7519	4,518	63,000	2434	60,9	50,4
505	0,4423	0,6110	0,0577	2,6936	4,518	63,125	2435	59,6	50,1
506	0,4716	0,6219	0,0553	2,3897	4,518	63,250	2437	52,9	49,9
507	0,5010	0,6329	0,0529	2,0858	4,518	63,375	2438	46,2	49,3
508	0,5303	0,6438	0,0504	1,7819	4,518	63,500	2439	39,4	48,7
509	0,5597	0,6547	0,0480	1,7324	4,518	63,625	2441	38,3	47,6
510	0,5890	0,6657	0,0456	1,9285	4,518	63,750	2442	42,7	46,4
511	0,6184	0,6766	0,0432	2,1246	4,518	63,875	2443	47,0	45,6
512	0,6477	0,6876	0,0408	2,3207	4,518	64,000	2445	51,4	45,3

Table 5. Page 53a

A	B	C	D	E	F	G	H	I
513	2446,11	2445,43	2460,49	2460,98	2483,38	1908,45	0,8728	0,0243
514	2447,47	2445,43	2460,49	2460,98	2483,38	1908,45	0,6228	0,1160
515	2448,82	2445,43	2460,49	2460,98	2483,38	1908,45	0,3728	0,2078
516	2450,17	2445,43	2460,49	2460,98	2483,38	1908,45	0,1228	0,2995
517	2451,52	2456,24	2460,49	2460,98	2483,38	1908,45	0,1272	0,3913
518	2452,87	2456,24	2460,49	2460,98	2483,38	1908,45	0,3772	0,4831
519	2454,22	2456,24	2460,49	2460,98	2483,38	1908,45	0,6272	0,5748
520	2455,58	2456,24	2460,49	2460,98	2483,38	1908,45	0,8772	0,6666
521	2456,93	2456,24	2460,49	2460,98	2483,38	1908,45	0,8728	0,7584
522	2458,28	2456,24	2460,49	2460,98	2483,38	1908,45	0,6228	0,8501
523	2459,63	2456,24	2460,49	2460,98	2483,38	1908,45	0,3728	0,9419
524	2460,98	2456,24	2460,49	2460,98	2483,38	1908,45	0,1228	0,9664
525	2462,33	2467,05	2460,49	2460,98	2483,38	1908,45	0,1272	0,8746
526	2463,68	2467,05	2460,49	2460,98	2483,38	1908,45	0,3772	0,7828
527	2465,04	2467,05	2460,49	2460,98	2483,38	1908,45	0,6272	0,6911
528	2466,39	2467,05	2460,49	2460,98	2483,38	1908,45	0,8772	0,5993
529	2467,74	2467,05	2460,49	2460,98	2483,38	3026,67	0,8728	0,5075
530	2469,09	2467,05	2460,49	2460,98	2483,38	3026,67	0,6228	0,4158
531	2470,44	2467,05	2460,49	2460,98	2483,38	3026,67	0,3728	0,3240
532	2471,79	2467,05	2460,49	2460,98	2483,38	3026,67	0,1228	0,2323
533	2473,15	2477,86	2460,49	2460,98	2483,38	3026,67	0,1272	0,1405
534	2474,50	2477,86	2460,49	2460,98	2483,38	3026,67	0,3772	0,0487
535	2475,85	2477,86	2489,94	2460,98	2483,38	3026,67	0,6272	0,0430
536	2477,20	2477,86	2489,94	2460,98	2483,38	3026,67	0,8772	0,1348
537	2478,55	2477,86	2489,94	2460,98	2483,38	3026,67	0,8728	0,2266
538	2479,90	2477,86	2489,94	2460,98	2483,38	3026,67	0,6228	0,3183
539	2481,26	2477,86	2489,94	2460,98	2483,38	3026,67	0,3728	0,4101
540	2482,61	2477,86	2489,94	2460,98	2483,38	3026,67	0,1228	0,5018
541	2483,96	2488,68	2489,94	2460,98	2483,38	3026,67	0,1272	0,5936
542	2485,31	2488,68	2489,94	2460,98	2483,38	3026,67	0,3772	0,6854

Table 5. Page 53b

A	J	K	L	M	N	O	P	Q	R
513	0,6771	0,6985	0,0384	2,3110	4,518	64,125	2446	51,1	46,0
514	0,7064	0,7094	0,0359	2,1906	4,518	64,250	2447	48,5	47,8
515	0,7358	0,7204	0,0335	2,0703	4,518	64,375	2449	45,8	50,1
516	0,7652	0,7313	0,0311	1,9499	4,518	64,500	2450	43,2	52,8
517	0,7945	0,7422	0,0287	2,0839	4,518	64,625	2452	46,1	55,3
518	0,8239	0,7532	0,0263	2,4635	4,518	64,750	2453	54,5	57,5
519	0,8532	0,7641	0,0239	2,8432	4,518	64,875	2454	62,9	59,8
520	0,8826	0,7750	0,0214	3,2228	4,518	65,000	2456	71,3	61,9
521	0,9119	0,7860	0,0190	3,3481	4,518	65,125	2457	74,1	64,0
522	0,9413	0,7969	0,0166	3,2277	4,518	65,250	2458	71,4	66,1
523	0,9706	0,8078	0,0142	3,1073	4,518	65,375	2460	68,8	67,7
524	1,0000	0,8188	0,0118	2,9197	4,518	65,500	2461	64,6	68,6
525	0,9707	0,8297	0,0093	2,8115	4,518	65,625	2462	62,2	68,3
526	0,9413	0,8406	0,0069	2,9489	4,518	65,750	2464	65,3	66,8
527	0,9120	0,8516	0,0045	3,0863	4,518	65,875	2465	68,3	64,8
528	0,8826	0,8625	0,0021	3,2237	4,518	66,000	2466	71,3	62,2
529	0,8533	0,8735	0,0003	3,1074	4,518	66,125	2468	68,8	59,7
530	0,8239	0,8844	0,0027	2,7496	4,518	66,250	2469	60,9	57,9
531	0,7945	0,8953	0,0052	2,3919	4,518	66,375	2470	52,9	56,3
532	0,7652	0,9063	0,0076	2,0341	4,518	66,500	2472	45,0	55,2
533	0,7358	0,9172	0,0100	1,9307	4,518	66,625	2473	42,7	53,9
534	0,7065	0,9281	0,0124	2,0729	4,518	66,750	2474	45,9	52,5
535	0,6771	0,9391	0,0148	2,3012	4,518	66,875	2476	50,9	51,5
536	0,6478	0,9500	0,0172	2,6270	4,518	67,000	2477	58,1	50,9
537	0,6184	0,9609	0,0197	2,6984	4,518	67,125	2479	59,7	51,5
538	0,5891	0,9719	0,0221	2,5242	4,518	67,250	2480	55,9	53,0
539	0,5597	0,9828	0,0245	2,3499	4,518	67,375	2481	52,0	54,9
540	0,5304	0,9937	0,0269	2,1757	4,518	67,500	2483	48,2	57,0
541	0,5010	0,9953	0,0293	2,2465	4,518	67,625	2484	49,7	58,4
542	0,4717	0,9844	0,0317	2,5503	4,518	67,750	2485	56,4	59,0

Table 5. Page 54a

A	B	C	D	E	F	G	H	I
543	2486,66	2488,68	2489,94	2460,98	2483,38	3026,67	0,6272	0,7771
544	2488,01	2488,68	2489,94	2460,98	2483,38	3026,67	0,8772	0,8689
545	2489,36	2488,68	2489,94	2460,98	2483,38	3026,67	0,8728	0,9607
546	2490,72	2488,68	2489,94	2460,98	2483,38	3026,67	0,6228	0,9476
547	2492,07	2488,68	2489,94	2460,98	2483,38	3026,67	0,3728	0,8558
548	2493,42	2488,68	2489,94	2460,98	2483,38	3026,67	0,1228	0,7641
549	2494,77	2499,49	2489,94	2460,98	2483,38	3026,67	0,1272	0,6723
550	2496,12	2499,49	2489,94	2460,98	2483,38	3026,67	0,3772	0,5805
551	2497,47	2499,49	2489,94	2460,98	2483,38	3026,67	0,6272	0,4888
552	2498,83	2499,49	2489,94	2460,98	2483,38	3026,67	0,8772	0,3970
553	2500,18	2499,49	2489,94	2460,98	2483,38	3026,67	0,8728	0,3052
554	2501,53	2499,49	2489,94	2460,98	2483,38	3026,67	0,6228	0,2135
555	2502,88	2499,49	2489,94	2460,98	2483,38	3026,67	0,3728	0,1217
556	2504,23	2499,49	2489,94	2460,98	2483,38	3026,67	0,1228	0,0300
557	2505,58	2510,30	2519,40	2460,98	2483,38	3026,67	0,1272	0,0618
558	2506,93	2510,30	2519,40	2460,98	2483,38	3026,67	0,3772	0,1536
559	2508,29	2510,30	2519,40	2553,07	2483,38	3026,67	0,6272	0,2453
560	2509,64	2510,30	2519,40	2553,07	2483,38	3026,67	0,8772	0,3371
561	2510,99	2510,30	2519,40	2553,07	2483,38	3026,67	0,8728	0,4289
562	2512,34	2510,30	2519,40	2553,07	2483,38	3026,67	0,6228	0,5206
563	2513,69	2510,30	2519,40	2553,07	2483,38	3026,67	0,3728	0,6124
564	2515,04	2510,30	2519,40	2553,07	2483,38	3026,67	0,1228	0,7041
565	2516,40	2521,11	2519,40	2553,07	2483,38	3026,67	0,1272	0,7959
566	2517,75	2521,11	2519,40	2553,07	2483,38	3026,67	0,3772	0,8877
567	2519,10	2521,11	2519,40	2553,07	2483,38	3026,67	0,6272	0,9794
568	2520,45	2521,11	2519,40	2553,07	2483,38	3026,67	0,8772	0,9288
569	2521,80	2521,11	2519,40	2553,07	2483,38	3026,67	0,8728	0,8370
570	2523,15	2521,11	2519,40	2553,07	2483,38	3026,67	0,6228	0,7453
571	2524,51	2521,11	2519,40	2553,07	2483,38	3026,67	0,3728	0,6535
572	2525,86	2521,11	2519,40	2553,07	2483,38	3026,67	0,1228	0,5618

Table 5. Page 54b

A	J	K	L	M	N	O	P	Q	R
543	0,4423	0,9735	0,0342	2,8542	4,518	67,875	2487	63,2	59,0
544	0,4130	0,9625	0,0366	3,1581	4,518	68,000	2488	69,9	58,5
545	0,3836	0,9516	0,0390	3,2077	4,518	68,125	2489	71,0	58,1
546	0,3542	0,9406	0,0414	2,9067	4,518	68,250	2491	64,3	57,8
547	0,3249	0,9297	0,0438	2,5271	4,518	68,375	2492	55,9	57,1
548	0,2955	0,9188	0,0463	2,1474	4,518	68,500	2493	47,5	56,0
549	0,2662	0,9078	0,0487	2,0222	4,518	68,625	2495	44,8	53,7
550	0,2368	0,8969	0,0511	2,1425	4,518	68,750	2496	47,4	50,4
551	0,2075	0,8860	0,0535	2,2629	4,518	68,875	2497	50,1	47,0
552	0,1781	0,8750	0,0559	2,3833	4,518	69,000	2499	52,7	43,5
553	0,1488	0,8641	0,0583	2,2493	4,518	69,125	2500	49,8	40,9
554	0,1194	0,8532	0,0608	1,8696	4,518	69,250	2502	41,4	39,4
555	0,0901	0,8422	0,0632	1,4900	4,518	69,375	2503	33,0	38,5
556	0,0607	0,8313	0,0656	1,1104	4,518	69,500	2504	24,6	38,2
557	0,0314	0,8204	0,0680	1,1087	4,518	69,625	2506	24,5	37,8
558	0,0020	0,8094	0,0704	1,4126	4,518	69,750	2507	31,3	37,5
559	0,0273	0,7985	0,0728	1,7712	4,518	69,875	2508	39,2	37,7
560	0,0567	0,7875	0,0753	2,1338	4,518	70,000	2510	47,2	38,6
561	0,0861	0,7766	0,0777	2,2420	4,518	70,125	2511	49,6	40,6
562	0,1154	0,7657	0,0801	2,1046	4,518	70,250	2512	46,6	43,6
563	0,1448	0,7547	0,0825	1,9672	4,518	70,375	2514	43,5	46,7
564	0,1741	0,7438	0,0849	1,8298	4,518	70,500	2515	40,5	49,4
565	0,2035	0,7329	0,0873	1,9468	4,518	70,625	2516	43,1	51,1
566	0,2328	0,7219	0,0898	2,3094	4,518	70,750	2518	51,1	51,7
567	0,2622	0,7110	0,0922	2,6720	4,518	70,875	2519	59,1	51,9
568	0,2915	0,7001	0,0946	2,8922	4,518	71,000	2520	64,0	51,6
569	0,3209	0,6891	0,0970	2,8169	4,518	71,125	2522	62,3	51,5
570	0,3502	0,6782	0,0994	2,4960	4,518	71,250	2523	55,2	51,6
571	0,3796	0,6673	0,1019	2,1750	4,518	71,375	2525	48,1	51,2
572	0,4089	0,6563	0,1043	1,8541	4,518	71,500	2526	41,0	50,3

Table 5. Page 55a

A	B	C	D	E	F	G	H	I
573	2527,21	2531,93	2519,40	2553,07	2483,38	3026,67	0,1272	0,4700
574	2528,56	2531,93	2519,40	2553,07	2483,38	3026,67	0,3772	0,3782
575	2529,91	2531,93	2519,40	2553,07	2483,38	3026,67	0,6272	0,2865
576	2531,26	2531,93	2519,40	2553,07	2483,38	3026,67	0,8772	0,1947
577	2532,61	2531,93	2519,40	2553,07	2483,38	3026,67	0,8728	0,1030
578	2533,97	2531,93	2519,40	2553,07	2483,38	3026,67	0,6228	0,0112
579	2535,32	2531,93	2548,86	2553,07	2483,38	3026,67	0,3728	0,0806
580	2536,67	2531,93	2548,86	2553,07	2483,38	3026,67	0,1228	0,1723
581	2538,02	2542,74	2548,86	2553,07	2483,38	3026,67	0,1272	0,2641
582	2539,37	2542,74	2548,86	2553,07	2483,38	3026,67	0,3772	0,3559
583	2540,72	2542,74	2548,86	2553,07	2483,38	3026,67	0,6272	0,4476
584	2542,08	2542,74	2548,86	2553,07	2483,38	3026,67	0,8772	0,5394
585	2543,43	2542,74	2548,86	2553,07	2483,38	3026,67	0,8728	0,6311
586	2544,78	2542,74	2548,86	2553,07	2483,38	3026,67	0,6228	0,7229
587	2546,13	2542,74	2548,86	2553,07	2483,38	3026,67	0,3728	0,8147
588	2547,48	2542,74	2548,86	2553,07	2483,38	3026,67	0,1228	0,9064
589	2548,83	2553,55	2548,86	2553,07	2483,38	3026,67	0,1272	0,9982
590	2550,19	2553,55	2548,86	2553,07	2483,38	3026,67	0,3772	0,9100
591	2551,54	2553,55	2548,86	2553,07	2483,38	3026,67	0,6272	0,8183
592	2552,89	2553,55	2548,86	2553,07	2483,38	3026,67	0,8772	0,7265
593	2554,24	2553,55	2548,86	2553,07	2483,38	3026,67	0,8728	0,6348
594	2555,59	2553,55	2548,86	2553,07	2483,38	3026,67	0,6228	0,5430
595	2556,94	2553,55	2548,86	2553,07	2483,38	3026,67	0,3728	0,4512
596	2558,29	2553,55	2548,86	2553,07	2483,38	3026,67	0,1228	0,3595
597	2559,65	2564,36	2548,86	2553,07	2483,38	3026,67	0,1272	0,2677
598	2561,00	2564,36	2548,86	2553,07	2483,38	3026,67	0,3772	0,1759
599	2562,35	2564,36	2548,86	2553,07	2483,38	3026,67	0,6272	0,0842
600	2563,70	2564,36	2578,32	2553,07	2483,38	3026,67	0,8772	0,0076
601	2565,05	2564,36	2578,32	2553,07	2483,38	3026,67	0,8728	0,0993
602	2566,40	2564,36	2578,32	2553,07	2483,38	3026,67	0,6228	0,1911

Table 5. Page 55b

A	J	K	L	M	N	O	P	Q	R
573	0,4383	0,6454	0,1067	1,7875	4,518	71,625	2527	39,6	48,7
574	0,4676	0,6345	0,1091	1,9666	4,518	71,750	2529	43,5	46,5
575	0,4970	0,6235	0,1115	2,1457	4,518	71,875	2530	47,5	44,8
576	0,5263	0,6126	0,1139	2,3248	4,518	72,000	2531	51,5	43,4
577	0,5557	0,6016	0,1164	2,2495	4,518	72,125	2533	49,8	43,2
578	0,5851	0,5907	0,1188	1,9285	4,518	72,250	2534	42,7	44,0
579	0,6144	0,5798	0,1212	1,7688	4,518	72,375	2535	39,1	45,2
580	0,6438	0,5688	0,1236	1,6314	4,518	72,500	2537	36,1	46,9
581	0,6731	0,5579	0,1260	1,7483	4,518	72,625	2538	38,7	48,4
582	0,7025	0,5470	0,1284	2,1109	4,518	72,750	2539	46,7	49,8
583	0,7318	0,5360	0,1309	2,4735	4,518	72,875	2541	54,7	51,6
584	0,7612	0,5251	0,1333	2,8361	4,518	73,000	2542	62,8	53,5
585	0,7905	0,5142	0,1357	2,9444	4,518	73,125	2543	65,2	56,0
586	0,8199	0,5032	0,1381	2,8070	4,518	73,250	2545	62,1	58,7
587	0,8492	0,4923	0,1405	2,6695	4,518	73,375	2546	59,1	60,9
588	0,8786	0,4814	0,1429	2,5321	4,518	73,500	2547	56,0	62,6
589	0,9079	0,4704	0,1454	2,6491	4,518	73,625	2549	58,6	63,2
590	0,9373	0,4595	0,1478	2,8318	4,518	73,750	2550	62,7	62,6
591	0,9666	0,4485	0,1502	3,0109	4,518	73,875	2552	66,6	61,3
592	0,9960	0,4376	0,1526	3,1899	4,518	74,000	2553	70,6	59,5
593	0,9746	0,4267	0,1550	3,0639	4,518	74,125	2554	67,8	57,7
594	0,9453	0,4157	0,1574	2,6843	4,518	74,250	2556	59,4	55,9
595	0,9159	0,4048	0,1599	2,3047	4,518	74,375	2557	51,0	54,0
596	0,8866	0,3939	0,1623	1,9250	4,518	74,500	2558	42,6	51,9
597	0,8572	0,3829	0,1647	1,7998	4,518	74,625	2560	39,8	49,5
598	0,8279	0,3720	0,1671	1,9201	4,518	74,750	2561	42,5	47,0
599	0,7985	0,3611	0,1695	2,0405	4,518	74,875	2562	45,2	44,9
600	0,7692	0,3501	0,1720	2,1760	4,518	75,000	2564	48,2	43,2
601	0,7398	0,3392	0,1744	2,2255	4,518	75,125	2565	49,3	37,0
602	0,7105	0,3283	0,1768	2,0294	4,518	75,250	2566	44,9	37,0

Table 5. Page 56a

A	B	C	D	E	F	G	H	I
603	2567,76	2564,36	2578,32	2553,07	2483,38	3026,67	0,3728	0,2829
604	2569,11	2564,36	2578,32	2553,07	2483,38	3026,67	0,1228	0,3746

Table 5. Page 56b

A	J	K	L	M	N	O	P	Q	R
603	0,6811	0,3173	0,1792	1,8333	4,518	75,375	2568	40,6	37,0
604	0,6518	0,3064	0,1816	1,6372	4,518	75,500	2569	36,2	37,0

Note that we have to remember the kind of construction of the universal cosmic clock (Figure 11). Each time when a full hour of a given Cosmic-Hierarchy level becomes finished, also all lower hands of the clock have to be adjusted to the point "0" of the clock. Therefore we have to add the following additional condition to our Table 5. In the calculation point -712 (for the year 790,44), when the actual year of our calculation reaches the "cosmic-jump" point of 790,217 years of the level 3 (column G of the Table 5), also the actual point of the level 2 has to be adjusted exactly to the same "cosmic-jump" point of 790,217 years. It can be done by means of an extra-function or just manually by writing that value directly in the corresponding cell of the calculation program. The same adjustment of the level 2 should be also carried out at the next "cosmic-jump" of the same level 3, at the calculation point 116, when we have to set the corresponding cell of the column E to the value of 1908,445 years[1].

A similar adjustment is also necessary for every lower level of the Cosmic Hierarchy in our calculations presented in the following chapters. It has almost no noticeable influence on the results of the Table 5. However, the results of our most accurate calculations for 20th and 21st century are strongly influenced by those adjustments.

---

[1] Exactly this point of time is the theoretical beginning of our first global civilization on the Earth.

Chapter 5

Maximal precision for 20th-century calculations

1. The idea

Most of the readers of this book remember very well the last decades of the recent century. We remember also the climate changes during these decades. Therefore it is interesting to increase the accuracy of our reconstruction of the global-climate changes in that time. It is useful also for our discussion of the advantage of our model in a comparison with other models of the contemporary science. The increased accuracy of the prognosis of the global-climate changes is also important for our own and for the next generation.

In order to increase the calculation accuracy, it is enough to consider the next shorter periods of the energy-flux modulation. Those are the periods belonging to the lower levels of the Cosmic Hierarchy. As the first step in that direction we consider here, in addition to the previous levels 3 and 2, also the level 1 of this hierarchy, with its period-length of 7,8539 years, which I have abbreviated in my program as 7y_7m[1]. All other details of the calculation remain the same as before in the previous chapter.

2. First steps with the increased accuracy

We have to start to that more precise reconstruction and forecast from one (arbitrarily chosen) calculation point of the basic program (of Table 5). I have chosen the point 100, corresponding to the theoretical minimum between the solar cycles 12 and 13.

Here is one practical advice for the readers going to repeat my calculations:

---

[1] 7.5839 years correspond almost exactly to 7 years and 7 months.

in the real calculations we need some more accurate starting values than those shown in Table 5. Therefore we have to increase the output of numbers in our program from two decimal places (as shown in Table 5) to three, four or even five decimal places, according to the desired accuracy of the actual calculations. In the present step of calculation I have used the values of the basic-calculation point 100 with three decimal points, as shown in Table 6 below.

Table 6. Calculation details of our model of the global energy-transfer changes for the 20th and 21st century

Column		Starting value	Status	Calculating function[1]	Following calculation	Note
Name	Description					
A	Nr	A4= 100	set	A5 = A4+1	calc. down	a
B	Year	B4= 1887,917	set	B5 = B4+0,337891875	calc. down	b
C	Jupiter	C4= 1883,175	set	C5 = WENN(ABS(C4-B5)<=5,40627;C4;C4+10,81254)	calc. down	c
D	Saturn	D4= 1900,784	set	D5 = WENN(ABS(D4-B5)<=14,729;D4;D4+29,458)	calc. down	d
E	7y_7m	E4= 1886,625	set	E5 = WENN(ABS(E4-B5)<=3,792;E4;E4+7,5839)	calc. down	e
F	LGS	F4= 1895,292	set	F5 = WENN(ABS(F4-B5)<=46,0448;F4;F4+92,0896)	calc. down	f
G	DC	G4= 1989,00	set	G5 = WENN(ABS(G4-B5)<=123,595;G4;G4+247,19)	calc. down	g
H	OLMG	H4= 1908,445	set	H5 = WENN(ABS(H4-B5)<=559,114;H4;H4+1118,228)	calc. down	h

---

[1] I have used my German version of the Open Office Calculation program.

I	Jup-M.	I4= 0,1228	calc.	I4 = 1-ABS((C4-B4)/5,40627)	calc. down	i
J	Sat-M.	J4= 0,1264	calc.	J4 = 1-ABS((D4-B4)/14,729)	calc. down	j
K	7_7-M.	K4= 0,6594	calc.	K4 = 1-ABS((E4-B4)/3,792)	calc. down	k
L	LGS-M	L4= 0,8398	calc.	L4 = 1-ABS((F4-B4)/46,0448)	calc. down	l
M	DC-M.	M4= 0,1821	calc.	M4 = 1-ABS((G4-B4)/123,595)	calc. down	m
N	OL-M.	N4= 0,9633	calc.	N4 = 1-ABS((H4-B4)/559,114)	calc. down	n
O	Total	O4= 2,8939	calc.	M4=I4+J4+K4+L4+M4+N4	calc. down	o
P	Scale	P4= 5,345	calc.	P4 = MAX(O4:O550)	P5=P4; calc. down	p
Q	Cycle	Q4= 12,500	set	Q5 = Q4+0,03125	calc. down	q
R	Year	R4= 1887,9	set	R4=A4	calc. down	r
S	Rel.	S4= 54,1	calc.	S4 = 100*O4/P4	calc. down	s
T	Aver.	T20= 67,8	calc.	T20 = SUMME(S4:S36)/33	calc. down	t

Notes:

a) This starting value shows us the present starting point of time in the main program; compare Table 5; Page 39b in Chapter 3; it has no further meaning.

b) The starting year has been chosen in correspondence to the solar cycle 12,5 (compare the above note a).

c) One of the both ends of every Sun-Jupiter cycle becomes chosen, depending on its smaller time difference to the actual calculation point. In that way the calculation point wandering with constant steps along the time scale (between the years 1887 and 2072) activates the consecutive "critical moments" of the Sun-Jupiter (energetic) interaction.

d) Saturn modulates this interaction between Jupiter and Sun through its own motion around the center of mass of the Solar System. I have assumed this modulation can be properly approximated with the known period of Saturn circulation around the Sun.

e) For our present high-accuracy short-ranged analysis we have to include also the shorter period of level 1 of the Cosmic Hierarchy (compare Table 2 in the previous Chapter 2); this period lasts almost exactly 7years and 7 months.

f) The Local Group of stars interacts energetically with our Solar System in a similar way like Jupiter interacts directly with the Sun. (compare also Table 2 in the previous chapter).

g) The total mass of the Dark Companion of the Sun, though widely distributed along Kuiper Belt, interact "collectively" with all remaining members of the Solar System, also modulating the energetic solar cycles. Its period is known exactly from the observation of Pluto, which circulates simultaneously around the center of mass of this Dark Companion in a plane perpendicular to the ecliptic and together with this dark mass around the center of mass of the whole Solar System (in Venus) in the ecliptic plane.

h) Even for the present short-range analysis we have to include also the 3rd level of the Cosmic Hierarchy of the Solar System (*compare Table 2 in the previous chapter*). The Orion Local Minigalaxy has influenced the "modern maximum" of the energy transfer to the Earth during the whole 20th century.

i-n) For our analysis of the relative changes of this energy transfer we can assume the same contribution from each of the considered factors. Therefore we use the same formula for the modulation of all six contributions.

o) We simply add all six contributions.

p) We look for the maximal value of the summarized contributions.

q-r) The exact cycle number and the actual year of each point of calculation have just an auxiliary role for better orientation and/or diagram production.

s) The total contribution of all six modulators of the energy transferred to the Solar System (including the Earth of course) is recalculated here in relation to the maximal value of the here analyzed period of about 180 years.

t) The resulting curve (note s) is averaged here over the whole solar cycle of 10,81254 years (or 33 calculation points).

3. Calculations down to the level 1 of the Cosmic Hierarchy

Table 7. Page 1a

A	B	C	D	E	F	G	H	I	J
Nr	Year	Jupiter	Saturn	7y_7m	LGS	DC	OLMG	Jup-M.	Sat-M.
100	**1887,92**	**1883,17**	**1900,78**	**1886,63**	**1895,29**	**1989,00**	**1908,45**	0,1228	0,1264
101	1888,25	1883,17	1900,78	1886,63	1895,29	1989,00	1908,45	0,0603	0,1494
102	1888,59	1893,99	1900,78	1886,63	1895,29	1989,00	1908,45	0,0022	0,1723
103	1888,93	1893,99	1900,78	1886,63	1895,29	1989,00	1908,45	0,0647	0,1952
104	1889,27	1893,99	1900,78	1886,63	1895,29	1989,00	1908,45	0,1272	0,2182
105	1889,61	1893,99	1900,78	1886,63	1895,29	1989,00	1908,45	0,1897	0,2411
106	1889,94	1893,99	1900,78	1886,63	1895,29	1989,00	1908,45	0,2522	0,2641
107	1890,28	1893,99	1900,78	1886,63	1895,29	1989,00	1908,45	0,3147	0,2870
108	1890,62	1893,99	1900,78	1894,21	1895,29	1989,00	1908,45	0,3772	0,3099
109	1890,96	1893,99	1900,78	1894,21	1895,29	1989,00	1908,45	0,4397	0,3329
110	1891,30	1893,99	1900,78	1894,21	1895,29	1989,00	1908,45	0,5022	0,3558
111	1891,63	1893,99	1900,78	1894,21	1895,29	1989,00	1908,45	0,5647	0,3788
112	1891,97	1893,99	1900,78	1894,21	1895,29	1989,00	1908,45	0,6272	0,4017
113	1892,31	1893,99	1900,78	1894,21	1895,29	1989,00	1908,45	0,6897	0,4246
114	1892,65	1893,99	1900,78	1894,21	1895,29	1989,00	1908,45	0,7522	0,4476
115	1892,99	1893,99	1900,78	1894,21	1895,29	1989,00	1908,45	0,8147	0,4705
116	1893,32	1893,99	1900,78	1894,21	1895,29	1989,00	1908,45	0,8772	0,4935
117	1893,66	1893,99	1900,78	1894,21	1895,29	1989,00	1908,45	0,9397	0,5164
118	1894,00	1893,99	1900,78	1894,21	1895,29	1989,00	1908,45	0,9978	0,5393
119	1894,34	1893,99	1900,78	1894,21	1895,29	1989,00	1908,45	0,9353	0,5623
120	1894,67	1893,99	1900,78	1894,21	1895,29	1989,00	1908,45	0,8728	0,5852
121	1895,01	1893,99	1900,78	1894,21	1895,29	1989,00	1908,45	0,8103	0,6082
122	1895,35	1893,99	1900,78	**1895,29**	1895,29	1989,00	1908,45	0,7478	0,6311
123	1895,69	1893,99	1900,78	1895,29	1895,29	1989,00	1908,45	0,6853	0,6541
124	1896,03	1893,99	1900,78	1895,29	1895,29	1989,00	1908,45	0,6228	0,6770
125	1896,36	1893,99	1900,78	1895,29	1895,29	1989,00	1908,45	0,5603	0,6999
126	1896,70	1893,99	1900,78	1895,29	1895,29	1989,00	1908,45	0,4978	0,7229

Table 7. Page 1b

A	K	L	M	N	O	P	Q	R	S	T
Nr	7_7-M.	LGS-M.	DC-M.	OL-M.	Total	Scale	Cycle	Year	Rel.	Aver.
100	0,6594	0,8398	0,1821	0,9633	2,8939	5,345	12,500	1887,9	54,1	
101	0,5703	0,8472	0,1849	0,9639	2,7759	5,345	12,531	1888,3	51,9	
102	0,4811	0,8545	0,1876	0,9645	2,6622	5,345	12,563	1888,6	49,8	
103	0,3920	0,8618	0,1903	0,9651	2,6693	5,345	12,594	1888,9	49,9	
104	0,3029	0,8692	0,1931	0,9657	2,6763	5,345	12,625	1889,3	50,1	
105	0,2138	0,8765	0,1958	0,9663	2,6833	5,345	12,656	1889,6	50,2	
106	0,1247	0,8839	0,1985	0,9669	2,6903	5,345	12,688	1889,9	50,3	
107	0,0356	0,8912	0,2013	0,9675	2,6973	5,345	12,719	1890,3	50,5	
108	0,0535	0,8985	0,2040	0,9681	2,8113	5,345	12,750	1890,6	52,6	
109	0,1426	0,9059	0,2067	0,9687	2,9965	5,345	12,781	1891,0	56,1	
110	0,2317	0,9132	0,2095	0,9693	3,1818	5,345	12,813	1891,3	59,5	
111	0,3208	0,9206	0,2122	0,9699	3,3670	5,345	12,844	1891,6	63,0	
112	0,4099	0,9279	0,2149	0,9705	3,5522	5,345	12,875	1892,0	66,5	
113	0,4990	0,9352	0,2177	0,9711	3,7374	5,345	12,906	1892,3	69,9	
114	0,5882	0,9426	0,2204	0,9717	3,9227	5,345	12,938	1892,6	73,4	
115	0,6773	0,9499	0,2232	0,9723	4,1079	5,345	12,969	1893,0	76,8	
116	0,7664	0,9572	0,2259	0,9730	4,2931	5,345	13,000	1893,3	80,3	67,8
117	0,8555	0,9646	0,2286	0,9736	4,4783	5,345	13,031	1893,7	83,8	67,9
118	0,9446	0,9719	0,2314	0,9742	4,6592	5,345	13,063	1894,0	87,2	68,1
119	0,9663	0,9793	0,2341	0,9748	4,6520	5,345	13,094	1894,3	87,0	68,5
120	0,8772	0,9866	0,2368	0,9754	4,5340	5,345	13,125	1894,7	84,8	69,0
121	0,7881	0,9939	0,2396	0,9760	4,4160	5,345	13,156	1895,0	82,6	69,5
122	0,9840	0,9987	0,2423	0,9766	4,5805	5,345	13,188	1895,4	85,7	70,2
123	0,8949	0,9914	0,2450	0,9772	4,4479	5,345	13,219	1895,7	83,2	70,9
124	0,8058	0,9841	0,2478	0,9778	4,3152	5,345	13,250	1896,0	80,7	71,7
125	0,7167	0,9767	0,2505	0,9784	4,1825	5,345	13,281	1896,4	78,2	72,5
126	0,6276	0,9694	0,2532	0,9790	4,0499	5,345	13,313	1896,7	75,8	73,3

Table 7. Page 2a

A	B	C	D	E	F	G	H	I	J
127	1897,04	1893,99	1900,78	1895,29	1895,29	1989,00	1908,45	0,4353	0,7458
128	1897,38	1893,99	1900,78	1895,29	1895,29	1989,00	1908,45	0,3728	0,7688
129	1897,72	1893,99	1900,78	1895,29	1895,29	1989,00	1908,45	0,3103	0,7917
130	1898,05	1893,99	1900,78	1895,29	1895,29	1989,00	1908,45	0,2478	0,8146
131	1898,39	1893,99	1900,78	1895,29	1895,29	1989,00	1908,45	0,1853	0,8376
132	1898,73	1893,99	1900,78	1895,29	1895,29	1989,00	1908,45	0,1228	0,8605
133	1899,07	1893,99	1900,78	1895,29	1895,29	1989,00	1908,45	0,0603	0,8835
134	1899,41	1904,80	1900,78	1902,87	1895,29	1989,00	1908,45	0,0022	0,9064
135	1899,74	1904,80	1900,78	1902,87	1895,29	1989,00	1908,45	0,0647	0,9293
136	1900,08	1904,80	1900,78	1902,87	1895,29	1989,00	1908,45	0,1272	0,9523
137	1900,42	1904,80	1900,78	1902,87	1895,29	1989,00	1908,45	0,1897	0,9752
138	1900,76	1904,80	1900,78	1902,87	1895,29	1989,00	1908,45	0,2522	0,9982
139	1901,09	1904,80	1900,78	1902,87	1895,29	1989,00	1908,45	0,3147	0,9789
140	1901,43	1904,80	1900,78	1902,87	1895,29	1989,00	1908,45	0,3772	0,9560
141	1901,77	1904,80	1900,78	1902,87	1895,29	1989,00	1908,45	0,4397	0,9330
142	1902,11	1904,80	1900,78	1902,87	1895,29	1989,00	1908,45	0,5022	0,9101
143	1902,45	1904,80	1900,78	1902,87	1895,29	1989,00	1908,45	0,5647	0,8871
144	1902,78	1904,80	1900,78	1902,87	1895,29	1989,00	1908,45	0,6272	0,8642
145	1903,12	1904,80	1900,78	1902,87	1895,29	1989,00	1908,45	0,6897	0,8413
146	1903,46	1904,80	1900,78	1902,87	1895,29	1989,00	1908,45	0,7522	0,8183
147	1903,80	1904,80	1900,78	1902,87	1895,29	1989,00	1908,45	0,8147	0,7954
148	1904,14	1904,80	1900,78	1902,87	1895,29	1989,00	1908,45	0,8772	0,7724
149	1904,47	1904,80	1900,78	1902,87	1895,29	1989,00	1908,45	0,9397	0,7495
150	1904,81	1904,80	1900,78	1902,87	1895,29	1989,00	1908,45	0,9978	0,7266
151	1905,15	1904,80	1900,78	1902,87	1895,29	1989,00	1908,45	0,9353	0,7036
152	1905,49	1904,80	1900,78	1902,87	1895,29	1989,00	1908,45	0,8728	0,6807
153	1905,83	1904,80	1900,78	1902,87	1895,29	1989,00	1908,45	0,8103	0,6577
154	1906,16	1904,80	1900,78	1902,87	1895,29	1989,00	1908,45	0,7478	0,6348
155	1906,50	1904,80	1900,78	1902,87	1895,29	1989,00	1908,45	0,6853	0,6119
156	1906,84	1904,80	1900,78	1910,46	1895,29	1989,00	1908,45	0,6228	0,5889

Table 7. Page 2b

A	K	L	M	N	O	P	Q	R	S	T
127	0,5385	0,9620	0,2560	0,9796	3,9172	5,345	13,344	1897,0	73,3	74,0
128	0,4494	0,9547	0,2587	0,9802	3,7845	5,345	13,375	1897,4	70,8	74,7
129	0,3603	0,9474	0,2614	0,9808	3,6519	5,345	13,406	1897,7	68,3	75,3
130	0,2712	0,9400	0,2642	0,9814	3,5192	5,345	13,438	1898,1	65,8	75,8
131	0,1821	0,9327	0,2669	0,9820	3,3865	5,345	13,469	1898,4	63,4	76,1
132	0,0929	0,9253	0,2696	0,9826	3,2539	5,345	13,500	1898,7	60,9	76,3
133	0,0038	0,9180	0,2724	0,9832	3,1212	5,345	13,531	1899,1	58,4	76,3
134	0,0853	0,9107	0,2751	0,9838	3,1635	5,345	13,563	1899,4	59,2	76,2
135	0,1744	0,9033	0,2778	0,9844	3,3340	5,345	13,594	1899,7	62,4	75,9
136	0,2635	0,8960	0,2806	0,9850	3,5046	5,345	13,625	1900,1	65,6	75,5
137	0,3526	0,8887	0,2833	0,9856	3,6751	5,345	13,656	1900,4	68,8	75,1
138	0,4417	0,8813	0,2860	0,9862	3,8457	5,345	13,688	1900,8	71,9	74,6
139	0,5308	0,8740	0,2888	0,9869	3,9740	5,345	13,719	1901,1	74,3	74,0
140	0,6199	0,8666	0,2915	0,9875	4,0987	5,345	13,750	1901,4	76,7	73,4
141	0,7090	0,8593	0,2942	0,9881	4,2233	5,345	13,781	1901,8	79,0	72,8
142	0,7981	0,8520	0,2970	0,9887	4,3480	5,345	13,813	1902,1	81,3	72,3
143	0,8872	0,8446	0,2997	0,9893	4,4727	5,345	13,844	1902,4	83,7	71,9
144	0,9764	0,8373	0,3024	0,9899	4,5973	5,345	13,875	1902,8	86,0	71,6
145	0,9345	0,8299	0,3052	0,9905	4,5911	5,345	13,906	1903,1	85,9	71,8
146	0,8454	0,8226	0,3079	0,9911	4,5375	5,345	13,938	1903,5	84,9	71,9
147	0,7563	0,8153	0,3106	0,9917	4,4840	5,345	13,969	1903,8	83,9	72,1
148	0,6672	0,8079	0,3134	0,9923	4,4304	5,345	14,000	1904,1	82,9	72,2
149	0,5781	0,8006	0,3161	0,9929	4,3769	5,345	14,031	1904,5	81,9	72,3
150	0,4890	0,7933	0,3188	0,9935	4,3190	5,345	14,063	1904,8	80,8	72,3
151	0,3999	0,7859	0,3216	0,9941	4,1404	5,345	14,094	1905,1	77,5	72,3
152	0,3108	0,7786	0,3243	0,9947	3,9619	5,345	14,125	1905,5	74,1	72,2
153	0,2217	0,7712	0,3270	0,9953	3,7833	5,345	14,156	1905,8	70,8	71,9
154	0,1326	0,7639	0,3298	0,9959	3,6048	5,345	14,188	1906,2	67,4	71,5
155	0,0435	0,7566	0,3325	0,9965	3,4262	5,345	14,219	1906,5	64,1	71,0
156	0,0457	0,7492	0,3352	0,9971	3,3390	5,345	14,250	1906,8	62,5	70,4

Table 7. Page 3a

A	B	C	D	E	F	G	H	I	J
157	1907,18	1904,80	1900,78	1910,46	1895,29	1989,00	1908,45	0,5603	0,5660
158	1907,51	1904,80	1900,78	1910,46	1895,29	1989,00	1908,45	0,4978	0,5430
159	1907,85	1904,80	1900,78	1910,46	1895,29	1989,00	1908,45	0,4353	0,5201
160	1908,19	1904,80	1900,78	1910,46	1895,29	1989,00	1908,45	0,3728	0,4971
161	1908,53	1904,80	1900,78	**1908,45**	**1908,45**	1989,00	1908,45	0,3103	0,4742
162	1908,87	1904,80	1900,78	1908,45	1908,45	1989,00	1908,45	0,2478	0,4513
163	1909,20	1904,80	1900,78	1908,45	1908,45	1989,00	1908,45	0,1853	0,4283
164	1909,54	1904,80	1900,78	1908,45	1908,45	1989,00	1908,45	0,1228	0,4054
165	1909,88	1904,80	1900,78	1908,45	1908,45	1989,00	1908,45	0,0603	0,3824
166	1910,22	1915,61	1900,78	1908,45	1908,45	1989,00	1908,45	0,0022	0,3595
167	1910,56	1915,61	1900,78	1908,45	1908,45	1989,00	1908,45	0,0647	0,3366
168	1910,89	1915,61	1900,78	1908,45	1908,45	1989,00	1908,45	0,1272	0,3136
169	1911,23	1915,61	1900,78	1908,45	1908,45	1989,00	1908,45	0,1897	0,2907
170	1911,57	1915,61	1900,78	1908,45	1908,45	1989,00	1908,45	0,2522	0,2677
171	1911,91	1915,61	1900,78	1908,45	1908,45	1989,00	1908,45	0,3147	0,2448
172	1912,25	1915,61	1900,78	1916,03	1908,45	1989,00	1908,45	0,3772	0,2219
173	1912,58	1915,61	1900,78	1916,03	1908,45	1989,00	1908,45	0,4397	0,1989
174	1912,92	1915,61	1900,78	1916,03	1908,45	1989,00	1908,45	0,5022	0,1760
175	1913,26	1915,61	1900,78	1916,03	1908,45	1989,00	1908,45	0,5647	0,1530
176	1913,60	1915,61	1900,78	1916,03	1908,45	1989,00	1908,45	0,6272	0,1301
177	1913,93	1915,61	1900,78	1916,03	1908,45	1989,00	1908,45	0,6897	0,1072
178	1914,27	1915,61	1900,78	1916,03	1908,45	1989,00	1908,45	0,7522	0,0842
179	1914,61	1915,61	1900,78	1916,03	1908,45	1989,00	1908,45	0,8147	0,0613
180	1914,95	1915,61	1900,78	1916,03	1908,45	1989,00	1908,45	0,8772	0,0383
181	1915,29	1915,61	1900,78	1916,03	1908,45	1989,00	1908,45	0,9397	0,0154
182	1915,62	1915,61	1930,24	1916,03	1908,45	1989,00	1908,45	0,9978	0,0075
183	1915,96	1915,61	1930,24	1916,03	1908,45	1989,00	1908,45	0,9353	0,0305
184	1916,30	1915,61	1930,24	1916,03	1908,45	1989,00	1908,45	0,8728	0,0534
185	1916,64	1915,61	1930,24	1916,03	1908,45	1989,00	1908,45	0,8103	0,0764
186	1916,98	1915,61	1930,24	1916,03	1908,45	1989,00	1908,45	0,7478	0,0993

Table 7. Page 3b

A	K	L	M	N	O	P	Q	R	S	T
157	0,1348	0,7419	0,3380	0,9977	3,3386	5,345	14,281	1907,2	62,5	69,8
158	0,2239	0,7345	0,3407	0,9983	3,3383	5,345	14,313	1907,5	62,5	69,2
159	0,3130	0,7272	0,3434	0,9989	3,3380	5,345	14,344	1907,9	62,4	68,6
160	0,4021	0,7199	0,3462	0,9995	3,3376	5,345	14,375	1908,2	62,4	67,9
161	0,9780	0,9982	0,3489	0,9999	4,1095	5,345	14,406	1908,5	76,9	67,3
162	0,8889	0,9909	0,3516	0,9992	3,9297	5,345	14,438	1908,9	73,5	66,8
163	0,7998	0,9835	0,3544	0,9986	3,7500	5,345	14,469	1909,2	70,2	66,3
164	0,7107	0,9762	0,3571	0,9980	3,5702	5,345	14,500	1909,5	66,8	66,0
165	0,6216	0,9688	0,3598	0,9974	3,3905	5,345	14,531	1909,9	63,4	65,8
166	0,5325	0,9615	0,3626	0,9968	3,2151	5,345	14,563	1910,2	60,1	65,6
167	0,4434	0,9542	0,3653	0,9962	3,1603	5,345	14,594	1910,6	59,1	65,5
168	0,3543	0,9468	0,3680	0,9956	3,1056	5,345	14,625	1910,9	58,1	65,5
169	0,2652	0,9395	0,3708	0,9950	3,0508	5,345	14,656	1911,2	57,1	65,5
170	0,1760	0,9321	0,3735	0,9944	2,9960	5,345	14,688	1911,6	56,0	65,5
171	0,0869	0,9248	0,3762	0,9938	2,9413	5,345	14,719	1911,9	55,0	65,6
172	0,0022	0,9175	0,3790	0,9932	2,8909	5,345	14,750	1912,2	54,1	65,6
173	0,0913	0,9101	0,3817	0,9926	3,0143	5,345	14,781	1912,6	56,4	65,7
174	0,1804	0,9028	0,3844	0,9920	3,1378	5,345	14,813	1912,9	58,7	65,6
175	0,2695	0,8955	0,3872	0,9914	3,2613	5,345	14,844	1913,3	61,0	65,5
176	0,3586	0,8881	0,3899	0,9908	3,3847	5,345	14,875	1913,6	63,3	65,3
177	0,4477	0,8808	0,3927	0,9902	3,5082	5,345	14,906	1913,9	65,6	65,1
178	0,5368	0,8734	0,3954	0,9896	3,6316	5,345	14,938	1914,3	67,9	64,3
179	0,6259	0,8661	0,3981	0,9890	3,7551	5,345	14,969	1914,6	70,2	63,6
180	0,7150	0,8588	0,4009	0,9884	3,8785	5,345	15,000	1914,9	72,6	63,0
181	0,8042	0,8514	0,4036	0,9878	4,0020	5,345	15,031	1915,3	74,9	62,6
182	0,8933	0,8441	0,4063	0,9872	4,1362	5,345	15,063	1915,6	77,4	62,3
183	0,9824	0,8367	0,4091	0,9866	4,1805	5,345	15,094	1916,0	78,2	62,2
184	0,9285	0,8294	0,4118	0,9860	4,0819	5,345	15,125	1916,3	76,4	62,2
185	0,8394	0,8221	0,4145	0,9853	3,9480	5,345	15,156	1916,6	73,9	62,4
186	0,7503	0,8147	0,4173	0,9847	3,8142	5,345	15,188	1917,0	71,4	62,6

Table 7. Page 4a

A	B	C	D	E	F	G	H	I	J
187	1917,31	1915,61	1930,24	1916,03	1908,45	1989,00	1908,45	0,6853	0,1222
188	1917,65	1915,61	1930,24	1916,03	1908,45	1989,00	1908,45	0,6228	0,1452
189	1917,99	1915,61	1930,24	1916,03	1908,45	1989,00	1908,45	0,5603	0,1681
190	1918,33	1915,61	1930,24	1916,03	1908,45	1989,00	1908,45	0,4978	0,1911
191	1918,67	1915,61	1930,24	1916,03	1908,45	1989,00	1908,45	0,4353	0,2140
192	1919,00	1915,61	1930,24	1916,03	1908,45	1989,00	1908,45	0,3728	0,2370
193	1919,34	1915,61	1930,24	1916,03	1908,45	1989,00	1908,45	0,3103	0,2599
194	1919,68	1915,61	1930,24	1916,03	1908,45	1989,00	1908,45	0,2478	0,2828
195	1920,02	1915,61	1930,24	1923,61	1908,45	1989,00	1908,45	0,1853	0,3058
196	1920,35	1915,61	1930,24	1923,61	1908,45	1989,00	1908,45	0,1228	0,3287
197	1920,69	1915,61	1930,24	1923,61	1908,45	1989,00	1908,45	0,0603	0,3517
198	1921,03	1926,42	1930,24	1923,61	1908,45	1989,00	1908,45	0,0022	0,3746
199	1921,37	1926,42	1930,24	1923,61	1908,45	1989,00	1908,45	0,0647	0,3975
200	1921,71	1926,42	1930,24	1923,61	1908,45	1989,00	1908,45	0,1272	0,4205
201	1922,04	1926,42	1930,24	1923,61	1908,45	1989,00	1908,45	0,1897	0,4434
202	1922,38	1926,42	1930,24	1923,61	1908,45	1989,00	1908,45	0,2522	0,4664
203	1922,72	1926,42	1930,24	1923,61	1908,45	1989,00	1908,45	0,3147	0,4893
204	1923,06	1926,42	1930,24	1923,61	1908,45	1989,00	1908,45	0,3772	0,5122
205	1923,40	1926,42	1930,24	1923,61	1908,45	1989,00	1908,45	0,4397	0,5352
206	1923,73	1926,42	1930,24	1923,61	1908,45	1989,00	1908,45	0,5022	0,5581
207	1924,07	1926,42	1930,24	1923,61	1908,45	1989,00	1908,45	0,5647	0,5811
208	1924,41	1926,42	1930,24	1923,61	1908,45	1989,00	1908,45	0,6272	0,6040
209	1924,75	1926,42	1930,24	1923,61	1908,45	1989,00	1908,45	0,6897	0,6269
210	1925,09	1926,42	1930,24	1923,61	1908,45	1989,00	1908,45	0,7522	0,6499
211	1925,42	1926,42	1930,24	1923,61	1908,45	1989,00	1908,45	0,8147	0,6728
212	1925,76	1926,42	1930,24	1923,61	1908,45	1989,00	1908,45	0,8772	0,6958
213	1926,10	1926,42	1930,24	1923,61	1908,45	1989,00	1908,45	0,9397	0,7187
214	1926,44	1926,42	1930,24	1923,61	1908,45	1989,00	1908,45	0,9978	0,7416
215	1926,77	1926,42	1930,24	1923,61	1908,45	1989,00	1908,45	0,9353	0,7646
216	1927,11	1926,42	1930,24	1923,61	1908,45	1989,00	1908,45	0,8728	0,7875

Table 7. Page 4b

A	K	L	M	N	O	P	Q	R	S	T
187	0,6612	0,8074	0,4200	0,9841	3,6803	5,345	15,219	1917,3	68,8	63,0
188	0,5721	0,8001	0,4227	0,9835	3,5464	5,345	15,250	1917,7	66,3	63,5
189	0,4830	0,7927	0,4255	0,9829	3,4125	5,345	15,281	1918,0	63,8	64,2
190	0,3939	0,7854	0,4282	0,9823	3,2787	5,345	15,313	1918,3	61,3	64,8
191	0,3048	0,7780	0,4309	0,9817	3,1448	5,345	15,344	1918,7	58,8	65,4
192	0,2157	0,7707	0,4337	0,9811	3,0109	5,345	15,375	1919,0	56,3	65,9
193	0,1266	0,7634	0,4364	0,9805	2,8770	5,345	15,406	1919,3	53,8	66,3
194	0,0375	0,7560	0,4391	0,9799	2,7432	5,345	15,438	1919,7	51,3	66,6
195	0,0517	0,7487	0,4419	0,9793	2,7126	5,345	15,469	1920,0	50,7	66,9
196	0,1408	0,7413	0,4446	0,9787	2,7569	5,345	15,500	1920,4	51,6	67,1
197	0,2299	0,7340	0,4473	0,9781	2,8013	5,345	15,531	1920,7	52,4	67,2
198	0,3190	0,7267	0,4501	0,9775	2,8500	5,345	15,563	1921,0	53,3	67,2
199	0,4081	0,7193	0,4528	0,9769	3,0193	5,345	15,594	1921,4	56,5	67,1
200	0,4972	0,7120	0,4555	0,9763	3,1887	5,345	15,625	1921,7	59,7	66,9
201	0,5863	0,7047	0,4583	0,9757	3,3580	5,345	15,656	1922,0	62,8	66,7
202	0,6754	0,6973	0,4610	0,9751	3,5273	5,345	15,688	1922,4	66,0	66,6
203	0,7645	0,6900	0,4637	0,9745	3,6967	5,345	15,719	1922,7	69,2	66,5
204	0,8536	0,6826	0,4665	0,9739	3,8660	5,345	15,750	1923,1	72,3	66,6
205	0,9427	0,6753	0,4692	0,9733	4,0354	5,345	15,781	1923,4	75,5	66,8
206	0,9682	0,6680	0,4719	0,9727	4,1410	5,345	15,813	1923,7	77,5	67,1
207	0,8791	0,6606	0,4747	0,9721	4,1321	5,345	15,844	1924,1	77,3	67,5
208	0,7899	0,6533	0,4774	0,9714	4,1233	5,345	15,875	1924,4	77,1	68,0
209	0,7008	0,6459	0,4801	0,9708	4,1144	5,345	15,906	1924,7	77,0	68,5
210	0,6117	0,6386	0,4829	0,9702	4,1055	5,345	15,938	1925,1	76,8	69,2
211	0,5226	0,6313	0,4856	0,9696	4,0966	5,345	15,969	1925,4	76,6	69,9
212	0,4335	0,6239	0,4883	0,9690	4,0878	5,345	16,000	1925,8	76,5	70,7
213	0,3444	0,6166	0,4911	0,9684	4,0789	5,345	16,031	1926,1	76,3	71,3
214	0,2553	0,6093	0,4938	0,9678	4,0656	5,345	16,063	1926,4	76,1	71,9
215	0,1662	0,6019	0,4965	0,9672	3,9318	5,345	16,094	1926,8	73,6	72,3
216	0,0771	0,5946	0,4993	0,9666	3,7979	5,345	16,125	1927,1	71,0	72,6

Table 7. Page 5a

A	B	C	D	E	F	G	H	I	J
217	1927,45	1926,42	1930,24	1931,20	1908,45	1989,00	1908,45	0,8103	0,8105
218	1927,79	1926,42	1930,24	1931,20	1908,45	1989,00	1908,45	0,7478	0,8334
219	1928,13	1926,42	1930,24	1931,20	1908,45	1989,00	1908,45	0,6853	0,8563
220	1928,46	1926,42	1930,24	1931,20	1908,45	1989,00	1908,45	0,6228	0,8793
221	1928,80	1926,42	1930,24	1931,20	1908,45	1989,00	1908,45	0,5603	0,9022
222	1929,14	1926,42	1930,24	1931,20	1908,45	1989,00	1908,45	0,4978	0,9252
223	1929,48	1926,42	1930,24	1931,20	1908,45	1989,00	1908,45	0,4353	0,9481
224	1929,82	1926,42	1930,24	1931,20	1908,45	1989,00	1908,45	0,3728	0,9710
225	1930,15	1926,42	1930,24	1931,20	1908,45	1989,00	1908,45	0,3103	0,9940
226	1930,49	1926,42	1930,24	1931,20	1908,45	1989,00	1908,45	0,2478	0,9831
227	1930,83	1926,42	1930,24	1931,20	1908,45	1989,00	1908,45	0,1853	0,9601
228	1931,17	1926,42	1930,24	1931,20	1908,45	1989,00	1908,45	0,1228	0,9372
229	1931,51	1926,42	1930,24	1931,20	1908,45	1989,00	1908,45	0,0603	0,9142
230	1931,84	1937,24	1930,24	1931,20	1908,45	1989,00	1908,45	0,0022	0,8913
231	1932,18	1937,24	1930,24	1931,20	1908,45	1989,00	1908,45	0,0647	0,8684
232	1932,52	1937,24	1930,24	1931,20	1908,45	1989,00	1908,45	0,1272	0,8454
233	1932,86	1937,24	1930,24	1931,20	1908,45	1989,00	1908,45	0,1897	0,8225
234	1933,19	1937,24	1930,24	1931,20	1908,45	1989,00	1908,45	0,2522	0,7995
235	1933,53	1937,24	1930,24	1931,20	1908,45	1989,00	1908,45	0,3147	0,7766
236	1933,87	1937,24	1930,24	1931,20	1908,45	1989,00	1908,45	0,3772	0,7537
237	1934,21	1937,24	1930,24	1931,20	1908,45	1989,00	1908,45	0,4397	0,7307
238	1934,55	1937,24	1930,24	1931,20	1908,45	1989,00	1908,45	0,5022	0,7078
239	1934,88	1937,24	1930,24	1931,20	1908,45	1989,00	1908,45	0,5647	0,6848
240	1935,22	1937,24	1930,24	1938,78	1908,45	1989,00	1908,45	0,6272	0,6619
241	1935,56	1937,24	1930,24	1938,78	1908,45	1989,00	1908,45	0,6897	0,6390
242	1935,90	1937,24	1930,24	1938,78	1908,45	1989,00	1908,45	0,7522	0,6160
243	1936,24	1937,24	1930,24	1938,78	1908,45	1989,00	1908,45	0,8147	0,5931
244	1936,57	1937,24	1930,24	1938,78	1908,45	1989,00	1908,45	0,8772	0,5701
245	1936,91	1937,24	1930,24	1938,78	1908,45	1989,00	1908,45	0,9397	0,5472
246	1937,25	1937,24	1930,24	1938,78	1908,45	1989,00	1908,45	0,9978	0,5243

Table 7. Page 5b

A	K	L	M	N	O	P	Q	R	S	T
217	0,0120	0,5872	0,5020	0,9660	3,6881	5,345	16,156	1927,5	69,0	72,8
218	0,1011	0,5799	0,5047	0,9654	3,7324	5,345	16,188	1927,8	69,8	72,9
219	0,1903	0,5726	0,5075	0,9648	3,7768	5,345	16,219	1928,1	70,7	72,9
220	0,2794	0,5652	0,5102	0,9642	3,8211	5,345	16,250	1928,5	71,5	72,7
221	0,3685	0,5579	0,5129	0,9636	3,8654	5,345	16,281	1928,8	72,3	72,4
222	0,4576	0,5506	0,5157	0,9630	3,9098	5,345	16,313	1929,1	73,1	72,0
223	0,5467	0,5432	0,5184	0,9624	3,9541	5,345	16,344	1929,5	74,0	71,4
224	0,6358	0,5359	0,5211	0,9618	3,9984	5,345	16,375	1929,8	74,8	71,0
225	0,7249	0,5285	0,5239	0,9612	4,0428	5,345	16,406	1930,2	75,6	70,5
226	0,8140	0,5212	0,5266	0,9606	4,0533	5,345	16,438	1930,5	75,8	70,2
227	0,9031	0,5139	0,5293	0,9600	4,0517	5,345	16,469	1930,8	75,8	70,0
228	0,9922	0,5065	0,5321	0,9594	4,0502	5,345	16,500	1931,2	75,8	69,8
229	0,9187	0,4992	0,5348	0,9588	3,8860	5,345	16,531	1931,5	72,7	69,7
230	0,8296	0,4918	0,5375	0,9582	3,7106	5,345	16,563	1931,8	69,4	69,6
231	0,7405	0,4845	0,5403	0,9575	3,6559	5,345	16,594	1932,2	68,4	69,6
232	0,6514	0,4772	0,5430	0,9569	3,6011	5,345	16,625	1932,5	67,4	69,7
233	0,5623	0,4698	0,5457	0,9563	3,5463	5,345	16,656	1932,9	66,3	69,8
234	0,4732	0,4625	0,5485	0,9557	3,4916	5,345	16,688	1933,2	65,3	70,0
235	0,3840	0,4552	0,5512	0,9551	3,4368	5,345	16,719	1933,5	64,3	70,1
236	0,2949	0,4478	0,5539	0,9545	3,3821	5,345	16,750	1933,9	63,3	70,1
237	0,2058	0,4405	0,5567	0,9539	3,3273	5,345	16,781	1934,2	62,2	69,9
238	0,1167	0,4331	0,5594	0,9533	3,2726	5,345	16,813	1934,5	61,2	69,7
239	0,0276	0,4258	0,5622	0,9527	3,2178	5,345	16,844	1934,9	60,2	69,3
240	0,0615	0,4185	0,5649	0,9521	3,2861	5,345	16,875	1935,2	61,5	68,8
241	0,1506	0,4111	0,5676	0,9515	3,4095	5,345	16,906	1935,6	63,8	68,1
242	0,2397	0,4038	0,5704	0,9509	3,5330	5,345	16,938	1935,9	66,1	67,3
243	0,3288	0,3964	0,5731	0,9503	3,6564	5,345	16,969	1936,2	68,4	66,4
244	0,4179	0,3891	0,5758	0,9497	3,7799	5,345	17,000	1936,6	70,7	65,5
245	0,5070	0,3818	0,5786	0,9491	3,9033	5,345	17,031	1936,9	73,0	64,4
246	0,5962	0,3744	0,5813	0,9485	4,0224	5,345	17,063	1937,2	75,3	63,3

Table 7. Page 6a

A	B	C	D	E	F	G	H	I	J
247	1937,59	1937,24	1930,24	1938,78	1908,45	1989,00	1908,45	0,9353	0,5013
248	1937,92	1937,24	1930,24	1938,78	1908,45	1989,00	1908,45	0,8728	0,4784
249	1938,26	1937,24	1930,24	1938,78	1908,45	1989,00	1908,45	0,8103	0,4554
250	1938,60	1937,24	1930,24	1938,78	1908,45	1989,00	1908,45	0,7478	0,4325
251	1938,94	1937,24	1930,24	1938,78	1908,45	1989,00	1908,45	0,6853	0,4096
252	1939,28	1937,24	1930,24	1938,78	1908,45	1989,00	1908,45	0,6228	0,3866
253	1939,61	1937,24	1930,24	1938,78	1908,45	1989,00	1908,45	0,5603	0,3637
254	1939,95	1937,24	1930,24	1938,78	1908,45	1989,00	1908,45	0,4978	0,3407
255	1940,29	1937,24	1930,24	1938,78	1908,45	1989,00	1908,45	0,4353	0,3178
256	1940,63	1937,24	1930,24	1938,78	1908,45	1989,00	1908,45	0,3728	0,2949
257	1940,97	1937,24	1930,24	1938,78	1908,45	1989,00	1908,45	0,3103	0,2719
258	1941,30	1937,24	1930,24	1938,78	1908,45	1989,00	1908,45	0,2478	0,2490
259	1941,64	1937,24	1930,24	1938,78	1908,45	1989,00	1908,45	0,1853	0,2260
260	1941,98	1937,24	1930,24	1938,78	1908,45	1989,00	1908,45	0,1228	0,2031
261	1942,32	1937,24	1930,24	1938,78	1908,45	1989,00	1908,45	0,0603	0,1801
262	1942,66	1948,05	1930,24	1946,36	1908,45	1989,00	1908,45	0,0022	0,1572
263	1942,99	1948,05	1930,24	1946,36	1908,45	1989,00	1908,45	0,0647	0,1343
264	1943,33	1948,05	1930,24	1946,36	1908,45	1989,00	1908,45	0,1272	0,1113
265	1943,67	1948,05	1930,24	1946,36	1908,45	1989,00	1908,45	0,1897	0,0884
266	1944,01	1948,05	1930,24	1946,36	1908,45	1989,00	1908,45	0,2522	0,0654
267	1944,34	1948,05	1930,24	1946,36	1908,45	1989,00	1908,45	0,3147	0,0425
268	1944,68	1948,05	1930,24	1946,36	1908,45	1989,00	1908,45	0,3772	0,0196
269	1945,02	1948,05	1959,70	1946,36	1908,45	1989,00	1908,45	0,4397	0,0034
270	1945,36	1948,05	1959,70	1946,36	1908,45	1989,00	1908,45	0,5022	0,0263
271	1945,70	1948,05	1959,70	1946,36	1908,45	1989,00	1908,45	0,5647	0,0493
272	1946,03	1948,05	1959,70	1946,36	1908,45	1989,00	1908,45	0,6272	0,0722
273	1946,37	1948,05	1959,70	1946,36	1908,45	1989,00	1908,45	0,6897	0,0951
274	1946,71	1948,05	1959,70	1946,36	1908,45	1989,00	1908,45	0,7522	0,1181
275	1947,05	1948,05	1959,70	1946,36	1908,45	1989,00	1908,45	0,8147	0,1410
276	1947,39	1948,05	1959,70	1946,36	1908,45	1989,00	1908,45	0,8772	0,1640

Table 7. Page 6b

A	K	L	M	N	O	P	Q	R	S	T
247	0,6853	0,3671	0,5840	0,9479	4,0209	5,345	17,094	1937,6	75,2	62,4
248	0,7744	0,3598	0,5868	0,9473	4,0193	5,345	17,125	1937,9	75,2	61,6
249	0,8635	0,3524	0,5895	0,9467	4,0178	5,345	17,156	1938,3	75,2	60,9
250	0,9526	0,3451	0,5922	0,9461	4,0163	5,345	17,188	1938,6	75,1	60,3
251	0,9583	0,3377	0,5950	0,9455	3,9313	5,345	17,219	1938,9	73,5	59,8
252	0,8692	0,3304	0,5977	0,9449	3,7516	5,345	17,250	1939,3	70,2	59,4
253	0,7801	0,3231	0,6004	0,9443	3,5718	5,345	17,281	1939,6	66,8	59,1
254	0,6910	0,3157	0,6032	0,9436	3,3921	5,345	17,313	1940,0	63,5	59,0
255	0,6019	0,3084	0,6059	0,9430	3,2123	5,345	17,344	1940,3	60,1	58,9
256	0,5128	0,3010	0,6086	0,9424	3,0326	5,345	17,375	1940,6	56,7	59,0
257	0,4237	0,2937	0,6114	0,9418	2,8528	5,345	17,406	1941,0	53,4	59,2
258	0,3346	0,2864	0,6141	0,9412	2,6730	5,345	17,438	1941,3	50,0	59,3
259	0,2455	0,2790	0,6168	0,9406	2,4933	5,345	17,469	1941,6	46,6	59,3
260	0,1564	0,2717	0,6196	0,9400	2,3135	5,345	17,500	1942,0	43,3	59,2
261	0,0672	0,2644	0,6223	0,9394	2,1338	5,345	17,531	1942,3	39,9	59,0
262	0,0219	0,2570	0,6250	0,9388	2,0021	5,345	17,563	1942,7	37,5	58,8
263	0,1110	0,2497	0,6278	0,9382	2,1256	5,345	17,594	1943,0	39,8	58,4
264	0,2001	0,2423	0,6305	0,9376	2,2491	5,345	17,625	1943,3	42,1	58,0
265	0,2892	0,2350	0,6332	0,9370	2,3725	5,345	17,656	1943,7	44,4	57,4
266	0,3783	0,2277	0,6360	0,9364	2,4960	5,345	17,688	1944,0	46,7	56,8
267	0,4674	0,2203	0,6387	0,9358	2,6194	5,345	17,719	1944,3	49,0	56,2
268	0,5565	0,2130	0,6414	0,9352	2,7429	5,345	17,750	1944,7	51,3	55,5
269	0,6456	0,2056	0,6442	0,9346	2,8731	5,345	17,781	1945,0	53,7	54,9
270	0,7347	0,1983	0,6469	0,9340	3,0424	5,345	17,813	1945,4	56,9	54,4
271	0,8238	0,1910	0,6496	0,9334	3,2118	5,345	17,844	1945,7	60,1	54,1
272	0,9129	0,1836	0,6524	0,9328	3,3811	5,345	17,875	1946,0	63,3	53,9
273	0,9979	0,1763	0,6551	0,9322	3,5463	5,345	17,906	1946,4	66,3	53,8
274	0,9088	0,1690	0,6578	0,9316	3,5375	5,345	17,938	1946,7	66,2	53,8
275	0,8197	0,1616	0,6606	0,9310	3,5286	5,345	17,969	1947,0	66,0	54,0
276	0,7306	0,1543	0,6633	0,9304	3,5197	5,345	18,000	1947,4	65,8	54,3

Table 7. Page 7a

A	B	C	D	E	F	G	H	I	J
277	1947,72	1948,05	1959,70	1946,36	1908,45	1989,00	1908,45	0,9397	0,1869
278	1948,06	1948,05	1959,70	1946,36	1908,45	1989,00	1908,45	0,9978	0,2098
279	1948,40	1948,05	1959,70	1946,36	1908,45	1989,00	1908,45	0,9353	0,2328
280	1948,74	1948,05	1959,70	1946,36	1908,45	1989,00	1908,45	0,8728	0,2557
281	1949,08	1948,05	1959,70	1946,36	1908,45	1989,00	1908,45	0,8103	0,2787
282	1949,41	1948,05	1959,70	1946,36	1908,45	1989,00	1908,45	0,7478	0,3016
283	1949,75	1948,05	1959,70	1946,36	1908,45	1989,00	1908,45	0,6853	0,3245
284	1950,09	1948,05	1959,70	1946,36	1908,45	1989,00	1908,45	0,6228	0,3475
285	1950,43	1948,05	1959,70	1953,95	1908,45	1989,00	1908,45	0,5603	0,3704
286	1950,76	1948,05	1959,70	1953,95	1908,45	1989,00	1908,45	0,4978	0,3934
287	1951,10	1948,05	1959,70	1953,95	1908,45	1989,00	1908,45	0,4353	0,4163
288	1951,44	1948,05	1959,70	1953,95	1908,45	1989,00	1908,45	0,3728	0,4392
289	1951,78	1948,05	1959,70	1953,95	1908,45	1989,00	1908,45	0,3103	0,4622
290	1952,12	1948,05	1959,70	1953,95	1908,45	1989,00	1908,45	0,2478	0,4851
291	1952,45	1948,05	1959,70	1953,95	1908,45	1989,00	1908,45	0,1853	0,5081
292	1952,79	1948,05	1959,70	1953,95	1908,45	1989,00	1908,45	0,1228	0,5310
293	1953,13	1948,05	1959,70	1953,95	1908,45	1989,00	1908,45	0,0603	0,5540
294	1953,47	1958,86	1959,70	1953,95	1908,45	1989,00	1908,45	0,0022	0,5769
295	1953,81	1958,86	1959,70	1953,95	1908,45	1989,00	1908,45	0,0647	0,5998
296	1954,14	1958,86	1959,70	1953,95	1908,45	1989,00	1908,45	0,1272	0,6228
297	1954,48	1958,86	1959,70	1953,95	1908,45	1989,00	1908,45	0,1897	0,6457
298	1954,82	1958,86	1959,70	1953,95	2000,53	1989,00	1908,45	0,2522	0,6687
299	1955,16	1958,86	1959,70	1953,95	2000,53	1989,00	1908,45	0,3147	0,6916
300	1955,50	1958,86	1959,70	1953,95	2000,53	1989,00	1908,45	0,3772	0,7145
301	1955,83	1958,86	1959,70	1953,95	2000,53	1989,00	1908,45	0,4397	0,7375
302	1956,17	1958,86	1959,70	1953,95	2000,53	1989,00	1908,45	0,5022	0,7604
303	1956,51	1958,86	1959,70	1953,95	2000,53	1989,00	1908,45	0,5647	0,7834
304	1956,85	1958,86	1959,70	1953,95	2000,53	1989,00	1908,45	0,6272	0,8063
305	1957,18	1958,86	1959,70	1953,95	2000,53	1989,00	1908,45	0,6897	0,8292
306	1957,52	1958,86	1959,70	1953,95	2000,53	1989,00	1908,45	0,7522	0,8522

Table 7. Page 7b

A	K	L	M	N	O	P	Q	R	S	T
277	0,6415	0,1469	0,6660	0,9297	3,5108	5,345	18,031	1947,7	65,7	54,7
278	0,5524	0,1396	0,6688	0,9291	3,4976	5,345	18,063	1948,1	65,4	55,3
279	0,4633	0,1323	0,6715	0,9285	3,3637	5,345	18,094	1948,4	62,9	56,0
280	0,3742	0,1249	0,6742	0,9279	3,2298	5,345	18,125	1948,7	60,4	56,7
281	0,2851	0,1176	0,6770	0,9273	3,0960	5,345	18,156	1949,1	57,9	57,3
282	0,1960	0,1103	0,6797	0,9267	2,9621	5,345	18,188	1949,4	55,4	57,8
283	0,1069	0,1029	0,6824	0,9261	2,8282	5,345	18,219	1949,8	52,9	58,3
284	0,0178	0,0956	0,6852	0,9255	2,6943	5,345	18,250	1950,1	50,4	58,7
285	0,0714	0,0882	0,6879	0,9249	2,7032	5,345	18,281	1950,4	50,6	59,1
286	0,1605	0,0809	0,6906	0,9243	2,7475	5,345	18,313	1950,8	51,4	59,3
287	0,2496	0,0736	0,6934	0,9237	2,7918	5,345	18,344	1951,1	52,2	59,5
288	0,3387	0,0662	0,6961	0,9231	2,8362	5,345	18,375	1951,4	53,1	59,6
289	0,4278	0,0589	0,6988	0,9225	2,8805	5,345	18,406	1951,8	53,9	59,6
290	0,5169	0,0515	0,7016	0,9219	2,9248	5,345	18,438	1952,1	54,7	59,5
291	0,6060	0,0442	0,7043	0,9213	2,9692	5,345	18,469	1952,5	55,5	59,5
292	0,6951	0,0369	0,7070	0,9207	3,0135	5,345	18,500	1952,8	56,4	59,5
293	0,7842	0,0295	0,7098	0,9201	3,0579	5,345	18,531	1953,1	57,2	59,7
294	0,8733	0,0222	0,7125	0,9195	3,1066	5,345	18,563	1953,5	58,1	60,0
295	0,9624	0,0149	0,7152	0,9189	3,2759	5,345	18,594	1953,8	61,3	60,3
296	0,9485	0,0075	0,7180	0,9183	3,3422	5,345	18,625	1954,1	62,5	60,7
297	0,8594	0,0002	0,7207	0,9177	3,3333	5,345	18,656	1954,5	62,4	61,3
298	0,7703	0,0072	0,7234	0,9171	3,3388	5,345	18,688	1954,8	62,5	61,9
299	0,6811	0,0145	0,7262	0,9165	3,3446	5,345	18,719	1955,2	62,6	62,6
300	0,5920	0,0218	0,7289	0,9158	3,3504	5,345	18,750	1955,5	62,7	63,3
301	0,5029	0,0292	0,7316	0,9152	3,3562	5,345	18,781	1955,8	62,8	64,2
302	0,4138	0,0365	0,7344	0,9146	3,3620	5,345	18,813	1956,2	62,9	65,0
303	0,3247	0,0439	0,7371	0,9140	3,3678	5,345	18,844	1956,5	63,0	65,8
304	0,2356	0,0512	0,7399	0,9134	3,3736	5,345	18,875	1956,8	63,1	66,4
305	0,1465	0,0585	0,7426	0,9128	3,3794	5,345	18,906	1957,2	63,2	66,9
306	0,0574	0,0659	0,7453	0,9122	3,3852	5,345	18,938	1957,5	63,3	67,2

Table 7. Page 8a

A	B	C	D	E	F	G	H	I	J
307	1957,86	1958,86	1959,70	1961,53	2000,53	1989,00	1908,45	0,8147	0,8751
308	1958,20	1958,86	1959,70	1961,53	2000,53	1989,00	1908,45	0,8772	0,8981
309	1958,54	1958,86	1959,70	1961,53	2000,53	1989,00	1908,45	0,9397	0,9210
310	1958,87	1958,86	1959,70	1961,53	2000,53	1989,00	1908,45	0,9978	0,9439
311	1959,21	1958,86	1959,70	1961,53	2000,53	1989,00	1908,45	0,9353	0,9669
312	1959,55	1958,86	1959,70	1961,53	2000,53	1989,00	1908,45	0,8728	0,9898
313	1959,89	1958,86	1959,70	1961,53	2000,53	1989,00	1908,45	0,8103	0,9872
314	1960,23	1958,86	1959,70	1961,53	2000,53	1989,00	1908,45	0,7478	0,9643
315	1960,56	1958,86	1959,70	1961,53	2000,53	1989,00	1908,45	0,6853	0,9414
316	1960,90	1958,86	1959,70	1961,53	2000,53	1989,00	1908,45	0,6228	0,9184
317	1961,24	1958,86	1959,70	1961,53	2000,53	1989,00	1908,45	0,5603	0,8955
318	1961,58	1958,86	1959,70	1961,53	2000,53	1989,00	1908,45	0,4978	0,8725
319	1961,92	1958,86	1959,70	1961,53	2000,53	1989,00	1908,45	0,4353	0,8496
320	1962,25	1958,86	1959,70	1961,53	2000,53	1989,00	1908,45	0,3728	0,8267
321	1962,59	1958,86	1959,70	1961,53	2000,53	1989,00	1908,45	0,3103	0,8037
322	1962,93	1958,86	1959,70	1961,53	2000,53	1989,00	1908,45	0,2478	0,7808
323	1963,27	1958,86	1959,70	1961,53	2000,53	1989,00	1908,45	0,1853	0,7578
324	1963,60	1958,86	1959,70	1961,53	2000,53	1989,00	1908,45	0,1228	0,7349
325	1963,94	1958,86	1959,70	1961,53	2000,53	1989,00	1908,45	0,0603	0,7120
326	1964,28	1969,68	1959,70	1961,53	2000,53	1989,00	1908,45	0,0022	0,6890
327	1964,62	1969,68	1959,70	1961,53	2000,53	1989,00	1908,45	0,0647	0,6661
328	1964,96	1969,68	1959,70	1961,53	2000,53	1989,00	1908,45	0,1272	0,6431
329	1965,29	1969,68	1959,70	1961,53	2000,53	1989,00	1908,45	0,1897	0,6202
330	1965,63	1969,68	1959,70	1969,12	2000,53	1989,00	1908,45	0,2522	0,5972
331	1965,97	1969,68	1959,70	1969,12	2000,53	1989,00	1908,45	0,3147	0,5743
332	1966,31	1969,68	1959,70	1969,12	2000,53	1989,00	1908,45	0,3772	0,5514
333	1966,65	1969,68	1959,70	1969,12	2000,53	1989,00	1908,45	0,4397	0,5284
334	1966,98	1969,68	1959,70	1969,12	2000,53	1989,00	1908,45	0,5022	0,5055
335	1967,32	1969,68	1959,70	1969,12	2000,53	1989,00	1908,45	0,5647	0,4825
336	1967,66	1969,68	1959,70	1969,12	2000,53	1989,00	1908,45	0,6272	0,4596

Table 7. Page 8b

A	K	L	M	N	O	P	Q	R	S	T
307	0,0317	0,0732	0,7481	0,9116	3,4544	5,345	18,969	1957,9	64,6	67,5
308	0,1208	0,0805	0,7508	0,9110	3,6384	5,345	19,000	1958,2	68,1	67,6
309	0,2099	0,0879	0,7535	0,9104	3,8224	5,345	19,031	1958,5	71,5	67,6
310	0,2990	0,0952	0,7563	0,9098	4,0021	5,345	19,063	1958,9	74,9	67,5
311	0,3882	0,1026	0,7590	0,9092	4,0611	5,345	19,094	1959,2	76,0	67,4
312	0,4773	0,1099	0,7617	0,9086	4,1201	5,345	19,125	1959,6	77,1	67,1
313	0,5664	0,1172	0,7645	0,9080	4,1536	5,345	19,156	1959,9	77,7	66,8
314	0,6555	0,1246	0,7672	0,9074	4,1667	5,345	19,188	1960,2	77,9	66,5
315	0,7446	0,1319	0,7699	0,9068	4,1799	5,345	19,219	1960,6	78,2	66,3
316	0,8337	0,1393	0,7727	0,9062	4,1930	5,345	19,250	1960,9	78,4	66,2
317	0,9228	0,1466	0,7754	0,9056	4,2061	5,345	19,281	1961,2	78,7	66,2
318	0,9881	0,1539	0,7781	0,9050	4,1955	5,345	19,313	1961,6	78,5	66,3
319	0,8990	0,1613	0,7809	0,9044	4,0304	5,345	19,344	1961,9	75,4	66,4
320	0,8099	0,1686	0,7836	0,9038	3,8653	5,345	19,375	1962,3	72,3	66,6
321	0,7208	0,1759	0,7863	0,9032	3,7002	5,345	19,406	1962,6	69,2	66,8
322	0,6317	0,1833	0,7891	0,9026	3,5352	5,345	19,438	1962,9	66,1	67,2
323	0,5426	0,1906	0,7918	0,9019	3,3701	5,345	19,469	1963,3	63,0	67,6
324	0,4535	0,1980	0,7945	0,9013	3,2050	5,345	19,500	1963,6	60,0	68,1
325	0,3644	0,2053	0,7973	0,9007	3,0399	5,345	19,531	1963,9	56,9	68,4
326	0,2752	0,2126	0,8000	0,9001	2,8792	5,345	19,563	1964,3	53,9	68,7
327	0,1861	0,2200	0,8027	0,8995	2,8391	5,345	19,594	1964,6	53,1	68,7
328	0,0970	0,2273	0,8055	0,8989	2,7991	5,345	19,625	1965,0	52,4	68,6
329	0,0079	0,2347	0,8082	0,8983	2,7590	5,345	19,656	1965,3	51,6	68,4
330	0,0812	0,2420	0,8109	0,8977	2,8813	5,345	19,688	1965,6	53,9	68,1
331	0,1703	0,2493	0,8137	0,8971	3,0194	5,345	19,719	1966,0	56,5	67,6
332	0,2594	0,2567	0,8164	0,8965	3,1575	5,345	19,750	1966,3	59,1	67,1
333	0,3485	0,2640	0,8191	0,8959	3,2957	5,345	19,781	1966,6	61,7	66,5
334	0,4376	0,2713	0,8219	0,8953	3,4338	5,345	19,813	1967,0	64,2	65,7
335	0,5267	0,2787	0,8246	0,8947	3,5719	5,345	19,844	1967,3	66,8	64,9
336	0,6158	0,2860	0,8273	0,8941	3,7101	5,345	19,875	1967,7	69,4	64,1

Table 7. Page 9a

A	B	C	D	E	F	G	H	I	J
337	1968,00	1969,68	1959,70	1969,12	2000,53	1989,00	1908,45	0,6897	0,4367
338	1968,34	1969,68	1959,70	1969,12	2000,53	1989,00	1908,45	0,7522	0,4137
339	1968,67	1969,68	1959,70	1969,12	2000,53	1989,00	1908,45	0,8147	0,3908
340	1969,01	1969,68	1959,70	1969,12	2000,53	1989,00	1908,45	0,8772	0,3678
341	1969,35	1969,68	1959,70	1969,12	2000,53	1989,00	1908,45	0,9397	0,3449
342	1969,69	1969,68	1959,70	1969,12	2000,53	1989,00	1908,45	0,9978	0,3220
343	1970,02	1969,68	1959,70	1969,12	2000,53	1989,00	1908,45	0,9353	0,2990
344	1970,36	1969,68	1959,70	1969,12	2000,53	1989,00	1908,45	0,8728	0,2761
345	1970,70	1969,68	1959,70	1969,12	2000,53	1989,00	1908,45	0,8103	0,2531
346	1971,04	1969,68	1959,70	1969,12	2000,53	1989,00	1908,45	0,7478	0,2302
347	1971,38	1969,68	1959,70	1969,12	2000,53	1989,00	1908,45	0,6853	0,2073
348	1971,71	1969,68	1959,70	1969,12	2000,53	1989,00	1908,45	0,6228	0,1843
349	1972,05	1969,68	1959,70	1969,12	2000,53	1989,00	1908,45	0,5603	0,1614
350	1972,39	1969,68	1959,70	1969,12	2000,53	1989,00	1908,45	0,4978	0,1384
351	1972,73	1969,68	1959,70	1969,12	2000,53	1989,00	1908,45	0,4353	0,1155
352	1973,07	1969,68	1959,70	1976,70	2000,53	1989,00	1908,45	0,3728	0,0926
353	1973,40	1969,68	1959,70	1976,70	2000,53	1989,00	1908,45	0,3103	0,0696
354	1973,74	1969,68	1959,70	1976,70	2000,53	1989,00	1908,45	0,2478	0,0467
355	1974,08	1969,68	1959,70	1976,70	2000,53	1989,00	1908,45	0,1853	0,0237
356	1974,42	1969,68	1959,70	1976,70	2000,53	1989,00	1908,45	0,1228	0,0008
357	1974,76	1969,68	1989,16	1976,70	2000,53	1989,00	1908,45	0,0603	0,0221
358	1975,09	1980,49	1989,16	1976,70	2000,53	1989,00	1908,45	0,0022	0,0451
359	1975,43	1980,49	1989,16	1976,70	2000,53	1989,00	1908,45	0,0647	0,0680
360	1975,77	1980,49	1989,16	1976,70	2000,53	1989,00	1908,45	0,1272	0,0910
361	1976,11	1980,49	1989,16	1976,70	2000,53	1989,00	1908,45	0,1897	0,1139
362	1976,44	1980,49	1989,16	1976,70	2000,53	1989,00	1908,45	0,2522	0,1369
363	1976,78	1980,49	1989,16	1976,70	2000,53	1989,00	1908,45	0,3147	0,1598
364	1977,12	1980,49	1989,16	1976,70	2000,53	1989,00	1908,45	0,3772	0,1827
365	1977,46	1980,49	1989,16	1976,70	2000,53	1989,00	1908,45	0,4397	0,2057
366	1977,80	1980,49	1989,16	1976,70	2000,53	1989,00	1908,45	0,5022	0,2286

Table 7. Page 9b

A	K	L	M	N	O	P	Q	R	S	T
337	0,7050	0,2934	0,8301	0,8935	3,8482	5,345	19,906	1968,0	72,0	63,5
338	0,7941	0,3007	0,8328	0,8929	3,9863	5,345	19,938	1968,3	74,6	62,9
339	0,8832	0,3080	0,8355	0,8923	4,1245	5,345	19,969	1968,7	77,2	62,4
340	0,9723	0,3154	0,8383	0,8917	4,2626	5,345	20,000	1969,0	79,7	62,1
341	0,9386	0,3227	0,8410	0,8911	4,2780	5,345	20,031	1969,3	80,0	61,8
342	0,8495	0,3300	0,8437	0,8905	4,2335	5,345	20,063	1969,7	79,2	61,7
343	0,7604	0,3374	0,8465	0,8899	4,0685	5,345	20,094	1970,0	76,1	61,8
344	0,6713	0,3447	0,8492	0,8893	3,9034	5,345	20,125	1970,4	73,0	62,0
345	0,5822	0,3521	0,8519	0,8887	3,7383	5,345	20,156	1970,7	69,9	62,3
346	0,4931	0,3594	0,8547	0,8880	3,5732	5,345	20,188	1971,0	66,8	62,8
347	0,4040	0,3667	0,8574	0,8874	3,4081	5,345	20,219	1971,4	63,8	63,3
348	0,3149	0,3741	0,8601	0,8868	3,2431	5,345	20,250	1971,7	60,7	63,7
349	0,2258	0,3814	0,8629	0,8862	3,0780	5,345	20,281	1972,1	57,6	64,0
350	0,1367	0,3888	0,8656	0,8856	2,9129	5,345	20,313	1972,4	54,5	64,2
351	0,0476	0,3961	0,8683	0,8850	2,7478	5,345	20,344	1972,7	51,4	64,4
352	0,0416	0,4034	0,8711	0,8844	2,6659	5,345	20,375	1973,1	49,9	64,5
353	0,1307	0,4108	0,8738	0,8838	2,6790	5,345	20,406	1973,4	50,1	64,5
354	0,2198	0,4181	0,8765	0,8832	2,6921	5,345	20,438	1973,7	50,4	64,5
355	0,3089	0,4254	0,8793	0,8826	2,7053	5,345	20,469	1974,1	50,6	64,3
356	0,3980	0,4328	0,8820	0,8820	2,7184	5,345	20,500	1974,4	50,9	64,1
357	0,4871	0,4401	0,8847	0,8814	2,7758	5,345	20,531	1974,8	51,9	63,9
358	0,5762	0,4475	0,8875	0,8808	2,8392	5,345	20,563	1975,1	53,1	63,6
359	0,6653	0,4548	0,8902	0,8802	3,0232	5,345	20,594	1975,4	56,6	63,4
360	0,7544	0,4621	0,8929	0,8796	3,2073	5,345	20,625	1975,8	60,0	63,3
361	0,8435	0,4695	0,8957	0,8790	3,3913	5,345	20,656	1976,1	63,4	63,3
362	0,9326	0,4768	0,8984	0,8784	3,5753	5,345	20,688	1976,4	66,9	63,4
363	0,9783	0,4842	0,9011	0,8778	3,7158	5,345	20,719	1976,8	69,5	63,7
364	0,8891	0,4915	0,9039	0,8772	3,7216	5,345	20,750	1977,1	69,6	64,1
365	0,8000	0,4988	0,9066	0,8766	3,7274	5,345	20,781	1977,5	69,7	64,7
366	0,7109	0,5062	0,9094	0,8760	3,7332	5,345	20,813	1977,8	69,8	65,3

Table 7. Page 10a

A	B	C	D	E	F	G	H	I	J
367	1978,13	1980,49	1989,16	1976,70	2000,53	1989,00	1908,45	0,5647	0,2516
368	1978,47	1980,49	1989,16	1976,70	2000,53	1989,00	1908,45	0,6272	0,2745
369	1978,81	1980,49	1989,16	1976,70	2000,53	1989,00	1908,45	0,6897	0,2974
370	1979,15	1980,49	1989,16	1976,70	2000,53	1989,00	1908,45	0,7522	0,3204
371	1979,49	1980,49	1989,16	1976,70	2000,53	1989,00	1908,45	0,8147	0,3433
372	1979,82	1980,49	1989,16	1976,70	2000,53	1989,00	1908,45	0,8772	0,3663
373	1980,16	1980,49	1989,16	1976,70	2000,53	1989,00	1908,45	0,9397	0,3892
374	1980,50	1980,49	1989,16	1984,28	2000,53	1989,00	1908,45	0,9978	0,4121
375	1980,84	1980,49	1989,16	1984,28	2000,53	1989,00	1908,45	0,9353	0,4351
376	1981,18	1980,49	1989,16	1984,28	2000,53	1989,00	1908,45	0,8728	0,4580
377	1981,51	1980,49	1989,16	1984,28	2000,53	1989,00	1908,45	0,8103	0,4810
378	1981,85	1980,49	1989,16	1984,28	2000,53	1989,00	1908,45	0,7478	0,5039
379	1982,19	1980,49	1989,16	1984,28	2000,53	1989,00	1908,45	0,6853	0,5268
380	1982,53	1980,49	1989,16	1984,28	2000,53	1989,00	1908,45	0,6228	0,5498
381	1982,86	1980,49	1989,16	1984,28	2000,53	1989,00	1908,45	0,5603	0,5727
382	1983,20	1980,49	1989,16	1984,28	2000,53	1989,00	1908,45	0,4978	0,5957
383	1983,54	1980,49	1989,16	1984,28	2000,53	1989,00	1908,45	0,4353	0,6186
384	1983,88	1980,49	1989,16	1984,28	2000,53	1989,00	1908,45	0,3728	0,6415
385	1984,22	1980,49	1989,16	1984,28	2000,53	1989,00	1908,45	0,3103	0,6645
386	1984,55	1980,49	1989,16	1984,28	2000,53	1989,00	1908,45	0,2478	0,6874
387	1984,89	1980,49	1989,16	1984,28	2000,53	1989,00	1908,45	0,1853	0,7104
388	1985,23	1980,49	1989,16	1984,28	2000,53	1989,00	1908,45	0,1228	0,7333
389	1985,57	1980,49	1989,16	1984,28	2000,53	1989,00	1908,45	0,0603	0,7562
390	1985,91	1991,30	1989,16	1984,28	2000,53	1989,00	1908,45	0,0022	0,7792
391	1986,24	1991,30	1989,16	1984,28	2000,53	1989,00	1908,45	0,0647	0,8021
392	1986,58	1991,30	1989,16	1984,28	2000,53	1989,00	1908,45	0,1272	0,8251
393	1986,92	1991,30	1989,16	1984,28	2000,53	1989,00	1908,45	0,1897	0,8480
394	1987,26	1991,30	1989,16	1984,28	2000,53	1989,00	1908,45	0,2522	0,8709
395	1987,60	1991,30	1989,16	1984,28	2000,53	1989,00	1908,45	0,3147	0,8939
396	1987,93	1991,30	1989,16	1984,28	2000,53	1989,00	1908,45	0,3772	0,9168

Table 7. Page 10b

A	K	L	M	N	O	P	Q	R	S	T
367	0,6218	0,5135	0,9121	0,8754	3,7390	5,345	20,844	1978,1	69,9	66,1
368	0,5327	0,5208	0,9148	0,8748	3,7448	5,345	20,875	1978,5	70,1	67,1
369	0,4436	0,5282	0,9176	0,8741	3,7506	5,345	20,906	1978,8	70,2	68,1
370	0,3545	0,5355	0,9203	0,8735	3,7564	5,345	20,938	1979,1	70,3	69,0
371	0,2654	0,5429	0,9230	0,8729	3,7622	5,345	20,969	1979,5	70,4	69,9
372	0,1763	0,5502	0,9258	0,8723	3,7680	5,345	21,000	1979,8	70,5	70,7
373	0,0872	0,5575	0,9285	0,8717	3,7738	5,345	21,031	1980,2	70,6	71,4
374	0,0019	0,5649	0,9312	0,8711	3,7791	5,345	21,063	1980,5	70,7	72,0
375	0,0911	0,5722	0,9340	0,8705	3,8381	5,345	21,094	1980,8	71,8	72,6
376	0,1802	0,5796	0,9367	0,8699	3,8972	5,345	21,125	1981,2	72,9	73,1
377	0,2693	0,5869	0,9394	0,8693	3,9562	5,345	21,156	1981,5	74,0	73,5
378	0,3584	0,5942	0,9422	0,8687	4,0152	5,345	21,188	1981,9	75,1	73,8
379	0,4475	0,6016	0,9449	0,8681	4,0742	5,345	21,219	1982,2	76,2	73,9
380	0,5366	0,6089	0,9476	0,8675	4,1332	5,345	21,250	1982,5	77,3	74,0
381	0,6257	0,6162	0,9504	0,8669	4,1922	5,345	21,281	1982,9	78,4	74,2
382	0,7148	0,6236	0,9531	0,8663	4,2512	5,345	21,313	1983,2	79,5	74,5
383	0,8039	0,6309	0,9558	0,8657	4,3103	5,345	21,344	1983,5	80,6	74,8
384	0,8930	0,6383	0,9586	0,8651	4,3693	5,345	21,375	1983,9	81,7	75,3
385	0,9821	0,6456	0,9613	0,8645	4,4283	5,345	21,406	1984,2	82,8	75,8
386	0,9288	0,6529	0,9640	0,8639	4,3449	5,345	21,438	1984,6	81,3	76,4
387	0,8397	0,6603	0,9668	0,8633	4,2257	5,345	21,469	1984,9	79,1	77,1
388	0,7506	0,6676	0,9695	0,8627	4,1065	5,345	21,500	1985,2	76,8	77,9
389	0,6615	0,6750	0,9722	0,8621	3,9873	5,345	21,531	1985,6	74,6	78,7
390	0,5724	0,6823	0,9750	0,8615	3,8724	5,345	21,563	1985,9	72,4	79,6
391	0,4832	0,6896	0,9777	0,8609	3,8782	5,345	21,594	1986,2	72,6	80,4
392	0,3941	0,6970	0,9804	0,8602	3,8840	5,345	21,625	1986,6	72,7	81,3
393	0,3050	0,7043	0,9832	0,8596	3,8898	5,345	21,656	1986,9	72,8	82,0
394	0,2159	0,7116	0,9859	0,8590	3,8956	5,345	21,688	1987,3	72,9	82,5
395	0,1268	0,7190	0,9886	0,8584	3,9014	5,345	21,719	1987,6	73,0	83,0
396	0,0377	0,7263	0,9914	0,8578	3,9072	5,345	21,750	1987,9	73,1	83,3

Table 7. Page 11a

A	B	C	D	E	F	G	H	I	J
397	1988,27	1991,30	1989,16	1991,87	2000,53	1989,00	1908,45	0,4397	0,9398
398	1988,61	1991,30	1989,16	1991,87	2000,53	1989,00	1908,45	0,5022	0,9627
399	1988,95	1991,30	1989,16	1991,87	2000,53	1989,00	1908,45	0,5647	0,9857
400	1989,28	1991,30	1989,16	1991,87	2000,53	1989,00	1908,45	0,6272	0,9914
401	1989,62	1991,30	1989,16	1991,87	2000,53	1989,00	1908,45	0,6897	0,9685
402	1989,96	1991,30	1989,16	1991,87	2000,53	1989,00	1908,45	0,7522	0,9455
403	1990,30	1991,30	1989,16	1991,87	2000,53	1989,00	1908,45	0,8147	0,9226
404	1990,64	1991,30	1989,16	1991,87	2000,53	1989,00	1908,45	0,8772	0,8996
405	1990,97	1991,30	1989,16	1991,87	2000,53	1989,00	1908,45	0,9397	0,8767
406	1991,31	1991,30	1989,16	1991,87	2000,53	1989,00	1908,45	0,9978	0,8538
407	1991,65	1991,30	1989,16	1991,87	2000,53	1989,00	1908,45	0,9353	0,8308
408	1991,99	1991,30	1989,16	1991,87	2000,53	1989,00	1908,45	0,8728	0,8079
409	1992,33	1991,30	1989,16	1991,87	2000,53	1989,00	1908,45	0,8103	0,7849
410	1992,66	1991,30	1989,16	1991,87	2000,53	1989,00	1908,45	0,7478	0,7620
411	1993,00	1991,30	1989,16	1991,87	2000,53	1989,00	1908,45	0,6853	0,7391
412	1993,34	1991,30	1989,16	1991,87	2000,53	1989,00	1908,45	0,6228	0,7161
413	1993,68	1991,30	1989,16	1991,87	2000,53	1989,00	1908,45	0,5603	0,6932
414	1994,02	1991,30	1989,16	1991,87	2000,53	1989,00	1908,45	0,4978	0,6702
415	1994,35	1991,30	1989,16	1991,87	2000,53	1989,00	1908,45	0,4353	0,6473
416	1994,69	1991,30	1989,16	1991,87	2000,53	1989,00	1908,45	0,3728	0,6244
417	1995,03	1991,30	1989,16	1991,87	2000,53	1989,00	1908,45	0,3103	0,6014
418	1995,37	1991,30	1989,16	1991,87	2000,53	1989,00	1908,45	0,2478	0,5785
419	1995,70	1991,30	1989,16	1999,45	2000,53	1989,00	1908,45	0,1853	0,5555
420	1996,04	1991,30	1989,16	1999,45	2000,53	1989,00	1908,45	0,1228	0,5326
421	1996,38	1991,30	1989,16	1999,45	2000,53	1989,00	1908,45	0,0603	0,5097
422	1996,72	2002,11	1989,16	1999,45	2000,53	1989,00	1908,45	0,0022	0,4867
423	1997,06	2002,11	1989,16	1999,45	2000,53	1989,00	1908,45	0,0647	0,4638
424	1997,39	2002,11	1989,16	1999,45	2000,53	1989,00	1908,45	0,1272	0,4408
425	1997,73	2002,11	1989,16	1999,45	2000,53	1989,00	1908,45	0,1897	0,4179
426	1998,07	2002,11	1989,16	1999,45	2000,53	1989,00	1908,45	0,2522	0,3950

Table 7. Page 11b

A	K	L	M	N	O	P	Q	R	S	T
397	0,0514	0,7337	0,9941	0,8572	4,0159	5,345	21,781	1988,3	75,1	83,4
398	0,1405	0,7410	0,9968	0,8566	4,1999	5,345	21,813	1988,6	78,6	83,5
399	0,2296	0,7483	0,9996	0,8560	4,3839	5,345	21,844	1988,9	82,0	83,4
400	0,3187	0,7557	0,9977	0,8554	4,5461	5,345	21,875	1989,3	85,0	83,2
401	0,4078	0,7630	0,9950	0,8548	4,6788	5,345	21,906	1989,6	87,5	82,8
402	0,4970	0,7703	0,9922	0,8542	4,8114	5,345	21,938	1990,0	90,0	82,3
403	0,5861	0,7777	0,9895	0,8536	4,9441	5,345	21,969	1990,3	92,5	81,8
404	0,6752	0,7850	0,9868	0,8530	5,0768	5,345	22,000	1990,6	95,0	81,4
405	0,7643	0,7924	0,9840	0,8524	5,2094	5,345	22,031	1991,0	97,5	81,0
406	0,8534	0,7997	0,9813	0,8518	5,3377	5,345	22,063	1991,3	99,9	80,7
407	0,9425	0,8070	0,9786	0,8512	5,3454	5,345	22,094	1991,6	100,0	80,6
408	0,9684	0,8144	0,9758	0,8506	5,2899	5,345	22,125	1992,0	99,0	80,5
409	0,8793	0,8217	0,9731	0,8500	5,1193	5,345	22,156	1992,3	95,8	80,5
410	0,7902	0,8291	0,9704	0,8494	4,9488	5,345	22,188	1992,7	92,6	80,5
411	0,7011	0,8364	0,9676	0,8488	4,7782	5,345	22,219	1993,0	89,4	80,7
412	0,6120	0,8437	0,9649	0,8482	4,6077	5,345	22,250	1993,3	86,2	80,9
413	0,5229	0,8511	0,9622	0,8476	4,4372	5,345	22,281	1993,7	83,0	81,1
414	0,4338	0,8584	0,9594	0,8470	4,2666	5,345	22,313	1994,0	79,8	81,4
415	0,3447	0,8657	0,9567	0,8463	4,0961	5,345	22,344	1994,4	76,6	81,6
416	0,2556	0,8731	0,9540	0,8457	3,9255	5,345	22,375	1994,7	73,4	81,6
417	0,1664	0,8804	0,9512	0,8451	3,7550	5,345	22,406	1995,0	70,2	81,6
418	0,0773	0,8878	0,9485	0,8445	3,5844	5,345	22,438	1995,4	67,1	81,5
419	0,0118	0,8951	0,9458	0,8439	3,4374	5,345	22,469	1995,7	64,3	81,4
420	0,1009	0,9024	0,9430	0,8433	3,4451	5,345	22,500	1996,0	64,4	81,2
421	0,1900	0,9098	0,9403	0,8427	3,4528	5,345	22,531	1996,4	64,6	80,8
422	0,2791	0,9171	0,9376	0,8421	3,4648	5,345	22,563	1996,7	64,8	80,3
423	0,3682	0,9245	0,9348	0,8415	3,5975	5,345	22,594	1997,1	67,3	79,7
424	0,4573	0,9318	0,9321	0,8409	3,7301	5,345	22,625	1997,4	69,8	78,9
425	0,5464	0,9391	0,9294	0,8403	3,8628	5,345	22,656	1997,7	72,3	78,1
426	0,6355	0,9465	0,9266	0,8397	3,9955	5,345	22,688	1998,1	74,7	77,3

Table 7. Page 12a

A	B	C	D	E	F	G	H	I	J
427	1998,41	2002,11	1989,16	1999,45	2000,53	1989,00	1908,45	0,3147	0,3720
428	1998,75	2002,11	1989,16	1999,45	2000,53	1989,00	1908,45	0,3772	0,3491
429	1999,08	2002,11	1989,16	1999,45	2000,53	1989,00	1908,45	0,4397	0,3261
430	1999,42	2002,11	1989,16	1999,45	2000,53	1989,00	1908,45	0,5022	0,3032
431	1999,76	2002,11	1989,16	1999,45	2000,53	1989,00	1908,45	0,5647	0,2802
432	2000,10	2002,11	1989,16	1999,45	2000,53	1989,00	1908,45	0,6272	0,2573
433	2000,43	2002,11	1989,16	1999,45	2000,53	1989,00	1908,45	0,6897	0,2344
434	2000,77	2002,11	1989,16	**2000,54**	2000,53	1989,00	1908,45	0,7522	0,2114
435	2001,11	2002,11	1989,16	2000,54	2000,53	1989,00	1908,45	0,8147	0,1885
436	2001,45	2002,11	1989,16	2000,54	2000,53	1989,00	1908,45	0,8772	0,1655
437	2001,79	2002,11	1989,16	2000,54	2000,53	1989,00	1908,45	0,9397	0,1426
438	2002,12	2002,11	1989,16	2000,54	2000,53	1989,00	1908,45	0,9978	0,1197
439	2002,46	2002,11	1989,16	2000,54	2000,53	1989,00	1908,45	0,9353	0,0967
440	2002,80	2002,11	1989,16	2000,54	2000,53	1989,00	1908,45	0,8728	0,0738
441	2003,14	2002,11	1989,16	2000,54	2000,53	1989,00	1908,45	0,8103	0,0508
442	2003,48	2002,11	1989,16	2000,54	2000,53	1989,00	1908,45	0,7478	0,0279
443	2003,81	2002,11	1989,16	2000,54	2000,53	1989,00	1908,45	0,6853	0,0050
444	2004,15	2002,11	2018,62	2000,54	2000,53	1989,00	1908,45	0,6228	0,0180
445	2004,49	2002,11	2018,62	2008,12	2000,53	1989,00	1908,45	0,5603	0,0409
446	2004,83	2002,11	2018,62	2008,12	2000,53	1989,00	1908,45	0,4978	0,0639
447	2005,17	2002,11	2018,62	2008,12	2000,53	1989,00	1908,45	0,4353	0,0868
448	2005,50	2002,11	2018,62	2008,12	2000,53	1989,00	1908,45	0,3728	0,1097
449	2005,84	2002,11	2018,62	2008,12	2000,53	1989,00	1908,45	0,3103	0,1327
450	2006,18	2002,11	2018,62	2008,12	2000,53	1989,00	1908,45	0,2478	0,1556
451	2006,52	2002,11	2018,62	2008,12	2000,53	1989,00	1908,45	0,1853	0,1786
452	2006,85	2002,11	2018,62	2008,12	2000,53	1989,00	1908,45	0,1228	0,2015
453	2007,19	2002,11	2018,62	2008,12	2000,53	1989,00	1908,45	0,0603	0,2244
454	2007,53	2012,93	2018,62	2008,12	2000,53	1989,00	1908,45	0,0022	0,2474
455	2007,87	2012,93	2018,62	2008,12	2000,53	1989,00	1908,45	0,0647	0,2703
456	2008,21	2012,93	2018,62	2008,12	2000,53	1989,00	1908,45	0,1272	0,2933

Table 7. Page 12b

A	K	L	M	N	O	P	Q	R	S	T
427	0,7246	0,9538	0,9239	0,8391	4,1281	5,345	22,719	1998,4	77,2	76,4
428	0,8137	0,9611	0,9211	0,8385	4,2608	5,345	22,750	1998,7	79,7	75,6
429	0,9029	0,9685	0,9184	0,8379	4,3935	5,345	22,781	1999,1	82,2	74,8
430	0,9920	0,9758	0,9157	0,8373	4,5261	5,345	22,813	1999,4	84,7	74,2
431	0,9189	0,9832	0,9129	0,8367	4,4967	5,345	22,844	1999,8	84,1	73,7
432	0,8298	0,9905	0,9102	0,8361	4,4511	5,345	22,875	2000,1	83,3	73,3
433	0,7407	0,9978	0,9075	0,8355	4,4056	5,345	22,906	2000,4	82,4	73,0
434	0,9373	0,9948	0,9047	0,8349	4,6353	5,345	22,938	2000,8	86,7	72,8
435	0,8482	0,9875	0,9020	0,8343	4,5751	5,345	22,969	2001,1	85,6	72,8
436	0,7591	0,9801	0,8993	0,8337	4,5149	5,345	23,000	2001,4	84,5	72,8
437	0,6699	0,9728	0,8965	0,8331	4,4546	5,345	23,031	2001,8	83,3	72,9
438	0,5808	0,9655	0,8938	0,8325	4,3901	5,345	23,063	2002,1	82,1	73,0
439	0,4917	0,9581	0,8911	0,8318	4,2048	5,345	23,094	2002,5	78,7	73,2
440	0,4026	0,9508	0,8883	0,8312	4,0196	5,345	23,125	2002,8	75,2	73,3
441	0,3135	0,9435	0,8856	0,8306	3,8344	5,345	23,156	2003,1	71,7	73,4
442	0,2244	0,9361	0,8829	0,8300	3,6492	5,345	23,188	2003,5	68,3	73,4
443	0,1353	0,9288	0,8801	0,8294	3,4639	5,345	23,219	2003,8	64,8	73,3
444	0,0462	0,9214	0,8774	0,8288	3,3147	5,345	23,250	2004,2	62,0	73,2
445	0,0429	0,9141	0,8747	0,8282	3,2612	5,345	23,281	2004,5	61,0	72,9
446	0,1320	0,9068	0,8719	0,8276	3,3000	5,345	23,313	2004,8	61,7	72,6
447	0,2211	0,8994	0,8692	0,8270	3,3389	5,345	23,344	2005,2	62,5	72,2
448	0,3103	0,8921	0,8665	0,8264	3,3778	5,345	23,375	2005,5	63,2	71,8
449	0,3994	0,8847	0,8637	0,8258	3,4166	5,345	23,406	2005,8	63,9	71,4
450	0,4885	0,8774	0,8610	0,8252	3,4555	5,345	23,438	2006,2	64,6	71,0
451	0,5776	0,8701	0,8583	0,8246	3,4944	5,345	23,469	2006,5	65,4	70,5
452	0,6667	0,8627	0,8555	0,8240	3,5333	5,345	23,500	2006,9	66,1	70,1
453	0,7558	0,8554	0,8528	0,8234	3,5721	5,345	23,531	2007,2	66,8	69,9
454	0,8449	0,8481	0,8501	0,8228	3,6154	5,345	23,563	2007,5	67,6	69,8
455	0,9340	0,8407	0,8473	0,8222	3,7792	5,345	23,594	2007,9	70,7	69,7
456	0,9769	0,8334	0,8446	0,8216	3,8969	5,345	23,625	2008,2	72,9	69,8

Table 7. Page 13a

A	B	C	D	E	F	G	H	I	J
457	2008,54	2012,93	2018,62	2008,12	2000,53	1989,00	1908,45	0,1897	0,3162
458	2008,88	2012,93	2018,62	2008,12	2000,53	1989,00	1908,45	0,2522	0,3391
459	2009,22	2012,93	2018,62	2008,12	2000,53	1989,00	1908,45	0,3147	0,3621
460	2009,56	2012,93	2018,62	2008,12	2000,53	1989,00	1908,45	0,3772	0,3850
461	2009,90	2012,93	2018,62	2008,12	2000,53	1989,00	1908,45	0,4397	0,4080
462	2010,23	2012,93	2018,62	2008,12	2000,53	1989,00	1908,45	0,5022	0,4309
463	2010,57	2012,93	2018,62	2008,12	2000,53	1989,00	1908,45	0,5647	0,4538
464	2010,91	2012,93	2018,62	2008,12	2000,53	1989,00	1908,45	0,6272	0,4768
465	2011,25	2012,93	2018,62	2008,12	2000,53	1989,00	1908,45	0,6897	0,4997
466	2011,59	2012,93	2018,62	2008,12	2000,53	1989,00	1908,45	0,7522	0,5227
467	2011,92	2012,93	2018,62	2015,70	2000,53	1989,00	1908,45	0,8147	0,5456
468	2012,26	2012,93	2018,62	2015,70	2000,53	1989,00	1908,45	0,8772	0,5686
469	2012,60	2012,93	2018,62	2015,70	2000,53	1989,00	1908,45	0,9397	0,5915
470	2012,94	2012,93	2018,62	2015,70	2000,53	1989,00	1908,45	0,9978	0,6144
471	2013,27	2012,93	2018,62	2015,70	2000,53	1989,00	1908,45	0,9353	0,6374
472	2013,61	2012,93	2018,62	2015,70	2000,53	1989,00	1908,45	0,8728	0,6603
473	2013,95	2012,93	2018,62	2015,70	2000,53	1989,00	1908,45	0,8103	0,6833
474	2014,29	2012,93	2018,62	2015,70	2000,53	1989,00	1908,45	0,7478	0,7062
475	2014,63	2012,93	2018,62	2015,70	2000,53	1989,00	1908,45	0,6853	0,7291
476	2014,96	2012,93	2018,62	2015,70	2000,53	1989,00	1908,45	0,6228	0,7521
477	2015,30	2012,93	2018,62	2015,70	2000,53	1989,00	1908,45	0,5603	0,7750
478	2015,64	2012,93	2018,62	2015,70	2000,53	1989,00	1908,45	0,4978	0,7980
479	2015,98	2012,93	2018,62	2015,70	2000,53	1989,00	1908,45	0,4353	0,8209
480	2016,32	2012,93	2018,62	2015,70	2000,53	1989,00	1908,45	0,3728	0,8438
481	2016,65	2012,93	2018,62	2015,70	2000,53	1989,00	1908,45	0,3103	0,8668
482	2016,99	2012,93	2018,62	2015,70	2000,53	1989,00	1908,45	0,2478	0,8897
483	2017,33	2012,93	2018,62	2015,70	2000,53	1989,00	1908,45	0,1853	0,9127
484	2017,67	2012,93	2018,62	2015,70	2000,53	1989,00	1908,45	0,1228	0,9356
485	2018,01	2012,93	2018,62	2015,70	2000,53	1989,00	1908,45	0,0603	0,9585
486	2018,34	2023,74	2018,62	2015,70	2000,53	1989,00	1908,45	0,0022	0,9815

Table 7. Page 13b

A	K	L	M	N	O	P	Q	R	S	T
457	0,8878	0,8260	0,8419	0,8210	3,8826	5,345	23,656	2008,5	72,6	69,9
458	0,7987	0,8187	0,8391	0,8204	3,8682	5,345	23,688	2008,9	72,4	70,3
459	0,7096	0,8114	0,8364	0,8198	3,8539	5,345	23,719	2009,2	72,1	70,7
460	0,6205	0,8040	0,8337	0,8192	3,8395	5,345	23,750	2009,6	71,8	71,3
461	0,5314	0,7967	0,8309	0,8186	3,8252	5,345	23,781	2009,9	71,6	71,9
462	0,4423	0,7894	0,8282	0,8179	3,8108	5,345	23,813	2010,2	71,3	72,7
463	0,3532	0,7820	0,8255	0,8173	3,7965	5,345	23,844	2010,6	71,0	73,3
464	0,2640	0,7747	0,8227	0,8167	3,7822	5,345	23,875	2010,9	70,8	73,9
465	0,1749	0,7673	0,8200	0,8161	3,7678	5,345	23,906	2011,2	70,5	74,3
466	0,0858	0,7600	0,8173	0,8155	3,7535	5,345	23,938	2011,6	70,2	74,6
467	0,0033	0,7527	0,8145	0,8149	3,7457	5,345	23,969	2011,9	70,1	74,9
468	0,0924	0,7453	0,8118	0,8143	3,9096	5,345	24,000	2012,3	73,1	75,0
469	0,1815	0,7380	0,8091	0,8137	4,0735	5,345	24,031	2012,6	76,2	75,1
470	0,2706	0,7306	0,8063	0,8131	4,2330	5,345	24,063	2012,9	79,2	75,0
471	0,3597	0,7233	0,8036	0,8125	4,2718	5,345	24,094	2013,3	79,9	74,9
472	0,4488	0,7160	0,8009	0,8119	4,3107	5,345	24,125	2013,6	80,6	74,7
473	0,5379	0,7086	0,7981	0,8113	4,3496	5,345	24,156	2014,0	81,4	74,4
474	0,6270	0,7013	0,7954	0,8107	4,3884	5,345	24,188	2014,3	82,1	74,1
475	0,7162	0,6940	0,7927	0,8101	4,4273	5,345	24,219	2014,6	82,8	73,8
476	0,8053	0,6866	0,7899	0,8095	4,4662	5,345	24,250	2015,0	83,6	73,7
477	0,8944	0,6793	0,7872	0,8089	4,5050	5,345	24,281	2015,3	84,3	73,6
478	0,9835	0,6719	0,7845	0,8083	4,5439	5,345	24,313	2015,6	85,0	73,6
479	0,9274	0,6646	0,7817	0,8077	4,4376	5,345	24,344	2016,0	83,0	73,7
480	0,8383	0,6573	0,7790	0,8071	4,2983	5,345	24,375	2016,3	80,4	73,9
481	0,7492	0,6499	0,7763	0,8065	4,1589	5,345	24,406	2016,7	77,8	74,1
482	0,6601	0,6426	0,7735	0,8059	4,0196	5,345	24,438	2017,0	75,2	74,4
483	0,5710	0,6352	0,7708	0,8053	3,8803	5,345	24,469	2017,3	72,6	74,8
484	0,4819	0,6279	0,7681	0,8047	3,7409	5,345	24,500	2017,7	70,0	75,3
485	0,3928	0,6206	0,7653	0,8040	3,6016	5,345	24,531	2018,0	67,4	75,7
486	0,3037	0,6132	0,7626	0,8034	3,4666	5,345	24,563	2018,3	64,9	75,9

Table 7. Page 14a

A	B	C	D	E	F	G	H	I	J
487	2018,68	2023,74	2018,62	2015,70	2000,53	1989,00	1908,45	0,0647	0,9956
488	2019,02	2023,74	2018,62	2015,70	2000,53	1989,00	1908,45	0,1272	0,9726
489	2019,36	2023,74	2018,62	2015,70	2000,53	1989,00	1908,45	0,1897	0,9497
490	2019,69	2023,74	2018,62	2023,29	2000,53	1989,00	1908,45	0,2522	0,9268
491	2020,03	2023,74	2018,62	2023,29	2000,53	1989,00	1908,45	0,3147	0,9038
492	2020,37	2023,74	2018,62	2023,29	2000,53	1989,00	1908,45	0,3772	0,8809
493	2020,71	2023,74	2018,62	2023,29	2000,53	1989,00	1908,45	0,4397	0,8579
494	2021,05	2023,74	2018,62	2023,29	2000,53	1989,00	1908,45	0,5022	0,8350
495	2021,38	2023,74	2018,62	2023,29	2000,53	1989,00	1908,45	0,5647	0,8121
496	2021,72	2023,74	2018,62	2023,29	2000,53	1989,00	1908,45	0,6272	0,7891
497	2022,06	2023,74	2018,62	2023,29	2000,53	1989,00	1908,45	0,6897	0,7662
498	2022,40	2023,74	2018,62	2023,29	2000,53	1989,00	1908,45	0,7522	0,7432
499	2022,74	2023,74	2018,62	2023,29	2000,53	1989,00	1908,45	0,8147	0,7203
500	2023,07	2023,74	2018,62	2023,29	2000,53	1989,00	1908,45	0,8772	0,6973
501	2023,41	2023,74	2018,62	2023,29	2000,53	1989,00	1908,45	0,9397	0,6744
502	2023,75	2023,74	2018,62	2023,29	2000,53	1989,00	1908,45	0,9978	0,6515
503	2024,09	2023,74	2018,62	2023,29	2000,53	1989,00	1908,45	0,9353	0,6285
504	2024,43	2023,74	2018,62	2023,29	2000,53	1989,00	1908,45	0,8728	0,6056
505	2024,76	2023,74	2018,62	2023,29	2000,53	1989,00	1908,45	0,8103	0,5826
506	2025,10	2023,74	2018,62	2023,29	2000,53	1989,00	1908,45	0,7478	0,5597
507	2025,44	2023,74	2018,62	2023,29	2000,53	1989,00	1908,45	0,6853	0,5368
508	2025,78	2023,74	2018,62	2023,29	2000,53	1989,00	1908,45	0,6228	0,5138
509	2026,11	2023,74	2018,62	2023,29	2000,53	1989,00	1908,45	0,5603	0,4909
510	2026,45	2023,74	2018,62	2023,29	2000,53	1989,00	1908,45	0,4978	0,4679
511	2026,79	2023,74	2018,62	2023,29	2000,53	1989,00	1908,45	0,4353	0,4450
512	2027,13	2023,74	2018,62	2030,87	2000,53	1989,00	1908,45	0,3728	0,4221
513	2027,47	2023,74	2018,62	2030,87	2000,53	1989,00	1908,45	0,3103	0,3991
514	2027,80	2023,74	2018,62	2030,87	2000,53	1989,00	1908,45	0,2478	0,3762
515	2028,14	2023,74	2018,62	2030,87	2000,53	1989,00	1908,45	0,1853	0,3532
516	2028,48	2023,74	2018,62	2030,87	2000,53	1989,00	1908,45	0,1228	0,3303

Table 7. Page 14b

A	K	L	M	N	O	P	Q	R	S	T
487	0,2146	0,6059	0,7599	0,8028	3,4434	5,345	24,594	2018,7	64,4	76,0
488	0,1255	0,5986	0,7571	0,8022	3,3832	5,345	24,625	2019,0	63,3	75,9
489	0,0364	0,5912	0,7544	0,8016	3,3230	5,345	24,656	2019,4	62,2	75,7
490	0,0528	0,5839	0,7516	0,8010	3,3683	5,345	24,688	2019,7	63,0	75,4
491	0,1419	0,5765	0,7489	0,8004	3,4863	5,345	24,719	2020,0	65,2	75,0
492	0,2310	0,5692	0,7462	0,7998	3,6042	5,345	24,750	2020,4	67,4	74,4
493	0,3201	0,5619	0,7434	0,7992	3,7222	5,345	24,781	2020,7	69,6	73,7
494	0,4092	0,5545	0,7407	0,7986	3,8402	5,345	24,813	2021,0	71,8	72,9
495	0,4983	0,5472	0,7380	0,7980	3,9582	5,345	24,844	2021,4	74,0	71,9
496	0,5874	0,5398	0,7352	0,7974	4,0762	5,345	24,875	2021,7	76,3	71,0
497	0,6765	0,5325	0,7325	0,7968	4,1942	5,345	24,906	2022,1	78,5	70,1
498	0,7656	0,5252	0,7298	0,7962	4,3122	5,345	24,938	2022,4	80,7	69,2
499	0,8547	0,5178	0,7270	0,7956	4,4302	5,345	24,969	2022,7	82,9	68,5
500	0,9438	0,5105	0,7243	0,7950	4,5482	5,345	25,000	2023,1	85,1	67,8
501	0,9671	0,5032	0,7216	0,7944	4,6003	5,345	25,031	2023,4	86,1	67,2
502	0,8779	0,4958	0,7188	0,7938	4,5357	5,345	25,063	2023,7	84,9	66,7
503	0,7888	0,4885	0,7161	0,7932	4,3504	5,345	25,094	2024,1	81,4	66,3
504	0,6997	0,4811	0,7134	0,7926	4,1652	5,345	25,125	2024,4	77,9	66,0
505	0,6106	0,4738	0,7106	0,7920	3,9800	5,345	25,156	2024,8	74,5	65,8
506	0,5215	0,4665	0,7079	0,7914	3,7948	5,345	25,188	2025,1	71,0	65,7
507	0,4324	0,4591	0,7052	0,7908	3,6095	5,345	25,219	2025,4	67,5	65,6
508	0,3433	0,4518	0,7024	0,7901	3,4243	5,345	25,250	2025,8	64,1	65,5
509	0,2542	0,4445	0,6997	0,7895	3,2391	5,345	25,281	2026,1	60,6	65,2
510	0,1651	0,4371	0,6970	0,7889	3,0539	5,345	25,313	2026,5	57,1	64,9
511	0,0760	0,4298	0,6942	0,7883	2,8686	5,345	25,344	2026,8	53,7	64,4
512	0,0131	0,4224	0,6915	0,7877	2,7097	5,345	25,375	2027,1	50,7	63,8
513	0,1023	0,4151	0,6888	0,7871	2,7027	5,345	25,406	2027,5	50,6	63,2
514	0,1914	0,4078	0,6860	0,7865	2,6957	5,345	25,438	2027,8	50,4	62,4
515	0,2805	0,4004	0,6833	0,7859	2,6887	5,345	25,469	2028,1	50,3	61,6
516	0,3696	0,3931	0,6806	0,7853	2,6817	5,345	25,500	2028,5	50,2	60,7

Table 7. Page 15a

A	B	C	D	E	F	G	H	I	J
517	2028,82	2023,74	2018,62	2030,87	2000,53	1989,00	1908,45	0,0603	0,3074
518	2029,16	2034,55	2018,62	2030,87	2000,53	1989,00	1908,45	0,0022	0,2844
519	2029,49	2034,55	2018,62	2030,87	2000,53	1989,00	1908,45	0,0647	0,2615
520	2029,83	2034,55	2018,62	2030,87	2000,53	1989,00	1908,45	0,1272	0,2385
521	2030,17	2034,55	2018,62	2030,87	2000,53	1989,00	1908,45	0,1897	0,2156
522	2030,51	2034,55	2018,62	2030,87	2000,53	1989,00	1908,45	0,2522	0,1927
523	2030,85	2034,55	2018,62	2030,87	2000,53	1989,00	1908,45	0,3147	0,1697
524	2031,18	2034,55	2018,62	2030,87	2000,53	1989,00	1908,45	0,3772	0,1468
525	2031,52	2034,55	2018,62	2030,87	2000,53	1989,00	1908,45	0,4397	0,1238
526	2031,86	2034,55	2018,62	2030,87	2000,53	1989,00	1908,45	0,5022	0,1009
527	2032,20	2034,55	2018,62	2030,87	2000,53	1989,00	1908,45	0,5647	0,0780
528	2032,53	2034,55	2018,62	2030,87	2000,53	1989,00	1908,45	0,6272	0,0550
529	2032,87	2034,55	2018,62	2030,87	2000,53	1989,00	1908,45	0,6897	0,0321
530	2033,21	2034,55	2018,62	2030,87	2000,53	1989,00	1908,45	0,7522	0,0091
531	2033,55	2034,55	2048,07	2030,87	2000,53	1989,00	1908,45	0,8147	0,0138
532	2033,89	2034,55	2048,07	2030,87	2000,53	1989,00	1908,45	0,8772	0,0367
533	2034,22	2034,55	2048,07	2030,87	2000,53	1989,00	1908,45	0,9397	0,0597
534	2034,56	2034,55	2048,07	2030,87	2000,53	1989,00	1908,45	0,9978	0,0826
535	2034,90	2034,55	2048,07	2038,45	2000,53	1989,00	1908,45	0,9353	0,1056
536	2035,24	2034,55	2048,07	2038,45	2000,53	1989,00	1908,45	0,8728	0,1285
537	2035,58	2034,55	2048,07	2038,45	2000,53	1989,00	1908,45	0,8103	0,1515
538	2035,91	2034,55	2048,07	2038,45	2000,53	1989,00	1908,45	0,7478	0,1744
539	2036,25	2034,55	2048,07	2038,45	2000,53	1989,00	1908,45	0,6853	0,1973
540	2036,59	2034,55	2048,07	2038,45	2000,53	1989,00	1908,45	0,6228	0,2203
541	2036,93	2034,55	2048,07	2038,45	2000,53	1989,00	1908,45	0,5603	0,2432
542	2037,27	2034,55	2048,07	2038,45	2000,53	1989,00	1908,45	0,4978	0,2662
543	2037,60	2034,55	2048,07	2038,45	2000,53	1989,00	1908,45	0,4353	0,2891
544	2037,94	2034,55	2048,07	2038,45	2000,53	1989,00	1908,45	0,3728	0,3120
545	2038,28	2034,55	2048,07	2038,45	2000,53	1989,00	1908,45	0,3103	0,3350
546	2038,62	2034,55	2048,07	2038,45	2000,53	1989,00	1908,45	0,2478	0,3579

Table 7. Page 15b

A	K	L	M	N	O	P	Q	R	S	T
517	0,4587	0,3857	0,6778	0,7847	2,6746	5,345	25,531	2028,8	50,0	59,7
518	0,5478	0,3784	0,6751	0,7841	2,6720	5,345	25,563	2029,2	50,0	58,6
519	0,6369	0,3711	0,6724	0,7835	2,7900	5,345	25,594	2029,5	52,2	57,6
520	0,7260	0,3637	0,6696	0,7829	2,9080	5,345	25,625	2029,8	54,4	56,7
521	0,8151	0,3564	0,6669	0,7823	3,0260	5,345	25,656	2030,2	56,6	56,0
522	0,9042	0,3491	0,6642	0,7817	3,1440	5,345	25,688	2030,5	58,8	55,4
523	0,9933	0,3417	0,6614	0,7811	3,2619	5,345	25,719	2030,8	61,0	54,9
524	0,9176	0,3344	0,6587	0,7805	3,2151	5,345	25,750	2031,2	60,1	54,5
525	0,8285	0,3270	0,6560	0,7799	3,1549	5,345	25,781	2031,5	59,0	54,2
526	0,7394	0,3197	0,6532	0,7793	3,0946	5,345	25,813	2031,9	57,9	54,1
527	0,6503	0,3124	0,6505	0,7787	3,0344	5,345	25,844	2032,2	56,8	54,1
528	0,5611	0,3050	0,6478	0,7781	2,9742	5,345	25,875	2032,5	55,6	54,3
529	0,4720	0,2977	0,6450	0,7775	2,9140	5,345	25,906	2032,9	54,5	54,5
530	0,3829	0,2903	0,6423	0,7769	2,8537	5,345	25,938	2033,2	53,4	54,7
531	0,2938	0,2830	0,6396	0,7762	2,8211	5,345	25,969	2033,5	52,8	54,9
532	0,2047	0,2757	0,6368	0,7756	2,8068	5,345	26,000	2033,9	52,5	55,0
533	0,1156	0,2683	0,6341	0,7750	2,7925	5,345	26,031	2034,2	52,2	55,0
534	0,0265	0,2610	0,6314	0,7744	2,7737	5,345	26,063	2034,6	51,9	54,9
535	0,0626	0,2537	0,6286	0,7738	2,7596	5,345	26,094	2034,9	51,6	54,8
536	0,1517	0,2463	0,6259	0,7732	2,7985	5,345	26,125	2035,2	52,4	54,7
537	0,2408	0,2390	0,6232	0,7726	2,8374	5,345	26,156	2035,6	53,1	54,4
538	0,3299	0,2316	0,6204	0,7720	2,8762	5,345	26,188	2035,9	53,8	54,1
539	0,4190	0,2243	0,6177	0,7714	2,9151	5,345	26,219	2036,3	54,5	53,8
540	0,5082	0,2170	0,6150	0,7708	2,9540	5,345	26,250	2036,6	55,3	53,3
541	0,5973	0,2096	0,6122	0,7702	2,9928	5,345	26,281	2036,9	56,0	52,9
542	0,6864	0,2023	0,6095	0,7696	3,0317	5,345	26,313	2037,3	56,7	52,6
543	0,7755	0,1949	0,6068	0,7690	3,0706	5,345	26,344	2037,6	57,4	52,5
544	0,8646	0,1876	0,6040	0,7684	3,1095	5,345	26,375	2037,9	58,2	52,4
545	0,9537	0,1803	0,6013	0,7678	3,1483	5,345	26,406	2038,3	58,9	52,5
546	0,9572	0,1729	0,5986	0,7672	3,1016	5,345	26,438	2038,6	58,0	52,8

Table 7. Page 16a

A	B	C	D	E	F	G	H	I	J
547	2038,95	2034,55	2048,07	2038,45	2000,53	1989,00	1908,45	0,1853	0,3809
548	2039,29	2034,55	2048,07	2038,45	2000,53	1989,00	1908,45	0,1228	0,4038
549	2039,63	2034,55	2048,07	2038,45	2000,53	1989,00	1908,45	0,0603	0,4267
550	2039,97	2045,36	2048,07	2038,45	2000,53	1989,00	1908,45	0,0022	0,4497
551	2040,31	2045,36	2048,07	2038,45	2000,53	1989,00	1908,45	0,0647	0,4726
552	2040,64	2045,36	2048,07	2038,45	2000,53	1989,00	1908,45	0,1272	0,4956
553	2040,98	2045,36	2048,07	2038,45	2000,53	1989,00	1908,45	0,1897	0,5185
554	2041,32	2045,36	2048,07	2038,45	2000,53	1989,00	1908,45	0,2522	0,5414
555	2041,66	2045,36	2048,07	2038,45	2000,53	1989,00	1908,45	0,3147	0,5644
556	2042,00	2045,36	2048,07	2038,45	2000,53	1989,00	1908,45	0,3772	0,5873
557	2042,33	2045,36	2048,07	2046,04	2000,53	1989,00	1908,45	0,4397	0,6103
558	2042,67	2045,36	2048,07	2046,04	2000,53	1989,00	1908,45	0,5022	0,6332
559	2043,01	2045,36	2048,07	2046,04	2000,53	1989,00	1908,45	0,5647	0,6561
560	2043,35	2045,36	2048,07	2046,04	2000,53	1989,00	1908,45	0,6272	0,6791
561	2043,69	2045,36	2048,07	2046,04	2000,53	1989,00	1908,45	0,6897	0,7020
562	2044,02	2045,36	2048,07	2046,04	2000,53	1989,00	1908,45	0,7522	0,7250
563	2044,36	2045,36	2048,07	2046,04	2000,53	1989,00	1908,45	0,8147	0,7479
564	2044,70	2045,36	2048,07	2046,04	2000,53	1989,00	1908,45	0,8772	0,7708
565	2045,04	2045,36	2048,07	2046,04	2000,53	1989,00	1908,45	0,9397	0,7938
566	2045,37	2045,36	2048,07	2046,04	2000,53	1989,00	1908,45	0,9978	0,8167
567	2045,71	2045,36	2048,07	2046,04	2000,53	1989,00	1908,45	0,9353	0,8397
568	2046,05	2045,36	2048,07	2046,04	2000,53	1989,00	1908,45	0,8728	0,8626
569	2046,39	2045,36	2048,07	2046,04	2000,53	1989,00	1908,45	0,8103	0,8856
570	2046,73	2045,36	2048,07	2046,04	2092,62	1989,00	1908,45	0,7478	0,9085
571	2047,06	2045,36	2048,07	2046,04	2092,62	1989,00	1908,45	0,6853	0,9314
572	2047,40	2045,36	2048,07	2046,04	2092,62	1989,00	1908,45	0,6228	0,9544
573	2047,74	2045,36	2048,07	2046,04	2092,62	1989,00	1908,45	0,5603	0,9773
574	2048,08	2045,36	2048,07	2046,04	2092,62	1989,00	1908,45	0,4978	0,9997
575	2048,42	2045,36	2048,07	2046,04	2092,62	1989,00	1908,45	0,4353	0,9768
576	2048,75	2045,36	2048,07	2046,04	2092,62	1989,00	1908,45	0,3728	0,9539

Table 7. Page 16b

A	K	L	M	N	O	P	Q	R	S	T
547	0,8681	0,1656	0,5958	0,7666	2,9623	5,345	26,469	2039,0	55,4	53,1
548	0,7790	0,1583	0,5931	0,7660	2,8229	5,345	26,500	2039,3	52,8	53,6
549	0,6899	0,1509	0,5904	0,7654	2,6836	5,345	26,531	2039,6	50,2	54,1
550	0,6008	0,1436	0,5876	0,7648	2,5486	5,345	26,563	2040,0	47,7	54,8
551	0,5117	0,1362	0,5849	0,7642	2,5343	5,345	26,594	2040,3	47,4	55,5
552	0,4226	0,1289	0,5822	0,7636	2,5199	5,345	26,625	2040,6	47,1	56,2
553	0,3335	0,1216	0,5794	0,7630	2,5056	5,345	26,656	2041,0	46,9	56,9
554	0,2444	0,1142	0,5767	0,7623	2,4912	5,345	26,688	2041,3	46,6	57,4
555	0,1552	0,1069	0,5739	0,7617	2,4769	5,345	26,719	2041,7	46,3	57,8
556	0,0661	0,0995	0,5712	0,7611	2,4626	5,345	26,750	2042,0	46,1	58,2
557	0,0230	0,0922	0,5685	0,7605	2,4942	5,345	26,781	2042,3	46,7	58,4
558	0,1121	0,0849	0,5657	0,7599	2,6580	5,345	26,813	2042,7	49,7	58,6
559	0,2012	0,0775	0,5630	0,7593	2,8219	5,345	26,844	2043,0	52,8	58,6
560	0,2903	0,0702	0,5603	0,7587	2,9858	5,345	26,875	2043,3	55,9	58,5
561	0,3794	0,0629	0,5575	0,7581	3,1497	5,345	26,906	2043,7	58,9	58,3
562	0,4685	0,0555	0,5548	0,7575	3,3135	5,345	26,938	2044,0	62,0	58,0
563	0,5576	0,0482	0,5521	0,7569	3,4774	5,345	26,969	2044,4	65,1	57,6
564	0,6467	0,0408	0,5493	0,7563	3,6413	5,345	27,000	2044,7	68,1	57,3
565	0,7358	0,0335	0,5466	0,7557	3,8051	5,345	27,031	2045,0	71,2	57,0
566	0,8250	0,0262	0,5439	0,7551	3,9646	5,345	27,063	2045,4	74,2	56,9
567	0,9141	0,0188	0,5411	0,7545	4,0035	5,345	27,094	2045,7	74,9	56,9
568	0,9968	0,0115	0,5384	0,7539	4,0360	5,345	27,125	2046,1	75,5	56,9
569	0,9077	0,0042	0,5357	0,7533	3,8967	5,345	27,156	2046,4	72,9	57,1
570	0,8186	0,0032	0,5329	0,7527	3,7637	5,345	27,188	2046,7	70,4	57,3
571	0,7295	0,0105	0,5302	0,7521	3,6391	5,345	27,219	2047,1	68,1	57,7
572	0,6404	0,0179	0,5275	0,7515	3,5144	5,345	27,250	2047,4	65,7	58,1
573	0,5513	0,0252	0,5247	0,7509	3,3897	5,345	27,281	2047,7	63,4	58,6
574	0,4622	0,0325	0,5220	0,7503	3,2646	5,345	27,313	2048,1	61,1	59,1
575	0,3731	0,0399	0,5193	0,7497	3,0940	5,345	27,344	2048,4	57,9	59,6
576	0,2840	0,0472	0,5165	0,7491	2,9235	5,345	27,375	2048,8	54,7	60,0

Table 7. Page 17a

A	B	C	D	E	F	G	H	I	J
577	2049,09	2045,36	2048,07	2046,04	2092,62	1989,00	1908,45	0,3103	0,9309
578	2049,43	2045,36	2048,07	2046,04	2092,62	1989,00	1908,45	0,2478	0,9080
579	2049,77	2045,36	2048,07	2046,04	2092,62	1989,00	1908,45	0,1853	0,8850
580	2050,11	2045,36	2048,07	2053,62	2092,62	1989,00	1908,45	0,1228	0,8621
581	2050,44	2045,36	2048,07	2053,62	2092,62	1989,00	1908,45	0,0603	0,8392
582	2050,78	2056,18	2048,07	2053,62	2092,62	1989,00	1908,45	0,0022	0,8162
583	2051,12	2056,18	2048,07	2053,62	2092,62	1989,00	1908,45	0,0647	0,7933
584	2051,46	2056,18	2048,07	2053,62	2092,62	1989,00	1908,45	0,1272	0,7703
585	2051,79	2056,18	2048,07	2053,62	2092,62	1989,00	1908,45	0,1897	0,7474
586	2052,13	2056,18	2048,07	2053,62	2092,62	1989,00	1908,45	0,2522	0,7245
587	2052,47	2056,18	2048,07	2053,62	2092,62	1989,00	1908,45	0,3147	0,7015
588	2052,81	2056,18	2048,07	2053,62	2092,62	1989,00	1908,45	0,3772	0,6786
589	2053,15	2056,18	2048,07	2053,62	2092,62	1989,00	1908,45	0,4397	0,6556
590	2053,48	2056,18	2048,07	2053,62	2092,62	1989,00	1908,45	0,5022	0,6327
591	2053,82	2056,18	2048,07	2053,62	2092,62	1989,00	1908,45	0,5647	0,6098
592	2054,16	2056,18	2048,07	2053,62	2092,62	1989,00	1908,45	0,6272	0,5868
593	2054,50	2056,18	2048,07	2053,62	2092,62	1989,00	1908,45	0,6897	0,5639
594	2054,84	2056,18	2048,07	2053,62	2092,62	1989,00	1908,45	0,7522	0,5409
595	2055,17	2056,18	2048,07	2053,62	2092,62	1989,00	1908,45	0,8147	0,5180
596	2055,51	2056,18	2048,07	2053,62	2092,62	1989,00	1908,45	0,8772	0,4951
597	2055,85	2056,18	2048,07	2053,62	2092,62	1989,00	1908,45	0,9397	0,4721
598	2056,19	2056,18	2048,07	2053,62	2092,62	1989,00	1908,45	0,9978	0,4492
599	2056,53	2056,18	2048,07	2053,62	2092,62	1989,00	1908,45	0,9353	0,4262
600	2056,86	2056,18	2048,07	2053,62	2092,62	1989,00	1908,45	0,8728	0,4033
601	2057,20	2056,18	2048,07	2053,62	2092,62	1989,00	1908,45	0,8103	0,3803
602	2057,54	2056,18	2048,07	2061,21	2092,62	1989,00	1908,45	0,7478	0,3574
603	2057,88	2056,18	2048,07	2061,21	2092,62	1989,00	1908,45	0,6853	0,3345
604	2058,21	2056,18	2048,07	2061,21	2092,62	1989,00	1908,45	0,6228	0,3115
605	2058,55	2056,18	2048,07	2061,21	2092,62	1989,00	1908,45	0,5603	0,2886
606	2058,89	2056,18	2048,07	2061,21	2092,62	1989,00	1908,45	0,4978	0,2656

Table 7. Page 17b

A	K	L	M	N	O	P	Q	R	S	T
577	0,1949	0,0546	0,5138	0,7484	2,7529	5,345	27,406	2049,1	51,5	60,2
578	0,1058	0,0619	0,5111	0,7478	2,5824	5,345	27,438	2049,4	48,3	60,3
579	0,0167	0,0692	0,5083	0,7472	2,4118	5,345	27,469	2049,8	45,1	60,3
580	0,0725	0,0766	0,5056	0,7466	2,3862	5,345	27,500	2050,1	44,6	60,2
581	0,1616	0,0839	0,5029	0,7460	2,3939	5,345	27,531	2050,4	44,8	60,0
582	0,2507	0,0912	0,5001	0,7454	2,4059	5,345	27,563	2050,8	45,0	59,6
583	0,3398	0,0986	0,4974	0,7448	2,5386	5,345	27,594	2051,1	47,5	59,0
584	0,4289	0,1059	0,4947	0,7442	2,6712	5,345	27,625	2051,5	50,0	58,4
585	0,5180	0,1133	0,4919	0,7436	2,8039	5,345	27,656	2051,8	52,5	57,6
586	0,6071	0,1206	0,4892	0,7430	2,9366	5,345	27,688	2052,1	54,9	56,8
587	0,6962	0,1279	0,4865	0,7424	3,0692	5,345	27,719	2052,5	57,4	56,2
588	0,7853	0,1353	0,4837	0,7418	3,2019	5,345	27,750	2052,8	59,9	55,6
589	0,8744	0,1426	0,4810	0,7412	3,3346	5,345	27,781	2053,1	62,4	55,0
590	0,9635	0,1500	0,4783	0,7406	3,4672	5,345	27,813	2053,5	64,9	54,6
591	0,9474	0,1573	0,4755	0,7400	3,4946	5,345	27,844	2053,8	65,4	54,2
592	0,8583	0,1646	0,4728	0,7394	3,4491	5,345	27,875	2054,2	64,5	53,9
593	0,7691	0,1720	0,4701	0,7388	3,4035	5,345	27,906	2054,5	63,7	53,7
594	0,6800	0,1793	0,4673	0,7382	3,3580	5,345	27,938	2054,8	62,8	53,7
595	0,5909	0,1866	0,4646	0,7376	3,3124	5,345	27,969	2055,2	62,0	53,7
596	0,5018	0,1940	0,4619	0,7370	3,2669	5,345	28,000	2055,5	61,1	53,8
597	0,4127	0,2013	0,4591	0,7364	3,2213	5,345	28,031	2055,8	60,3	53,9
598	0,3236	0,2087	0,4564	0,7358	3,1714	5,345	28,063	2056,2	59,3	54,0
599	0,2345	0,2160	0,4537	0,7352	3,0009	5,345	28,094	2056,5	56,1	54,0
600	0,1454	0,2233	0,4509	0,7345	2,8303	5,345	28,125	2056,9	52,9	53,9
601	0,0563	0,2307	0,4482	0,7339	2,6598	5,345	28,156	2057,2	49,8	53,6
602	0,0328	0,2380	0,4455	0,7333	2,5549	5,345	28,188	2057,5	47,8	53,4
603	0,1219	0,2454	0,4427	0,7327	2,5625	5,345	28,219	2057,9	47,9	53,0
604	0,2111	0,2527	0,4400	0,7321	2,5702	5,345	28,250	2058,2	48,1	52,5
605	0,3002	0,2600	0,4373	0,7315	2,5779	5,345	28,281	2058,6	48,2	52,0
606	0,3893	0,2674	0,4345	0,7309	2,5855	5,345	28,313	2058,9	48,4	51,4

Table 7. Page 18a

A	B	C	D	E	F	G	H	I	J
607	2059,23	2056,18	2048,07	2061,21	2092,62	1989,00	1908,45	0,4353	0,2427
608	2059,57	2056,18	2048,07	2061,21	2092,62	1989,00	1908,45	0,3728	0,2198
609	2059,90	2056,18	2048,07	2061,21	2092,62	1989,00	1908,45	0,3103	0,1968
610	2060,24	2056,18	2048,07	2061,21	2092,62	1989,00	1908,45	0,2478	0,1739
611	2060,58	2056,18	2048,07	2061,21	2092,62	1989,00	1908,45	0,1853	0,1509
612	2060,92	2056,18	2048,07	2061,21	2092,62	1989,00	1908,45	0,1228	0,1280
613	2061,26	2056,18	2048,07	2061,21	2092,62	1989,00	1908,45	0,0603	0,1051
614	2061,59	2066,99	2048,07	2061,21	2092,62	1989,00	1908,45	0,0022	0,0821
615	2061,93	2066,99	2048,07	2061,21	2092,62	1989,00	1908,45	0,0647	0,0592
616	2062,27	2066,99	2048,07	2061,21	2092,62	1989,00	1908,45	0,1272	0,0362
617	2062,61	2066,99	2048,07	2061,21	2092,62	1989,00	1908,45	0,1897	0,0133
618	2062,94	2066,99	2077,53	2061,21	2092,62	1989,00	1908,45	0,2522	0,0096
619	2063,28	2066,99	2077,53	2061,21	2092,62	1989,00	1908,45	0,3147	0,0326
620	2063,62	2066,99	2077,53	2061,21	2092,62	1989,00	1908,45	0,3772	0,0555
621	2063,96	2066,99	2077,53	2061,21	2092,62	1989,00	1908,45	0,4397	0,0785
622	2064,30	2066,99	2077,53	2061,21	2092,62	1989,00	1908,45	0,5022	0,1014
623	2064,63	2066,99	2077,53	2061,21	2092,62	1989,00	1908,45	0,5647	0,1243
624	2064,97	2066,99	2077,53	2061,21	2092,62	1989,00	1908,45	0,6272	0,1473
625	2065,31	2066,99	2077,53	2068,79	2092,62	1989,00	1908,45	0,6897	0,1702
626	2065,65	2066,99	2077,53	2068,79	2092,62	1989,00	1908,45	0,7522	0,1932
627	2065,99	2066,99	2077,53	2068,79	2092,62	1989,00	1908,45	0,8147	0,2161
628	2066,32	2066,99	2077,53	2068,79	2092,62	1989,00	1908,45	0,8772	0,2390
629	2066,66	2066,99	2077,53	2068,79	2092,62	1989,00	1908,45	0,9397	0,2620
630	2067,00	2066,99	2077,53	2068,79	2092,62	1989,00	1908,45	0,9978	0,2849
631	2067,34	2066,99	2077,53	2068,79	2092,62	1989,00	1908,45	0,9353	0,3079
632	2067,68	2066,99	2077,53	2068,79	2092,62	1989,00	1908,45	0,8728	0,3308
633	2068,01	2066,99	2077,53	2068,79	2092,62	1989,00	1908,45	0,8103	0,3537
634	2068,35	2066,99	2077,53	2068,79	2092,62	1989,00	1908,45	0,7478	0,3767
635	2068,69	2066,99	2077,53	2068,79	2092,62	1989,00	1908,45	0,6853	0,3996
636	2069,03	2066,99	2077,53	2068,79	2092,62	1989,00	1908,45	0,6228	0,4226

Table 7. Page 18b

A	K	L	M	N	O	P	Q	R	S	T
607	0,4784	0,2747	0,4318	0,7303	2,5932	5,345	28,344	2059,2	48,5	50,8
608	0,5675	0,2820	0,4291	0,7297	2,6009	5,345	28,375	2059,6	48,7	50,1
609	0,6566	0,2894	0,4263	0,7291	2,6085	5,345	28,406	2059,9	48,8	49,5
610	0,7457	0,2967	0,4236	0,7285	2,6162	5,345	28,438	2060,2	48,9	49,1
611	0,8348	0,3041	0,4209	0,7279	2,6239	5,345	28,469	2060,6	49,1	48,8
612	0,9239	0,3114	0,4181	0,7273	2,6315	5,345	28,500	2060,9	49,2	48,6
613	0,9870	0,3187	0,4154	0,7267	2,6132	5,345	28,531	2061,3	48,9	48,5
614	0,8979	0,3261	0,4127	0,7261	2,4470	5,345	28,563	2061,6	45,8	48,6
615	0,8088	0,3334	0,4099	0,7255	2,4015	5,345	28,594	2061,9	44,9	48,7
616	0,7197	0,3408	0,4072	0,7249	2,3559	5,345	28,625	2062,3	44,1	49,0
617	0,6306	0,3481	0,4044	0,7243	2,3104	5,345	28,656	2062,6	43,2	49,3
618	0,5415	0,3554	0,4017	0,7237	2,2841	5,345	28,688	2062,9	42,7	49,8
619	0,4524	0,3628	0,3990	0,7231	2,2844	5,345	28,719	2063,3	42,7	50,4
620	0,3632	0,3701	0,3962	0,7225	2,2848	5,345	28,750	2063,6	42,7	51,0
621	0,2741	0,3774	0,3935	0,7219	2,2851	5,345	28,781	2064,0	42,7	51,5
622	0,1850	0,3848	0,3908	0,7213	2,2854	5,345	28,813	2064,3	42,8	51,9
623	0,0959	0,3921	0,3880	0,7206	2,2858	5,345	28,844	2064,6	42,8	52,2
624	0,0068	0,3995	0,3853	0,7200	2,2861	5,345	28,875	2065,0	42,8	52,4
625	0,0823	0,4068	0,3826	0,7194	2,4510	5,345	28,906	2065,3	45,9	52,6
626	0,1714	0,4141	0,3798	0,7188	2,6296	5,345	28,938	2065,6	49,2	52,7
627	0,2605	0,4215	0,3771	0,7182	2,8081	5,345	28,969	2066,0	52,5	52,8
628	0,3496	0,4288	0,3744	0,7176	2,9867	5,345	29,000	2066,3	55,9	52,7
629	0,4387	0,4361	0,3716	0,7170	3,1652	5,345	29,031	2066,7	59,2	
630	0,5278	0,4435	0,3689	0,7164	3,3394	5,345	29,063	2067,0	62,5	
631	0,6170	0,4508	0,3662	0,7158	3,3930	5,345	29,094	2067,3	63,5	
632	0,7061	0,4582	0,3634	0,7152	3,4465	5,345	29,125	2067,7	64,5	
633	0,7952	0,4655	0,3607	0,7146	3,5000	5,345	29,156	2068,0	65,5	
634	0,8843	0,4728	0,3580	0,7140	3,5536	5,345	29,188	2068,4	66,5	
635	0,9734	0,4802	0,3552	0,7134	3,6071	5,345	29,219	2068,7	67,5	
636	0,9375	0,4875	0,3525	0,7128	3,5357	5,345	29,250	2069,0	66,1	

Table 7. Page 19a

A	B	C	D	E	F	G	H	I	J
637	2069,36	2066,99	2077,53	2068,79	2092,62	1989,00	1908,45	0,5603	0,4455
638	2069,70	2066,99	2077,53	2068,79	2092,62	1989,00	1908,45	0,4978	0,4685
639	2070,04	2066,99	2077,53	2068,79	2092,62	1989,00	1908,45	0,4353	0,4914
640	2070,38	2066,99	2077,53	2068,79	2092,62	1989,00	1908,45	0,3728	0,5143
641	2070,72	2066,99	2077,53	2068,79	2092,62	1989,00	1908,45	0,3103	0,5373
642	2071,05	2066,99	2077,53	2068,79	2092,62	1989,00	1908,45	0,2478	0,5602
643	2071,39	2066,99	2077,53	2068,79	2092,62	1989,00	1908,45	0,1853	0,5832
644	2071,73	2066,99	2077,53	2068,79	2092,62	1989,00	1908,45	0,1228	0,6061
645	2072,07	2066,99	2077,53	2068,79	2092,62	1989,00	1908,45	0,0603	0,6290
646	2072,41	2077,80	2077,53	2068,79	2092,62	1989,00	1908,45	0,0022	0,6520

Table 7. Page 19b

A	K	L	M	N	O	P	Q	R	ST
637	0,8484	0,4949	0,3498	0,7122	3,4110	5,345	29,281	2069,4	63,8
638	0,7593	0,5022	0,3470	0,7116	3,2864	5,345	29,313	2069,7	61,5
639	0,6702	0,5095	0,3443	0,7110	3,1617	5,345	29,344	2070,0	59,1
640	0,5811	0,5169	0,3416	0,7104	3,0371	5,345	29,375	2070,4	56,8
641	0,4920	0,5242	0,3388	0,7098	2,9124	5,345	29,406	2070,7	54,5
642	0,4029	0,5315	0,3361	0,7092	2,7877	5,345	29,438	2071,1	52,2
643	0,3138	0,5389	0,3334	0,7086	2,6631	5,345	29,469	2071,4	49,8
644	0,2247	0,5462	0,3306	0,7080	2,5384	5,345	29,500	2071,7	47,5
645	0,1356	0,5536	0,3279	0,7074	2,4137	5,345	29,531	2072,1	45,2
646	0,0464	0,5609	0,3252	0,7067	2,2934	5,345	29,563	2072,4	42,9

4. Calculations down to the levels 0 and -1

The next two steps towards the increased accuracy of our calculation include obviously the periods of the level 0 and -1 of the Cosmic Hierarchy of our Solar System. The length of one period of the level 0 is given at the bottom of Table 2 (in Chapter 2). It equals 0,62456 year or 228,12 days[1]. By using the cosmic quantum number (compare the notes to this Table 2) we can scale the periods of the Cosmic Hierarchy with the number 12.142775. It gives for the period of the level -1 the duration of 0,051435 year or 18,786 days. Extending the desired part of our basic calculations (as described previously) over these two shorter periods of time, we are able to calculate any change of the global climate lasting as shortly as a few weeks in the past or in the future.

On the first stage of these calculations, I have enhanced the number of the calculation points for every solar cycle to 64, starting from the same basic calculation point number 100, as described in the previous Table 6. On the second stage, I have limited the calculations to the period of time between 2000 and 2015 and enhanced the calculation accuracy to 512 points per cycle. This accuracy allows us to compare the present theory with such rough data of the observational meteorology as the relative changes of the averaged monthly temperature in an arbitrary region of the Earth's surface. The third part of this book presents the main results of our calculations.

---

[1] what I have abbreviated in my program as 7,5m standing for 7,5 months.

PART THREE

Reconstruction and prognosis of the Earth’s global-climate changes

In the previous part of this book we have seen thousands of numbers. Is it necessary to present all of them here? Absolutely, yes. Why? Because there exist already thousands of books and many thousands of scientific articles, that consider the reconstruction and prognosis of the global-climate changes. Unfortunately, all of them are using quite false assumptions about the physics of the climate changes. Those false assumptions result in enormous calculations by means of the strongest computers of the world. These calculations, when printed out, would fill not only hundred pages of a single book - like our Part 2 here above - but probably all books available around the world today. Nevertheless, the effect is still miserable. On the contrary, our numbers give a very realistic and precise reconstruction of all historically-documented periods of the past climate changes. Therefore, it is very important to know exactly, where the numbers are coming from.

Basing on our numbers, we are now able to predict the future changes of the global Earth's climate, not only from year to year, but also month by month. And what is important, we do not have to wait over many decades in order to see the world becoming warmer, or the sea level getting higher, as threatened by the "warming alarmists". Our forecast can be verified immediately, during the few next months. Therefore, we have to be active just now. The coming climate change will be very extensive and we have to be prepared as soon as possible. It is the main reason for me to write the present book.

Chapter 6

Reconstruction of the climate history

1. The results of our basic calculations

The last two columns of Table5 (in Part 2) present two rows of numbers with values between zero and 100 percent. The last but one column Q contains the main rasults of our calculations. These are the relative changes of the (energetic) influence of our five "modulators" (Jupiter, Saturn, Sun's Dark Companion, Local Group of Stars, and the Orion "Minigalaxy") on the extrasolar energy flux reaching the Earth (almost simultaneously with other members of the Solar System) in our journey across the Universe.

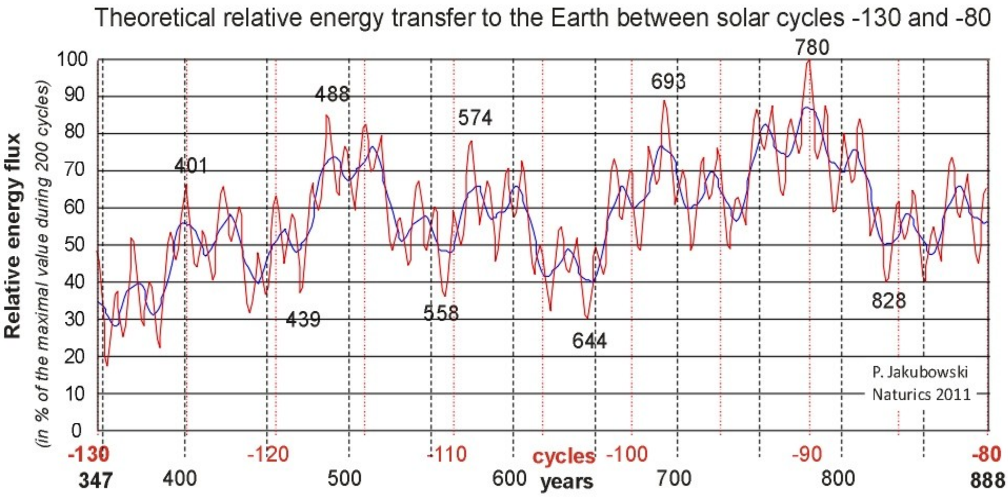


Figure 13. Theoretical reconstruction of the complete energy transfer from the cosmic space to Earth during the solar cycles -130 to -80, with the length of 10,81254 years each; shown in relation to the maximal value reached in year 780. The blue curve is the red one averaged over a whole solar cycle.

Figure 13 presents the first fourth of the results plotted along the usual timescale for the time period between years 347 and 888, corresponding to the (theoretical) solar cycles from -130 to -80. As we can see, the maximum of the calculated influence for the whole considered period of about 2200 years has been reached in year 780, during the Medieval Climatic Optimum (compare also our original diagrams 3 and 6 in Chapter 1).

The second fourth of our results, presented in Figure 14, shows the gradual transition from the previous climatic optimum to the following climatic depression, a period known in the European history as a period of extreme poverty and obscurantism. However, this was first of all a period of an extremaly unfavourable climate. The science of that time was not yet ready to understand the natural reasons for this extreme climate change[1].

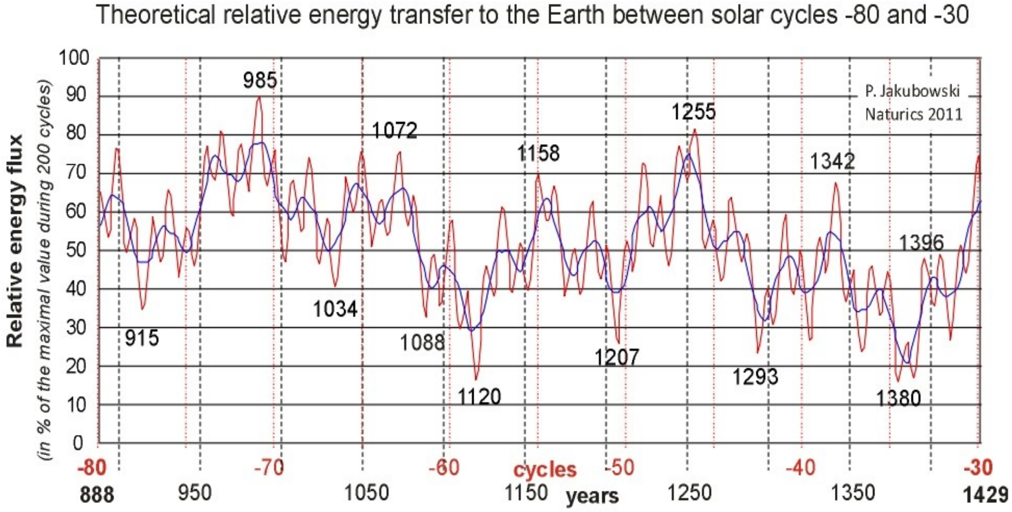


Figure 14. Theoretical reconstruction of the complete energy transfer from the cosmic space to Earth during the solar cycles -80 to -30; a continuation of Figure 13.

The first half of the third fourth of the range of time considered in Table 5 presents the second really cold time of the second millennium between 1550 and 1680, which has been known first of all in the European history as the "Little Ice

---

[1] For more historical details compare Table 1 in Chapter 1.

Age". The averaged relative energy transfer during that time (the blue curve on Figure 15) was permanently below 60 percent of the maximal value. During this period one has observed only very few sunspots[1].

The second half of the diagram in Figure 15 shows the much more favourable climate of the 18th century and the short return to the cold phase again between 1820 and 1860. First about 1860 the Earth has entered the present warming phase, which has been misused in the climate debate as a man-made climate change. Our model shows this warming completely independently of any industrial influence. Therefore, our "human" acceleration of it cannot be important indeed.

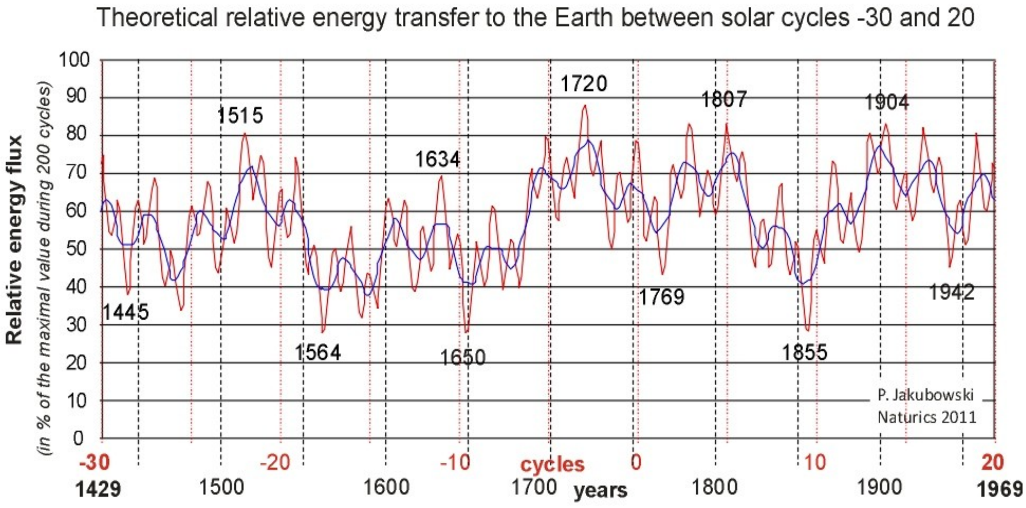


Figure 15. Theoretical reconstruction of the complete energy transfer from the cosmic space to Earth during the solar cycles -30 to 20; a continuation of figures 13 and 14.

The last part of our results in Table 5, given as a diagram in Figure 16, shows very evidently that our "modern" climatic optimum is over very soon; its

---

[1] At the beginning of 17th century Galileo has started the telescopic observations of the solar surface. The period of the lowered number of the sunspots has been called later as Maunder Minimum. However, the lowered number of the sunspots should be understood as a result of the sinking energy flux to the Solar System in that time, and not as an argument for the weaker intrinsic solar activity.

maximum has been reached about 1991. At the very latest since 2023 we are entering a new cold period similar to that one around the year 1855. We have to prepare our global economy to this new challenge. In order to obtain more details about the coming decades I have increased the calculation accuracy, what will be discussed in the following chapters. The next "Little Ice Age" between 2115 and 2160, and more dramatically between 2300 and 2450, should be also discussed in our generation, because we have to leave some available energy sources unused for the coming generations.

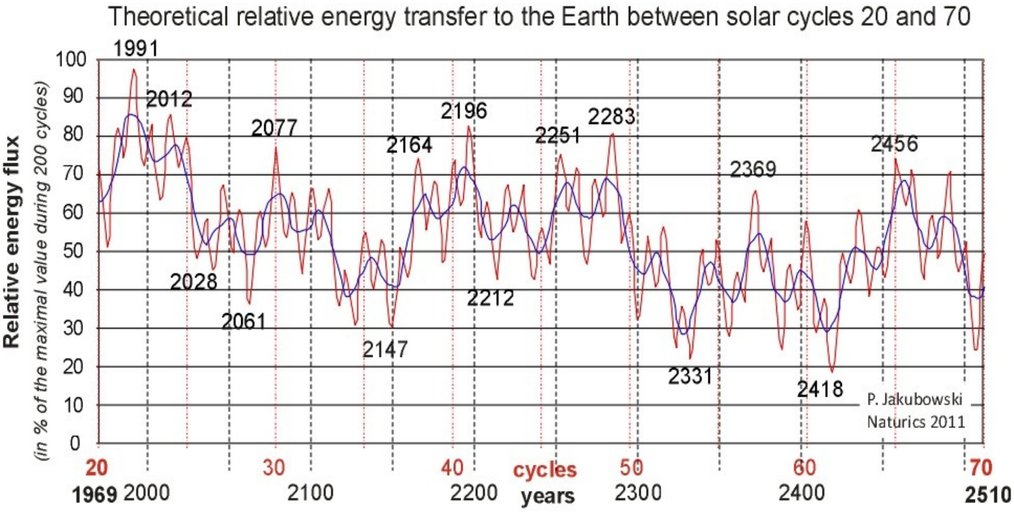


Figure 16. Theoretical reconstruction of the complete energy transfer from the cosmic space to Earth during the recent forty years and the prognosis for the solar cycles 24 to 70; a continuation of figures 13 to 15.

The basic accuracy of our calculations is high enough for our historical reconstruction of the past climate changes[1]. However, for our looked for precise forecast of the coming climate changes we would like to increase this accuracy many times. We would like to see these changes on a possibly detailed scale of individual months. The results of such an increment in accuracy will be presented in the next chapters.

---

[1] Compare also Table 1 in Chapter 1.

2. Historical events adequate to climate changes

Let us consider just one example of the historical events undoubtedly connected with the global climate changes we have described in the previous chapter. It concerns the mysterious "extinction" of the ancient Pueblo-Peoples culture in central North America, the fall of the culture of the Anasazi Indians[1].

> "The period from 700-1130 AD saw a rapid increase in population due to consistent and regular rainfall patterns. Studies of skeletal remains show that this growth was due to increased fertility rather than decreased mortality. However, this tenfold increase in population over the course of a few generations could not be achieved by increased birthrate alone; likely it also involved migrations of peoples from surrounding areas. Innovations such as pottery, food storage, and agriculture enabled this rapid growth. Over several decades, the Ancient Pueblo culture spread across the landscape. ...
>
> The ancient Pueblos attained a cultural "Golden Age" between about 900 and 1130. During this time, generally classed as Pueblo II, the climate was relatively warm and rainfall mostly adequate. ...
>
> After approximately 1150, North America experienced significant climatic change in the form of a 300-year drought called the Great Drought. This also led to the collapse of the Tiwanaku civilization around Lake Titicaca in present-day Bolivia.[15] The contemporary Mississippian culture also collapsed during this period. Confirming evidence is found in excavations of the western regions of the Mississippi Valley between 1150 and 1350, which show long-lasting patterns of warmer, wetter winters and cooler, drier summers. In this later period, the Pueblo II became more self-contained, decreasing trade and interaction with more distant communities. Southwest farmers developed irrigation techniques appropriate to seasonal rainfall, including soil and water control features such as check dams and terraces. The population of the region continued to be mobile, abandoning settlements and fields under adverse conditions. Along with the change in precipitation patterns, there was a drop in water table levels due to a different cycle unrelated to rainfall. This forced the abandonment of

---

[1] http://en.wikipedia.org/wiki/Ancient_Pueblo_Peoples

> settlements in the more arid or over-farmed locations.
>
> The ancient Pueblo did not "vanish", as is commonly portrayed in media presentations or popular books, but migrated to areas in the southwest with more favorable rainfall and dependable streams. ...
>
> It is not entirely clear why the Ancestral Puebloans migrated from their established homes in the 12th and 13th centuries. Factors examined and discussed include global or regional climate change (cf. Little Ice Age), prolonged periods of drought, cyclical periods of topsoil erosion, environmental degradation, de-forestation, hostility from new arrivals, religious or cultural change, and even influence from Mesoamerican cultures. Many of these possibilities are supported by archaeological evidence. ... The archaeological record indicates that it was not unusual for ancient Pueblo peoples to adapt to climatic change by changing residences and locations."

As we see, the same global climatic changes, leading in over-populated Europe to numerous wars and catastrophic epidemics during the first (coldest) phase of the "Little Ice Age", have caused a seemingly softer migration of the climate refugees in the relatively under-populated North America.[1]

---

[1] Compare also the National Geographic issue from September 28, 2001

Chapter 7

20th-century climate reconstruction

1. Basic-calculations for the 20th century

Figure 17 presents that part of our basic calculations (Table 5) corresponding to the period of time between 1893 and 2066. This period contains the cosmic "quantum jump" of the level 3 (in year 1908,445), the whole 20th century and two third of the 21st century, including the "quantum jump" of the level 2 (in year 2000,535). These "quantum jumps" are almost invisible in Figure 17 because of the used scale of the basic calculations. And all theoretical solar cycles have still the same theoretical length of 10,81254 years. It is because we have used till now only the modulators of these cycles with periods longer than the solar-cycle length.

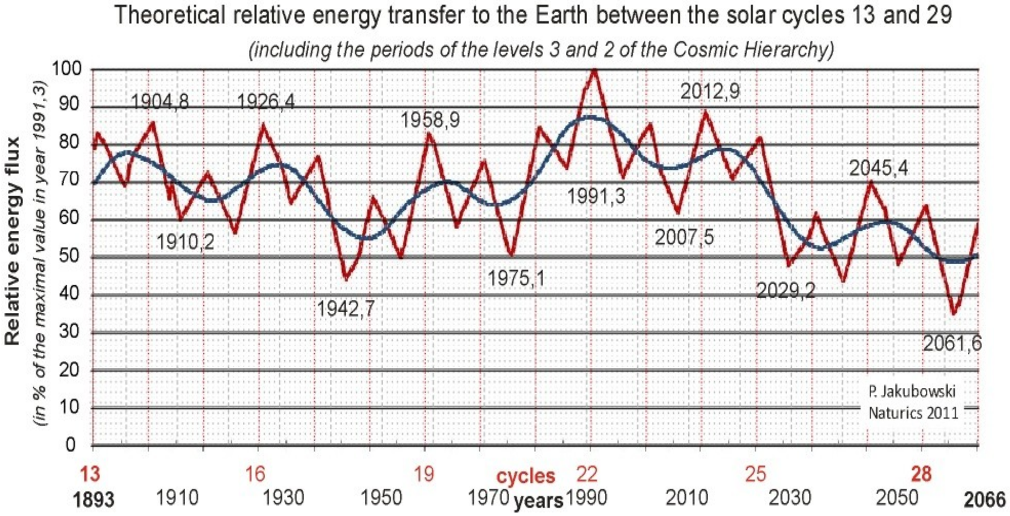


Figure 17. Theoretical reconstruction of the energy transfer to Earth during the recent century; the corresponding cutting of the Figures 15 and 16.

2. Influence of the level 1 on the basic results of calculations

If we wish to increase the accuracy of our calculations we have to include also the modulators with periods shorter than a single solar cycle. The strongest of them is of course the next lover level 1 of the Cosmic Hierarchy with its period of 7,5839 years (or 7 years and 7 months). As we can see in Figure 18[1], this period modulates the formal length of the solar energetic cycles very distinctly. It can be seen especially well for the cycles 16, 19, and 21. Also the present cycle 24 is a drastic example of this modulation. It will reach its seeming maximum three years later (in 2015) than its theoretical maximum in 2012[2]. The other effect of this modulation is the stronger evidence of the previously discussed "quantum jumps" of the level 3 and 2.

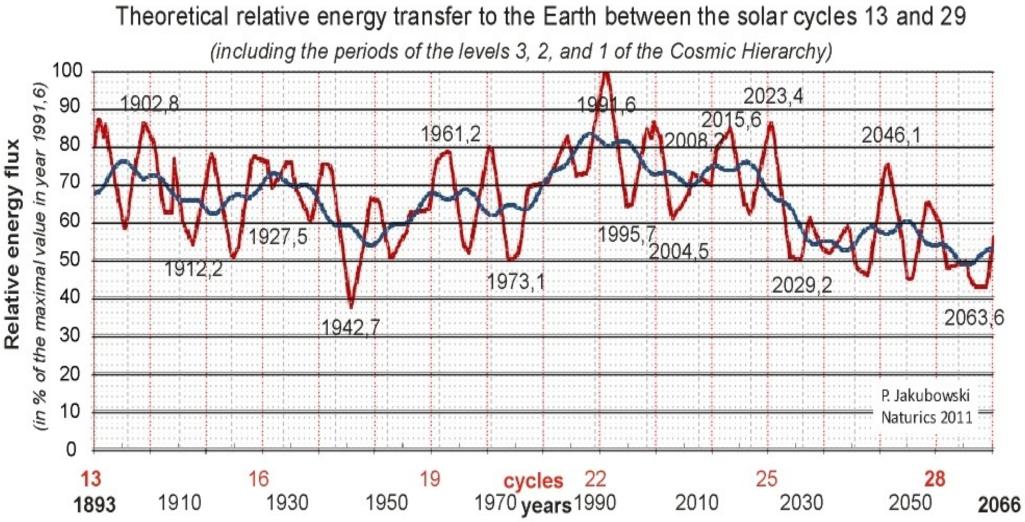


Figure 18. The level 1 of the Cosmic Hierarchy, the first period of the hierarchy shorter than a single solar cycle; the first step towards the higher accuracy of the detailed reconstruction and prognosis of the cosmic-energy transfer.

---

[1] We don't present the full tables of our calculations for the levels 1, 0, and -1 here, because these calculation-data are just a simple extension of the Table 7.

[2] Compare also the traditional analysis of the sunspots, for example here: http://solarscience.msfc.nasa.gov/images/Zurich_Color_Small.jpg

3. The additional influence of the level 0

The influence of the level 0, with its period of 228,1 days being shorter than one year, is not very easy to observe without an additional magnification of the viewed range of time. In the magnification of the previous Figure 18 it seems to be not important at all. It looks in Figure 19 like a "noise" of an electromagnetic signal. Nevertheless, this accuracy allows us already to study the basic physical connection between the cosmic-energy transfer and the origin of the extreme storms in the Earth's atmosphere, as shown in the following Figure 20.

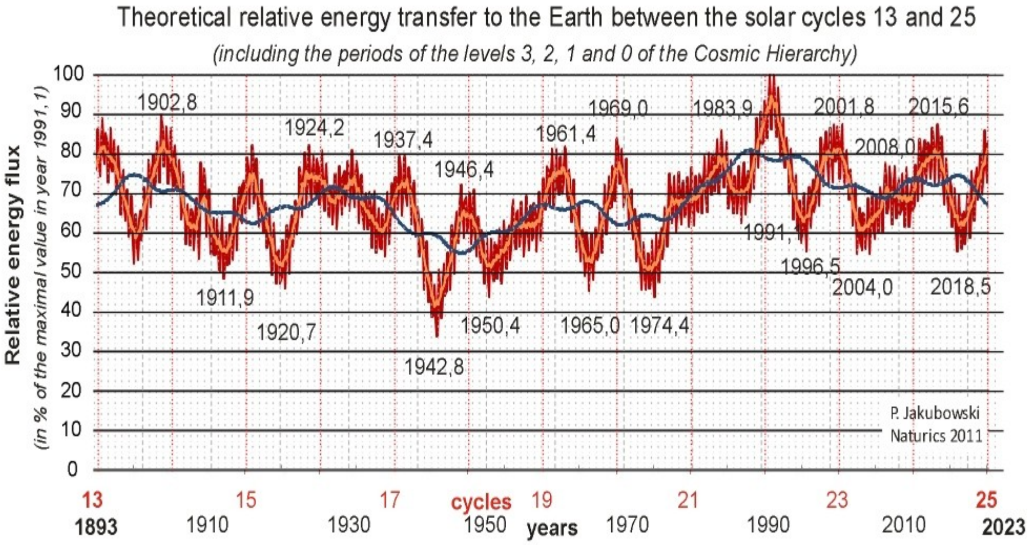


Figure 19. The level 0 of the Cosmic Hierarchy included into the calculations of the diagram in Figure 18; it is the second step towards the higher accuracy of the climate reconstruction and prognosis.

It is evident from the Figure 20 that the extremely strong storms occur in those years when the energy transfer to the Earth changes its intensity-level, from increasing to decreasing, or reversely. According to this observation the next period of heavy storms is to be expected in winter 2014/2015.

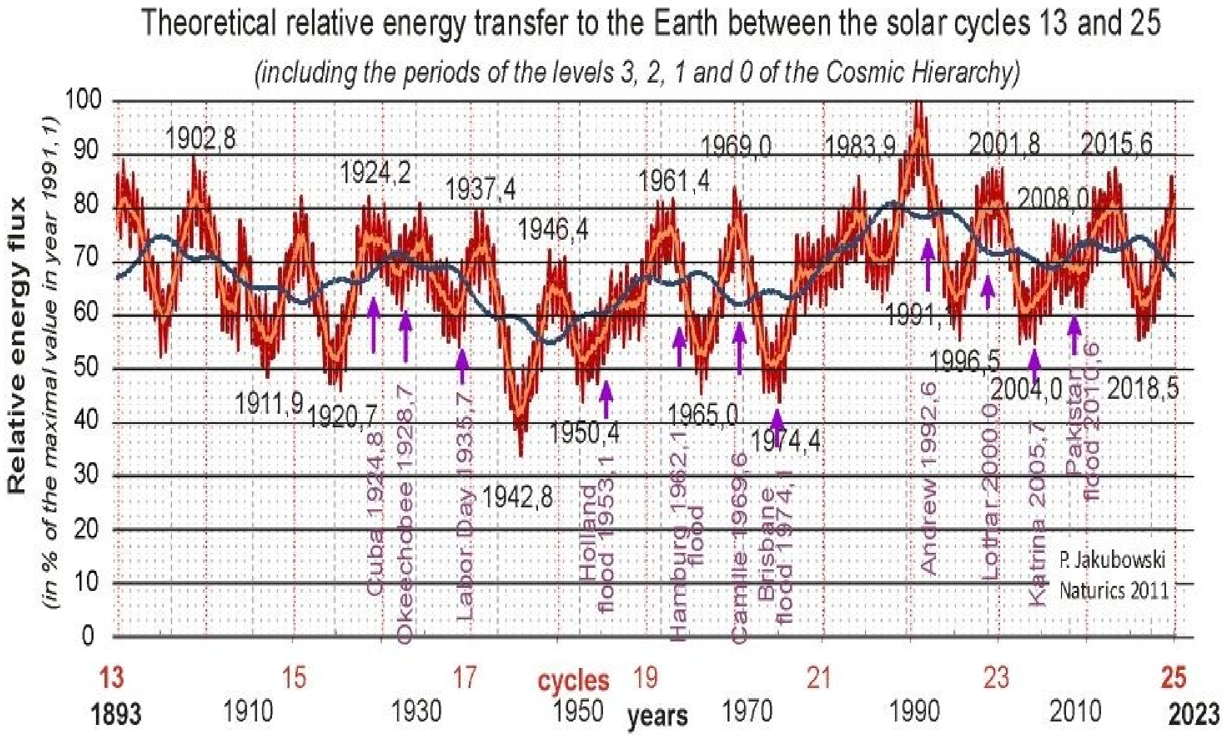


Figure 20. The present level of accuracy allows a discussion of the origin of periods with the extreme stormy events.

4. The extreme accuracy including the level -1

Now, let us magnify our view upon the Figure 19.

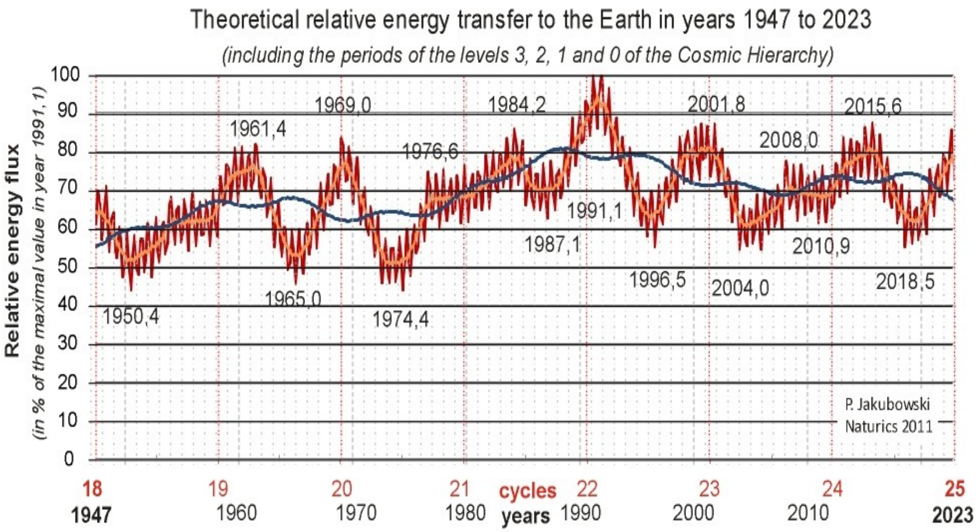


Figure 21. We prepare the next step of the increased accuracy; this is the corresponding cutting of the Figure 19 (or 20).

However, such a reserved step as shown in Figure 21 brings still no improvement of the situation. We need some more drastic step. We have to cut off a period of time in which we are able to separate the individual months. Only at this large magnification we are able to discus the influence of the next-level cosmic modulator upon the energy transfer to the Earth. The period of this next theoretical level -1 can be calculated (as we remember from the previous chapter) by division of the period 228,12 days by the scaling factor of 12,1428, giving the period of 18,786 days. Introducing such a short-termed modulator into our calculations of the previous level we can obtain, for example, the following diagram, as shown in Figure 22.

It has no meaning, in relation to which value we compare our actual diagram. What matters is the relative relation of all values to each others. In the Figure 21 we have plotted all values in the relation to the maximal value of the year1991,1. However, in Figure 22 we can use as the reference value the local maximum from the year 2015,62[1]. It changes our relative diagrams in any way. If we need in some later moment to present our detailed calculation in relation to the absolute maximum of our whole calculations range of 2200 years, it is enough to compare the value of the year 2015 here with the corresponding value of the year 2012 in our basic Figure 16.

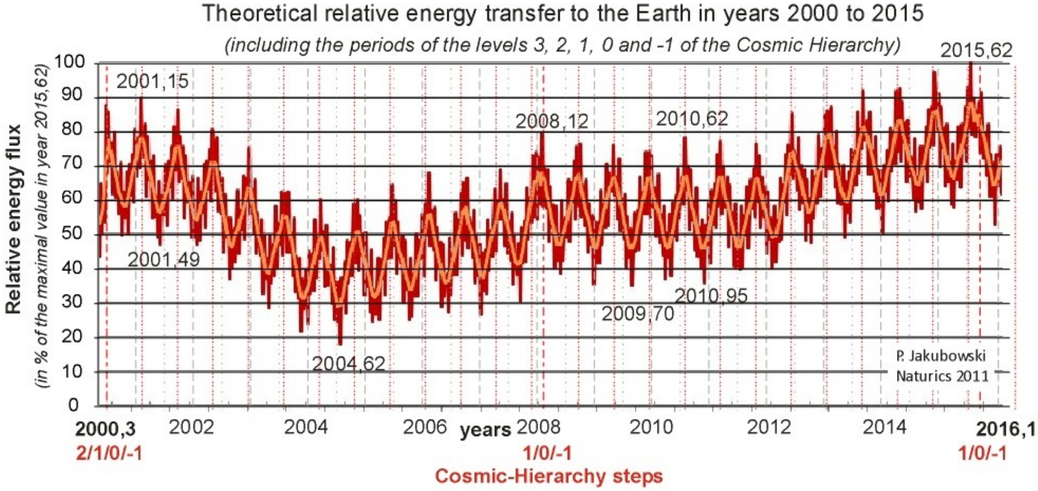


Figure 22. The further cutting of the Figure 21, already showing the next smaller level of the Cosmic Hierarchy, the level -1, with its period of 18.8 days.

5. Local meteorological events correlated to climate changes

Let us magnify our view once more. Now, we see the period of an individual month in the following Figure 23. In this magnification, we are able to compare the climatic changes with the observed meteorological events lasting just

---

[1] Obviously, our corresponding calculations cannot be changed in any way; we calculate in any case beginning with one of the previously calculated points of the basic calculation (with the Cosmic-Hierarchy levels 3 and 2, as presented in Table 5).

a few weeks. We cut out the period of ten years from Figure 22, as shown in the figure below.

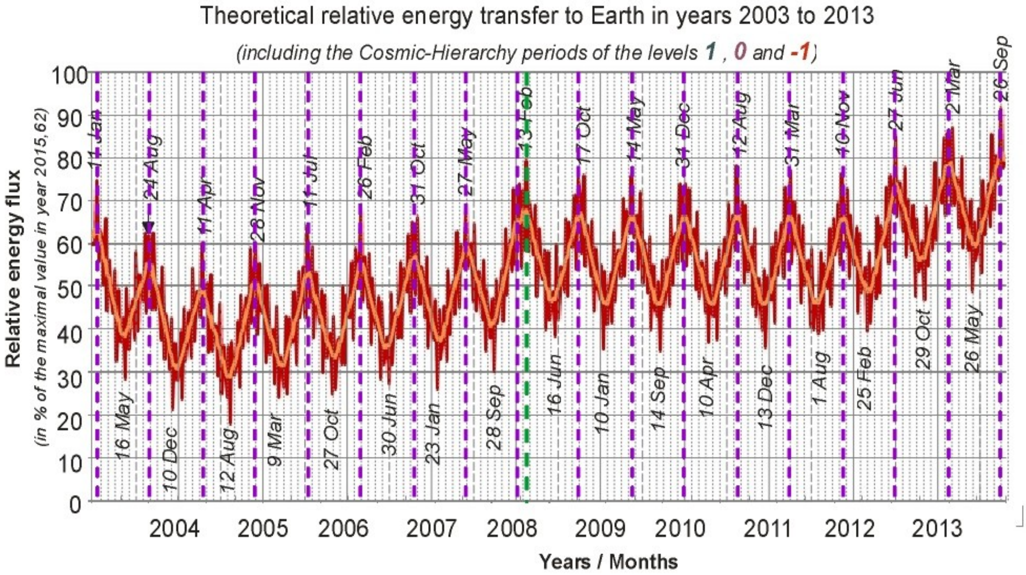


Figure 23. The central part of Figure 22, showing the individual months at the first time in our analysis, allows now a comparison with the detailed weather events.

In that figure we see the differently colored "quantum jumps" of the level 1 (in year 2008,119), of the level 0 (separated by 228,12 days from each other) and of the level -1 (with our shortest period considered here, of 18,8 days). It should be possible now, with this extreme accuracy below an individual month, to demonstrate the whole precision of our model by a comparison of our climatic reconstruction with some chosen meteorological observations covering the same couple of years. I have chosen for such a comparison the rough data of Mr. Wlk, amateur-meteorologist in Kelkheim-Eppenhain in Germany, available on internet[1]. These data (presented in Table 8 below) are introduced in the following Figure 24.

---

[1] http://www.wlk.de/haupt.htm

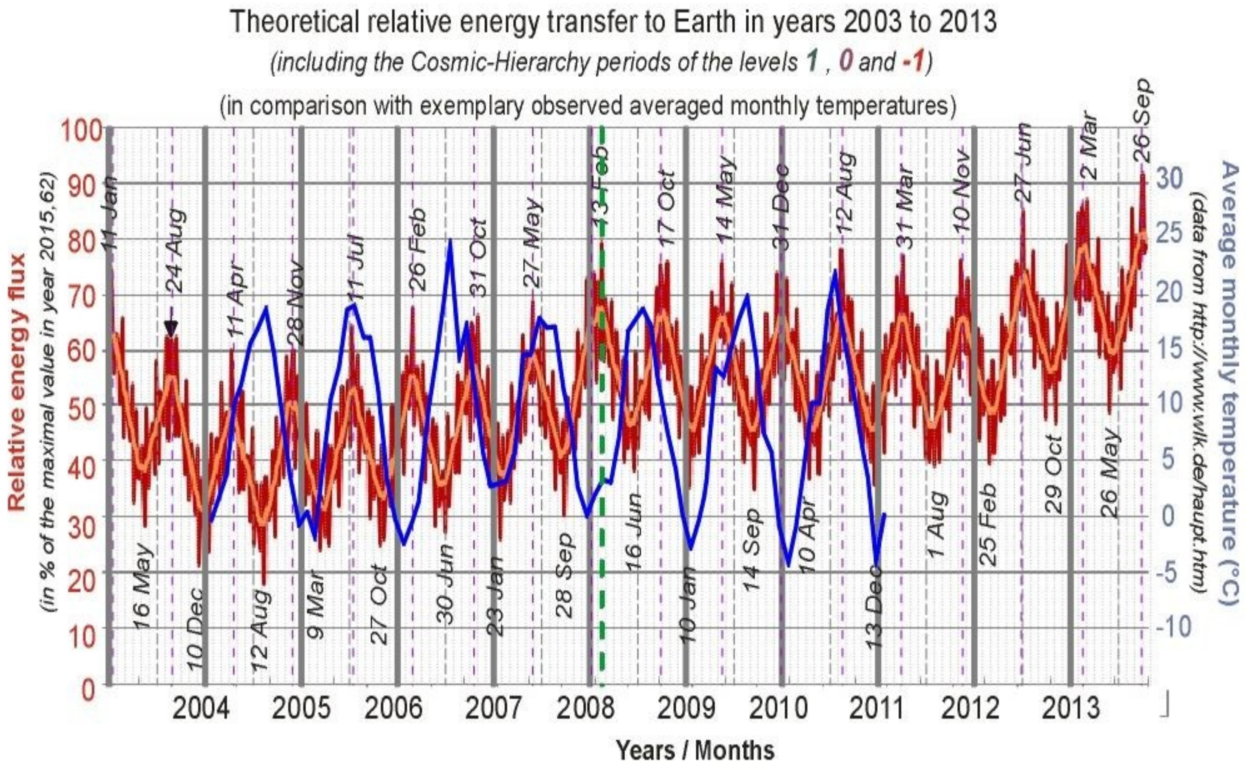


Figure 24. The weather events represented through the monthly averaged temperature for an exemplary place (here in Kelkheim-Eppenhain in Germany; the blue curve in the diagram) show the natural annual periodicity. An influence of the cosmic-energy transfer on these averaged temperatures is clearly evident (compare the discussion in the following text).

Table 8. The observational data of the monthly averaged temperature; data collected by Wlk in Kelkheim-Eppenhain in Germany (http://www.wlk.de/haupt.htm)

	2004	2005	2006	2007	2008	2009	2010	2011
Jan	0,1	0,9	-2	3,4	2,5	-2,5	-3,8	0,3
Feb	2,3	-1,3	-0,4	3,7	3,6	0,4	-0,7	0,9
Mar	4,4	4,8	1,9	6,2	3,4	4	4,2	**5**
Apr	10,7	10,9	8,7	15,1	7,5	13,8	10,6	**9**
May	12,5	14	13,8	15,1	17,4	13,1	10,5	**11**
Jun	16,1	19,1	19,3	18,2	18,4	15,9	18,9	**15**
Jul	17,6	19,4	24,8	17,3	19,1	18,6	22,4	**17**
Aug	19,1	16,6	14,7	17,5	17,5	20,4	16,6	**19**
Sep	14,9	16,7	17,6	12,3	12,1	15,2	12,3	**15**
Oct	9,6	11,3	11,7	8,6	8,2	7,8	8	**11**
Nov	3,4	3,8	6,1	2,8	4,4	6,1	4	**5**
Dec	-0,5	0	3,1	0,4	0	-0,8	-3,6	**-2**

The last column of the above table gives our prognosis for the monthly averaged temperature at the same measuring station. However, the tendency can be understood global, for the whole Earth simultaneously. The months from April to July should be colder than on average of the recent decade, whereas the months August, September, and October will be warmer than the average. To know this can be important not only for our economy but also for our holidays. I am really curious about the observational data of the coming months.

Before we are going to compare the meteorological data, the monthly averaged temperature (somewhere on the Earth's surface) with our theoretical relative changes of the global energy flux to the Earth, we have to be aware of the following difference. The flux of the cosmic energy to the Earth is independent of the actual position of the Earth within the Solar System. The whole Solar System is a collective receiver of this energy incoming from outside. Jupiter, Saturn and solar "Dark Companion" are members of the system. However, they are not the energy sources themselves. In our model, they are just modulators of the energy transfer. On the contrary, the meteorological data are obviously modulated through the annual relative motion of the Earth around the Sun. Therefore it is clear that we observe the highest temperatures during each summer at the location of the measuring station and the lowest temperatures during each winter. The influence of the cosmic energy is more subtle than the absolute difference between the summer and winter temperatures, and it is long-termed. We have to look more carefully at the Figure 24 (in comparison with Table 8). If we do that, we can recognize many astonishing points of that influence.

Generally, we observe the strongest influence each time when the averaged density of the cosmic energy (represented through the orange-colored curve in Figure 24) changes its tendency, from rising to sinking, or reversely. For example, the additional cosmic energy incoming in August 2004 results in the second warmest August of the measured period 2004-2010 (compare Table 8). On the contrary, the typically rising annual tendency of the temperature between January and February 2005 wil be interrupted, because the cosmic-energy flux is still lowering its intensity. It results in the coldest February of the observed period. Also in midsummer 2005 the cosmic-energy flux beginns to sink, leading to the second coldest July of the period. On the contrary, the cosmic flux begins to rise in June 2006, supporting the annual summer tendency, what results in the distinctly warmest July of the period. The same part of the cosmic tendency reverses even the annual sinking-temperature tendency, resulting in September 2006 warmer by 2,9 deg than the preceding August 2006 and in the hottest seven consecutive months - the warmest winter of the whole period.

On the contrary, two years later, at almost the same situation (with only about two weaks difference), the cosmic influence is opposite to that described just above. It is because we have to remember that the summer 2008 and the winter 2008/2009 are on the declining side of the "quantum jump" of the level 1 in year 2008,119 (compare Figure 10 once more). This time the sinking flux of the level 1 of the cosmic energy (not directly visible in the magnification of Figure 24; compare Figure 21) is stronger decreasing than the increasing influence of the energy flux of the level 0. This results in some extraordinary situations. After the coldest April 2008 there follows the hottest May 2008 and then the coldest September 2008 and the second coldest January 2009 again. Also the coldest June 2009 strengthenes the observation that we are still on the cooling side of the "quantum jump" of the level 3 (from the year 1908,445) and of the "quantum jump" of the level 2 (from the year 2000,535).

The overlapping of the annual tendency to the cold winter months with the sinking energy flux of the level 0, as shown in Figure 24, explains further the extremely cold months January 2010 and December 2010 separated with the second warmest July 2010.

As we can see, the reached accuracy of our description forces a new kind of our weather understanding. We have to consider our weather as a really three-dimensional phenomenon. Let us imagine the following weather-situation, which can be observed readily in the temperate zone. During a sunny, windless day we can often observe a smoke or steam from a factory chimney rising vertically upward. On the contrary, during another windless, but cloudy and wet day we can see the same smoke or steam floating over the ground. Why could be the difference? Is it really weather-dependent?

Yes, it is. The windless sunshine occurs during a high-pressure weather-phase, when the air pressure is higher than normal for the observed area. The hot gas from the chimney is of a lower density than the surrounding air. This gas is rising in this dense air like a cork released under water. On the contrary, the air pressure around the chimney is lowered during a bad-weather phase. The gas from the chimney enters this low-pressure area and has immediately the possibility to expand horizontally.

However, the behavior of the gas from chimney is also an indicator of the air properties in the wide area around the factory. The situation is following. All the air in the sunshine area rises and takes the gas with it upward (what is different from the cork situation under the water). Reversely, all the air in the bad-weather area is sinking to the ground, pressing the outcoming gas also to the ground. First in that extended description of the whole situation we are able to recognize the imperfection of our understanding. There are still some important open questions here. Where is going all the rising sunshine-weather air to? Where is coming all the sinking bad-weather air from? And where is it vanishing in? It cannot enter the solid ground. A closed circulation has to exist between the adjacent areas of the high pressure and the low pressure.

For example, in the european-weather "kitchen" we have always the Azores high-pressure area and the Island low-pressure area. If they are coulped to each other, it should be possible to observe the hot rising air above Azores traveling in the upper layers of the atmosphere towards Island area in order to cool down and sink there to the ground. In a corresponding wavelength-range of our observational satellites we should see this "air-bridge" between the two areas in a similar way as the protuberances bulging above the Sun's surface.

Shortly speaking, we have to understand the weather, and consequently also its origin, the climate changes, as a three-dimensional phenomenon. By doing so we would probably avoid in the future such embarrassing situations as that one in Christmas-days 1999, when the european weather service had overlooked the maighty storm "Lothar". It has devastated large regions in France, South-Germany and Switzerland but almost nobody has been warned before. I am sure that the origin of this devastating air circulation was to find not in the flat, usually observed atmospheric layers but in the upper layers of the atmosphere. It was a typical example of the influence of the cosmic energy flux (that we are discussing in this book) on the regular, annual development of the weather phenomena.

In that context we can treat climate as a cosmic weather. Any change of the global climate is as natural phenomenon as the permanent change of our meteorological weather, however on a somewhat longer scale of time. The new understanding of the energy sources changing this weather allows us to prepare the long-term climate prognosis similar to those daily short-term meteorological forecasts presented every evening in TV.

6. El Niño - global meteorological event correlated to climate changes

The probably most important achievement of our global-climate changes model is the precise order of all these changes on a common scale of time, as we have discussed in the previous points of this chapter. Nevertheless, from a practical point of view it is not less important to know also the quantitative relations of the energy-transfer intensity during the individual periods of the global-climate development to each other. Simply speaking, it is not only important to know that we are entering a cold phase of the global climate now, but also how deep should be the coming cooling indeed. We have to know the intensity of the global-climate changes.

Figure 10 (in Chapter 2) demonstrates the hypothetical relative intensity of the energy transfer during the cosmic quantum jumps n and n-1 to each other. The Unified Physics suggests that this relation should be even as high as the square of the scaling factor of our universal timescale (it is $12.142775^2 = 147.45$). The study of this relation and the whole intensity problem will surely take some of the next decades. Here I am going to demonstrate my personal view on the way towards the problem solution.

I suppose, one of the best starting points could be the explanation of the temporal correlation of the El Niño event with the global-climate changes predicted with our model. El Niño is a complex of events ranging on the boundary between the global (climatic) and local (meteorological) phenomena. According to Wikipedia[1]:

> "El Niño/La Niña-Southern Oscillation, or ENSO, is a quasiperiodic climate pattern that occurs across the tropical Pacific Ocean with on average five year intervals. It is characterized by variations in the temperature of the surface of the tropical eastern Pacific Ocean—warming or cooling known as El Niño and La Niña respectively—and air surface pressure in the tropical western Pacific—the Southern Oscillation. The two variations are coupled: the warm oceanic phase, El Niño, accompanies high air surface pressure in the western Pacific, while the cold phase, La Niña, accompanies low air surface pressure in the western Pacific. Mechanisms that cause the oscillation remain under study."

The contemporary studies of the El Niño phenomenon are problematic because there is a great misunderstanding in the fundamental physics of this event. One supposes, for example, that "ENSO causes extreme weather such as floods, droughts and other weather disturbances in many regions of the world". It cannot be true. All the world-wide "extreme weather" is influenced by the cosmic energy transfer simultaneously with the Pacific-Ocean weather. There are no other (hidden) causality between the various weather phenomena.

My personal optimism concerning the "cosmic" way of the problem solution grounds on the observation that the Cosmic-Hierarchy level 0 and the

---

[1] For more information about El Niño (and La Niña) see for example: http://en.wikipedia.org/wiki/El_Ni%C3%B1o-Southern_Oscillation.

ENSO are in an exact resonance: eight periods of 228.12 days equals almost exactly five years of the Southern Oscillation (1826 days). In order to really observe this correlation we have to add the "second dimension" (of the energy-transfer intensity) to our timescale diagrams. Let us begin our analysis with a part of the Figure 21, as shown in Fig.25.

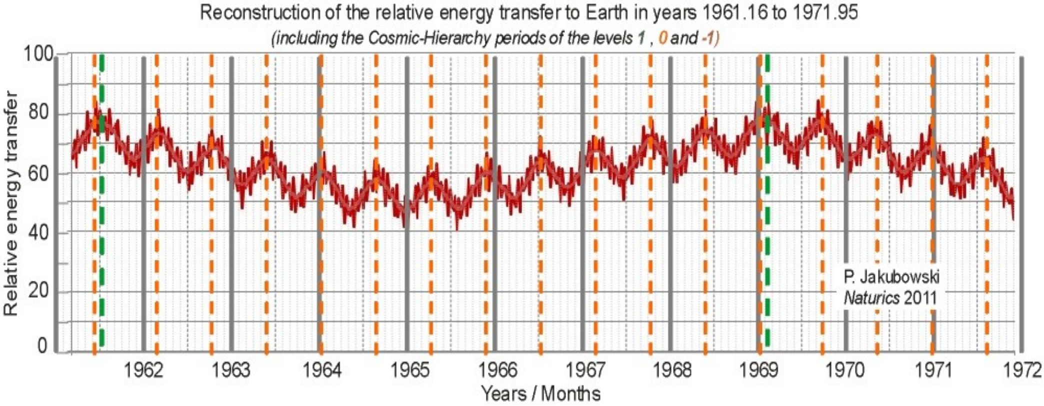


Figure 25. An exemplary period of the reconstruction of the temporary changes of the energy transfer to the Earth (including the shortest considered period of 18.8 days of the level -1 of the Cosmic Hierarchy).

In Figure 25 the relative intensity is shown in relation to its maximal value calculated previously for the year 1991,1 (compare Fig.21). The periods of the level 1 are marked with green lines and those of the level 0 - with orange-color lines. As discussed in Part 2 of this book, we have hitherto simply assumed that all individual contributions to the global (temporary) changes of the energy transfer have the same "weight"; we have simply added all of them (compare column O of Table 6).

Now we have to start to add the differentiated intensity from various levels of the Cosmic Hierarchy. Since we have no experience with such calculations we have to observe very carefully, in which way this differentiation changes our results. I propose to start with some small differentiation, just for to see the results on the same graphical scale of our diagrams as previously (I am afraid that if we begin immediately with 100-fold differentiation, we have no possibility to control what is going on with our diagram). Thus I have assumed, in accordance with Figure 10, that the intensity of the higher-level quantum jump begins to influenced the lower-level jumps at the second but last such smaller jump (of the number 10 of 12). Similarly, after a higher-level jump has happened, the transfer intensity returns to the "normal" level just two sub-periods after that. Therefore, I have chosen the differentiation shown in Figure 26 (being a simplification of Figure 10) for the preliminary calculations of the El-Niño problem.

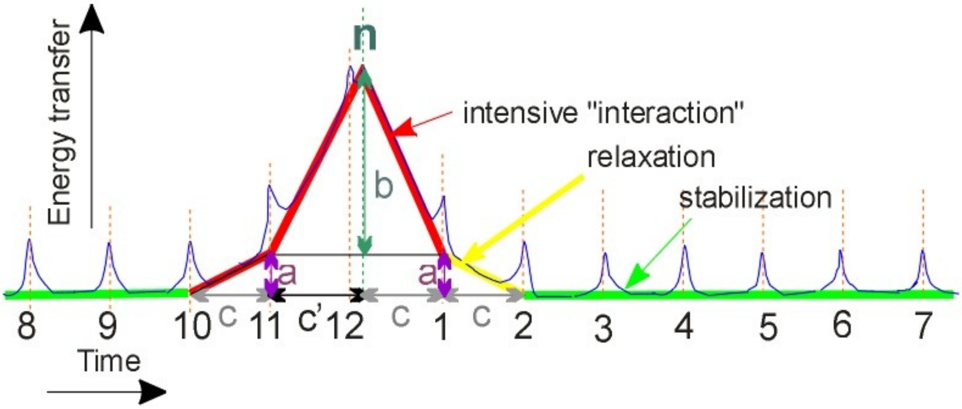


Figure 26. A schematic quantum jump of the level n of the Cosmic Hierarchy. A simplification of the Figure 10 used here for the preliminary calculations of the El-Niño problem (*for more explanations see in the text*).

The three grey-colored sections "c" of the timescale equal the period of the level n-1 of the Cosmic Hierarchy. The black section "c'" equals the section "c" plus the remaining part of the period n between the 12th subsection and the point of the jump n. The vertical section "a" is the height (increasing intensity) of the first "interacting" section of the quantum jump and also the height (decreasing intensity) of the relaxation part after the jump. The section "b" is the height (strongly increasing intensity) of the intense interaction between the corresponding ("jumping") members of the Cosmic Hierarchy during the time period "c'" and also the height of the strongly decreasing intensity of the energy transfer directly after the jump, during the first following subperiod "c" of time of the level n-1.

In the first approximation I have tested the minimal differentiation of the chosen sections of the cosmic jump. Firstly, I have used the height 1 for the section "a" and 2 for the section "b" of the diagram 26 for each quantum jumps of the level 1 of the Cosmic Hierarchy. Secondly, we are going to discuss here the El Niño events over some longer period than a single decade of the Figure 25. The observational data that I have found in Internet cover the period of sixty years between 1950 and 2010[1]. During this period the Earth (together with the whole Solar System) has experienced also the recent quantum jump of the level 2, in year 2000.535. Therefore, in accordance with the schema of Figure 26, we have to begin the differentiation of the intensity of this quantum jump two periods of the level 1 before this year (in year 1984.284) and finish them two such periods after that jump (in year 2015.703). Though this differentiation-range lies outside the period of the Figure 25, this choice influences the maximal intensity chosen for our relative scale of the presented diagrams. In this first example I have chosen the value 2 for the sections "a" and the value 4 for the sections "b" of the diagram 26 of the level-2 jump (in year 2000.535). The results are shown in Figure 27.

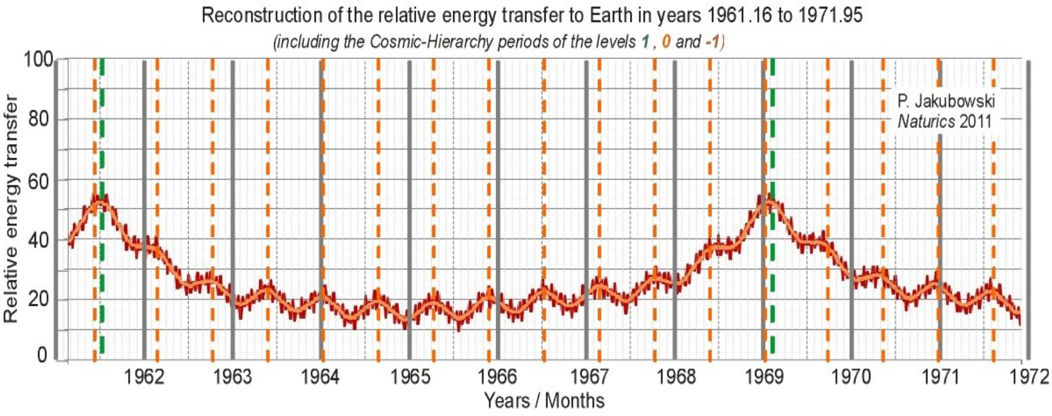


Figure 27. Calculations as in Fig. 25, but with the following differentiation (according to Fig. 26) of the sectors of level-2 quantum jump (2000.535): a2 = 2; b2 = 4; and of each level-1 quantum jump: a1 = 1; b1 = 2; the sector "c" contains 360 calculation points for level 2 and 30 for level 1; sector "c'" contains 410 calculation points for level 2 and 34 such points for level 1.

---

[1] Data to El Niño were used after: Climate Prediction Center of the National Weather Service; http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/ensostuff/ensoyears.shtml

In the next approximation I have increased the differentiation of the level-2 quantum jump in relation to the unchanged choice for the jump of the level 1. This time I have chosen a2 = 8 and b2 = 16. The results are shown in Figure 28 (note the changed left-side scale of the transfer intensity).

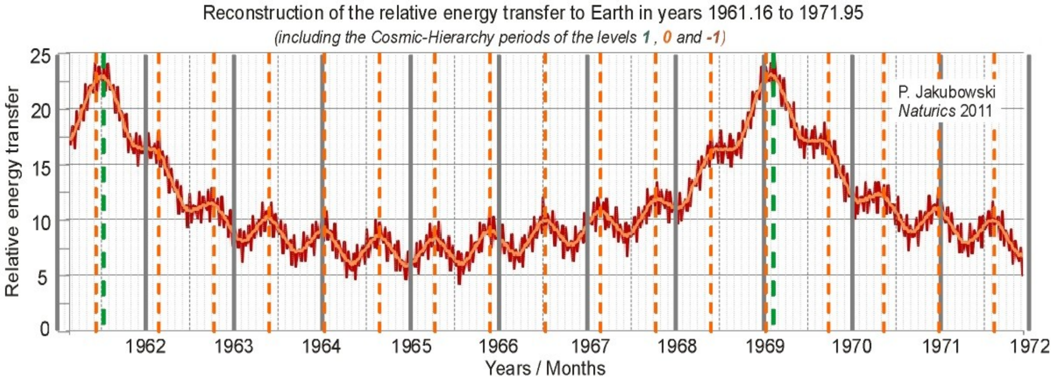


Figure 28. The same calculation as in Figure 27, but with increased differentiation of the sectors of the quantum jump of the level 2 (year 2000.535): a2 = 8; b2 = 16; note the changed intensity scale in comparison with Figure 27.

In order to see also the influence of the increased differentiation of the quantum jumps of the level 1, I have doubled now their values a and b in the following example (Figure 29).

After these preliminary exercises with our calculation scale, we are prepared to discuss the correlation of our predicted global-climate changes with the observed variations of the temperature in El Niño events during the observation period between 1950 and 2010, reported by the American Climate Prediction Center of the National Weather Service (compare the footnote on the previous page). They data give 3-month running mean of anomalies in El Niño episodes in relation to the 1971-2000 base period. I have just ploted these anomalies month after month in percentual relation to the maximal difference of 4.6°C (maximum 2.5°C - minimum -2.1°C). The result of this comparison for the exemplary decade of Figure 29 is presented with the blue curve in Figure 30. On the following pages we can see also all other decades of the whole period of observation, 1950-2010.

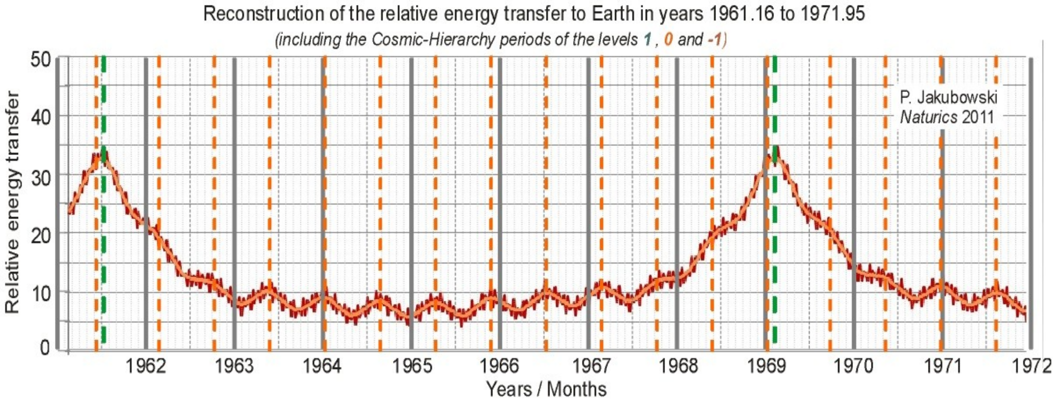


Figure 29. The same calculation as in Figure 28, but with increased differentiation of the sectors of the quantum jump of the level 1 (here presented in two examples of the years 1961.532 and 1969.116)): a1 = 2; b1 = 4; note the changed intensity scale in comparison to Figure 28.

What can we note directly from Figure 30? First of all, we see that the quantum jumps of the level 1 are the mark-points of the El Niño anomaly. Next, we can also see the five-years pseudo-periodicity of the El Niño episodes (1961.5 with 1966, and 1964 with 1969), and the correlation of the anomaly extrema with the quantum jumps of the level 0 of the Cosmic Hierarchy. Thus we can conclude that El Niño is evidently coupled on the energy transfer of the Cosmic Hierarchy.

However, we are just beginning to observe this correlation between the two complicated phenomena. Therefore we have to collect as many observations as possible before we will be ready to some final conclusion. We have to try out yet many other data and also many other approximations of the data presentation, like the energy-transfer intensity differentiation presented here above. We have to remember that we are today still in the "relaxation sector" of the quantum jump of the level 3 (from the year 1908.445). This should be connected with some additional decreasing tendency of the global temperature, yet not considered in the present version of our global-climate-change model. Until 2015.703 we are also in the "relaxation sector" of the recent quantum jump of the level 2 (in year 2000.535). All such additional factors have to be included in the full analysis of the final correlation between the modelled global-climate changes and the global and local meteorological events.

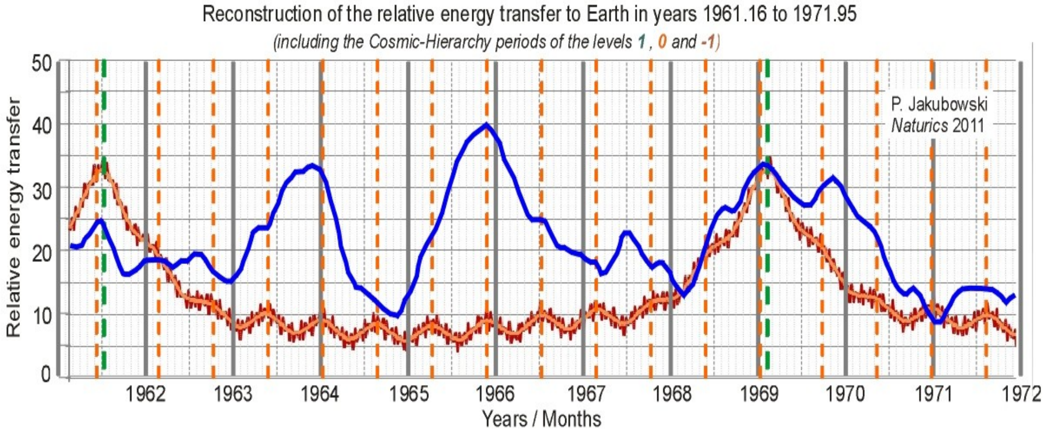


Figure 30. The previous Figure 29 extended with the relative changes of the El-Niño-temperature anomaly[1], presented here in percents of the maximal anomaly of 4.6°C meassured during the period 1950-2010.

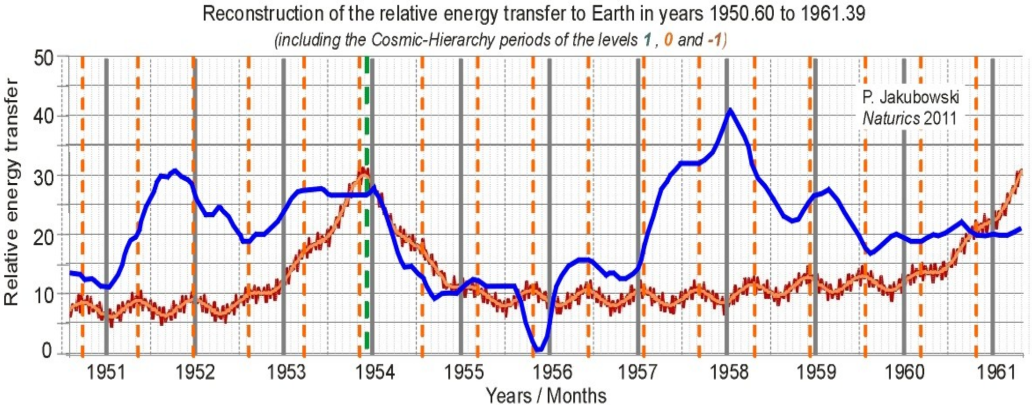


Figure 30a. The decade preceding that of the Figure 30

---

[1] http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/ensostuff/ensoyears.shtml

In order to obtain more information on the starting level, I present here the following extension of the Figure 30 over the whole period between 1950 and 2010, for which the El-Niño-temperature anomaly has been observed. Figure 30b is the same as Figure 30 above.

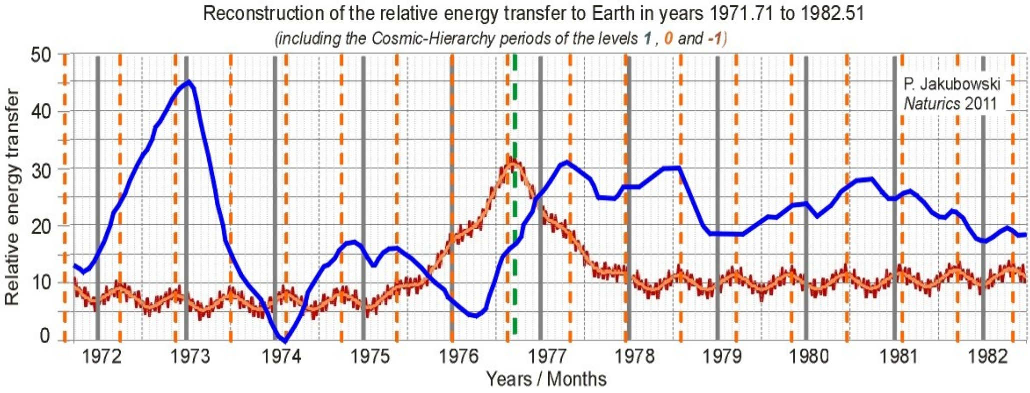


Figure 30c. The decade following that of the Figure 30

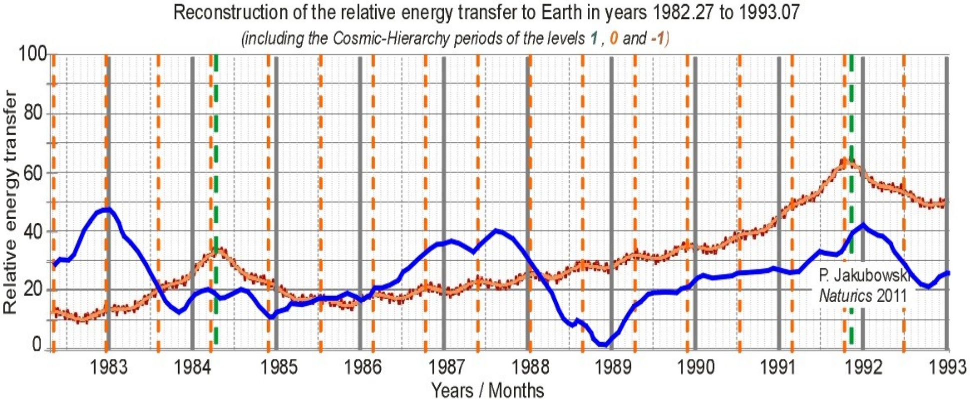


Figure 30d. The decade following that of the Figure 30c. Note the changed scale on the vertical axis.

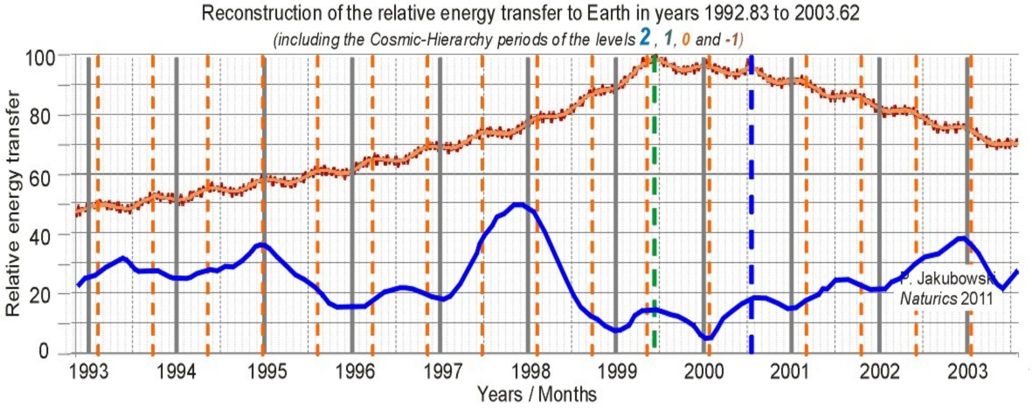


Figure 30e. The decade following that of the Figure 30d.

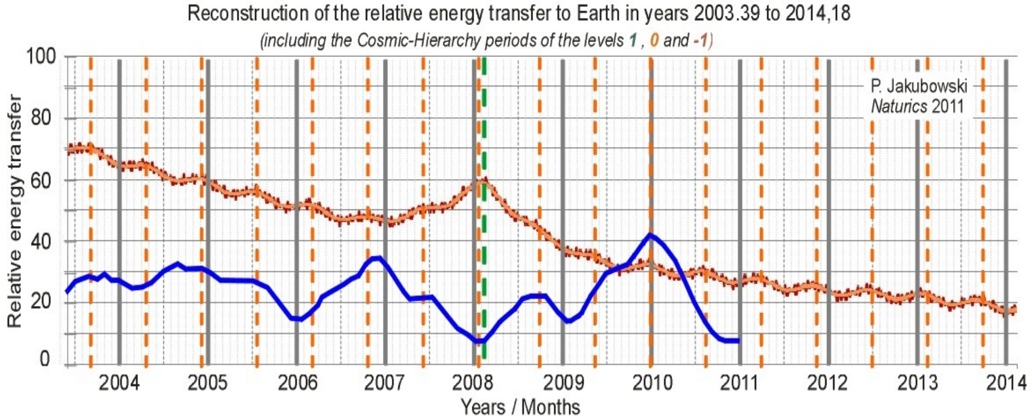


Figure 30f. The present decade, following that of the Figure 30e.

One general observation seems to be especially valuable to be noted here. In almost all cases where the quantum jump of the level 0 pumps its cosmic energy into the Earth´s atmosphere in addition to the annual solar energy of December and January (the summer months in the South Pacific), we observe a positive pik of the El Niño anomaly. On the contrary, we observe that a similar pumping of the additional energy during the winter months May to September (in South Pacific) almost always results in a lowering of the El Niño temperature.

The only plausible explanation of this observation is the following. The cosmic energy flux connected with the quantum jump of the level 0 reaches the Earth during the Pacific winter from a direction opposite to the Sun´s position relative to the Earth. The cosmic energy flux influences negatively the annual "stream" of the solar energy reaching the Earth. It opens a quite new perspective for our energetic analysis. It probably explains also why the El Niño anomaly seems to reverse its sign in the vicinity of the quantum jump of the level 2 (in year 2000.535).

Chapter 8

Prognosis of the global-climate changes

1. Short-term prognosis for one generation

I have good news for my own generation. From the climate point of view we are a lucky generation. It is the last generation of our whole global civilization which still has a real chance to surrender its professional responsibility to the younger generation before the real global cooling could grow to a non-controlable disaster. The younger generation of our children and grand-children has no more time to waste for the senseless global-climate-change debate without knowing the fundamental physical principles govering the climate changes. I have presented these fundamental principles in the previous chapters. What are the consequences for all of us?

As can be seen in the following Figure 31, we expect yet a whole decade (2012-2022) with global climate-changes being in principle comparable to those of the previous decade (2001-2011; compare Fig.21). Despite the already sinking global Earth's temperature, the years 2012-2014 will be rather warm than cold. First the winter 2016/17 will be extremely hard. The warm summers 2019-2022 will shortly change the cooling tendency. July 2022 should be the warmest months of the whole decade. However, it will be the last warm period in the lifetime of our old generation. The cold winter 2023/2024 ends the "modern" global warming definitely.

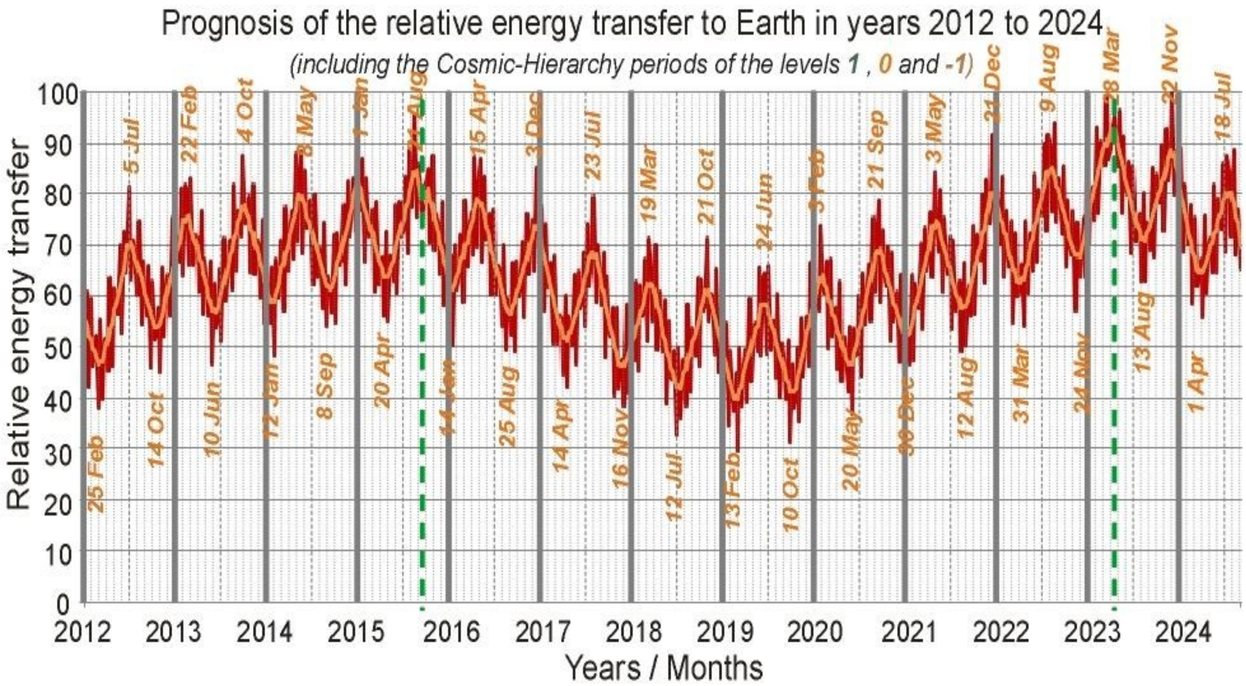


Figure 31. The global-climate changes to be expected in years 2012 to 2024.
Two "quantum jumps" of the level 1 are separated by a period of 7.5839 years. This period "contains" 12.1428 periods of the level 0, with 228.1 days each, containing also 12.1428 periods of the level -1, with a length of 18.8 days each. The values of the level -1, averaged over eleven weeks, as shown with the orange-colored curve, influence the annual local (meteorological) temperatures in every point of the Earth's surface. The dates for the change this tendency from cooling to warming and reversely, are noted explicitely in the figure.

2. Prognosis for the next generation

The next generation can use the presented method and calculate the detailed prognosis of the global-climate changes with the same accuracy of one month vor the whole rest of the 21st century. However, I think for a quick overview it is enough some lower accuracy, extending over many decades in a single diagram. The following Figure 32 has been chosen for that purpose.

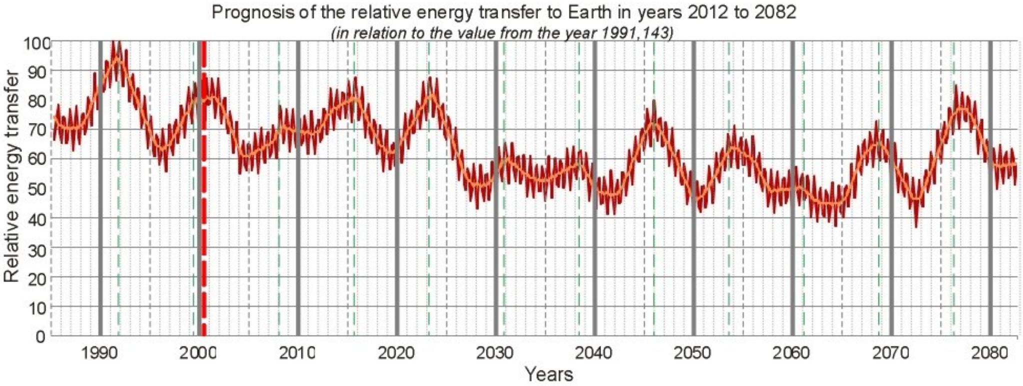


Figure 32. Reconstruction of the recent two decades and prognosis for the next seven decades of the global energy transfer to the Earth. The cosmic quantum jump of the level 2 (red) is seen in year 2000.535. The quantum jumps of the level 1 are marked with green lines, separated from each other with 12.1 shortest periods of the level 0 (228 days).

Note that we are returning in this figure to the standard calculation of the relative energy transfer, focussing our attention on the temporal changes of this transfer. The absolute intensity of this transfer, like previously suggested by discussing the El Niño problem, has to be considered in the next step of the present study. It can result in a slight shift of the years with maximal and minimal global temperature in relation to the above prognosis. However, the global cooling tendency during the next seven decades remains a "cold" reality. The next generation of social managers has to be prepared for some reasonable solution of the energy problem within this reality.

3. Long-term prognosis for the next centuries

The long-term prognosis seems to be maybe not so much important for us today as the two previous prognoses. However, in our global civilization we have to realize our responsibility also for the future generations. We are not allowed to exhaust all the today available sources of energy, leaving nothing for the future generations, before we learn to use effectively the cosmic energy sources. As we can see in the Figure 33, the next generations of the Earth's inhabitants will meet with much more severe conditions to live here than our own conditions.

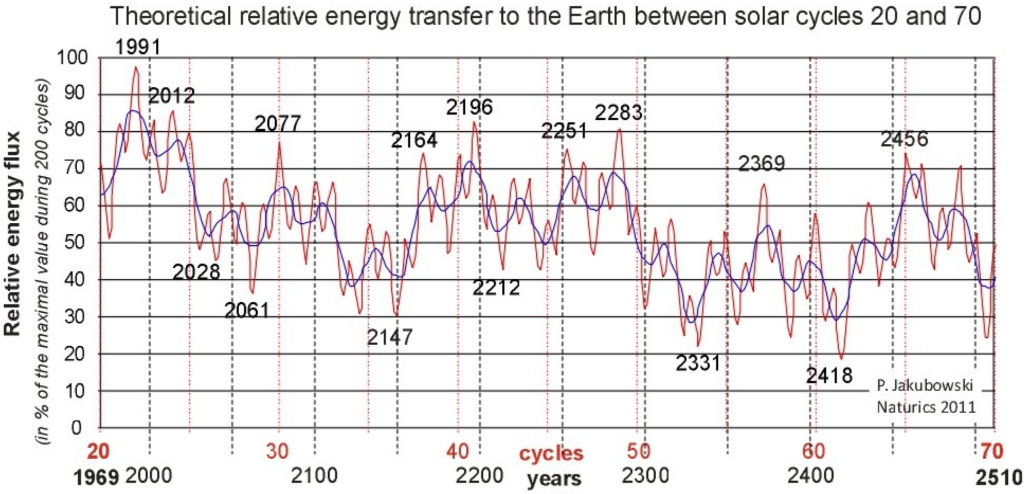


Figure 33. Reconstruction of the recent forty years and prognosis for the next five hundred years of the global energy transfer to the Earth.

The relatively warmer period between 2160 and 2290 will be not warmer than the 18th century (compare Figure 15). And the cold period between 2300 and 2450 will be not warmer than the coldest phase of the previous "Little Ice Age" (compare Figure 14). I cannot imagine a "modern" life in the northern hemisphere under such cold conditions without some new source of energy.

4. What have we learned?

What have we learned here? First of all, we have seen that in order to solve a puzzle it is not enough to have set some individual puzzle-pieces. Without having at least an imagination of the complete picture, how the ready puzzle could look like, it is very difficult to solve the task. The physical parameters of the atmosphere near the Earth´s surface, the same parameters for the upper atmosphere, for the upper and lower layers of the oceanic water, the clouds, snow and ice distibution around the Earth, the concentration and distribution of gases and dust particles in the atmosphere, are all just individual pieces of the global-climate "puzzle". We know always much too few of them, and the net of the measured points is always much too incomplete Therefore, though theoretically not impossible, it is very difficult to complete all of them to a "full picture" of the global climate. It is surely much easier to begin the analysis with a full picture of the energetic situation, delivered in our model. To divide the global flux of the cosmic energy into the local streams, warming or cooling some smaller parts of the Earth´s surface, is thereafter much easier than any classical, reversed task, combining some individual "pieces", as described above.

Secondly, we have learned from this book (including the appendixes) that the Cosmic Hierarchy of the Solar System is reality. It is the first idea we have to think about, when solving an arbitrary task on a global scale, whether in cosmology, archeology, evolution research, sociology, or in futurology. Our huge Universe is quantized according to the same rules as the microcosm. The universal cosmic scale of time can be hierarchically extended down to our internal body-periods (bioresonances).

Finally, we have learned that the ideas of the Unified Physics of *Naturics* are applicable to the whole matter. A relativistic quantum of matter is the main idea. And the Quantum Spectrum of Matter, a "global library" of such quanta, is the unified description of Nature.

Appendixes

Appendix 1

Traditional geological timescale

We compare the theoretical steps of our timescale from Chapter 2 (Point 3) with the most important steps of the traditional geological timescales (*see Refs. 1 and 2 below*).

Table A1/1. Cosmic vs traditional geological timescale

- **3506.673 My** Moon's formation - (Paturi): 4600-4000 My
- **3506.673 My** Archean - (Paturi): 4000 My
- **2621.070 My** Proterozoic - (Paturi): 2500 My
- **554.663 My** Paleozoic - (Paturi): 590 My
    - **554.663 My** Cambrian - (Paturi): 590 My
    - **506.041 My** Ordovician - (Paturi): 500 My; (Shear): 505 My
    - **433.109 My** Silurian - (Paturi): 440 My; (Shear): 438 My
    - **408.798 My** Devonian - (Paturi): 410 My; (Shear): 408 My
    - **360.176 My** Carboniferous - (Paturi): 360 My; (Shear): 360 My
    - **287.243 My** Permian - (Paturi): 290 My; (Shear): 286 My
- **259.462 My** Mesozoic - (Paturi): 250 My; (Shear): 258 My(*)
    - **259.462 My** Triassic - (Paturi): 250 My
    - **210.840 My** Jurassic - (Paturi): 210 My
    - **137.908 My** Cretaceous - (Paturi): 140 My
    - **64.975 My** Cenozoic - (Paturi): 66 My

Note: * - According to the timescale by Shear, there exists a distinct boundary between early and late Permian exactly at this time point. Our time scale differentiated the results of the events of levels 7 and 8 in their intensity and duration so much that our boundary between the Paleozoic Era and Mesozoic Era is much more natural than in the traditional picture of the Earth's history.

The traditional geological timescale is a result of many years of research carried out by thousands of scientists around the world. Each of the mark-points of this scale has been investigated and estimated separately of each others. The accuracy of those estimations has been increased by new observational techniques and new generations of scientists proving the work of their predecessors. Our idea of the Cosmic Hierarchy allows us a simultaneous estimation of all these points, on all levels of the timescale, with a uniform accuracy much better than that of any observational method. Our theoretical cosmic timescale gives the whole Earth-science the unique opportunity to callibrate their observational techniques and instruments.

References

1. Felix R. Paturi, "*Die Chronik der Erde*", Chronik Verlag, Dortmund 1991 (in German).

2. William A. Shear, Nature, Vol.351, 23 May 1991, pp.283-289, "*The early development of terrestrial ecosystems*".

Appendix 2

Theoretical estimation of the age of the largest terrestrial impact craters

The full listing of the presently known terrestrial impact craters is available for example under the address: http://www.unb.ca/passc/ImpactData base/, on the Homepage of PASSC, the canadian "Planetary and Space Science Centre". The Table A2/1 below shows the observed age and the theoretical age for the best investigated impact craters (in the age-sequence).

Table A2/1. A comparison of the theoretical with observed age of the best investigated terrestrial impact craters (*Level means in this table the corresponding level of the Cosmic Hierarchy of the Sun.*)

Nr	Name	Diame-ter (km)	Observed age (My)	Theor. level	Theoretical age (My)	Agreement
1	Sikhote Alin	0.027	0.000056	1	0.0000568	very good
2	Barringer	1.186	0.049 ± 0.003	4	0.049477	**ideal**
3	Lonar	1.83	0.052 ± 0.006	3	0.054110[1]	good
4	Boxhole	0.17	0.0540±0.0015	3	0.054110	**ideal**
5	Zhamanshin	14	0.9 ± 0.1	5	0.85470	**ideal**
6	Bosumtwi	10.5	1.03 ± 0.02	5	1.0196	**ideal**
7	New Quebec	3.44	1.4 ± 0.1	4	1.406[2]	good

---

[1] At this observational relative inaccuracy this crater could be also created after the impact of a part of a larger impactor of the level 4 0.049477 My ago, the same one which had created the Barringer crater.

[2] At this observational relative inaccuracy this crater could be also created after the impact of a part of a larger impactor of the level 5 1.349 My ago.

8	El'gygytgyn	18	3.5 ± 0.5	5	3.516	**ideal**
9	Roter Kamm	2.5	3.7 ± 0.3	4	3.697[1]	good
10	Kara-Kul	52	<5	6	4341	very good
11	Ries	24	15 ± 1	6	14.351	**ideal**
12	Steinheim	3.8	15 ± 1	5	15.034[2]	good
13	Haughton	24	23 ± 1	5	22.998[3]	very good
14	Chesapeake Bay	90	35.5 ± 0.3	6	34.658 or 36.660	good
15	Popigai	100	35.7 ± 0.8	6	34.658 or 36.660	good
16	Mistastin	28	36 ± 4	5	36.000[4]	good
17	Wanapitei	7.5	37.2 ± 1.2	5	37.178[5]	good
18	Logoisk	15	42.3 ± 1.1	5	42.292[6]	very good
19	Ragozinka	9	46 ± 3	5	45.967[7]	good
20	Gusev	3	49.0 ± 0.2	6	48.958	very good
21	Kamensk	25	49 ± 0.2	6	48.958	**ideal**
22	Montagnais	45	50.50 ± 0.76	6	50.960	**ideal**

---

[1] At this observational relative inaccuracy this crater could be also created after the impact of a part of a larger impactor of the level 5 3.681 My ago.

[2] At this observational relative inaccuracy this crater could be also created after the impact of a part of a larger impactor of the level 6 14.351 My ago, the same one which had created the Ries crater, or qiute separately through some impactor of the level 4.

[3] At this observational relative inaccuracy this crater could be also created after the impact of a part of a larger impactor of the level 6 22.645 My ago.

[4] At this observational relative inaccuracy this crater could be also created after the impact of a part of a larger impactor of the level 6 36.660 My ago.

[5] At this observational relative inaccuracy this crater could be also created after the impact of a part of a larger impactor of the level 6 36.660 My ago, the same one which had created the Mistastin crater.

[6] At this observational relative inaccuracy this crater could be also created after the impact of a part of a larger impactor of the level 6 42.952 My ago.

[7] At this observational relative inaccuracy this crater could be also created after the impact of a part of a larger impactor of the level 6 46.956 My ago.

23	Marquez	12.7	58 ± 2	5	57.979[8]	good
24	Chicxulub	170	64.98 ± 0.05	7	*64.975*	*the adjusting point of the timescale of Naturics*
25	Kara	65	70.3 ± 2.2	6	69.265 or 71.267	very good
26	Ust-Kara	25	70.3 ± 2.2	6	69.265 or 71.267	very good
27	Manson	35	73.8 ± 0.3	6	73.269	**ideal**
28	Lappajärvi	23	73.3 ± 5.3	6	73.269	**ideal**
29	Wetumpka	6.5	81.0 ± 1.5	5	80.948[1]	good
30	Dellen	19	89.0 ± 2.7	6	89.572[2]	very good
31	Steen River	25	95 ± 7	6	95.578	**ideal**
32	Deep Bay	13	99 ± 4	5	99.088[3]	good
33	Carswell	39	115 ± 10	7	113.597[4]	good
34	Tookoonooka	55	128 ± 5	6	127.898 or 129.900	very good
35	Mjølnir	40	142 ± 2.6	6	142.198	**ideal**
36	Gosses Bluff	22	142.5 ± 0.8	6	142.198	**ideal**

---

[8] At this observational relative inaccuracy this crater could be also created after the impact of a part of a larger impactor of the level 6 58.969 My ago.

[1] At this observational relative inaccuracy this crater could be also created after the impact of a part of a larger impactor of the level 6 81.278 My ago.

[2] At this observational relative inaccuracy this crater could be also created after the impact of a part of a larger impactor of the level 7 89.286 My ago.

[3] At this observational relative inaccuracy this crater could be also created after the impact of a part of a larger impactor of the level 6 99.582 My ago.

[4] At this relatively large diameter this crater has been probably created by an impactor of the level 7; however the observational inaccuracy allows also its age in accordance with some earlier or later impact of the level 6.

37	Morokweng	70	145 ± 0.8	6	144.200	**ideal**
38	Puchezh-Katunki	80	167 ± 3	6	166.509	**ideal**
39	Manicouagan	100	214 ± 1	7	210.840[1]	good
40	Araguainha	40	244.40 ± 3.25	6	243.445 or 245.447	very good
41	Clearwater East	26	290 ± 20	7	287.241[2]	very good
42	Clearwater West	36	290 ± 20	7	287.241	very good
43	Charlevoix	54	342 ± 15	6	342.157	very good
44	Woodleigh	40	364 ± 8	7	360.176[3]	good
45	Siljan	52	368.0 ± 1.1	6	368.470	**ideal**
46	Ilyinets	8.5	378 ± 5	6	378.481	very good
47	Shoemaker (Teague)	30	1630 ± 5	6	1630.215[4]	good
48	Sudbury	250	1850 ± 3	7	1860.492	very good
49	Vredefort	300	2023 ± 4	8	2030.668	very good

---

[1] At this large diameter this crater should be almost surely created by an impactor of the level 7; however if the given observational age and accuracy is correct, it could be also an extreme case of the level 6 impact 213.128 My ago.

[2] These two craters are almost surely created by an impactor of the level 7; however at the given observational inaccuracy they could be also created by some impactor of the level 6.

[3] At this relatively large diameter this crater has been probably created by an impactor of the level 7; however the observational inaccuracy allows also its age in accordance with some earlier or later impact of the level 6.

[4] At this absolute inaccuracy the true theoretical age cannot be surely ordered to the presented value of the level 6 (with period of 2.002 My); it could be even also ordered to an impact of the level 7 1638.223 My ago.

As we can see in the table above, the agreement is mostly (in 34 cases of 49) "ideal" or "very good". The agreement has been qualified as "good" in the remaining 15 cases, when inside of the observational-error range also some other theoretical point of the same level could be possible.

Some further examples of the investigated craters, however, with still unsufficient accuracy of the crater-age estimation are given in the table below. This low accuracy leads to an uncertain estimation of the impactor level, disabling an exact comparison with our theoretical timescale.

Table A2/2. Examples of an unsufficient observational accuracy in estimation of the age of the terrestrial impact craters

Nr	**Name**	***Diameter (km)***	***Observed age (My)***	***Theor. level***	***Theoretical age (My)***
1	Wabar	0.116	0.000140	1	0.000140
2	Azuara	30	~ 40	7 or	40.664
				6 or	40.950
				5	39.937
3	Boltysh	24	65.17 ± 0.64	7 or	64.975
				6 or	65.261
				5	65.096
4	Mien	9	121.0 ± 2.3	6 or	121.891
				5	121.067 or 120.902
5	Zapadnaya	3.2	165 ± 5	7 or	162.219
				6 or	164.507
				5 or	?
				4	?
6	Obolon'	20	169 ± 7	7 or	162.219
				6 or	168.511
				5	169.029

7	Rochechouart	23	214 ± 8	7 or 6 or 5	210.840 213.128 ?
8	Saint Martin	40	220 ± 32	7 or 6	210.840 ?
9	Ternovka	11	280 ± 10	7 or 6 or 5	287.241 279.233 ?
10	Flynn Creek	3.8	360 ± 20	7 or 6 or 5 or 4	360.176 ? ? ?
11	Kaluga	15	380 ± 5	7 or 6 or 5	384.487 380.483 379.988
12	Elbow	8	395 ± 25	6 or 5	394.7832 ?
13	Brent	3.8	396 ± 20	6 or 5 or 4	396.785 ? ?
14	Pilot	6	445 ± 2	6 or 5	445.407 445.078
15	Slate Islands	30	~ 450	7 or 6 or 5	457.420 449.412 ?
16	Ames	16	470 ± 30	6 or 5	469.718 ?
17	Presqu'ile	24	< 500	?	?
18	Acraman	90	~ 590	7 or 6	582.444 590.738
19	Beaverhead	60	~ 600	7 or 6	606.755 600.749

20	Strangways	25	646 ± 42	7 or 6	655.377 or 631.066 ?

There are many craters on the Earth's surface which had originated during the points of time corresponding exactly with the "quantum jumps" of the Cosmic Hierarchy of the Solar System. On the contrary, there is not one example of a large impact crater (at least known to me), that would originated evidently outside such cosmic "quantum jumps". This means that the energetic influence of the Cosmic Hierarchy upon the Earth's geologic and biologic development is the main (if not even the only important) factor of the evolution of life and the human being.

Appendix 3

Cosmic triggers of the strongest earthquakes

The real strongest earthquakes world-wide in a time-relation to the "quantum jumps" of the Cosmic Hierarchy and to the theoretical turning points of the Earth's orbit around the Sun and Venus

We understand pretty good today, why do the earthquakes happen. It was not always so. Only after the geophysics has accepted the Wegener's model of a dynamic Earth, with the tectonic plates moving on her surface, we have recognized the places, where the earthquakes preferably occur. We have realized that the most earthquakes occur on the edges of the oppositiely moving tectonic plates (colliding "head on head" or drifting apart, or sliding in opposite directions).

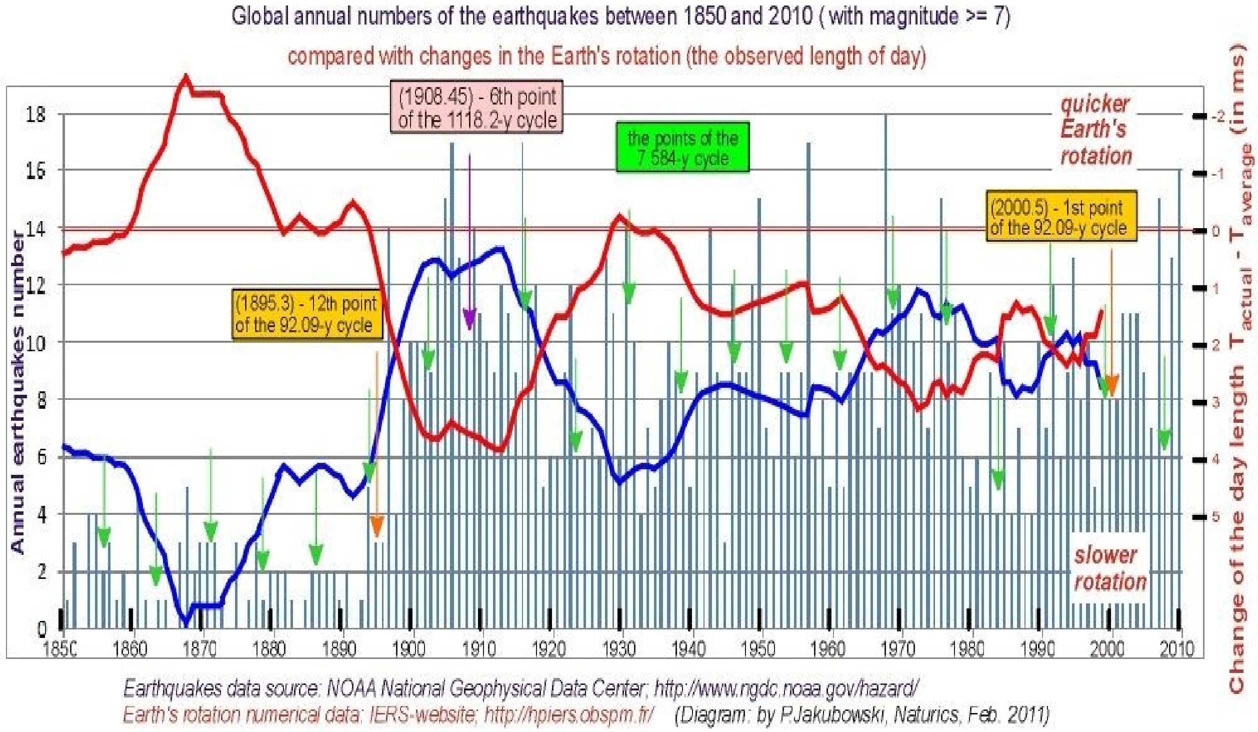
We understand also principally, when does an earthquake happen. It takes place when the mechanical stress between the two involved plates increases beyond the actual material limit of one of these plates. The material becomes broken and the plates move against each other. Unfortunately, there are almost hundred thousand kilometers of the tectonic-plate edges on the Earth's surface. Too much for us to measure continuously the stress along all the lines. And the different kinds of ground possess different material properties. When should each of them pass its critical value?

Thanks to the *Naturics* idea of the Cosmic Hierarchy of the Solar System, we can go now one further step toward the understanding of the earthquakes. We are able now to identify the periods of time with an enhanced occurrence-probability of the strongest earthquakes. It does not allow us yet to say where exactly on the Earth's surface the next strong quake is going to happen. However, we are able to say, when the probability of this earthquake is extremely increased and when not. It could be a sign for geophysicists in the most densely populated areas to intensify their measurements of the ground stress and watch other warning signs.

The idea of the Cosmic Hierarchy makes clear to us that the Earth is not an isolated rocky body in a vast Universe. It means also that the triggers of the earthquakes, the causes for the Earth's shake, are to be seen first of all outside the Earth, and not under the ground. The Earth, together with the whole Solar System, crosses (with a speed of thousands kilometer in a second) various regions of the Universe, with different energy density. Penetrating a region with extremely high energy density, Earth becomes shaked like a car on a street paved with cobble-stones or an airplane in a turbulences-zone. If the mechanical stress at any point along the tectonic-plates edges is very near its limiting value at that moment, the earthquake will occur exactly there.

Figure 10 (in Chapter 2) shows schematically the energy transfer during such a "cosmic quantum jump", during a crossing of the energy bridge, with an intensity corresponding to the actual level of the Cosmic Hierarchy. We have also seen in Chapter 2 that our Solar System has experienced a relatively intense "quantum jump" of the level 5 exactly 6812 years ago. Since then we have still not experienced any single "jump"of the level 4, but only six such "jumps" of the level 3, the last one in summer 1908. Exactly this relatively recent event gives us the unique possibility to study the influence of the cosmic-energy flux on the frequency of the strongest earthquakes, as shown in the following Figure 34.

This figure shows first of all an annual distribution of the number of the strongest earthquakes world-wide between 1850 and 2010. We see a dramatic rise of this number in 20th century in comparison with the second half of the 19th century. Is this rise a real phenomenon or is it caused artifically through obviously better information exchange (with telegraph, telephone and radio) in 20th century? In order to check this dilemma, we consider also a second physical phenomenon connected with the Earth's motion through the cosmic space. It is the rotation velocity of the Earth around her own axis, i.e. the observed length of day on Earth. The change of the day length is shown in Figure 34 with the red curve. We see that the Earth has rotated in the second half of the 19th century quicker than during the whole 20th century indeed. In order to better compare the both diagrams, I have reflected the red curve horizontally. Its blue "reflection"corresponds pretty well with the earthquake-number distribution. What does it mean?



Global annual numbers of the earthquakes between 1850 and 2010 (with magnitude >= 7)

compared with changes in the Earth's rotation (the observed length of day)

Earthquakes data source: NOAA National Geophysical Data Center; http://www.ngdc.noaa.gov/hazard/

Earth's rotation numerical data: IERS-website; http://hpiers.obspm.fr/ (Diagram: by P.Jakubowski, Naturics, Feb. 2011)

Figure 34. Annual distribution of the number of the strongest earthquakes world-wide between 1850 and 2010 in comparison with the rotation velocity of the Earth around her own axis, the observed length of day on Earth (the red curve; its horizontal reflection is the blue one).

First of all, the increase of the earthquakes frequency around the year 1908 (1894-1930) was a real physical event. Secondly, also the interaction of the Earth's surface with the cosmic-energy stream is a real phenomenon. If the Earth is traveling through a cosmic region of some enhanced energy density (as supposed around the year 1908, during the "cosmic quantum jump" of the level 3; compare Figure 10 once more), the stronger friction in that region slows the Earth rotation. Thanks to the layered internal structure of the Earth's body, the heavy core works as fly-wheel and accelerates the rotation after the "jump" again.

For a completeness of the Figure 34 I have also marked the theoretical points of time for the "quantum jumps" of the levels 2 and 1 of the Cosmic Hierarchy. A regularity can be observed that a year with a distinctly higher number of the earthquakes is often prelude to the "quantum jumps" of the level 1. An exact analysis with a resolution of an individual month is however necessary in that case.

The next Figure 35 presents the real orbit of the Earth around the Venus and Sun as seen from the center of mass of the whole Solar System (located in Venus). The Sun has to circulate the center of mass (the black circle). Also the Earth has to hold the (almost) constant distance to the Sun. During an (almost) closed period of eight years (compare the dates on the right side of the picture) the Sun completes thirteen revolutions around Venus. In the same time the Earth completes five revolutions around Venus and (obviously) eight revolutions around the Sun. The resulting orbit is the presented rosette[1].

During this priod of eight years the Earth moves on this rosette-orbit with a periodically changing relative velocity towards Venus. This velocity goes down to zero in points C, G, K, O and S, the points of the minimal distance Earth-Venus, and also in points A, E, I, M, and Q, with the maximal Earth's distance to Venus. In these points the relative velocity to Venus reaches zero again. There are also ten further specific points of the orbit (B=H, D=R, F=L, J=P, and N=T) where the Earth´s distances to the Sun and to the Venus are (almost) the same. These points are important for our discussion here, because we have to see in Venus the center of mass of the whole system (100 percent of the mass) and in the Sun we have

---

[1] The real rosette is not exactly closed, because the relations of the orbits sizes are today not exactly 8:5:13, (the Earth-Moon system is coming closer to the Sun about 14 m every year) however it is of no importance for our discussion here.

about 97 percent of the whole mass[1]. If the Earth is stretched out by these two comparable masses in two different directions, the Earth´s crust can activate some stronger earthquakes. Of course, the stronger earthquakes can be also triggered in the remaining ten characteristic points of the Earth´s orbit, when the velocity in relation to Venus changes its directions (passing through zero value).

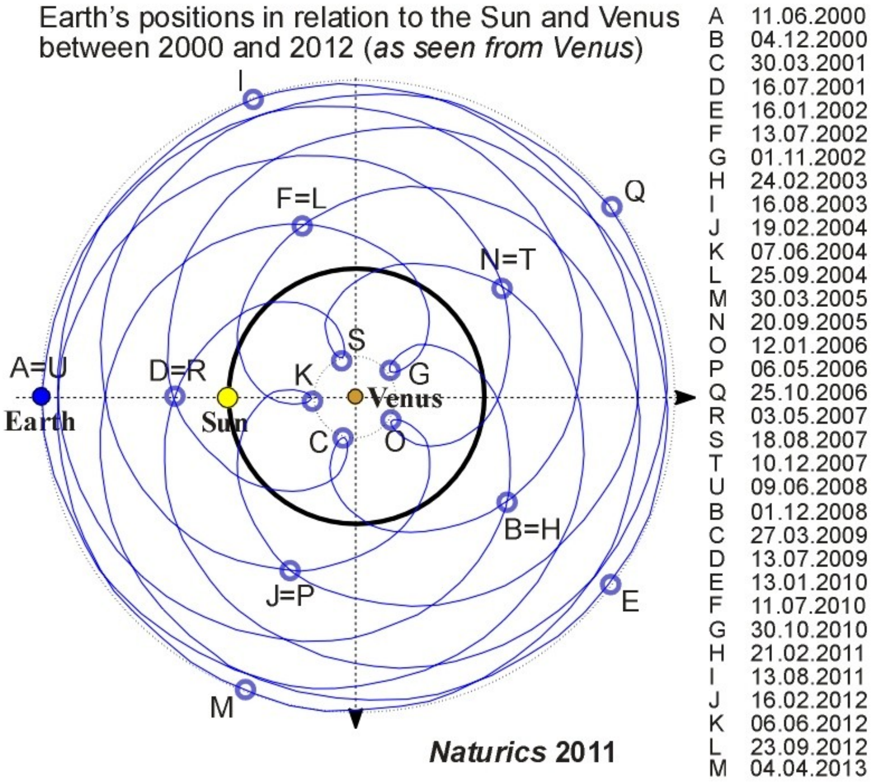


Figure 35. The real orbit (see the data on the right) of the Earth around the Sun and around the center of mass of the whole Solar System in Venus.

The preliminary confrontation of our suppositions with the real earthquakes during this range of years is presented graphically on the following two figures 36a and b. A necessary further study of this influence should improve the life comfort on the continuously "shaked" Earth's surface.

---

[1] The remaining mass is the "Dark Companion" and all known planets, monds, and asteroids.

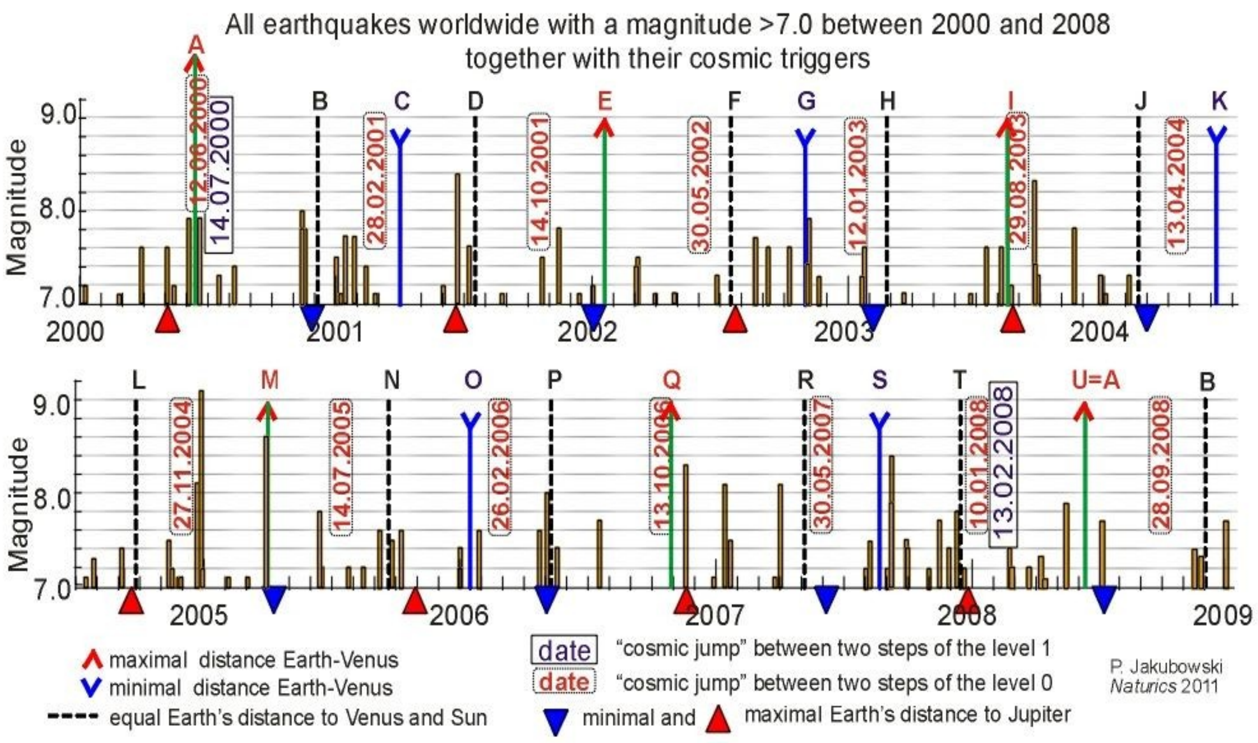


Figure 36a. All earthquakes world-wide with magnitude > 7.0 between 2000 and 2008 together with their cosmic triggers: 1) the cosmic quantum jumps of the level 2 on 14 July 2000 and of the level 1 on 13 February 2008 and of the level 0 (as indicated with red data); 2) the characteristic points of the Earth's orbit (compare Fig. 35); 3) the extremal points of the Earth-Jupiter distance.

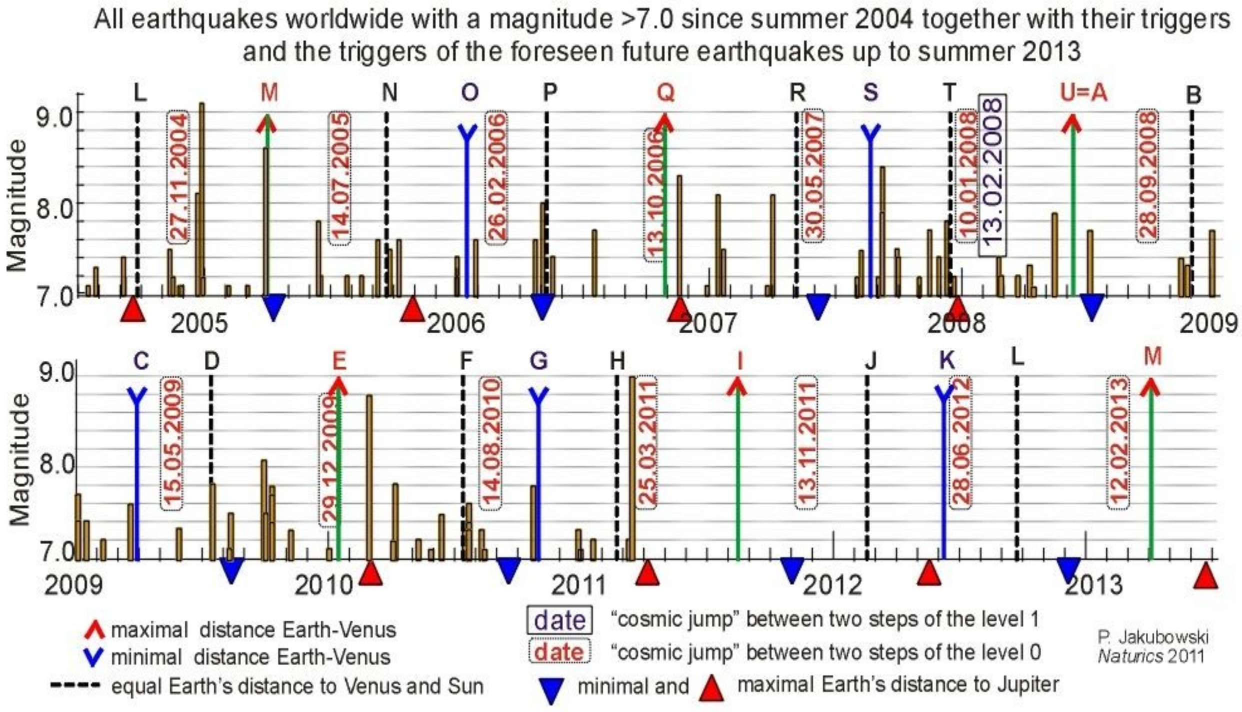


Figure 36b. All earthquakes world-wide with magnitude > 7.0 between summer 2004 and summer 2013 together with their cosmic triggers. (the Japan-earthquake on 11 March 2011 was the last one at the moment of the figure preparation) (*for more explanation compare the Fig. 36a*).