The Causes of Variations when Making Dowsable Measurements
Part 3 – Monthly and Annual Variations caused by Gravity

by

Jeffrey S. Keen

BSc Hons ARCS MInstP CPhys CEng

www.jeffreykeen.org

Pre-amble and Abstract

Comprehension of the structure of the universe requires a theory of quantum gravity. Attempting to link quantum physics with general relativity is one current approach. Many researchers, including the author, believes that the solution lies not just in physics, but involves consciousness and cognitive neuroscience together with understanding the nature and perception of information. This paper combines these latter factors in a non-orthodox approach linked by geometry.

This is the third of a 5-part complementary series of papers examining several local and non-local factors which affect dowsing measurements, (and hence perception and consciousness), on a daily, monthly, annual, or ad hoc basis. Part 2 of this series of papers identified gravity (via its influence on tides) to have a significant effect on dowsed measurements. This avenue of research into gravity is now further developed, by making a start in quantifying the involvement of gravity:-

1. on consciousness,
2. with information,
3. with subtle energies that may be the same as dark energy,
4. in the structure of the universe, and
5. in triggering well known biological events in animals and plants.

Via the use of a standard yardstick, significant variations in length have been measured during the course of a 28-day lunar cycle (caused by the Moon orbiting the Earth), and a 365-day annual cycle (caused by the Earth's orbit around the Sun). Gravity is shown to be the main cause. Other perturbations may be present.

But are these repeatable periodic patterns of changing length caused by gravity's biological effects on the dowser, or in the information obtained by the dowser? In other words, is gravity acting directly on the dowser's brain and body, or is gravity causing changes in consciousness via the Information Field? The latter is the "front runner" in the theory of dowsing.

Yardstick and Protocol

A standard yardstick and protocol (*See Reference 20)*, has been established which involves geometry and the simple measurement of the length of a dowsable line. This has been adopted as the basis for the experiments detailed here relating to monthly and annual changes.

As an introduction, background and context, this paper should also be read in conjunction with Part 1 (*See Reference 21)* and Part 2 (*See Reference 22)*. These relate to personal and daily variations respectively.

Variations in Dowsing Measurements over a Lunar Month

This section details how and why the length of a dowsable line changes over a lunar month. The findings are summarised graphically in Figure 1, where the axes are length and date /time.

THE MOON'S EFFECT ON DOWSING MEASUREMENTS

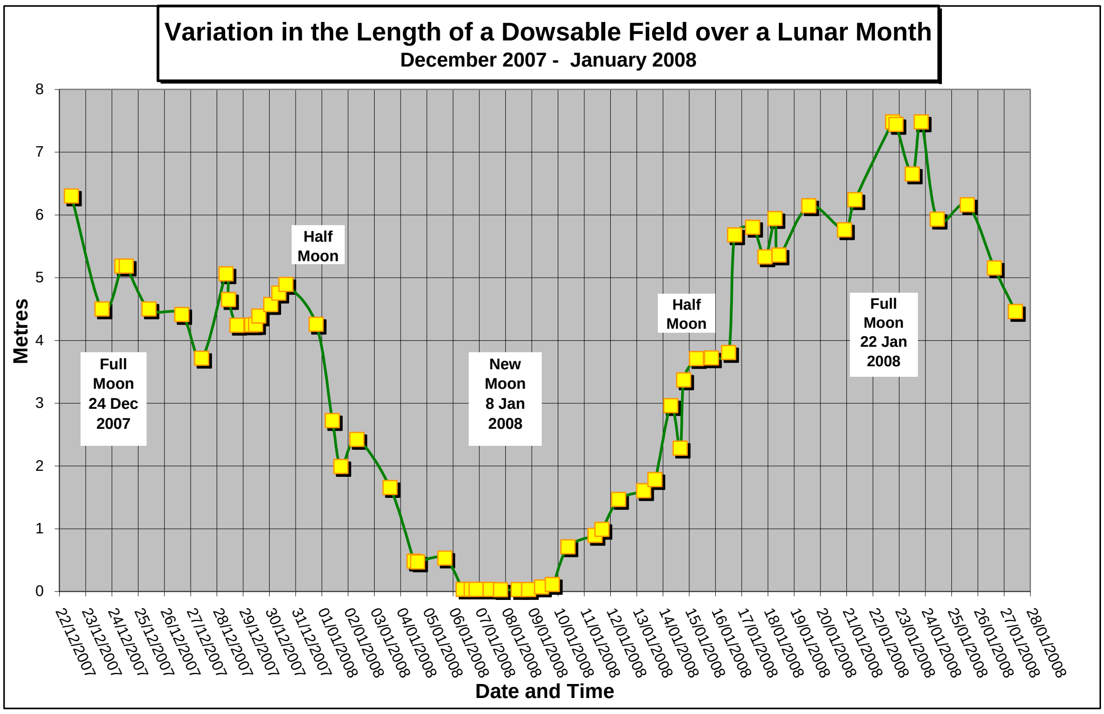

Figure 1

The main obvious features are that the measured length fluctuates wildly with the position of the moon. Near full moon the readings are maxima, whilst at new moon they are minima. Full moon produces a lower gravitational force on earth, as the sun and moon's gravity are pulling in opposite directions, as depicted in Figure 2.

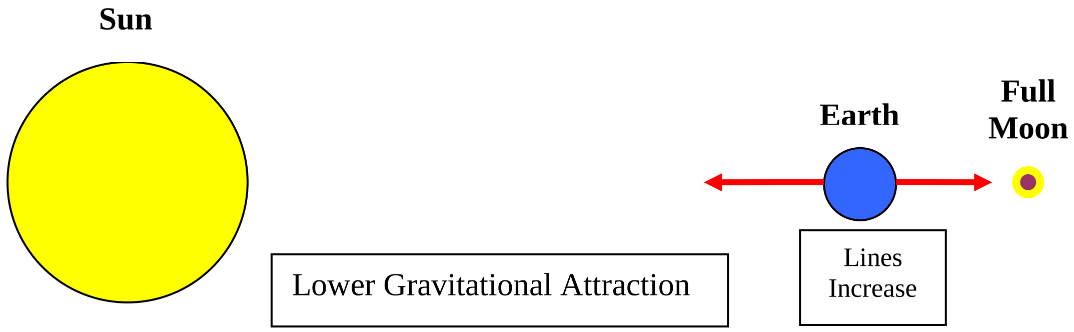

Figure 2

As depicted in Figure 3, new moon produces a higher gravitational force to observers on earth, as the sun and moon's gravity are pulling in the same directions.

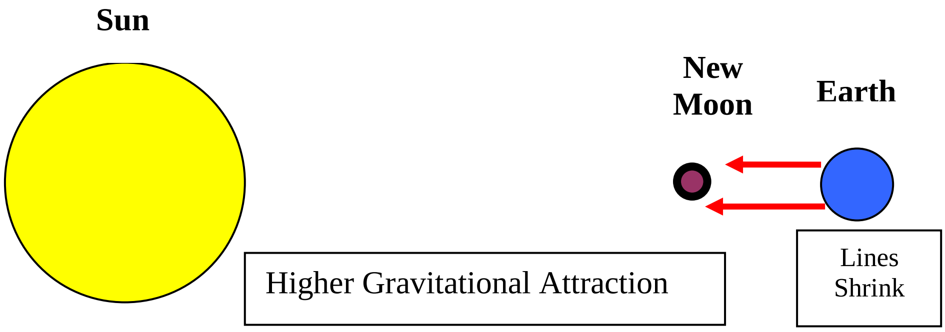

Figure 3

These variations of length over the December 07 – January 08 lunar month increased by about 225 times from new moon to full moon; dropping from 6.30 metres at the first full moon down to only 28 mm at new moon.

The 21st Dec was winter solstice, and this may be relevant and affect results. Also apparent from inspection is that the second full moon has higher values than the first. As discussed in the next section, this is probably caused by an annual variation that is superimposed on the graph.

In summary, the moon's gravitational attraction, as perceived by an observer on earth, has a significant effect on measurements when dowsing. These continual variations are due to the moon's gravity being superimposed on the sun's gravity as the moon elliptically orbits the earth. Over the course of a lunar month, measured lengths shrink near new moon, but increase near full moon.

Annual Variations in Dowsing Measurements

This section details how the length of a dowsable line changes over a year. To achieve this it is first necessary for the adopted protocol to eliminate any unwanted effects caused by personal, daily and monthly variations. Readings were therefore taken by the same observer, at the same astronomical events four times during each lunar month (at new moon, full moon, first quarter, and last quarter), and at the same time in the day (9:00 am GMT, or 10:00 am BST). The findings of the changing length of the dowsed yardstick from November 2008 to December 2009 are summarised as a graph in Figure 4, and have an approximate appearance of a sine wave.

Over a period of one year, the length of the line increases from 2.0 metres to 4.8 metres, more than doubling in a ratio of 1:2.4, or 140%. As is apparent, the peaks and troughs near aphelion and perihelion suggest gravity is again involved. A stronger gravity situation near perihelion produces shorter lines, whilst weaker gravity at aphelion increases perceived length. This conclusion is consistent with monthly variations as discussed above.

On closer examination, the findings are not so clear cut. The length of the brown line which shows measurements taken at the moon's first quarter (the data points indicated with diamonds) was a minimum near Perihelion on 4th January 2009, when the earth in its elliptical orbit was closest to the sun. However, the other 3 lines where measurements were made at full, new, and last quarter moon were a minimum at early February, which is over 1 month later. Similarly, the length of the line was a maximum near Aphelion on 4th July for those measurements taken at new and full moon, but also peaked one month later, at the end of July, for measurements at last and first quarter. There seems to be lagging perturbations.

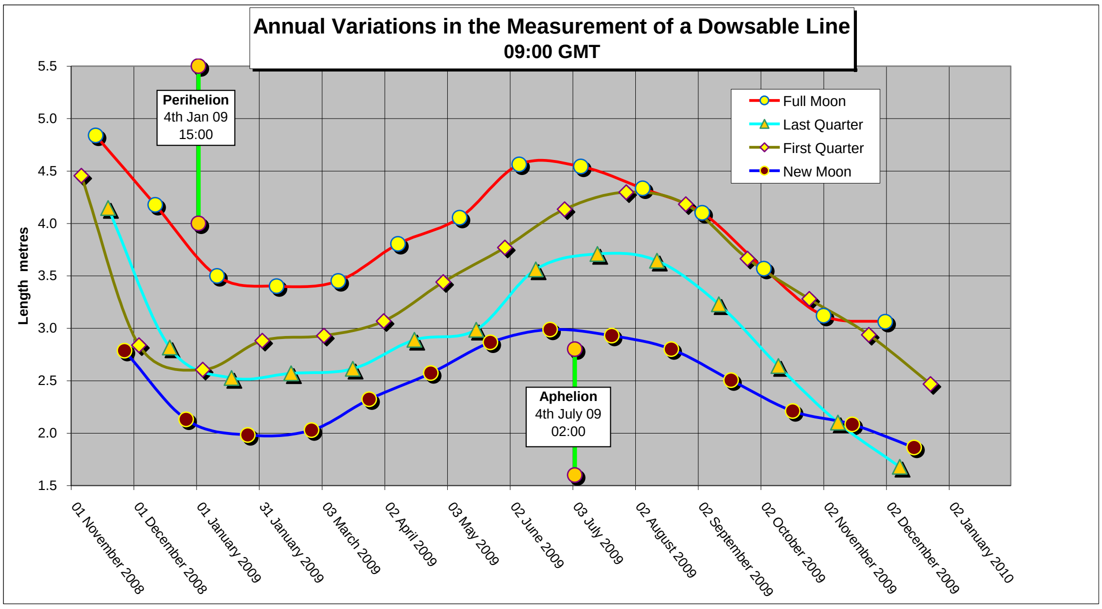

Figure 4

It is also not apparent why the lines for the moon's first and last quarter appear to swap at perihelion, or if this is significant. Additionally, the measurements made at the last and first quarters (producing the blue and brown two inner lines) are not as symmetrical as would be expected. The blue last quarter line (marked with triangles) not only decreased relatively to the other lines and crosses the brown first quarter line; it falls in value below the mauve new moon line during November 2009. A similar apparent anomaly is that the first quarter brown line (marked in diamonds) increases its value relative to the other lines throughout the year. It not only crossed the last quarter line, but met and followed the red full moon line from August 2009 to November 2009.

The December 2009 values for measurements taken at both full and new moon are less than measurements taken in December 2008. This suggests that there is also a year to year variation possibly due to movements of planets, and the solar system moving round the galaxy. Further research is necessary to confirm the reasons for these apparent anomalies.

But what is cause and effect? Is it possible that all of the above observations have causes other than gravity, such as the increase in temperature or sunlight hours during the northern hemisphere's summer?

There is no general evidence, documented or otherwise, for dowsing being affected by temperature. In particular, annual readings for Figure 4 were produced in a centrally heated flat at virtually the same temperature at 9 am GMT of about 20° C. Similar dowsed lengths were obtained when the temperatures were about 10° C in England, but re-measured by the author on the next day in much hotter countries such as in southern Spain, Madeira, Israel, or India where temperatures were about 27° C. The shape of the curves in Figure 4 is therefore not due to temperature.

The analysis in Part 2 of this complementary paper was not available when this experiment was commenced. In essence, the perceived length of a dowsed line is a function of the number of hours of sunlight. The importance of sunrise and sunset was discovered 6 months after commencing this annual experiment. It is therefore necessary to avoid any gravitational effects under investigation being compromised by sunlight. Prior to measurements being made at 9a.m. GMT, there are about 4 hours of sunlight in summer, and only 1 hour in winter.

With the benefit of hindsight, it would also have been better not to use readings taken close to the times of new and full moon. Again, it was discovered several months after commencing this experiment that additional resonance peaks and troughs lasting a few hours occur at new and full moon. – a new phenomenon to be discussed in Part 4 of this series of papers. However, in practice this phenomenon only interrupted new moon readings on August 20th at 10:02 am, and full moon on July 7th at 9:21 am. For the rest of the year the 9:00 am measurements did not occur during these peaks or troughs. The experiment was not started again because the results showed a good trend and one objective was to plot the maximum and minimum bands.

As a result of the above sources of error, a revised protocol was adopted whereby measurements were made 2 hours after sunrise to eliminate variations due to differing hours of daylight. These measurements were only made on the first and last quarters of the moon's phases each lunar month; thereby avoiding possible anomalies at new and full moon. This revised protocol should achieve the objective of concentrating on the effects of the sun's gravity, but minimising any interfering effects of the moon's gravity.

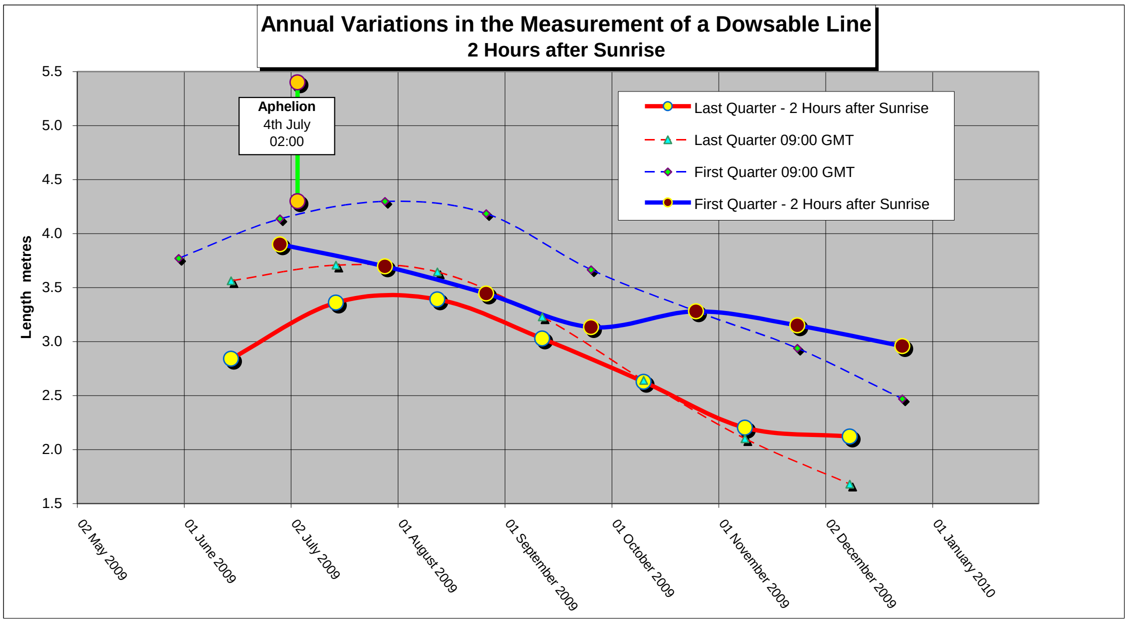

Figure 5

The solid lines plotted in Figure 5 represent these new measurements and data. The dotted lines are a comparison with the graph in Figure 4 where measurements were always taken at 9:00 GMT. Where both the bold and dotted lines cross over at the end of October shows that the effects of sunlight have been minimized. As demonstrated with daily variations in Part 2, more sunlight after sunrise produces longer lines. Therefore one would expect the dotted line to be above the solid line in summer and below the solid line in winter. On inspection of Figure 5, this is what was found.

An interesting anomaly is that measurements taken at the moon's first quarter (the solid blue line) produced a peak near aphelion on 4th July, but measurements taken at the moon's last quarter (the solid red line) produced a peak near the end of July. Is this a perturbation, which, in the northern hemisphere, has a similar effect to that producing maximum summer temperatures in July and August, but not on the longest day (20th June)? Also, the minimum winter temperatures are in February – not the shortest day (21st December).

Another anomaly is that the October and November readings taken at the first quarter (blue line) increase whilst measurements at the last quarter (red line) continue to decrease. A possible explanation is that the moon's elliptical orbit changes gravitational attraction in a more complex manner than anticipated by this experiment. Further astronomical research is required to see if there is any correlation between the dowsed curves and the complex changes of gravitational attraction between the sun, the moon, and earth.

A possible challenge to the revised protocol is that two hours of sunlight in summer could be more intense than in winter. However, as explained in Part 2, direct sunlight on the dowser is not relevant, but it could indirectly affect the Information Field. Also as shown in Part 2, during the two hours after sunrise, the length of the yardstick line increased significantly in December compared to June. This seems counter intuitive. But as the curves in Figure 5 decrease in value from June to December the intensity of sunlight cannot be a significant factor.

In summary, the Sun's gravitational attraction, as perceived by an observer on earth, continually changes because of the earth's rotation around the sun in its elliptical orbit. Over the course of a year, these changes in gravity cause variations in measurements. Length increases near aphelion, but decreases near perihelion. There are additional perturbations, possibly due to the moon's orbit that requires further research.

Effects of Gravity

For both the sun and moon's gravity, **longer** lines are produced when there is a **lower** gravitational force. The reverse is also true. The lines are **shorter** when there is **higher** gravity. Using the terminology of General Relativity, it is postulated that the Information Field (i.e. "the fabric of the universe" which the dowser taps into) "is distorted by mass and gravitation". Lower gravity suggests a less stressed local Information Field. Higher gravity suggests a more distorted Information Field. The implication is that a reduced gravitational field in the neighbourhood of the local Information Field produces a larger dowsed length than when the Information Field is more stressed by higher gravitation.

An interesting observation is that gravity acts vertically, but affects horizontal dowsable lines! But this is more evidence that we are dowsing an Information Field affected by gravity, not physical lines.

So how does gravity affect dowsing? Does it directly and physically affecting the dowser's brain and biology thereby altering his or her perception of length? Based on over 20 years of experimentation, the numerous references and bibliography at the end of this paper, and interpreting the findings in this paper, the author does not favour this explanation. Gravity does not seem to act directly on subtle energy beams or dowsers' minds. Gravity affects the Information Field into which the dowser interrogates.

Conclusions

A major achievement of this paper is that the monthly and annual variations in experimental results when dowsing have, for the first time, been measured, analysed and documented. The findings here have also been shown to be repeatable. Definite causes are gravity with other possible perturbations. One effect is that the moon's gravity can increase the perceived length of a line by 225 times, and its effect is much greater than the sun which can only cause a 2.4 times increase!

If the cosmos affects dowsing and minds, what else does it affect? It is postulated that the subconscious effects documented in this paper are also the mechanism for triggering numerous well-known biological events in animals and plants. Examples include the menstrual cycle, fish spawning, eggs hatching, and financial peaks and troughs in world markets. Could there also be a general connection to mood swings, and other health problems?

These are significant results not only in investigating how dowsing works, but possibly more importantly, for adopting the use of dowsing in scientific research, and furthering the study of consciousness and the structure of the universe.

The Way Forward, and Suggestions for Future Research

As always, discoveries in research generate more questions than answers. Independent research is required to confirm and develop the above findings on the causes of monthly and annual variations. Interesting questions and suggested topics for future research include the following:

1. Is what is being investigated a gravitational force, potential, or gradient?
2. How and why does gravity affect the length of a line?
3. Why do measurement peaks seem to be caused by lower gravity and troughs by higher gravity?
4. Is a dowser directly affected by gravity?
5. Are variations in measurements a result of gravity making changes in the Information Field?
6. Does gravity affect the Information Field, or is it the other way round. i.e. is the Information Field involved in producing gravity?
7. Does dowsing work when there is no gravity, or free fall?
8. Why is the minimum length not always at perihelion but in mid February?
9. Why are there anomalies in the curves relating to the moon's first and last quarters?
10. What other perturbations are present that require further research?
11. Is there a year to year variation, possibly due to movements of planets around the solar system, and the latter moving round the galaxy?
12. Are gravitational changes linked to the body's health, as well as perception?

Acknowledgements

Acknowledgements are due to the UK Dowsing Research Group (DRG) members who assisted in this avenue of research, helped to confirm many of the findings, suggested causes, and following their enthusiastic review of the author's lectures, encouraged its documentation.

References and Bibliography

1. The British Society of Dowsers, Earth Energies Group : *An Encyclopaedia of Terms*
2. The British Society of Dowsers website http://www.britishdowsers.org/
3. James Spottiswoode, Journal of Scientific Exploration : June 1997, Vol. 11, No. 2, Cognitive Sciences Laboratory, Palo Alto
4. *Measuring Range,* September 2001, Vol. 39 No. 273 The Journal of the British Society of Dowsers
5. The Journal of the British Society of Dowsers : *Measuring Dowsing*, Volume 39 No. 273, September 2001
6. *The Physics of Dowsing & the Brain*, December 2001, Vol. 6 No 24 The BSD Earth Energy Group Newsletter
7. *Two Body Interaction Parts 1&2*, December 2002 & March 2003, Vols. 39 &.40, Nos 278 & 279 Dowsing Today
8. Dowsing Today : *Auras Revisited - Parts 1, 2, 3,* December 2003 – March 2005, Vol. 40 Nos. 282, 285, 287
9. Keen, Jeffrey : *Consciousness, Intent, and the Structure of the Universe,* Trafford, 2005, 1-4120-4512-6, http://www.trafford.com/robots/04-2320.html
10. The American Dowser : *The Anatomy of Conical Helices, Consciousness, and Universal Constants* – Parts 1- 4, February - October 2007, Vol. 47 Nos. 1, 2, 3, 4
11. Physics World : *Dark Energy*, December 2007, Vol. 20 No. 12
12. Dowsing Today : The Journal of the British Society of Dowsers : *Angkor Wat, Consciousness, and Universal Constants – Parts 1- 2*, September - December 2007, Vol. 41 Nos. 297, 298
13. ASD Digest : *The Tree of Life and Universal Constants*, Winter 2008-09, Vol.49 Issue No. 1
14. Further details can be found on the author's website www.jeffreykeen.org
15. Physics World : *The Digital Universe*, Seth Lloyd, November 2008, Vol. 21 No. 11
16. Dowsing Today : *Measuring the Size of a Dowsable Field*, September 2008, Vol. 41, No. 301
17. Network Review : From Banks and Ditches to Dowsing Two-Dimensional Geometry, Spring 2009, No. 99
18. *A Model of Consciousness,* April 2009, Vol. 65 No 4 World Futures – The Journal of General Evolution, Taylor & Francis
19. Keen, Jeffrey : Dowsing Geometry - A Database of Patterns Analogous to X-ray Crystallography; September 2009.
20. Keen, Jeffrey : A Standard "Yardstick" and Protocol for Dowsing Research Measurements; October 2009..
21. Keen, Jeffrey : The Causes of Variations When Making Dowsable Measurements; Part 1 - Introduction and Personal Factors, 28 November 2009, e-paper.
22. Keen, Jeffrey : The Causes of Variations When Making Dowsable Measurements; Part 2 Daily Variations Caused by the Earth Spinning on Its Axis, 10 December 2009.

Further Reading

a. Bekenstein, Jacob : *Information in the Holographic Universe,* Scientific American, 2003
b. Bohm, David : *The Undivided Universe,* Routledge, 2005, 041512185X
c. Bohm, David : *Wholeness and the Implicate Order,* Routledge,1980
d. Bird, Christopher : *The Divining Hand,* Shiffer Publishing, 1993
e. Curran, Jude : *The Wave,* O-Books; 2005, 1-905047-33-9
f. Dyer, Dr Wayne : *The Power of Intention*, Hay House 2004
g. Edwards, Lawrence : *The Vortex of Life,* Floris, 1993, 0-86315-148-5
h. Greene, Brian : *The Fabric of the Cosmos*, Allen Lane, 2004
i. Hansard, Christopher : *The Tibetan Art of Positive Thinking,* Hodder, 2003
j. Hawking, Stephen : *The Universe in a Nutshell,* Bantam Press, 2001
k. Keen, Jeffrey : *Consciousness, Intent, and the Structure of the Universe*; Trafford; 2005; 1-4120-4512-6; http://www.trafford.com/robots/04-2320.html
l. Laszlo, Ervin : *The Connectivity Hypothesis*, SUNY Press, 2003
m. Laszlo, Ervin : *Science and the Akashic Field*, Inner Traditions; 2004;
n. 1-59477-042-5
o. Lyons, James : *Quantifying Effects In Consciousness*, University of Hull 1998
p. McTaggart, Lynne : *The Field,* Harper Collins, 2001
q. Merrick, Richard : *Interference (A Grand Scientific Musical Theory)*, 2009, 978-0-615-20599-1
r. Mitchell, Edgar : *Nature's Mind: the Quantum Hologram*, http:www.edmitchellapollo14.com
s. Penrose, Roger : *Shadows of the Mind*, Oxford University Press, 1994
t. Penrose, Roger : *The Emperor's New Mind*, Oxford University Press, 1999
u. Pribram, Karl : *Consciousness Reassessed*, Mind and Matter, 2004
v. Radin, Dean : *Conscious Universe,* Harper, 1997, 0062515025
w. Radin, Dean : *Entangled Minds*, Paraview, 2006, 1-4165-1677-8
x. Rosenblum, Bruce & Kuttner, Fred : *Quantum Enigma*, OUP/Duckworth, 2007, 978 07156 36541
y. Sheldrake, Rupert : *Morphic Resonances*, Inner Traditions, 2000
z. Sheldrake, Rupert : *The Sense of being Stared At*, Arrow, 2004
aa. Smolin, Lee : *The Trouble with Physics*, Allen Lane, 2006, 978-0-713-99799-6
bb. Stewart, Malcolm : Patterns of Eternity, Floris Books, 2009
cc. Talbot, Michael : *The Holographic Universe*, Harper, 1996, 0586091718
dd. Tiller, William : *Conscious Acts of Creation*, Pavoir, 2001, 01929331053
ee. Tiller, William : *Subtle Energies, Intentionality and Consciousness*, Pavior 1997, 0964263742
ff. Wallace, Alan : *Hidden Dimensions (The Unification of Physics and Consciousness),* Columbia University Press, 2007