26. The Causes of Variations when Making Dowsable Measurements
Part 2 – Daily Variations caused by the Earth Spinning on its Axis

by

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Pre-amble and Abstract

This is the second of a 5-part series of papers examining several local and non-local factors which affect dowsing measurements on a daily, monthly, annual, or ad hoc basis. Via the use of a standard yardstick, this paper quantifies significant variations in its length during the course of a day. In general, perceived measurements gradually increase in length during daylight hours, and continually reduce during the night. The major turning points are the local times of sunrise and sunset. To a lesser extent tides have an influence, but other perturbations are present that require further research.

As well as tides and the Sun's photons, several additional contributory factors are identified such as the Earth's spin on its tilted axis, gravity, solar wind, or a possible subtle energy emitted by the Sun. But is the repeatable daily pattern of changing length caused by biological effects in the dowser, or in the information obtained by the dowser? In other words, is the above list of physical local and non local factors acting directly on the dowser's brain and body, or are these factors causing changes in consciousness via the Information Field? The latter is the "front runner" in the theory of dowsing.

This article is a summary of the concepts, which are augmented on the author's website http://www.jeffreykeen.co.uk/

The General Pattern of Daily Variations

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. By using this yardstick, the findings and causes of variations in the length of this dowsable line during the course of a 24-hour period, are detailed here. This paper should be read in conjunction with Part 1 (*See Reference 21).*

Figures 1, 2, and 3 are graphs which show how the length of the yardstick changes over the course of "typical" days. In general, the shape of the curve has increasing values of length during daylight, and decreasing lengths during the night. Lengths reach a maximum at sunset, and are a minimum at sunrise. There are various perturbation peaks and troughs superimposed on this general pattern.

The measurements for Figure 1 were taken on 12 and 13th April 2009, which were 3 days after full moon. The curve looks like Elliott waves, or the stock market. There is a 25% variation from peak to trough (4.146m to 3.140m). As is apparent, the peaks occur at 19:58 on 12th April 2009, and 20:00 on 13th April 2009. Both were the local times of sunset. The minimum length occurred at 6:18 am, the exact time of local sunrise. However, could this be just a coincidence?

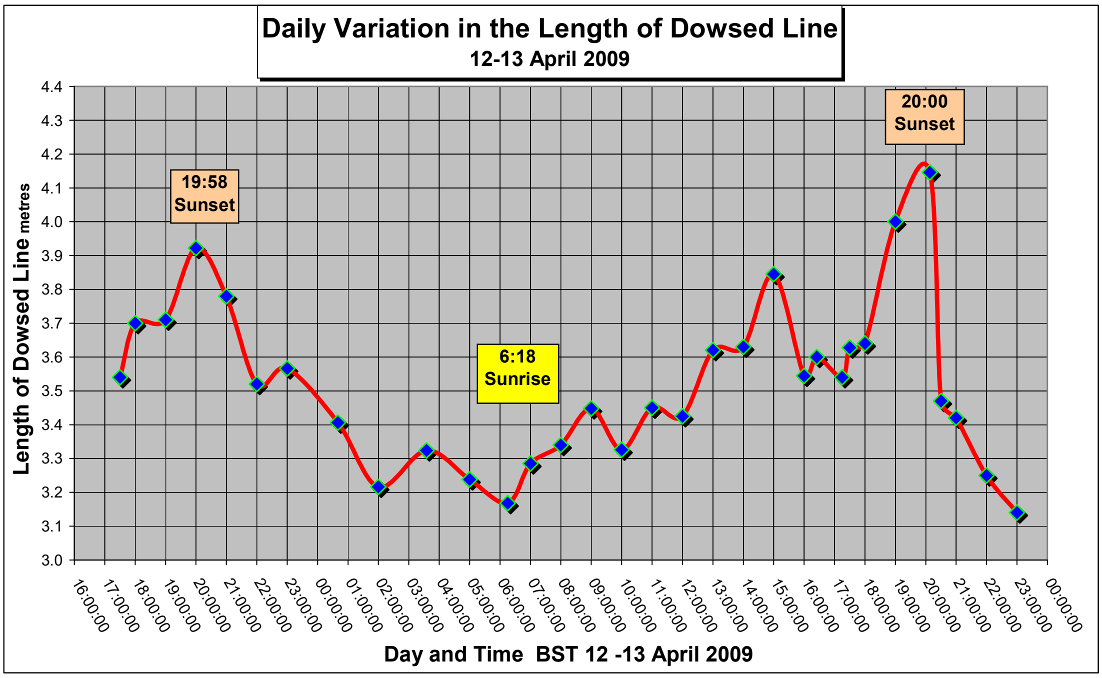

Figure 1

In an attempt to resolve this issue, measurements were also repeated on 27th and 28th June 2009 (coinciding with the moon's first quarter), see Figure 2, as well as 6th December 2009, see Figure 3. The purpose was to see if the findings were repeatable, and if there were any significant differences in spring, summer or winter.

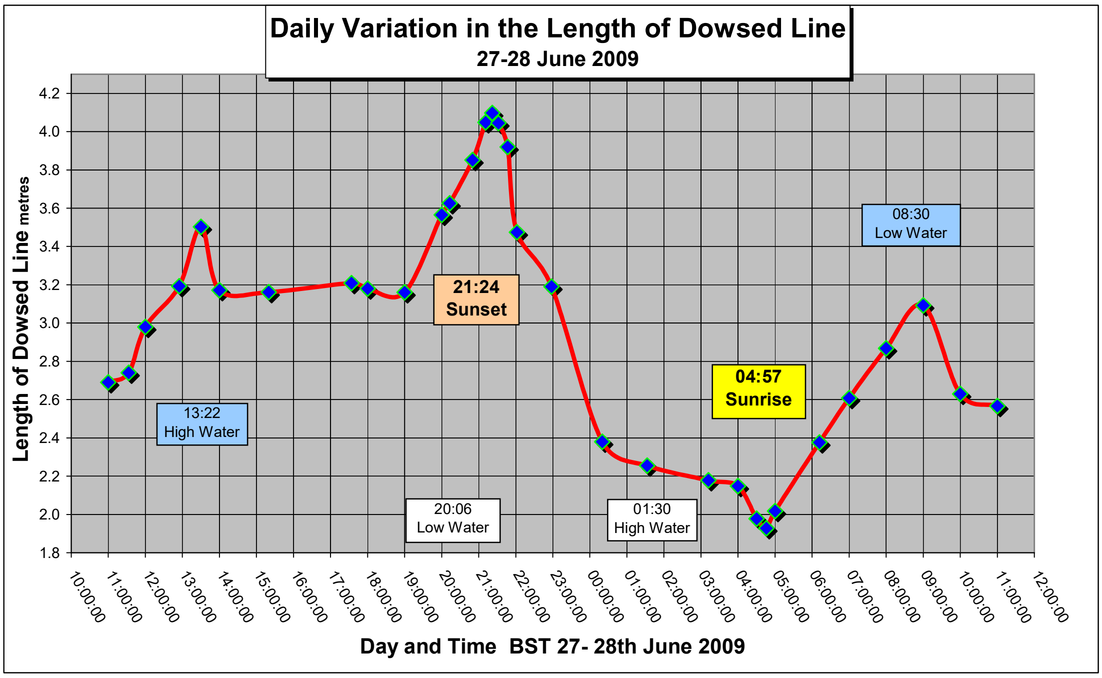

Figure 2

Apart from the differences in scale of both axes, is not immediately obvious why Figure 2 appears smoother and less frenetic than Figure 1. There is a 52% variation from peak to trough (4.098m to 1.982m), which is more than twice the variation compared to Figure 1. The peaks occur at 21:22 pm, whilst the trough is at 4:46 am. There is therefore a significant correlation with local sunset (21:24) and sunrise (04:57).

Having refined experimental techniques as a result of Figures 1 and 2, more points of data were created to produce Figure 3. This demonstrates with greater accuracy that the same general daily pattern exists at all times of the year, with the same major turning points. Figure 3 also demonstrates that whilst undertaking the same measurement on 6th December, during a 24 hour period there was a 77% variation in length from peak to trough (3.965m to 0.923m). The differences in the same measurement at the same times on different days, including why the measurement at 23:00 on 5th December is different from that at 23:00 on 6th December is covered in Part 3 of this series of papers.

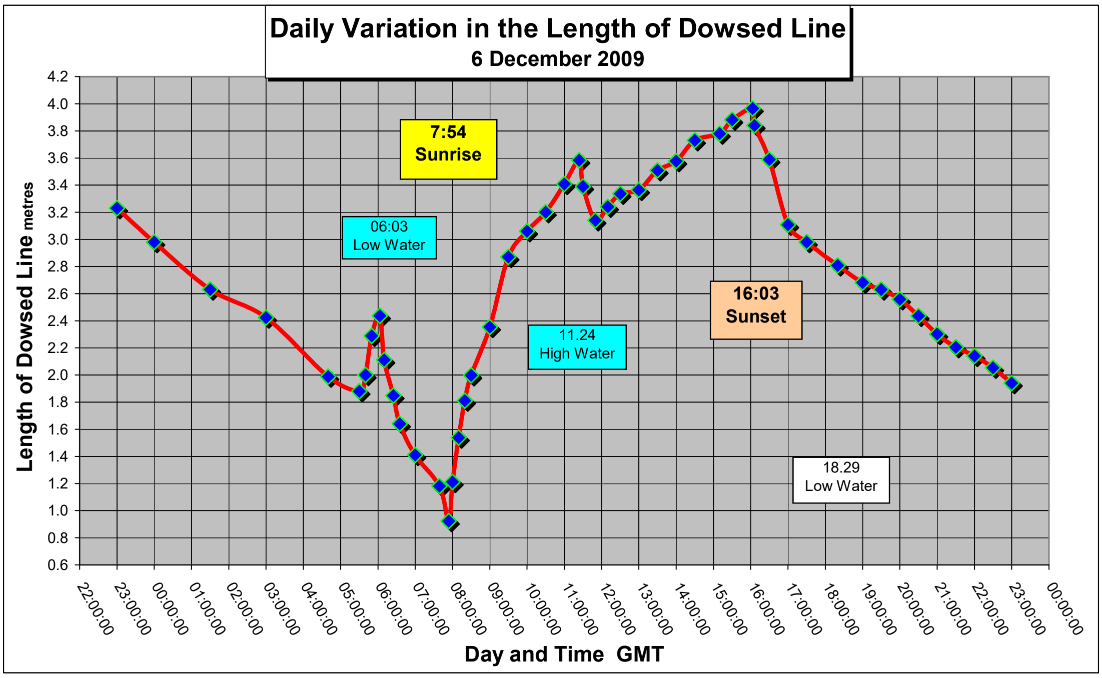

Figure 3

This experiment demonstrates why it is important to understand that dowsing measurements can appear to be random. Although variations up to 77% may appear detrimental, in practice, it is a powerful tool of great benefit for discovering the factors involved in dowsing. As will become apparent this gives insights into consciousness and the structure of the universe.

As discovered, the overall trends of the three curves on three different days are similar. Local Sunrise and Sunset are the obvious main events. But what physically or mentally do they produce that creates the shapes of these Length-Time graphs. And there seems to be several additional perturbations. Are these variations caused by one or more of the following factors?

Tides

Tides have a perturbation effect, causing secondary peaks and troughs. In Figure 1, the factors in favour of tides are that there are 24 hours between peaks, and the trough is 10 hours after the peak. On 13th April local low water was at 6:33 am. Unfortunately, this coincided with the sunrise trough. The other high and low waters do not seem to correlate with the graph. Tides are therefore not proven in Figure 1.

However, Figure 2 shows significant perturbation peaks at high water at 13:22 and low water at 08:30. Surprisingly, both high and low water seemed to cause a peak – not a peak and trough as would be expected instinctively.

As a result of the above findings, refined techniques led to the more accurate data in Figures 4 and 5. These graphs should be read in conjunction with Figure 3, which for reasons of scale only contains an extract of these data. These curves illustrate how the perceived length of a line changed at high and low tides on 6th December 2009 at Bournemouth, where the measurements were made. The peaks coincide precisely with the predicted times in tidal charts. The effect lasts about 1 to 2 hours, and further research is required to explain why both graphs are asymmetrical.

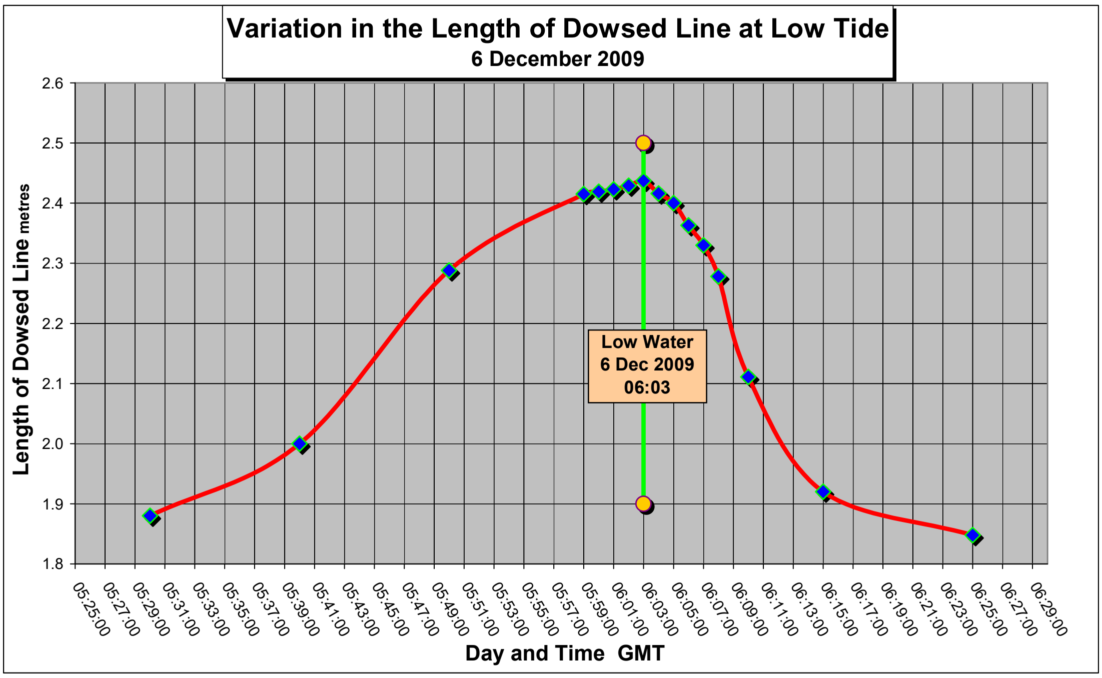

Figure 4

Unlike two tides a day in most places, these times relate to Bournemouth where there are four tides a day. Figure 2 suggests that the two tides at 20:06 and 01:30 have little effect, so only 2 out of the 4 tides may affect dowsing. This is confirmed in Figure 3 where the low tide at 06:03 and the high tide at 11:24 produce significant peaks, but the second low water at 18:29 has no effect. This complements other studies showing that gravity has an important effect on dowsing. The flow of currents round the Solent that produce the second daily tides do not directly involve gravity and do not seem to affect dowsing. Tides are due to a combination of the earth's spin and the moon's gravity producing a mound of ocean water going round the Earth.

Presumably this mass of water affects the local gravity. But do tides affect the dowser, or the Information Field?

In summary, it would seem that tides have a secondary effect on dowsing variations; they produce subsidiary peaks irrespective of high or low water. This invites the question whether dowsing experiments inland, and well away from a coast, are similarly affected by tides. If so, at what location are the tidal predictions relevant?

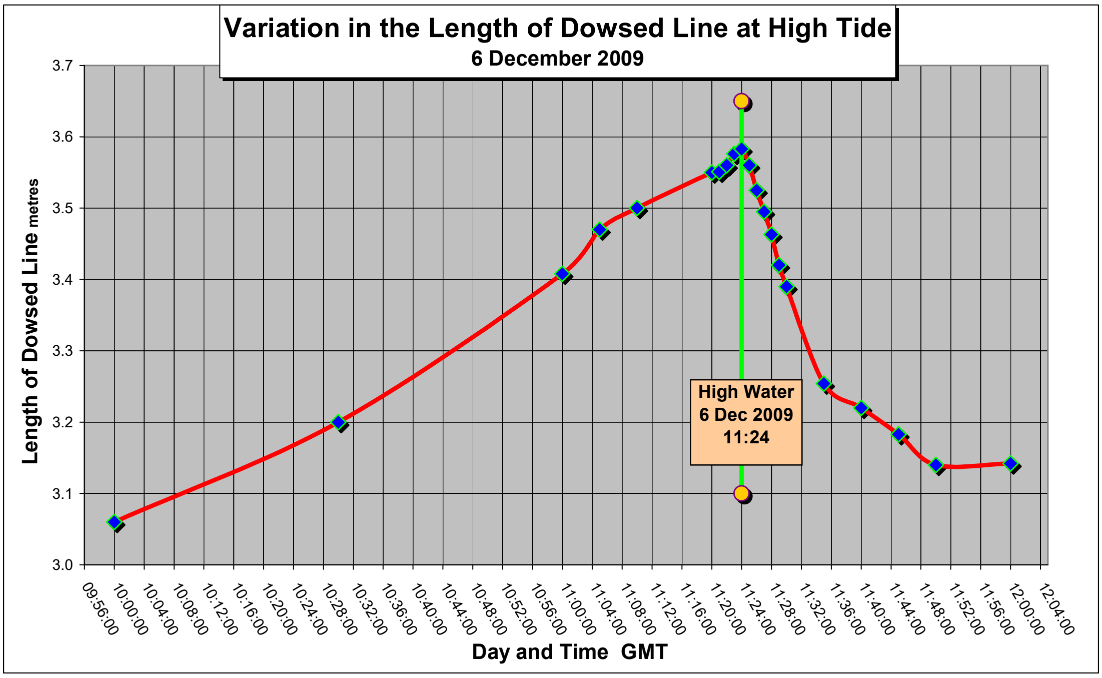

Figure 5

Tiredness

A simple explanation for the trends in Figures 1, 2, and 3, could be that one becomes tired after sunset, and the body tends to sleep to sunrise. During daylight one remains increasingly alert, with ones dowsing ability improving correspondingly.

However, this simplistic model does not tie up with reality. One can be very tired during the day, especially at the sunset peak. Lengths do not become reduced during these "tiredness" periods. Unlike complex or contentious applications such as remote viewing, telepathy, or information dowsing, the yardstick and protocol adopted here for scientific research utilises the simplest form of dowsing. Dowsing here is digital; one either obtains a "yes" or "no" to the presence or absence of the end boundary of the line being measured. Tiredness often occurs after about 1-2 hours of continuous dowsing. The dowser then stops dowsing because of lack of concentration, and not obtaining a reaction. Tiredness does not seem to affect the length of a line.

Tiredness is therefore an unlikely explanation for daily variations in dowsing.

Hormones, Circadian Rhythms, or other Physiological Reasons

Hormones, Circadian Rhythms, or other physiological reasons may be triggered by sunrise and sunset. Medical correlations are required to prove if hormones are the cause of the variation curves. However, a perusal of publications shows different daily patterns for different hormones, and comparisons are difficult because only a few measurements are made in a 24 hour period, not every 30 minutes as in Figure 3.

Possibly more important is the question whether the length being measured is determined by external factors (such as the mind's interaction with the Information Field), or by the biological state of the observer. The latter seems unlikely as all 10 graphs in this paper demonstrate that the dowsing response is accurate to within a minute of the published times of sunrise, sunset, and the tides. Biological systems would not react this quickly, especially in an artificially lit building on cloudy days. As with tiredness, the author's experience suggests that the biological state of the observer only has a minor effect on dowsing measurements.

Local Sidereal Time (LST)

In common everyday use, clock time is based on a 24 hour day which in turn depends on the earth spinning on its axis. Not only is the latter variable, but if astronomical observations are being made or cosmic influences are being researched, sidereal time is used as it is based on the stars.

Published research indicates that LST is a factor in the magnitude of psi-related phenomena. In particular, remote viewing was 3-4 times more effective near 13:30 LST, when the Milky Way was just under the horizon. *(See reference 3)*. Based on the latitude and longitude where the measurements for Figure 1 were made, 13.30 LST was at midnight GMT (01:00 BST) on 13 April. So the fluctuations in Figure 1 do not seem to be connected to the optimum remote viewing time. In Figure 2, Local Sidereal Time also does not appear to be a significant factor as 13:30 LST equated to 20:13; which was over an hour before the peak at 21:24. In Figure 3, 13:30 LST equated to 08:35 GMT but there are no peaks interrupting the smooth upward curve. Even though the latter time nearly coincided with the sunrise trough, thereby introducing an element of uncertainty, it seems reasonable to assume that LST and cosmic influences do not contribute to daily dowsing variations. This conclusion does not apply to Parts 3-5 of this paper.

Daylight and Night Time

To recap, the general shape of the curves in Figures 1, 2, and 3 have increasing values of length during daylight, and decreasing lengths during the night. But how are the cause and effect related? How does one explain the apparent "capacitor" effect whereby dowsing measurements seem to "discharge" between dusk and dawn and "charge up" between dawn and peaking at dusk?

The presence or absence of direct sunlight on the dowser does not seem to be the cause of these daily variations. A peak is obtained even when dowsing in a well artificially lit room after sunset, and a trough is obtained when working in a darkened room after dawn. Dowsing indoors or outside also seems to make little difference. If photons from the sun are relevant, rather than having a direct physical and biological effect, they may affect the local Information Field. Alternatively, a subtle energy from the sun could affect either the dowser or the Information Field.

Another possibility could be that sunrise and sunset are the timing triggers for the build up and decay of hormones, circadian rhythms, or other physiological reasons that may cause the daily variations when dowsing. This is unlikely not only because of the reasons discussed earlier in the section on circadian rhythms, but dowsing measurements are not significantly affected when changing time zones.

Another possibility is that during the day the observer may be directly affected by the incoming solar wind of charged particles emanating from the sun. At night the observer is screened by the earth. The electrostatic and electromagnetic changes caused by this solar wind could create this capacitor effect. It is known that dowsing certain geometries is affected by magnetism. *(See References 19, 17, 14, 9)*. Does this possible electromagnetic factor affect the dowser or the Information Field? The author tends to favour the latter. One reason is that a dowser in a Faraday cage has little effect, but some geometric patterns in a screened cage are affected. More research is obviously required.

Local Sunrise and Sunset

As stated earlier, the main cause of daily variations in dowsing involves the local times of **sunrise and sunset**. Measurements are shortest at sunrise and reach a maximum at sunset.

In an attempt to investigate further what causes the significant peaks at sunset and troughs at sunrise, more detailed data was obtained on five different days as depicted in Figures 6 to 10. The immediate observation is that not only are these peaks and troughs repeatable, but are accurate to within a few minutes and seconds of actual sunset and sunrise. Figures 6, 7, and 8 are sunset peaks recorded on 23rd November, 11th November, and 27th June 2009, whilst Figures 9 and 10 are sharp troughs at sunrise on 20th August 2009 and 6th December 2009. All occurred precisely at the predicted times. As with Figures 4 and 5 which were in relation to tides, the graphs in Figures 6, 7, 9, and 10 are asymmetric. (Having a very short time span, Figure 8 is a special case where asymmetry has little time to apply). This suggests that the same mechanism is responsible for both peaks and troughs. It is not obvious why.

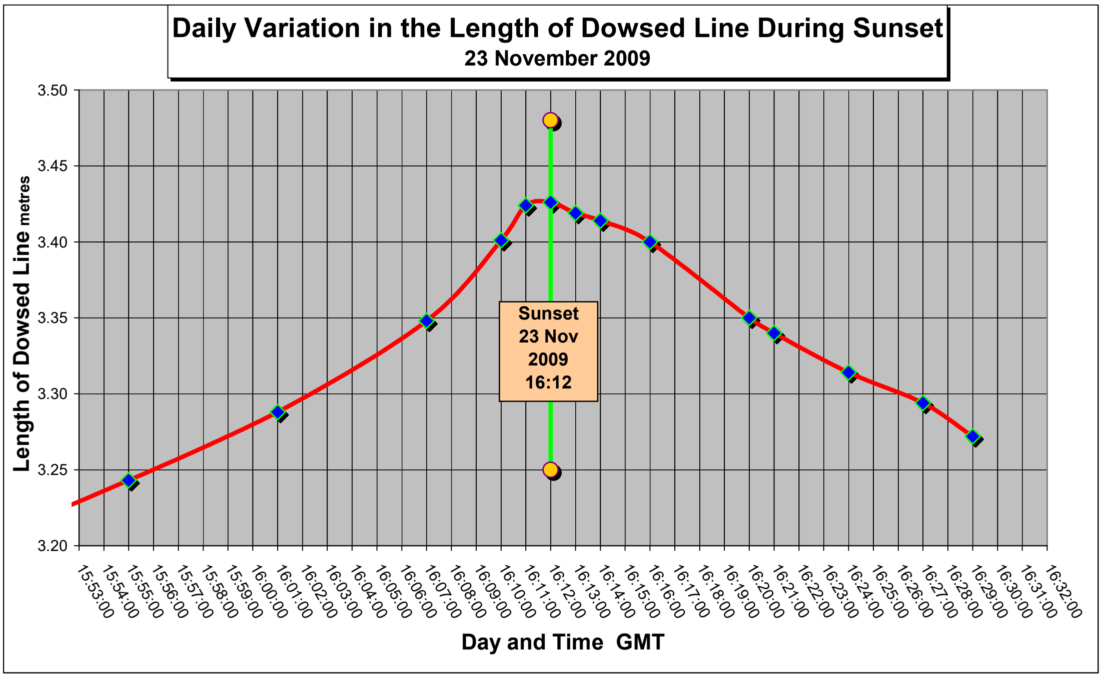

Figure 6

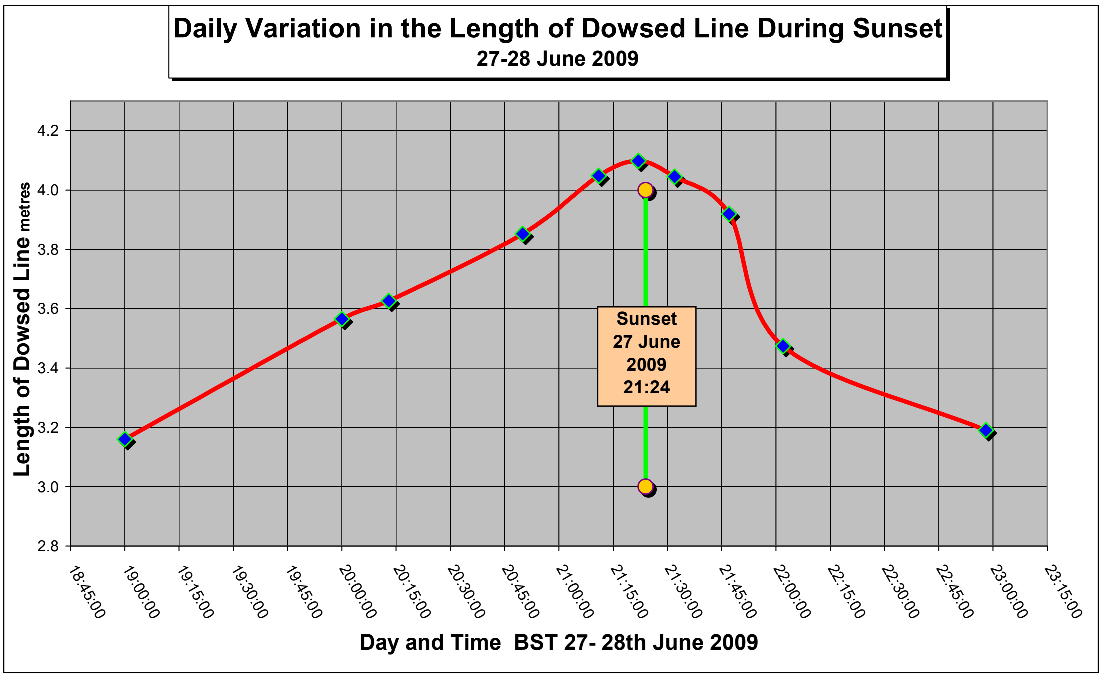

Figure 7

Figure 8 is the result an opportunistic experiment of a Funchal sunset in Madeira viewed from a cliff top facing south west. As there was a clear sky, with the sunset over the sea, there was an uninterrupted view of the setting sun on the horizon. This allowed accurate measurements to be taken every 30 seconds, with the state of the setting sun superimposed on the graph.

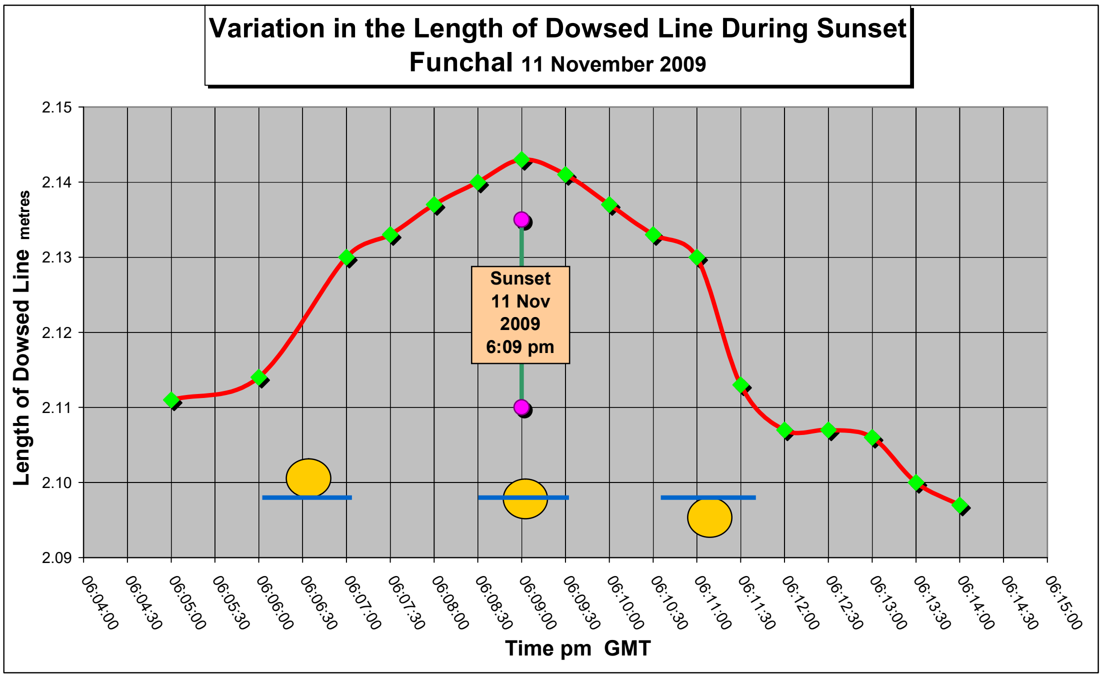

Figure 8

As is apparent, the peak starts as the sun touches the horizon. The maximum length is just over 2.14 metres which occurred precisely at the predicted time of 6:09 pm, when half of the sun was below the horizon. The peak ends just when the sun has fully set.

The effect lasts about 5 minutes. Although this peak involves an increase in length of only 1.61%, it is significant. But what is its cause?

Hugo Jenks has pointed out that the curve at sunset, as in Figure 8, can be obtained by the inverse of the differential of the visible area of the sun's disc as it sets. Why should dowsing the length if lines coming from a dot equal the inverse of a differential? As the same dowsed peak is obtained on cloudy days when the sun is not visible, or indoors in a hall with no direct daylight, the dowser's ability to see the sun is irrelevant. Similarly, the setting sun effect in Figure 8 is only relevant for about 6 minutes, but as can be seen from the other graphs, the peaks last for hours. Nor does solar wind seem relevant to explain this very short timescale peak.

Are the sudden sharp peaks and troughs at sunset and sunrise caused by a subtle energy from the sun affecting either the dowser or the Information Field? Not many other factors could act so fast.

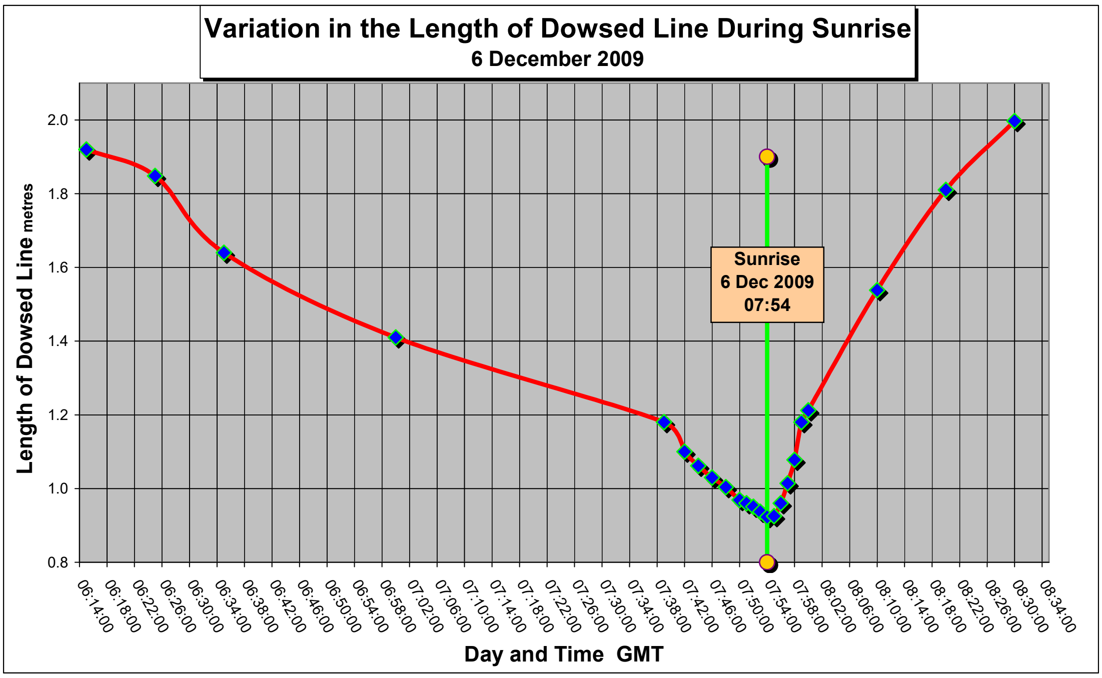

Figure 9

In the above analysis, possible sources of error are two fold. At sunset the sun's rays are passing over the horizon through a thicker layer of the atmosphere, and become diffracted. This may cause a possible error in perceived location so that the sunset is still visible after the predicted time. However, this would not change the conclusions.

The other possible challenge is that the light from the sun takes over 8 minutes to reach the earth. However, the graph demonstrates that if what is being dowsed emanates from the sun, it also travels at the speed of light, or if it is a local effect it produces a very fast dowsing reaction. This is unlike other similar Length/Time dowsing curves (discussed elsewhere in this series of papers), where the peak differs significantly from predicted times; demonstrating that dowsing information is not travelling at the speed of light.

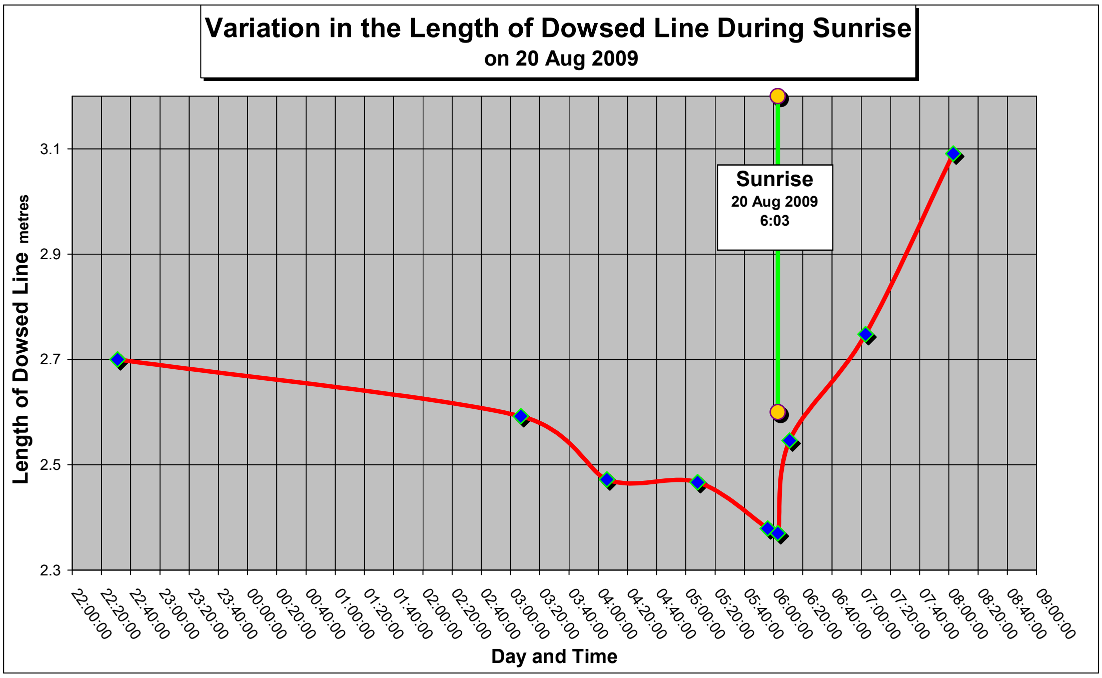

Figure 10

Conclusions

A major achievement of this paper is that the daily 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 sunrise and sunset, and to a lesser extent tides. Other possible factors include perturbations due to physical and/or biological reasons.

There do not seem to be any simple answers to explain the shapes of these graphs. What is cause, and what is effect? Although the observer/dowser is only the "messenger" is the messenger directly affected by a combination of such factors as tides, gravity, photons from the sun, solar wind, subtle energy from the sun, or the Earth's spin on its axis? Alternatively, are these factors affecting the Information Field which the dowser interrogates? The author's experience suggests the latter. These peaks and troughs may signal a new and unexpected phenomena or resonance. These are exciting prospects for future research.

The Way Forward, and Suggestions for Future Research

More independent research is required to confirm and develop the above findings on the causes of daily variations. However, using the combined results of a group of dowsers in an attempt to improve accuracy may prove counter productive as their perception and differing circadian rhythms may obscure the findings. Non interacting individuals are preferable. Suggested topics for future research include the following:

1. Is a dowser directly affected by non local factors such as gravity, the Earth's spin on its tilted axis, tides, the sun's subtle energy, sun light, or solar wind?
2. Are daily variations a result of changes in the Information Field caused by these factors?

3. When performing dowsing experiments inland and well away from a coast, for what location are the tidal predictions relevant?
4. How do tides have an influence on the measurements of length, and why do they increase length?
5. Why are measurements shortest at sunrise and maximum at sunset?
6. Why are peaks and troughs accurate to within a few minutes and seconds of actual sunset and sunrise?
7. What is its cause of the sunset peaks and sunrise troughs?
8. What other perturbations are present that require further research?
9. Why are some of the graphs asymmetrical?

Acknowledgements

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