

SCIENTIFIC EVIDENCE THAT SUPPORTS ASTROLOGY



**I DON'T BELIEVE IN ASTROLOGY. I'M A SAGITTARIUS
AND WE'RE SKEPTICAL.
-ARTHUR C. CLARKE**

**SAY WHAT YOU WILL ABOUT ASTROLOGY. IT'S STILL
MORE RELIABLE THAN STATISTICS.**

-DOC BENTON



Once upon a time, the leading astrologers of the day were also the leading mathematicians and scientists. People like Newton, Kepler, and Cardano.

Today, however, while astrology still has great thinkers and pioneers in statistical and evidence-based astrology such as Robert Currey and David Cochrane, the majority of its practitioners are probably more oriented toward counseling than research. Nonetheless, scientific evidence is mounting regarding the connections between celestial and terrestrial events, what I like to call the *Astrological Hypothesis Assumption* or AHA! Thus, today I want to show you just a fraction of some of the scientific evidence that exists for AHA.



Throughout I will show you mostly titles and abstracts from published research, and then I will summarize the results and explain why they are important for astrology.

Many of these papers and abstracts are found at the U.S. government's PubMed website (mostly studies involving the Sun or the Moon), and copies may be found on my own webpage, www.docbenton.com/arc.htm. Additionally, each study that lends support to astrology often contains references to several other studies that are also supportive, and thus, the evidence for AHA is growing larger every day. However, while many of these studies do support tenets of traditional astrology, they also often contain results we might not expect. Let us begin.

EVIDENCE FROM ASTROPHYSICS

OCTOBER, 1973

VOLUME 5

NUMBER 10

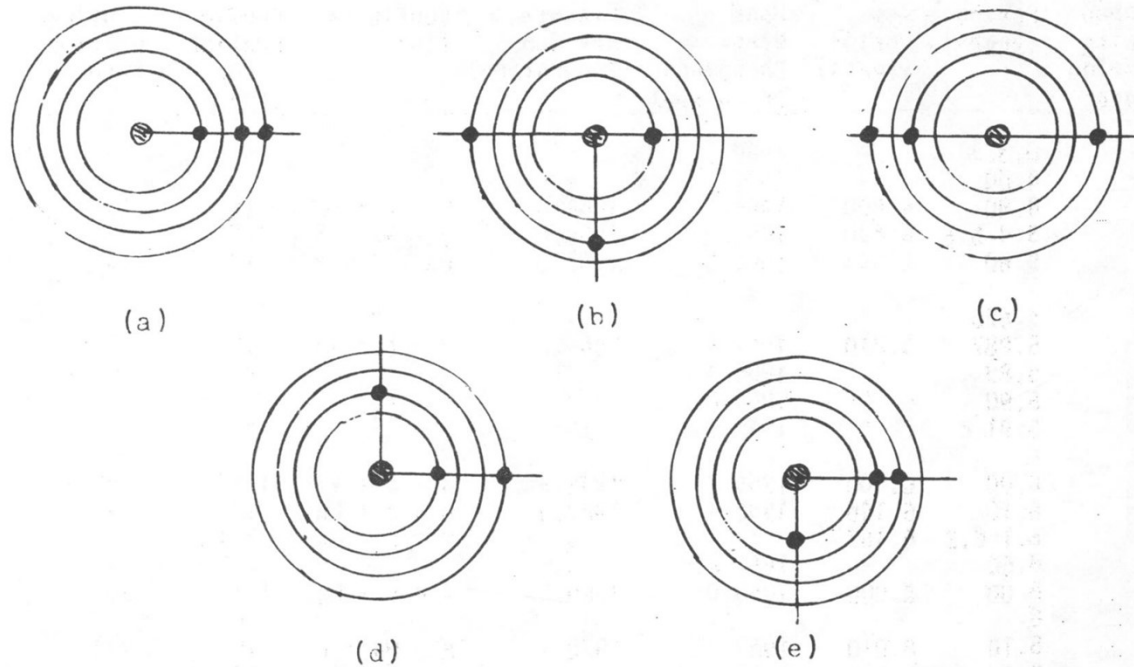
(1973)

Correlations between Sunspots and Planetary Positions

The periodicity, nature, and cause of sunspots has attracted scientific attention over the years.¹ Most early theories averred that they were of planetary origin.¹ In particular, possible tidal effects were investigated not only in the past but up to the present day.² Voight, for example, showed how the combined influences of Neptune, Uranus, Saturn and Jupiter could give a close resemblance

This study published in 1973 found that sunspot activity is at a maximum whenever three planets heliocentrically make angles of 0° , 90° , or 180° with one another. Why is this important for astrology?

Planetary Positions



This is important because in astrology the geocentric planetary angles of 0° , 90° , or 180° are believed to cause tension within people just as these same heliocentric angles cause tension within the Sun.

Lagrange point

(Wikipedia)

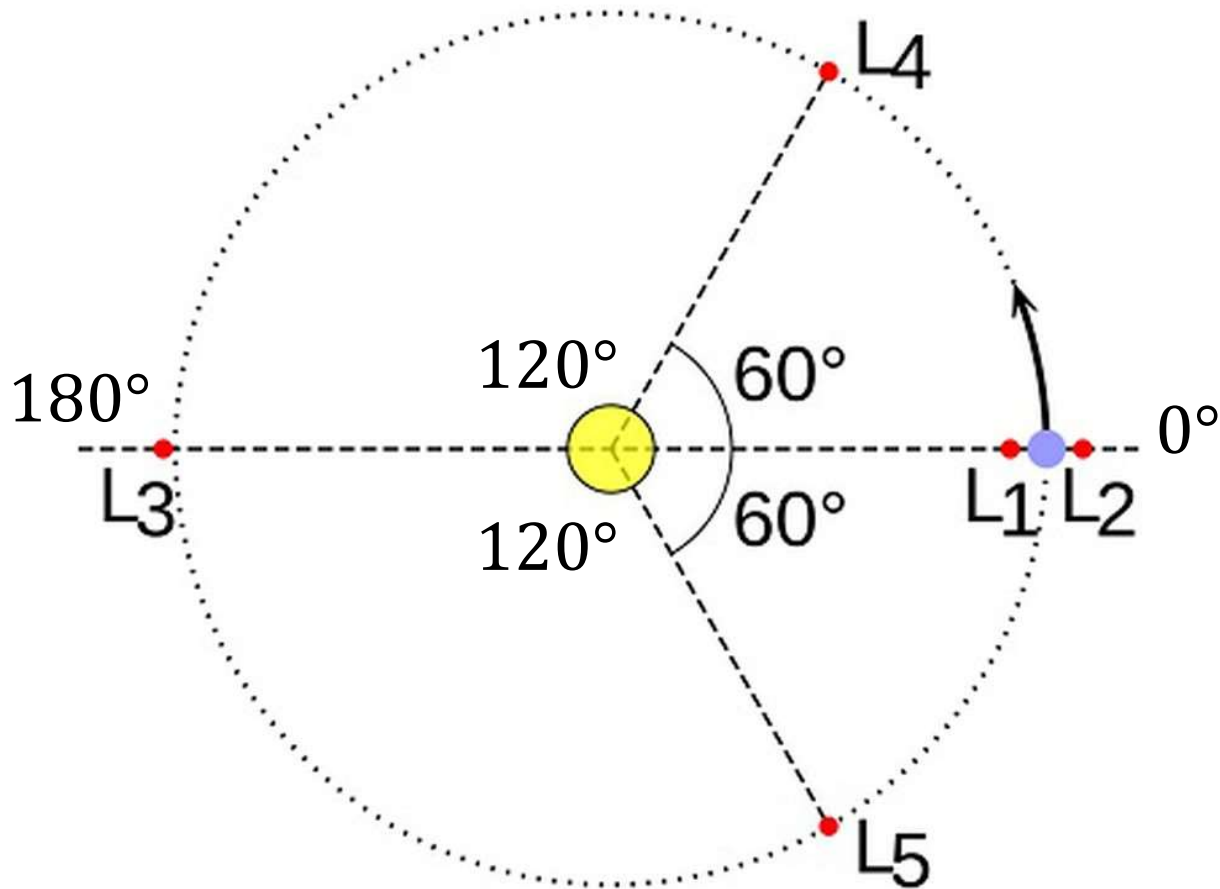
[Article](#) [Talk](#)

From Wikipedia, the free encyclopedia

For the video game, see [Lagrange Point \(video game\)](#).

In [celestial mechanics](#), the **Lagrange points** (/ləˈɡrɑːndʒ/; also **Lagrangian points** or **libration points**) are points of equilibrium for small-mass objects under the influence of two massive [orbiting](#) bodies. Mathematically, this involves the solution of the [restricted three-body problem](#).^[1]

When one celestial body orbits another like the Earth's orbit around the Sun, there are places called "Lagrange Points" where the gravitational and centrifugal forces cancel each other out. Why are these "gravitational voids" important for astrology?



They are important for astrology because, if the Sun is at the center, then the heliocentric angle between any two Lagrange points will be a 6th harmonic angle. We are, however, still a long way from being able to conclude from this that geocentric trines and sextiles are “easy aspects,” but this looks like a step in the right direction.

(2011)

Is there a planetary influence on solar activity?

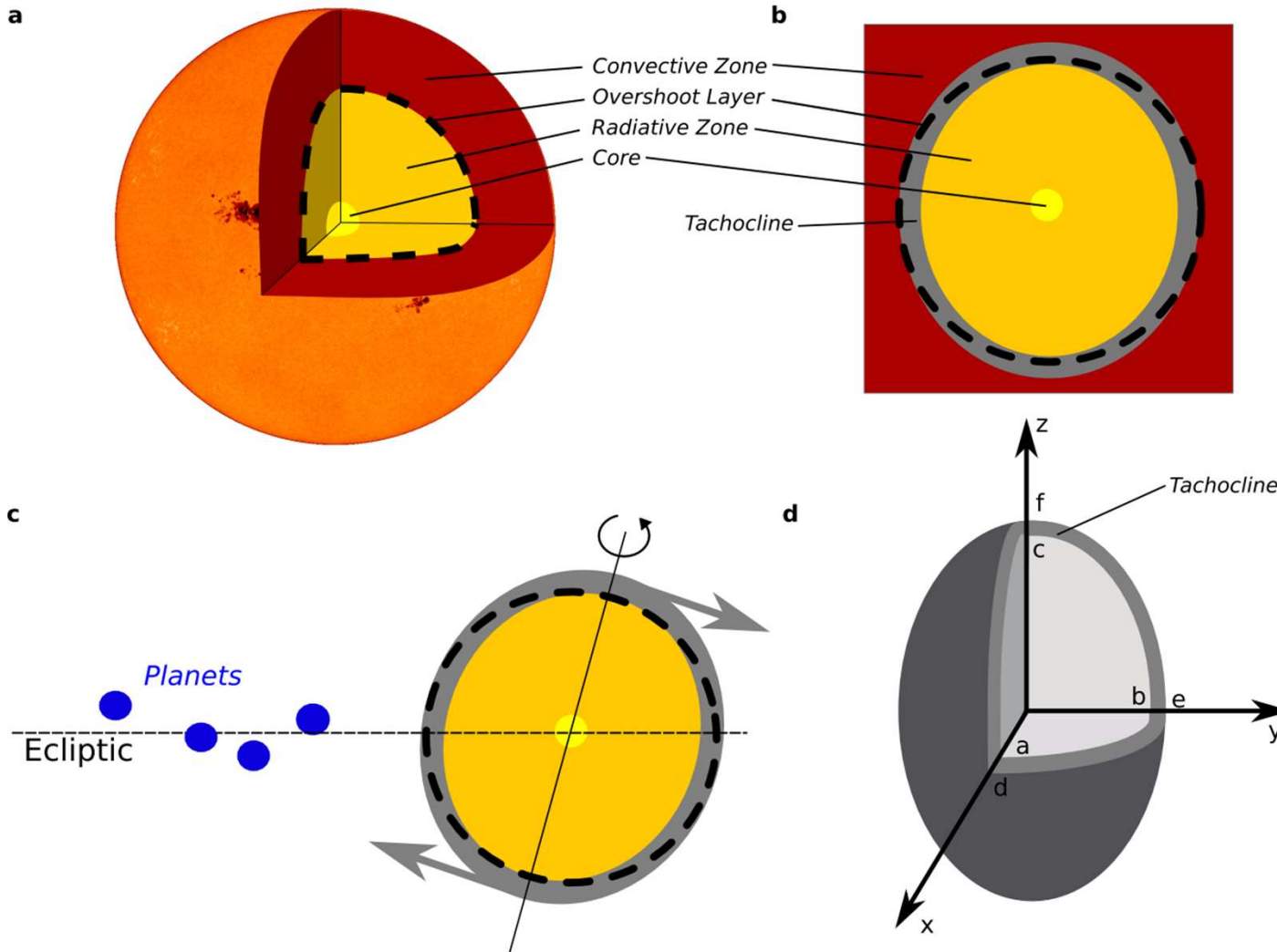
J. A. Abreu, J. Beer, A. Ferriz-Mas,, K. G. McCracken, and F. Steinhilber

Methods. We developed a simple physical model for describing the time-dependent torque exerted by the planets on a non-spherical tachocline and compared the corresponding power spectrum with that of the reconstructed solar activity record.

Results. We find an excellent agreement between the long-term cycles in proxies of solar activity and the periodicities in the planetary torque and also that some periodicities remain phase-locked over 9400 years.

Conclusions. Based on these observations we put forward the idea that the long-term solar magnetic activity is modulated by planetary effects. If correct, our hypothesis has important implications for solar physics and the solar-terrestrial connection.

This study found that gravitational torque exerted by planets can affect solar activity. Why is this important for astrology?



This result is unexpected since the gravitational forces exerted by the planets are small in comparison to the forces driving activity in the Sun, and the same criticism has been made of astrology, that any planetary gravity would be too weak to affect people on Earth. Nonetheless, this appears to be an example of the "Butterfly Effect" where small changes can be amplified over time and produce big results.

In mathematics, the *Butterfly Effect* is also known as sensitivity to initial conditions. This occurs whenever small changes in a starting point result in big differences later on, and this is why we can never predict the weather very far in advance. Slight errors in the measurement of temperature, wind speed, and other weather variables get magnified over time and lead to very different weather patterns. As an example from mathematics, consider the numbers 0.9, 1, and 1.1. They are all very close to one another, but as we raise these numbers to higher and higher powers, we get very different results.

$$0.9^{100} = 0.0000265613988875876$$

$$1^{100} = 1$$

$$1.1^{100} = 13,780.6123398224$$

On the correlation between solar activity and large earthquakes worldwide

(2020)

Vito Marchitelli^{1,2}, Paolo Harabaglia¹, Claudia Troise^{3,4} & Giuseppe De Natale^{3,4}✉

A Statistical Study of the Correlation between Geomagnetic Storms and $M \geq 7.0$ Global Earthquakes during 1957–2020

(2020)

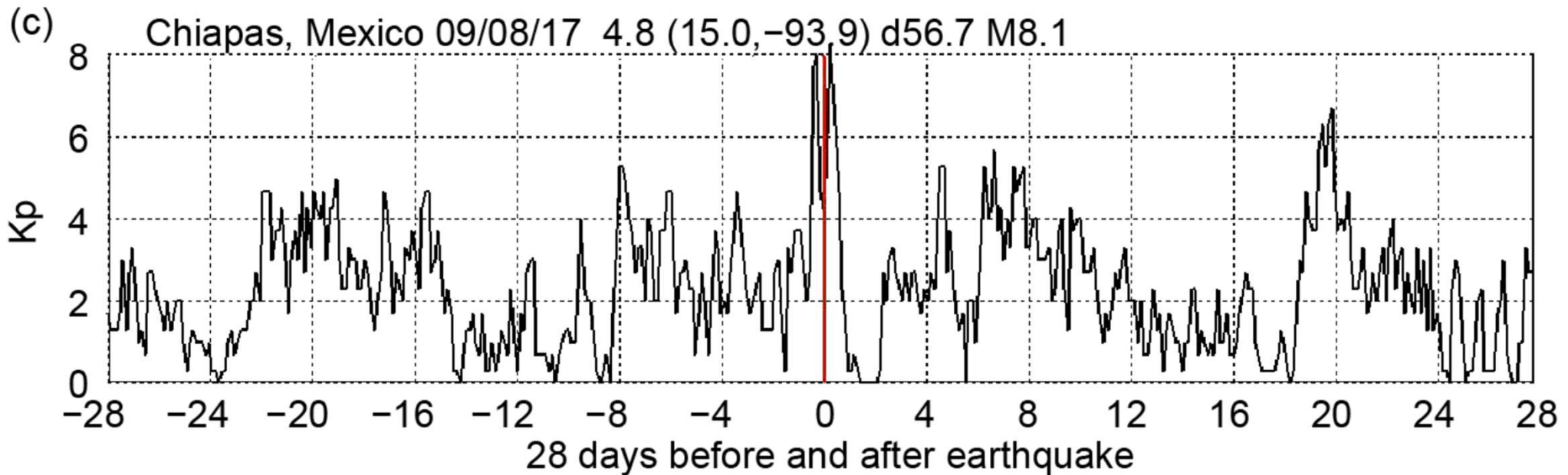
Hongyan Chen¹ , Rui Wang¹, Miao Miao¹ , Xiaocan Liu², Yonghui Ma³ ,
Katsumi Hattori^{4,5}  and Peng Han^{1,*} 

Geomagnetic Kp Index and Earthquakes

(2018)

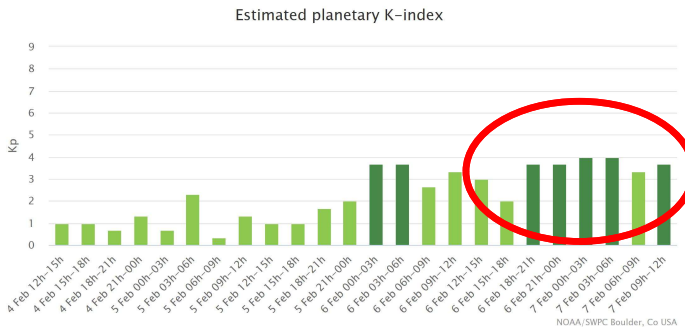
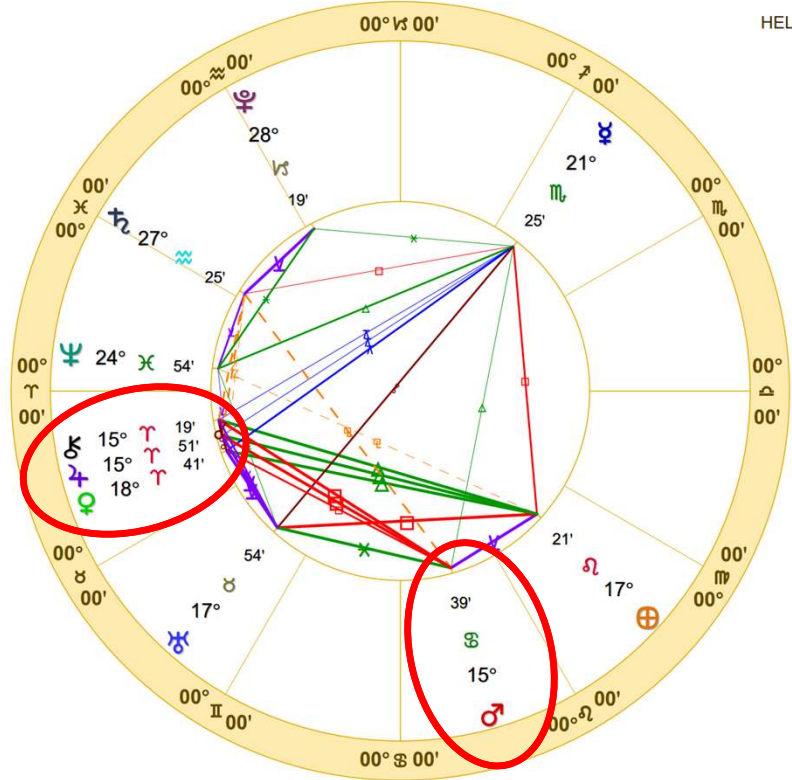
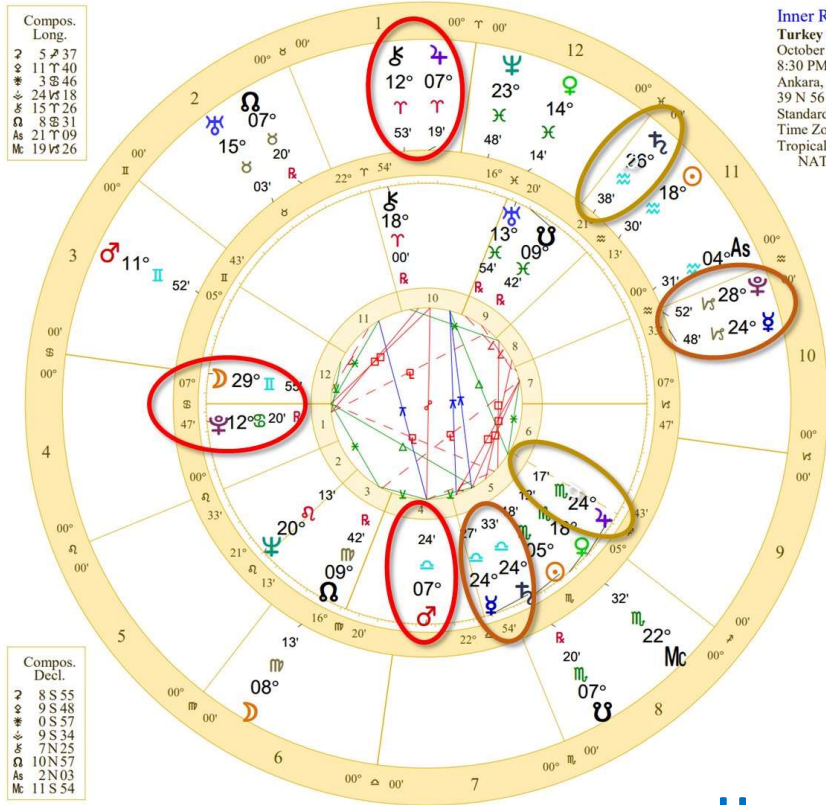
Nobuo Urata¹, Gerald Duma^{2*}, Friedemann Freund¹

These three studies found links between large earthquakes and consequences of solar activity such as the proton density in the Earth's magnetosphere and the occurrence of geomagnetic storms. Why is this important for astrology?



The Kp index is a measure of the intensity of geomagnetic storms, and the graph above shows the Kp index peaking at the time of an 8.1 magnitude earthquake in Chiapas, Mexico.

Some astrologers have long suspected connections between earthquakes and cosmic events such as eclipses, Moon wobbles, squares by the Sun to the Lunar Nodes, and 4th harmonic aspects by slow moving planets. These studies support astrology by at least confirming that celestial connections to earthquakes do indeed exist.



Here we see “old” and “new” astrology coming together in the recent earthquake in Turkey. Chiron made a strong square to Turkey’s natal Pluto, and heliocentrically there were four planets involved in a strong square triggering solar activity that elevated the Kp index.

Time-Dependent Nuclear Decay Parameters: New Evidence for New Forces?

(2009)

**E. Fischbach · J.B. Buncher · J.T. Gruenwald ·
J.H. Jenkins · D.E. Krause · J.J. Mattes · J.R. Newport**

This study found that sunspots and solar flares can alter the rate of decay of certain radioactive substances on Earth. The authors also speculate as an alternative hypothesis that perhaps it is the measuring instruments that are being affected. Why is this study important to astrology?

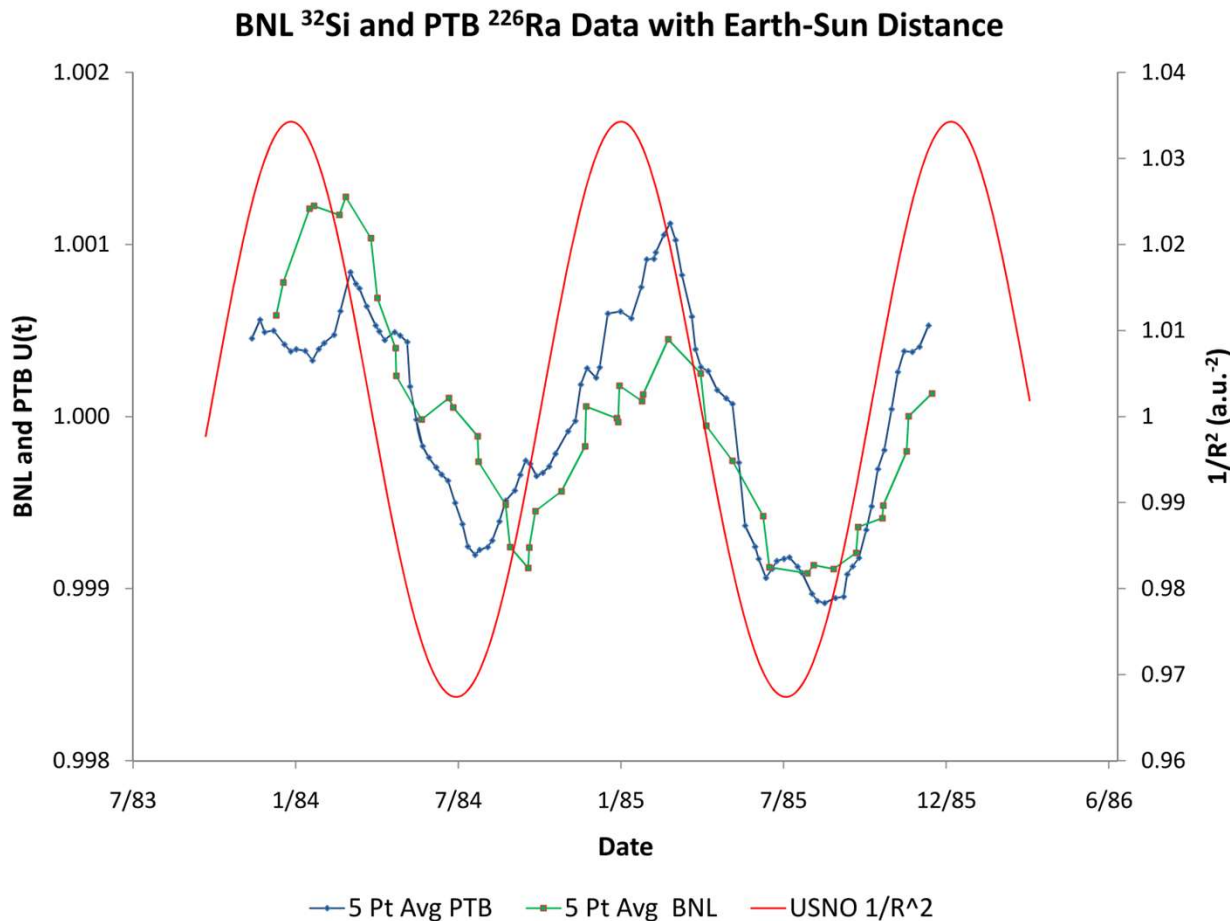


Fig. 4 Correlation between the centered 5 point averaged decay rates of $^{32}\text{Si}/^{36}\text{Cl}$ at BNL and ^{226}Ra at PTB. The centered 5 point average illustrates the effect of smoothing out short-term fluctuations in both data sets. The BNL and PTB data for $U(t)$ have been averaged in common weekly bins for purposes of comparison

This result is important for astrology because it suggests that it is possible for celestial events to affect things on Earth all the way down to a molecular level and that it can affect non-biological processes in addition to biological organisms.

**EVIDENCE FROM
CHRONOBIOLOGY AND
HELIOBIOLOGY**

REVIEW PAPER

Are cyclic plant and animal behaviours driven by gravimetric mechanical forces?

(2021)

Cristiano de Mello Gallep^{1,*}  and Daniel Robert² 

This article is a survey of how solar and lunar cycles affect both biological organisms and some non-biological processes on Earth. Why is this article important to astrology?

References

- Adushkin VV, Riabova SA, Spivak AA.** 2017. Lunar–solar tide effects in the Earth’s crust and atmosphere. *Izvestiya, Physics of the Solid Earth* **53**, 565–580.
- Ageev IM, Rybin YM, Shishkin GG.** 2018. Manifestation of solar–terrestrial rhythms in variations of the electrical conductivity of water. *Biophysics* **63**, 282–288.
- Akasofu SI.** 1982. Interaction between a magnetized plasma flow and a strongly magnetized celestial body with an ionized atmosphere: energetics of the magnetosphere. *Annual Review of Astronomy and Astrophysics* **20**, 117–138.
- Arnaudon L, Bordry F, Coosemans W, et al.** 1993. Effects of tidal forces on the beam energy in LEP. In: *International Conference on Particle Accelerators*. Washington DC, USA, 17–20 May, 1993. Proceedings. New York: IEEE, 44–46.
- Aschoff J.** 1981. *Biological rhythms*. Boston: Springer.
- Baluska F, Volkmann D, Barlow PW.** 2004. Cell bodies in a cage. *Nature* **428**, 371.
- Barlow PW.** 2012. Moon and cosmos: plant growth and plant bioelectricity. In: Volkov AG, ed. *Plant Electrophysiology*. Berlin: Springer, 249–280.
- Barlow PW.** 2015. Leaf movements and their relationship with the lunisolar gravitational force. *Annals of Botany* **116**, 149–187.
- Barlow PW, Fisahn J.** 2012. Lunisolar tidal force and the growth of plant roots, and some other of its effects on plant movements. *Annals of Botany* **110**, 301–318.
- Barlow PW, Fisahn J, Yazdanbakhsh N, Moraes TA, Khabarova OV, Gallego CM.** 2013. *Arabidopsis thaliana* root elongation growth is sensitive to lunisolar tidal acceleration and may also be weakly correlated with geomagnetic variations. *Annals of Botany* **111**, 859–872.
- Barlow PW, Klingelé E, Klein G, Sen MM.** 2008. Leaf movements of bean plants and lunar gravity. *Plant Signaling & Behavior* **3**, 1083–1090.
- Barlow PW, Mikulecký M Sr, Střeščík J.** 2010. Tree-stem diameter fluctuates with the lunar tides and perhaps with geomagnetic activity. *Protoplasma* **247**, 25–43.
- Bizet F, Pereda-Loth V, Chauvet H, Gérard J, Eche B, Girousse C, Courtade M, Perbal G, Legué V.** 2018. Both gravistimulation onset and removal trigger an increase of cytoplasmic free calcium in statocytes of roots grown in microgravity. *Scientific Reports* **8**, 11442.

This article is important to astrology not only for its thoroughness, but also because it contains approximately three pages of references to leading studies that show how organisms and other things on Earth can be influenced by celestial cycles through gravity, changes in light, and rhythmic tides. Hence, not only do celestial/terrestrial links exist, they may also function through several different mechanisms.

Annals of Botany **116**: 149–187, 2015

doi:10.1093/aob/mcv096, available online at www.aob.oxfordjournals.org

ANNALS OF
BOTANY
Founded 1887

(2015)

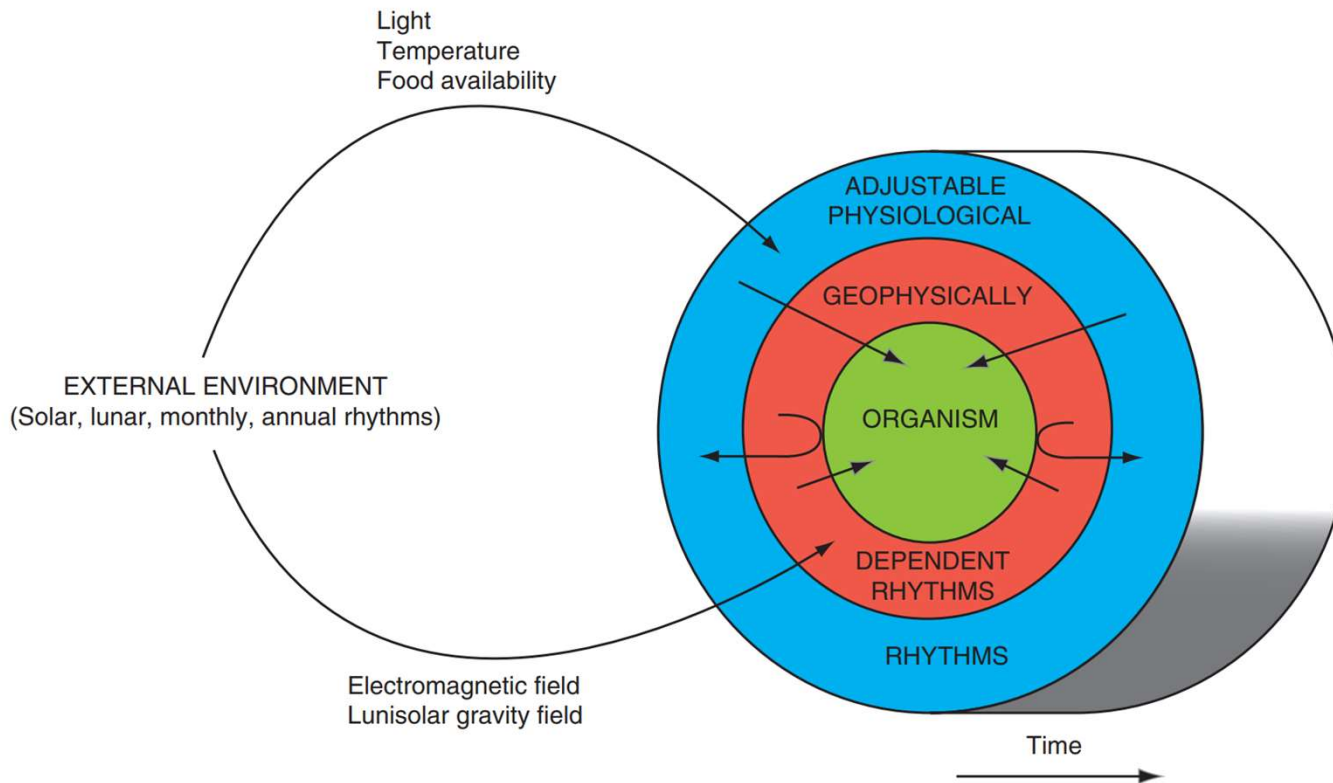
RESEARCH IN CONTEXT

Leaf movements and their relationship with the lunisolar gravitational force

Peter W. Barlow*

This study found that leaf movements are influenced by lunisolar gravitational forces. Why is this important for astrology?

Barlow – Leaf movements and lunisolar gravitational force



This study is important because many scientists have claimed that gravitational forces from celestial bodies are simply too weak to affect organisms on Earth. This study disproves that assertion and, once again, suggests that the *Butterfly Effect* is in play.

Annals of Botany **122**: 757–766, 2018

doi: 10.1093/aob/mcx176, available online at www.academic.oup.com/aob

ANNALS OF
BOTANY
Founded 1887

RESEARCH IN CONTEXT: PART OF A SPECIAL ISSUE ON FUNCTIONAL–DEVELOPMENTAL
PLANT CELL BIOLOGY (2018)

Peter Barlow’s insights and contributions to the study of tidal gravity variations and ultra-weak light emissions in plants

Cristiano M. Gallep^{1*}, João F. Viana¹, Michal Cifra², Dominic Clarke³ and Daniel Robert³

This study found that lunisolar gravitational forces can affect the emission of photons by coffee seedlings. Why is this important for astrology?

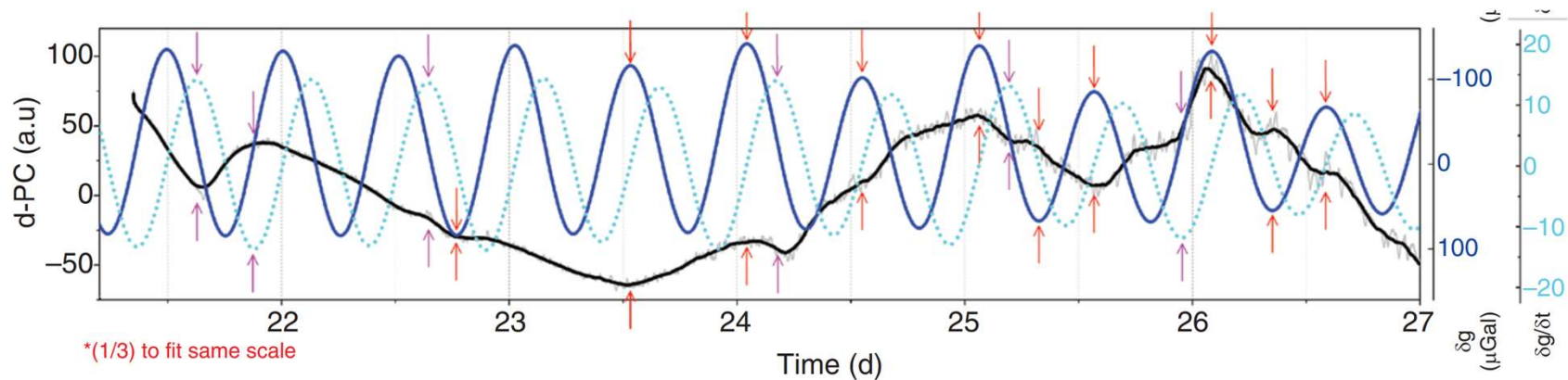


FIG. 2. Detrended photon-count [d-PC, with local smooth of 10^2 (grey line) and 10^3 points (black line)] and local gravimetric tide (δg , blue line) and first derivative ($\delta g/\delta t$, point, light-blue line) data for germination tests of coffee beans in optimal conditions, March 2016. Pairs of vertical arrows (same time) mark significant turning points of δg (red arrows) or to $\delta g/\delta t$ (purple arrows) in coincidence to local/trend changes in d-PC data. For test t3 (23–26 d) the vertical axis (d-PC) is divided by 3, to fit similar scale of other tests.

This study is important to astrology because it shows, along with some other studies above, just how deep celestial influences can reach when it comes to affecting processes on Earth.

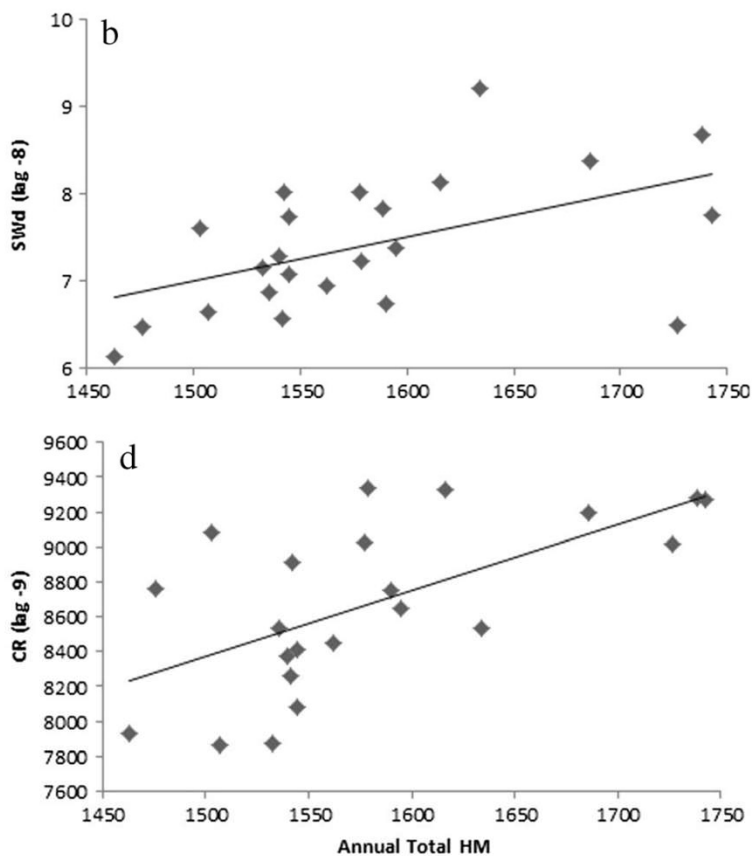
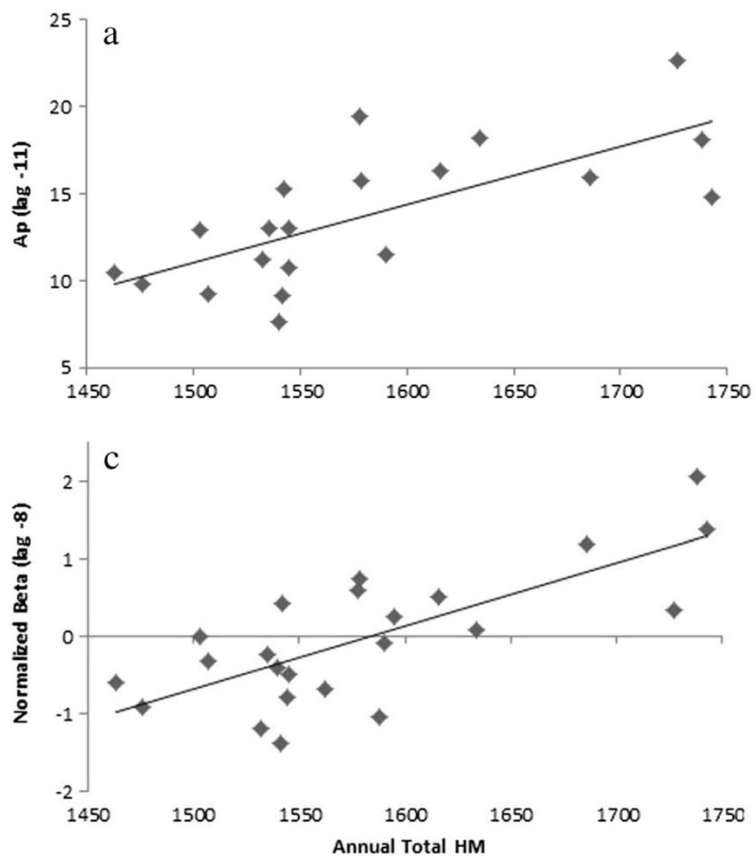
**An Influence of Changes of Heliogeophysical Conditions on
Biological Systems: Some Results of Studies Conducted in
the Azerbaijan National Academy of Sciences**

E.S.Babayev¹, A.A.Allahverdiyeva², F.R.Mustafa¹, P.N.Shustarev¹
(2007)

**Annual incidence of mortality related to hypertensive disease
in Canada and associations with heliophysical parameters**

Joseph M. Caswell^{1,2,3} • Trevor N. Carniello^{1,2,4} • Nirosha J. Murugan^{2,5}
(2016)

These two studies found ways in which the Sun can influence biological organisms. Why are they important for astrology?



These studies are important because they show that the Sun does, indeed, produce some effects on the conditions of human beings on Earth.

Fig. 4 Scatterplots of linear (Pearson r) correlations between annual total deaths from hypertensive diseases in Canada (HM) with **a** geomagnetic activity (A_p index) lagged by 11 years, **b** solar wind proton density (SW_d)

index lagged by 8 years, **c** solar wind plasma beta (β) lagged by 8 years, and **d** cosmic rays (CR) lagged by 9 years

**Cyclic patterns of cancer incidence in males by body site:
data from the USA for the period 1973-1989**

B. D. Dimitrov

(2000)

**Heliogeophysical Aspects of Rheology: New
Technologies and Horizons of Preventive Medicine**

Trofimov Alexander and Sevostyanova Evgeniya

(2013)

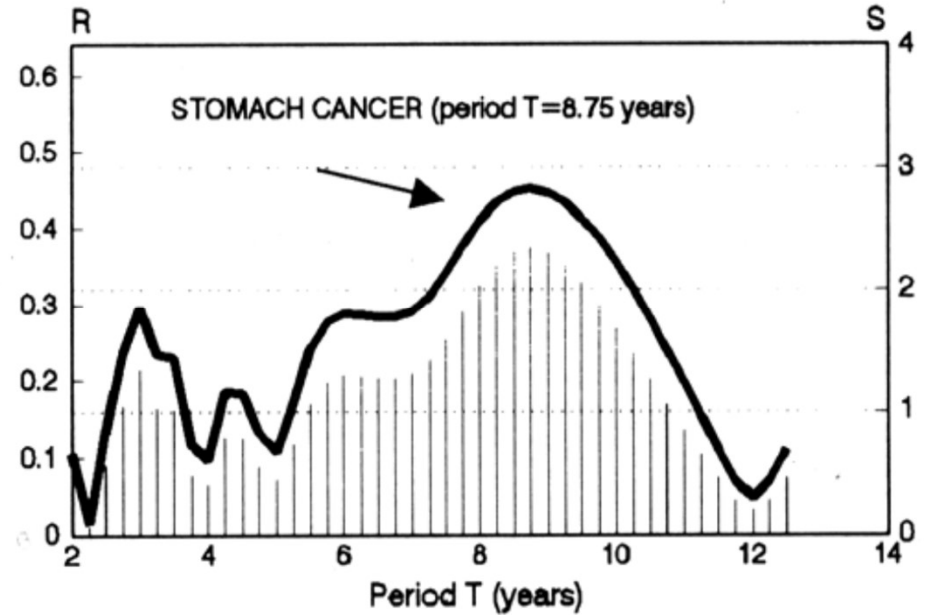
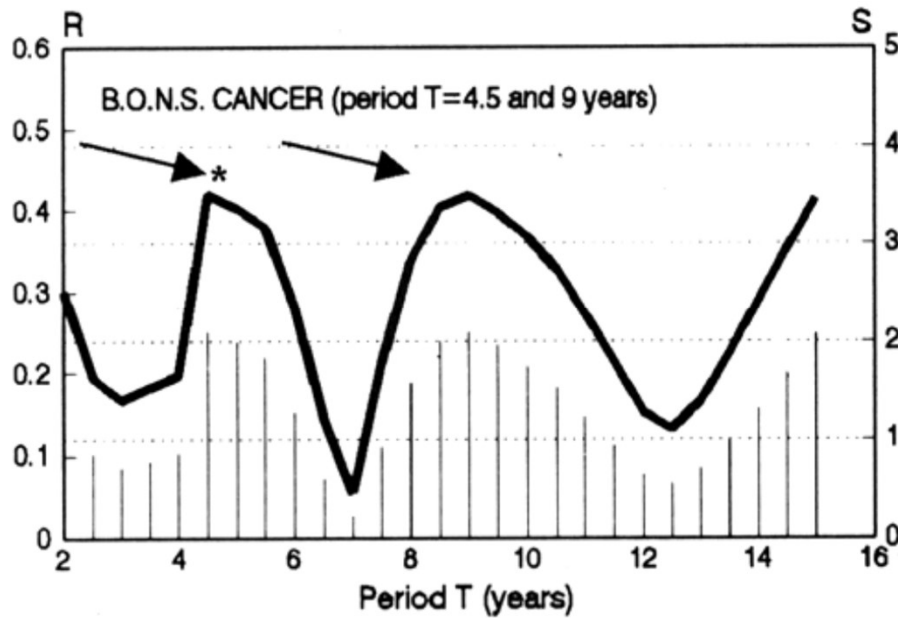
**[The problem of the effect of cosmogeophysical
factors on the formation of the properties of
developing organisms during early ontogeny]**

[Article in Russian]

I N Semenenia

(1995)

Each of these studies provides evidence of what is known as heliogeophysical imprinting during the development of the fetus. In other words, evidence of the effects of the Sun on a fetus prior to birth. Why is this study important to astrology?



These studies are important because they show that some version of pre-natal astrology is indeed valid.

Human Responses to the Geophysical Daily, Annual and Lunar Cycles

Review

(2008)

Russell G. Foster¹ and Till Roenneberg²

This paper is a review of the literature that shows the many connectons between celestial cycles and human responses. Why is this important to astrology?

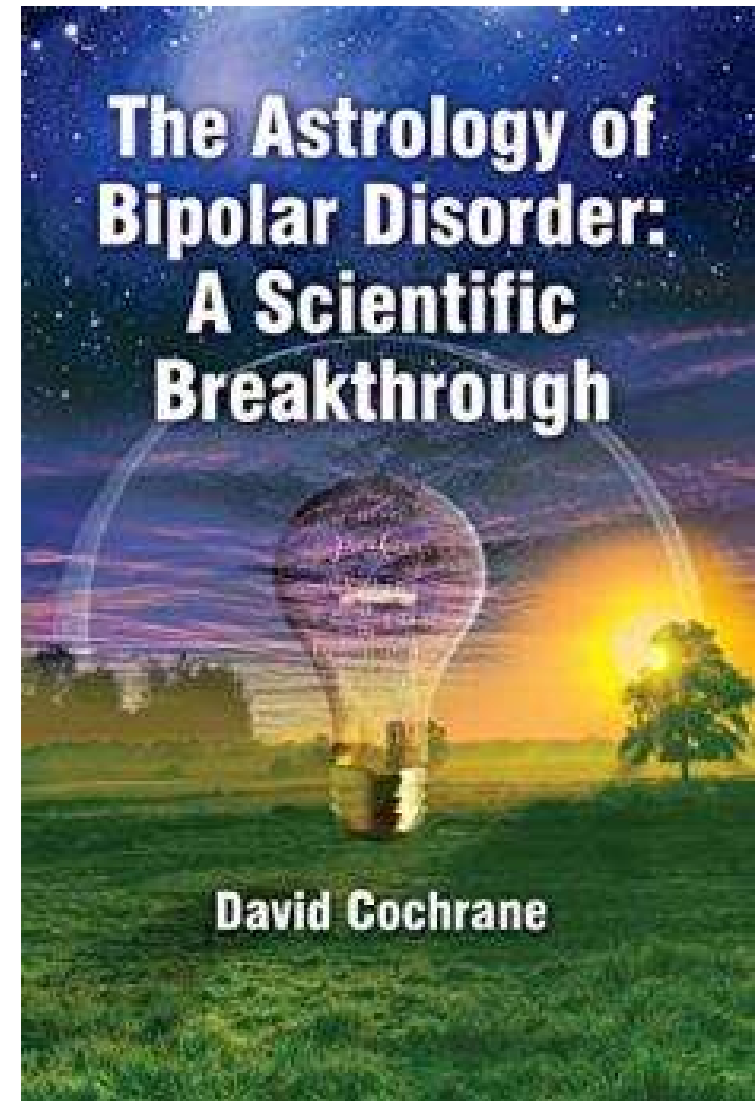
Condition	Month of <u>Birth</u>												Reference
	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
General pathologies													
Asthma (UK)													[55]
Asthma (UK)													[103]
Asthma (Denmark)													[104]
Crohn's disease (Israel)													[105]
Childhood diabetes mellitus													[106]
Glaucoma													[107]
Hodgkin disease													[108]
Psychiatric disorders													
Alcohol abuse													[42]
Autism													[42]
Bipolar													[42]
Eating disorder													[42]
Personality disorder													[42]
Neuroses													[42]
SAD													[42,109]
Schizoaffective disorder													[42]
Schizophrenia (N. hemisphere)													[42,109–112]
Schizophrenia (S. hemisphere)													[110,111]
Suicidal behaviour (W. Australia)													[113]
Neurological illness													
Alzheimer's disease													[42]
Amyotrophic lateral sclerosis													[66]
Down's syndrome													[42]
Epilepsy													[66]
Mental retardation													[42]
Motor neuron disease													[42]
MS (Northern hemisphere)													[46,66,109,114]
MS (Southern hemisphere)													[46]
Narcolepsy													[115]
Parkinson's disease													[42,66,109]

Current Biology

This paper is important for several reasons including this table showing the association between birth month and various diseases. In this way, the article also provides some support for a type of Sun sign astrology.

EVIDENCE FROM STATISTICS

Two of the leading researchers in statistical and evidenced-based astrology today are David Cochrane and Robert Currey. David is CEO of Cosmic Patterns that produces the Kepler and Sirius astrology programs, he has a master's degree in data analysis, and he has been a pioneer in the use of statistics and extreme case sampling to produce an evidence-based astrology. He is also a founding member of the Cosmobiology Institute that is dedicated to scientific research on the relationships between cosmic phenomena and organic life.



CORRELATION

The Astrological Association
Journal of Research
in Astrology

Vol.35 (1) 2022

Editorial: Quantifying Archetypes

Testing Mundane Astrology 1984-2021
by **Johnson Holt**

Measuring & comparing aspect orbs
by **Kyösti Tarvainen**

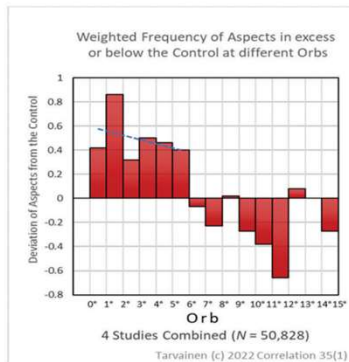
The impact of Recent Advances
by **Robert Currey**

Introduction & Interview of **Arthur Mather**
by **Graham Douglas**

Astrological Research in the 21st Century
by **Roy Gillett**

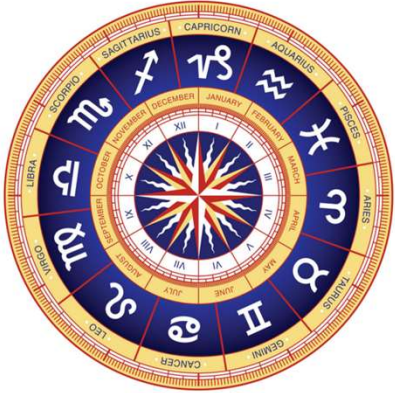
Introduction & Interview of **Suitbert Ertel**
by **Garry Phillipson**

Book Review: *The Astrology of Bipolar Disorder*
by **Robert Currey**



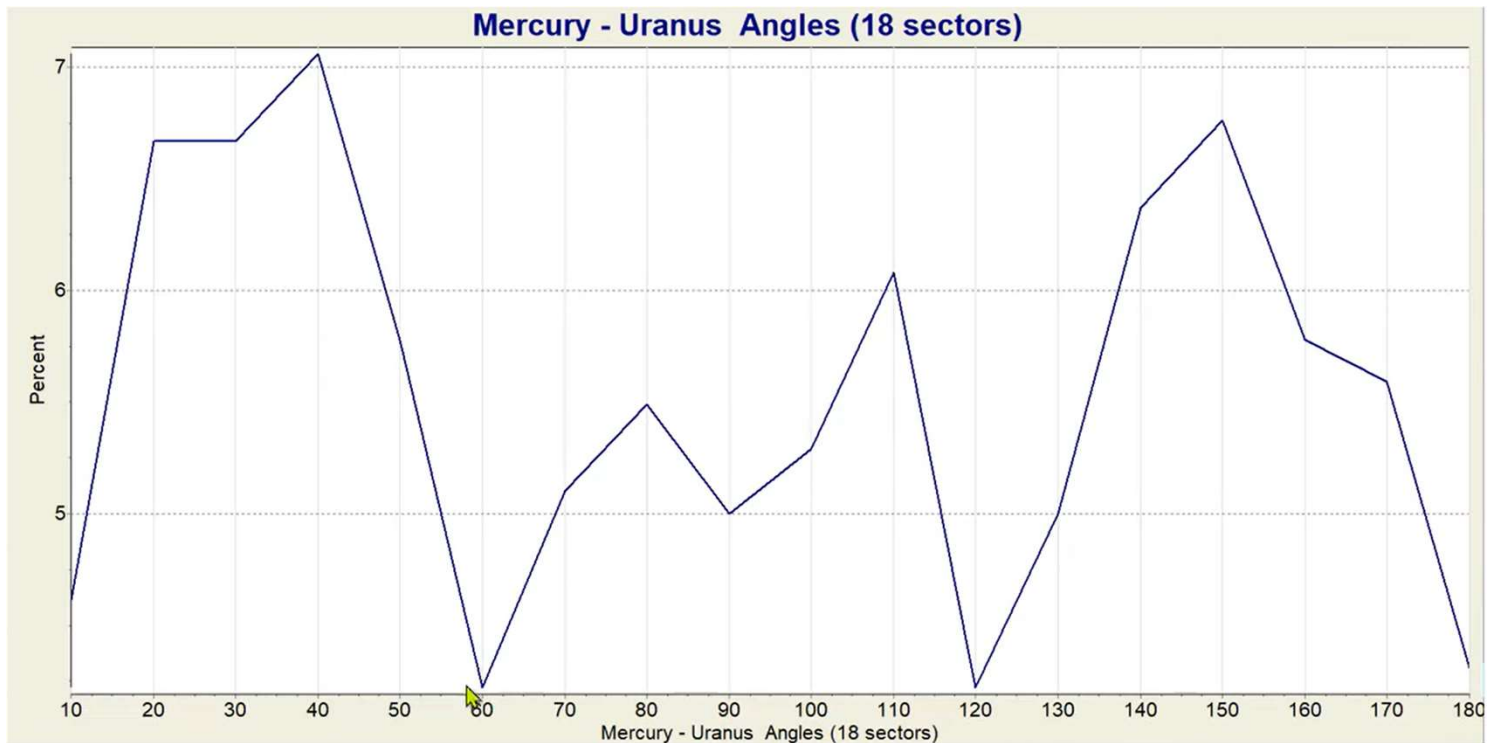
- ★ Dr Johnson Holt finds an association between alignments of the Outer Planets & global news highlights as proposed by Professor Tarnas in his book *Cosmos and Psyche*.
- ★ Dr Kyösti Tarvainen compares aspects by orb & how applying & separating aspects vary in 50,828 natal charts.
- ★ Robert Currey on why subsequent critical reviews of astrology research fall well below the standard aspired to by the book 'Recent Advances in Natal Astrology' (1977)
- ★ Arthur Mather co-author of *Recent Advances* & other critical research books, interviewed by Graham Douglas, on his path from keen researcher to accepting divination.
- ★ Roy Gillett, President of the Astrological Association, shares his vision & model for astrology research in the future.
- ★ Dr Garry Phillipson interviews Professor Suitbert Ertel who clarifies the past & his radical approach to future research.
- ★ David Cochrane's *Vibrational Astrology* & his new title *Astrology of Bipolar Disorder* reviewed by Robert Currey.

Robert Currey is an astrologer and software designer who is also a very fine statistician, and he is the current editor of *Correlation*, a publication of the Astrological Association (of Great Britain). This magazine presents rigorous, peer-reviewed statistical and quantitative evidence for astrology, and while most of the supportive studies that follow represent research done by non-astrologers, I have also included a few results from both David Cochrane and from *Correlation*.



Also, note that most astrological influences are likely weak to moderate in strength because if they weren't, then we wouldn't be able to mitigate the outcomes through free will. They're not like jumping out of a plane where we have no choice but to accelerate at a rate of $32 \text{ ft}/\text{sec}^2$ due to gravity.

Additionally, a single astrological influence can manifest in several possible ways, and a single outcome can be the result of any of several different astrological causes. All of this makes it more difficult but not impossible to assess astrology using statistics. In many ways, an astrological influence is like a quantum wave function that contains all possible outcomes with probabilities assigned to each. Or as Dr. Rick Tarnas likes to say, astrology is archetypally predictive, but not concrete predictive.



Also, while we often do find statistical evidence for traditional astrology, it's often not what one would expect. For example, David Cochrane examined the assumption that Mercury/Uranus aspects are more prevalent in astrologers' charts and this turned out to be true, but it was semisextiles and quincunxes that mattered the most while sextiles and trines had the lowest frequency of all. Not at all what most astrologers would expect! Now let's look at some studies.

Are Children Like Werewolves? Full Moon and Its Association with Sleep and Activity Behaviors in an International Sample of Children

(2016)

Jean-Philippe Chaput^{1}, Madyson Weippert¹, Allana G. LeBlanc², Mads F. Hjorth³,
Kim F. Michaelsen³, Peter T. Katzmarzyk⁴, Mark S. Tremblay¹, Tiago V. Barreira^{4,5},
Stephanie T. Broyles⁴, Mikael Fogelholm⁶, Gang Hu⁴, Rebecca Kuriyan⁷, Anura Kurpad⁷,
Estelle V. Lambert⁸, Carol Maher⁹, Jose Maia¹⁰, Victor Matsudo¹¹, Timothy Olds⁹,
Vincent Onywera¹², Olga L. Sarmiento¹³, Martyn Standage¹⁴, Catrine Tudor-Locke^{4,15},
Pei Zhao¹⁶ and Anders M. Sjödín³ for the ISCOLE Research Group*

This cross-cultural study found a small but significant effect of the Full Moon on sleep. All in all, children sleep about five minutes less at a Full Moon as compared to sleep at a New Moon. Why is this study important for astrology?

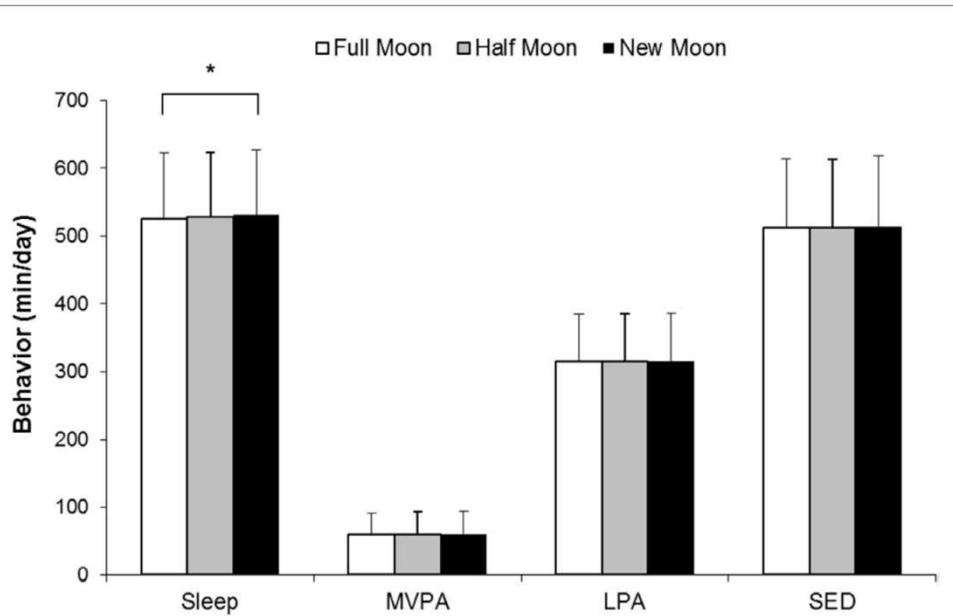


FIGURE 1 | Sleep and activity behaviors according to moon phases.

Data are presented as mean values and SDs. A multilevel linear mixed model was used with participants and schools as random effects and sites as fixed effects. The model was adjusted for age, sex, highest parental education, day of measurement, and body mass index z-score. Full moon (± 4 days; includes 30% of observations), half moon ($\pm 5-9$ days from full moon; includes 33% of observations), and new moon ($\pm 10-14$ days from full moon; includes 37% of observations). *Sleep duration is significantly shorter during “full moon” compared to “new moon” ($P < 0.01$). MVPA, moderate-to-vigorous physical activity; LPA, light-intensity physical activity; SED, sedentary time.

Even though the effect is small (5 minutes less of sleep), this study is important for astrology because it supports traditional astrological theory regarding how things are intensified at a Full Moon.

Evidence that the Lunar Cycle Influences Human Sleep

(2013)

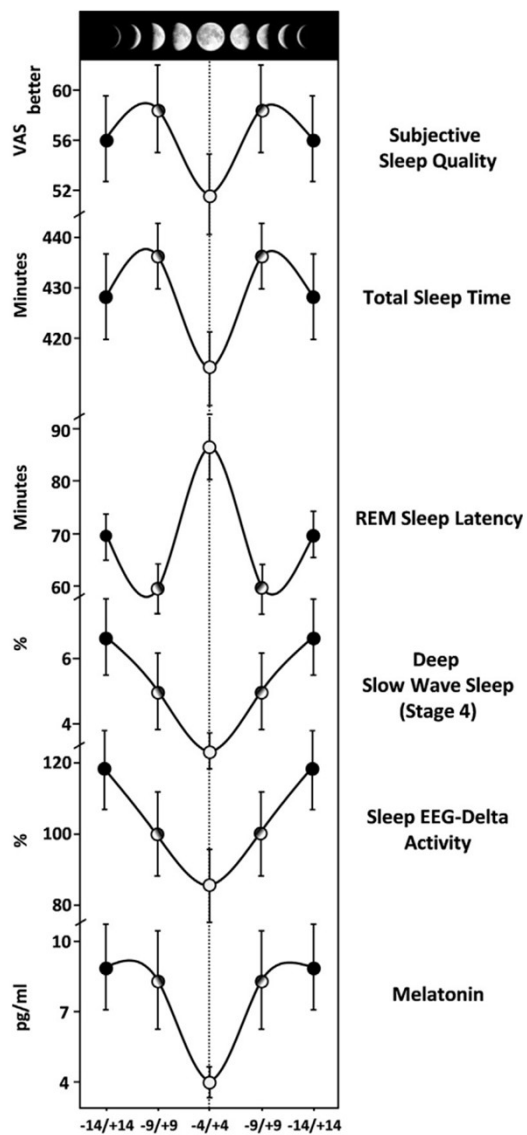
Christian Cajochen,^{1,*} Songül Altanay-Ekici,¹
Mirjam Münch,² Sylvia Frey,¹ Vera Knoblauch,³
and Anna Wirz-Justice¹

¹Centre for Chronobiology, Psychiatric Hospital of the
University of Basel, 4012 Basel, Switzerland

²Solar Energy and Building Physics Laboratory, Swiss Federal
Institute of Technology Lausanne, 1015 Lausanne, Switzerland

³Centre for Sleep Medicine, Hirslanden Clinic, 8702 Zollikon,
Switzerland

Researchers found that for adults sleeping under controlled laboratory conditions during a Full Moon that delta brainwaves decreased by 30%, the time needed to fall asleep increased by 5 minutes, the length of sleep time decreased by 20 minutes, endogenous melatonin levels decreased, and the participants reported diminished quality of sleep. Why is this important for astrology?



These results are much more definitive than those of the previous study that examined the sleep of children during a Full Moon, and these results are important to astrology because they provide several objective measures that people are more restless during a Full Moon just as astrology believes. Furthermore, the study was done under controlled conditions where subjects were not exposed to moonlight, and they were not even aware of the purpose of the study.

The dark side of the moon

(2009)

Leonie A Calver ¹, Barrie J Stokes, Geoffrey K Isbister

Objective: The belief that the full moon and disturbed behaviour are closely linked is alive and well, despite studies to the contrary. We investigated the possibility that there is an association between only extreme behavioural disturbance and the full moon.

Results: Of 91 patients with violent and acute behavioural disturbance, 21 (23%) presented during the full moon--double the number for other lunar phases ($P = 0.002$). Sixty (66%) had either alcohol intoxication or psychostimulant toxicity, and five attacked staff (biting [2], spitting [1], kicking [1] and scratching [1]). In contrast, 512 hospital security calls for patients with less severe behaviour were evenly distributed throughout the lunar cycle.

This study found that hospital patients are more likely to exhibit disturbed behavior during a Full Moon. Why is this important for astrology?

Design, setting and participants: We undertook an observational study of patients with violent and acute behavioural disturbance who presented to the emergency department of Calvary Mater Newcastle and patients with less severe behaviour for whom hospital security calls were made.

Conclusion: Violent and acute behavioural disturbance manifested more commonly during the full moon.

This study is important for astrology because it confirms the kind of behavior that astrology expects to be more prevalent during a Full Moon.

Lunar cycle and psychiatric hospital admissions for schizophrenia: new findings from Henan province, China

(2020)

Ran-Ran Wang, Yu Hao , Hua Guo, Meng-Qi Wang, Ling Han, Ruo-Yun Zheng, ...show all

Pages 438-449 | Received 21 Mar 2019, Accepted 26 May 2019, Published online: 07 Apr 2020

This study found that hospital admissions for schizophrenia are significantly more likely ($p < 0.0001$) at the Full Moon and the 1st Quarter Moon. Why is this result important for astrology?

Conclusions: Psychiatric admissions for schizophrenia show lunar periodicities. People with schizophrenia tend to be stable in the new moon, but their condition is easily aggravated during the first quarter and full moon. Patients with paranoid schizophrenia are more susceptible to deterioration at the full moon, so merit more attention and care from communities, families, and hospitals.

This study is important for astrology because it reaffirms traditional associations of the Full Moon with “lunacy” while also showing that the waxing square of the Moon is an important indicator.

Moon/sun – suicide

(2018)

Attempts to understand the complex mechanism of suicide

Zoltán Kmetty, Álmos Tomasovszky and Károly Bozsonyi

From the journal [Reviews on Environmental Health](#)

<https://doi.org/10.1515/reveh-2017-0039>

Results:

Among women aged 20–49 years, a significant increase in the risk of suicide has been observed during proton solar events. At the same time, among women aged 50–59 years a slight but significant decrease has been identified in the risk of suicide during magnetic storms and full moons.

This study showed that women in a certain age group have a heightened risk of suicide during Full Moons, magnetic storms, and proton solar events. Why is this important for astrology?

The specific relationships identified in the case of females suggest that the biological factors we consider contributing to suicides might be operating differently in the case of the male and female populations. This also suggests that in understanding this extremely complex phenomenon social and biological explanations should not be considered as rivals but as working in a complementary fashion.

This study is important for astrology not only because it confirms some traditional suspicions regarding the Full Moon, but also because it alerts us to gender differences in how people may react and it also shows that disturbances to Earth's geomagnetic sphere can play a role.

The full moon and motorcycle related mortality: population based double control study (2017)

[Donald A Redelmeier](#), professor of medicine¹ and [Eldar Shafir](#), professor of psychology and public affairs²

Conclusion

The full moon is associated with an increased risk of fatal motorcycle crashes, although potential confounders cannot be excluded. An awareness of the risk might encourage motorcyclists to ride with extra care during a full moon and, more generally, to appreciate the power of seemingly minor distractions at all times.

This study found that motorcycle fatalities were more likely during a Full Moon. Why is this result important for astrology?

Results

13 029 motorcyclists were in fatal crashes during 1482 relevant nights. The typical motorcyclist was a middle aged man (mean age 32 years) riding a street motorcycle with a large engine in a rural location who experienced a head-on frontal impact and was not wearing a helmet. 4494 fatal crashes occurred on the 494 nights with a full moon (9.10/night) and 8535 on the 988 control nights without a full moon (8.64/night). Comparisons yielded a relative risk of 1.05 associated with the full moon (95% confidence interval 1.02 to 1.09, $P=0.005$), a conditional odds ratio of 1.26 (95% confidence interval 1.17 to 1.37, $P<0.001$), and an absolute increase of 226 additional deaths over the study interval. The increase extended to diverse types of motorcyclists, vehicles, and crashes; was accentuated during a supermoon; and replicated in analyses from the United Kingdom, Canada, and Australia.

[Back to Top](#)

This study is important for astrology because it is along the lines of what astrology might expect during a Full Moon.

World cup soccer players tend to be born with sun
and moon in adjacent zodiacal signs

(2000)

J Verhulst

Br J Sports Med 2000;34:465–466

This study not only found that exceptional soccer players tend to be born with Sun and Moon in adjacent signs, it also notes that for each of the aspects by sign of semisextile, sextile, square, trine, and quincunx, the number of soccer players for each waxing aspect correlates strongly with the number for each corresponding waning aspect. Why is this important for astrology?

Table 2 Distribution of z (first column; see text) for the 704 players selected for the World Cup (second column)

z	Cup players $n=704$
0	52
1	80
2	59
3	44
4	75
5	40
6	45
7	50
8	61
9	51
10	59
11	88

This study is important for astrology because it not only provides some justification for traditional Ptolemaic aspects, it also yields a rather significant but unexpected result regarding the placement of the Sun and the Moon in champion soccer players.

aspect	count	percentage
conj/opp	97	14%
semisextile	168	24%
sextile	118	17%
square	95	13%
trine	136	19%
quincunx	90	13%

	waxing	waning	
conjunction	52	45	opposition
semisextile	80	88	semisextile
sextile	59	59	sextile
square	44	51	square
trine	75	61	trine
quincunx	40	50	quincunx

An Empirical Study of the Relation between Astrological Factors and Personality

(1978)

J. Mayo^a, O. White^a & H. J. Eysenck^a

In 1978, psychologist Hans Eysenck did a study that initially found that introverts are more likely to have their Sun in earth and water signs while extroverts are more likely to have their Sun in air and fire signs. Unfortunately, these findings were later deemed inconclusive as a result of too many of the subjects having detailed knowledge of astrology. Follow-up studies that controlled for prior knowledge of astrology did not find this affect. However, ...

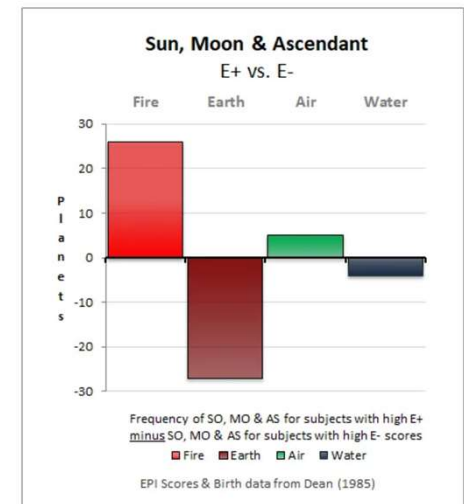
Astrological Signs as Determinants of Extroversion and Emotionality: An Empirical Study (1995)

Dave Clarke, Toos Gabriels & Joan Barnes

A study published in 1996 by Clarke as a follow-up to the original Eysenck study on astrology and extroversion/introversion found that people born with both Sun and Moon in positive signs (fire or air) are significantly more likely to be extroverted than people born with both in negative signs (earth and water). Furthermore, ...

Can Extraversion [E] and Neuroticism [N] as defined by Eysenck match the Four Astrological Elements? (2017)

by
Robert Currey



Frequency of planets in each Element for E+ (n=108) minus frequency for E- subjects (n=108)

A study by Robert Currey that appeared in *Correlation* paired keywords from the Eysenck Personality Inventory (EPI) with each of the astrological elements and showed that fire signs tend to be extroverted, earth signs are introverted, air signs tend toward emotional stability, and water signs do not appear to be well-identified by the EPI. Additionally, ...

Eysenck's personality analysis and position of the planets at birth: a replication on American subjects

(1981)

Michel Gauquelin ¹, Françoise Gauquelin ¹, Sybil B.G. Eysenck ²

**MARS, JUPITER, AND SATURN EFFECTS
ON EXTRAVERSION/INTROVERSION**

by David Cochrane
and David Fink, Ed.D.

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(2010)

Separate studies by M. Gauquelin, F. Gauquelin, & Eysenck and Cochrane & Fink confirm that people with Mars or Jupiter recently rising or culminating tend to be more extroverted as compared to those with Saturn recently rising or culminating. Together, the studies by Clarke, Curry, Gauquelin, and Cochrane provide both confirmation and clarification of traditional astrological theory.

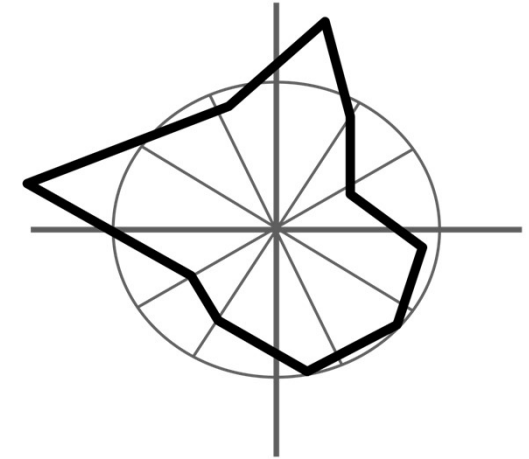
Mars effect

(Wikipedia)

Article [Talk](#)

From Wikipedia, the free encyclopedia

The **Mars effect** is a purported statistical correlation between [athletic](#) eminence and the position of the planet [Mars](#) relative to the horizon at time and place of birth. This controversial finding was first reported by the [French psychologist](#) and "neo-astrologer" Michel Gauquelin.^[1] In his book *L'influence des astres* ("The Influence of the Stars", 1955),^[2] Gauquelin suggested that a statistically significant number of sports champions were born just after the planet Mars rises or [culminates](#). He also divided the [plane of the ecliptic](#) into twelve [sectors](#), identifying two "key" sectors of [statistical significance](#).



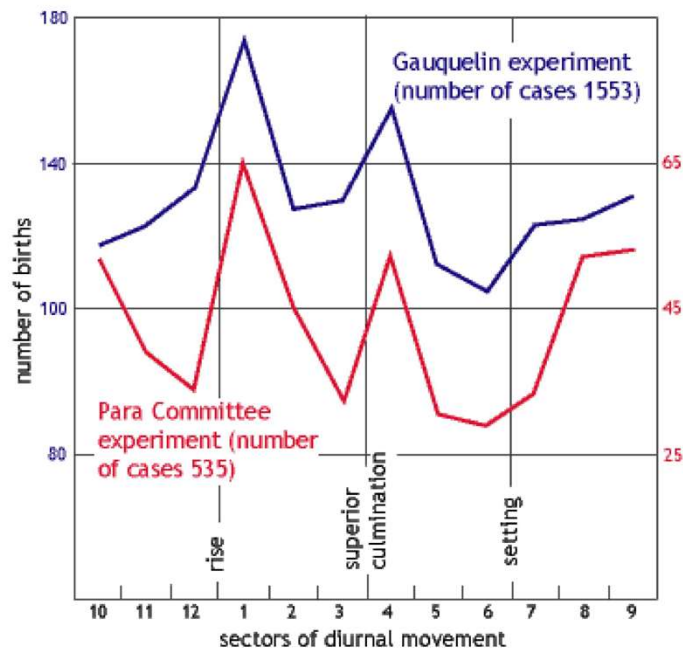
The most famous statistical study of an astrological affect is what is commonly known as the “Mars effect” that was discovered by psychologist and statistician Michel Gauquelin. This study found Mars appearing more often just after rising or culminating in the charts of sports champions.

Gauguelin: Is There a Mars Effect?

(1988)

Reviewing the Mars Effect

by Michel Gauguelin



As expected, many scientists were skeptical of the *Mars effect*, and they pinpointed what they felt might be flaws in the analysis. However, Gauguelin and others addressed each of these possible flaws, and the *Mars effect* has endured. Also, his study has been replicated at least 7 times, and the results were positive in 6 out of those 7 studies.

Update on the (1992) "Mars Effect"

SUITBERT ERTEL

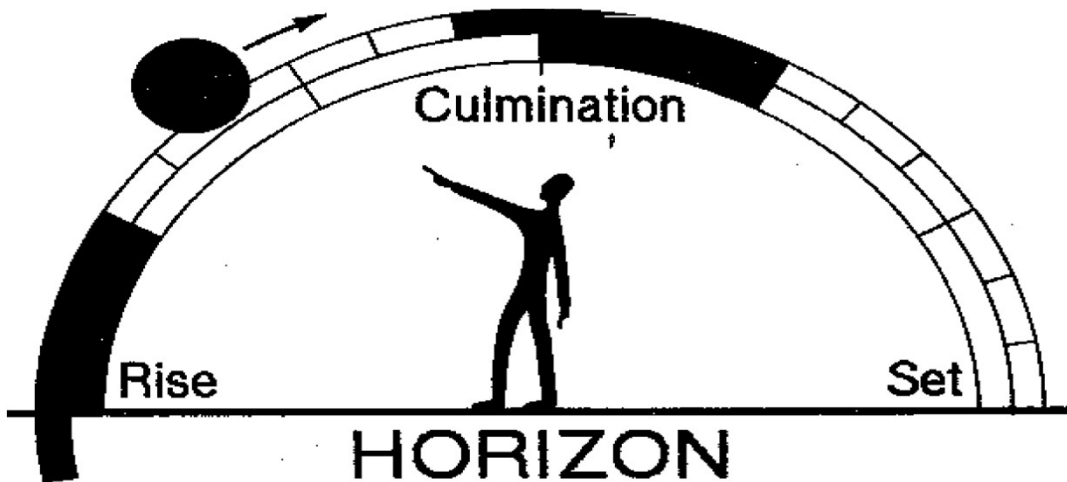
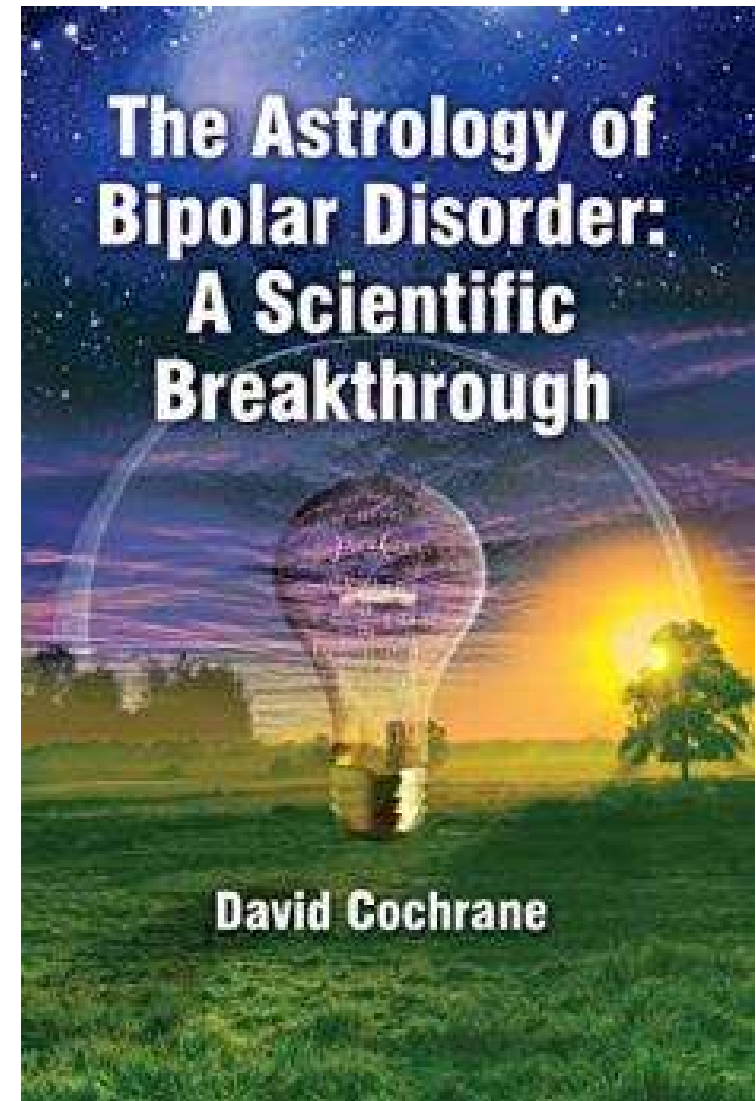


Figure 1: The "Mars effect"

In the 1990s, statistician **Suitbert Ertel** did a thorough review of Gauquelin's data, and he found several patterns within the data that are **extremely unlikely to be due to chance**. His work confirmed the *Mars effect*, but also raised new questions. For instance, there is a *Saturn effect* for eminent scientists, but it mysteriously weakens when you look at the most eminent scientists.

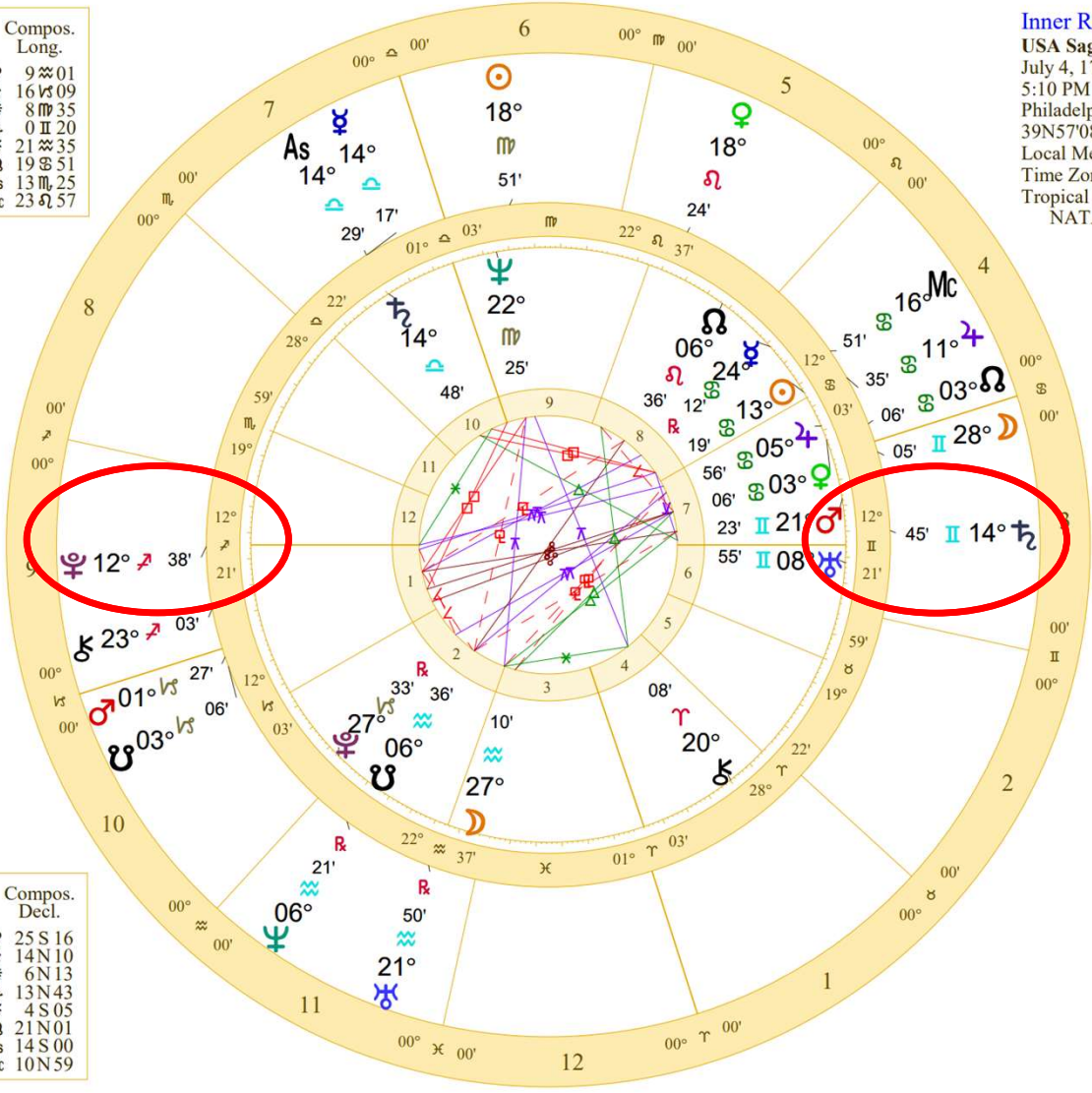
And finally, I want to end this section with another reference to the work of David Cochrane. He is perhaps the leading expert today on harmonic and midpoint astrology (also known as vibrational astrology), and he has been very successful in developing and testing sophisticated astrosignatures for a variety of conditions. His latest discovery is a statistically verifiable astrosignature for bipolar disorder, and the entire body of his work provides a blueprint for the future of statistical and evidence-based astrology.



EVIDENCE FROM MUNDANE ASTROLOGY

Compos.	Long.
♃	9♌01
♄	16♌09
♅	8♍35
♆	0♎20
♇	21♏35
♈	19♏51
♉	13♐25
♊	23♑57

Compos.	Decl.
♃	25 S 16
♄	14 N 10
♅	6 N 13
♆	13 N 43
♇	4 S 05
♈	21 N 01
♉	14 S 00
♊	10 N 59



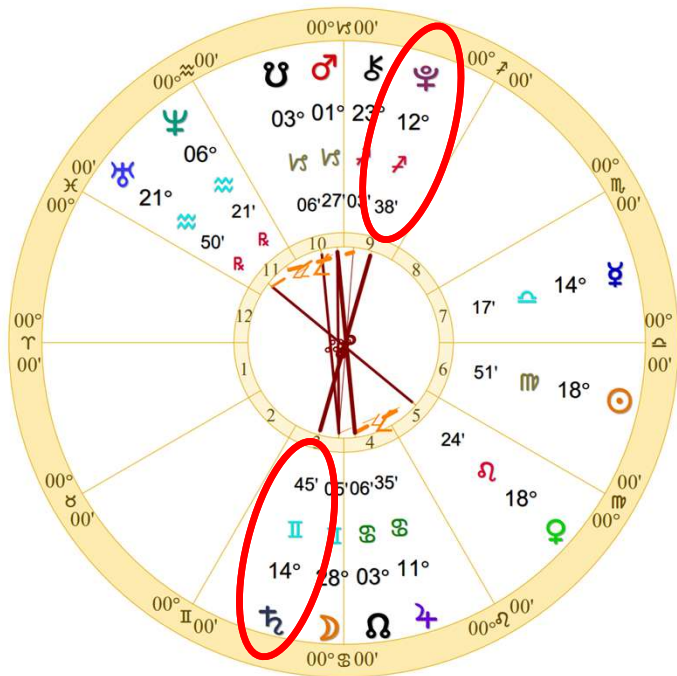
Inner Ring:
USA Sagittarius
 July 4, 1776
 5:10 PM
 Philadelphia, PA
 39N57'08" 75W09'51"
 Local Mean Time
 Time Zone: 0 hours West
 Tropical Regiomontanus
 NATAL CHART

Outer Ring:
9/11
 September 11, 2001
 8:46:40 AM
 New York, New York
 40N42'51" 74W00'23"
 Daylight Saving Time
 Time Zone: 5 hours West
 Tropical 0-Aries
 NATAL CHART

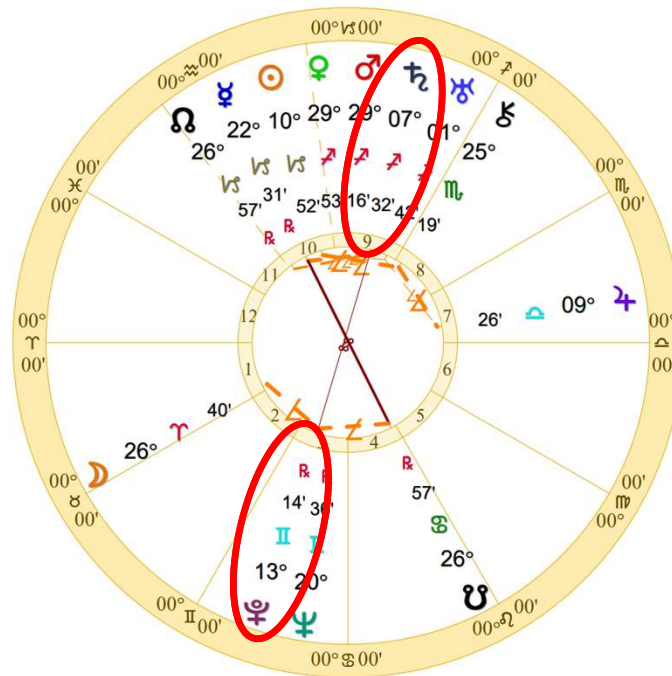
Compos.	Long.	Compos.	Decl.
♁	16♏05	♈	13N36
♂	27♏38	♉	4N23
♆	4♐15	♊	5N08
♅	25♑45	♋	19N40
♄	26♒25	♌	1S37
♃	8♓46	♍	23N00
♂	14♌47	♎	8N38
♆	15♍23	♏	3N24
♅	29♎23	♐	7S12
♄	5♏06	♑	17S58

Doc Benton
 "The Wizard of AZ"
 Scottsdale, AZ

The Pluto/Saturn opposition on 9/11 had a special resonance for America since it was conjunct the Ascendant/Descendant axis in the Sibley chart for America (one of several relevant USA charts). But why New York City?



9/11
 September 11, 2001
 8:46:40 AM
 New York, New York
 40N42'51" 74W00'23"
 Daylight Saving Time
 Time Zone: 5 hours West
 Tropical 0-Aries
 NATAL CHART



New York - all burroughs
 January 1, 1898
 12:01 AM
 New York, New York
 40N42'51" 74W00'23"
 Standard Time
 Time Zone: 5 hours West
 Tropical 0-Aries
 NATAL CHART

The association with New York City becomes clear when we look at the chart for its incorporation with all burroughs in 1898. Both this chart and the 9/11 chart have a Pluto/Saturn opposition in the signs Gemini and Sagittarius.

Association between alignments of the outer planets and global news highlights – a study of mundane astrology 1984-2021

(2022)

Abstract

A significant association ($p < .01$) was found between the occurrence of tight aspects ($orb < 1^\circ$) that the five outer planets make in the sky and the occurrence of independently sourced historical highlights over the period 1984 to 2021. The aspects considered were all conjunctions and oppositions between Uranus, Neptune and Pluto and the same aspects these planets make with Jupiter and Saturn. The number of news highlights in a year was compared with the frequency of these aspects in that year or in the previous year. The conditional probability of a high-news year given two or more such aspects was 0.68, compared to a conditional probability of 0.23 given one or zero aspects. A high-news year was therefore nearly three times as likely when two or more aspects occurred in the same year or in the previous year than when they did not.

More recently (2022) a study found a significant association ($p=.0085$) between conjunctions and oppositions of outer planets and the number of news reports at www.onthisday.com in that year or the previous year.

Association between alignments of the outer planets and global news highlights – a study of mundane astrology 1984-2021

(2022)

Abstract

A significant association ($p < .01$) was found between the occurrence of tight aspects ($orb < 1^\circ$) that the five outer planets make in the sky and the occurrence of independently sourced historical highlights over the period 1984 to 2021. The aspects considered were all conjunctions and oppositions between Uranus, Neptune and Pluto and the same aspects these planets make with Jupiter and Saturn. The number of news highlights in a year was compared with the frequency of these aspects in that year or in the previous year. The conditional probability of a high-news year given two or more such aspects was 0.68, compared to a conditional probability of 0.23 given one or zero aspects. A high-news year was therefore nearly three times as likely when two or more aspects occurred in the same year or in the previous year than when they did not.

A ‘low number of news highlights’ was defined as less than or equal to 7 per year, and ‘high’ was defined as greater than or equal to 8. Also, ‘few conjunctions or oppositions’ was defined as 0 or 1, and ‘many’ was defined as 2 or more for the current or previous year.

	Many aspects in the year or in the previous year	Few aspects in the year or in the previous year	TOTALS:
High number of highlights in the year	17 (13.2)	3 (6.8)	20
Low number of highlights in the year	8 (11.8)	10 (6.2)	18
TOTALS:	25	13	38

The above table summarizes the data collected with observed counts followed by expected counts in parentheses. A CHI-SQUARE test shows that these results would happen by chance with a probability of $p = 0.0085$. Thus, the conclusion is that these results are not due to chance since the probability of that happening is very low.

	Many aspects in the year or in the previous year	Few aspects in the year or in the previous year	TOTALS:
High number of highlights in the year	17 (68%)	3 (23%)	20
Low number of highlights in the year	8 (32%)	10 (77%)	18
TOTALS:	25	13	38

Column Percentages

$$68\%/32\% = 2.125 \quad 77\%/23\% = 3.348$$

If we analyze each column, then we see that when there were **many aspects**, the number of news highlights was **high 68%** of the time and **low 32%** of the time. Similarly, when there were **few aspects**, the number of news highlights was **high 23%** of the time and **low 77%** of the time.

	Many aspects in the year or in the previous year	Few aspects in the year or in the previous year	TOTALS:
High number of highlights in the year	17 (85%)	3 (15%)	20
Low number of highlights in the year	8 (44%)	10 (56%)	18
TOTALS:	25	13	38

Row Percentages

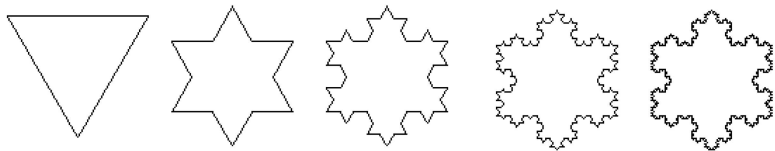
$$85\%/15\% = 5.667$$

$$56\%/44\% = 1.273$$

If we analyze each row, then we see that when the number of news highlights was **high**, there were **many aspects 85%** of the time and **low aspects 15%** of the time. Similarly, when the number of news highlights was **low**, there were **many aspects 44%** of the time and **few aspects 56%** of the time.

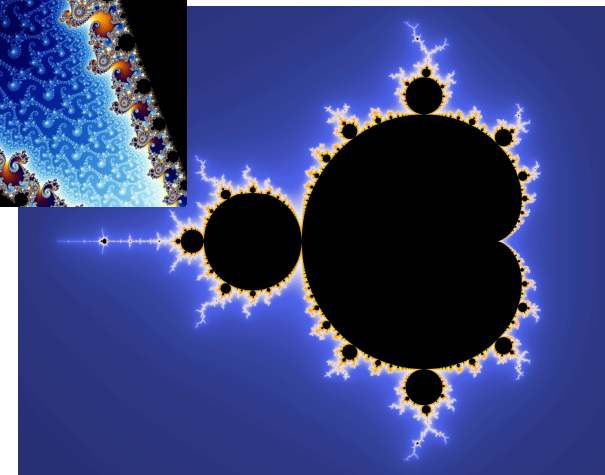
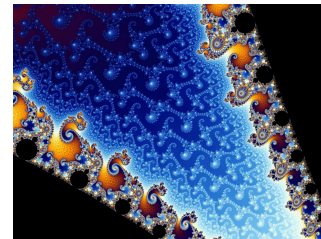
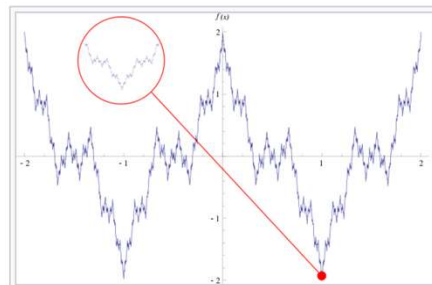
EVIDENCE FROM THE FRINGES OF SCIENCE

Occasionally, an important idea comes along that society is not able to adequately recognize at the time. A case in point is the concept of a **fractal curve** which is 'infinitely wiggly.' We usually think of fractals as having been discovered around 1979 by the mathematician Benoit Mandelbrot. However, the mathematician Helge von Koch discovered such curves in 1904 as did Karl Weierstrass in the 1800s. The world was not yet ready for this concept.



Constructing the Koch Snowflake

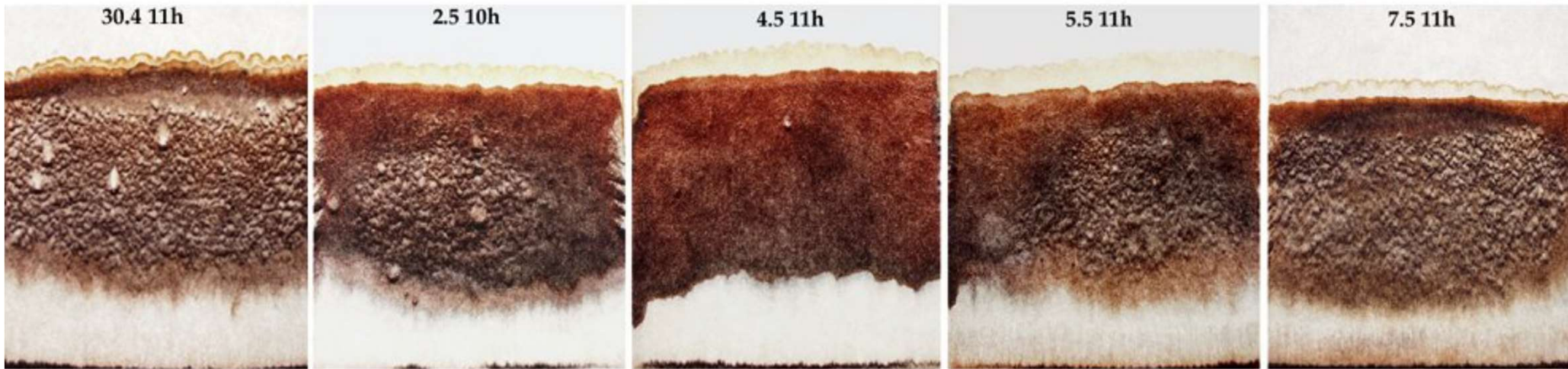
Weierstrass function →



Mandelbrot Set

Mars Saturn conjunction, 4.5.2002

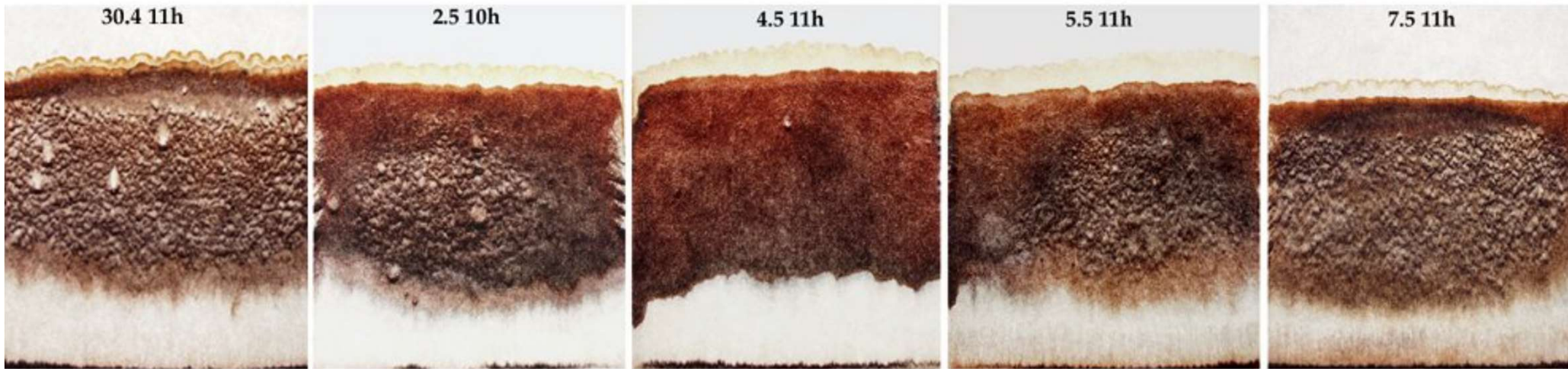
(2002)



Another idea whose time may not have come might be what is known as the “Kolisko effect.” In 1926, a woman named Lily Kolisko designed an experiment to test the associations of certain metals with particular planets. Her method involved creating 1% solutions of various metallic salts and placing filter paper in the solutions. Normally, a crystalline precipitate would appear on the filter paper, but she reasoned that this action would be blocked during conjunctions of the related planet.

Mars Saturn conjunction, 4.5.2002

(2002)



The images above show the results of this capillary dynamolysis using an iron solution before, during, and after a Mars/Saturn conjunction, and as the pictures show, the iron precipitate crystallization disappears during the conjunction (middle image). Several but not all researchers have been able to replicate Lily Kolisko's results, and while this effect needs more vetting, it could provide proof of planetary effects if fully verified.

EVIDENCE FROM ASTROLOGERS

It is said that when the Higgs boson was discovered in 2012 that it wasn't really observed directly. Instead, its discovery was the result of a preponderance of evidence that would be difficult to explain without assuming its existence. In a similar way, I would argue that we now have a preponderance of evidence from astrophysics, chronobiology, heliobiology, and statistics that can't be explained without assuming an interaction between celestial and terrestrial events. Thus, in my opinion, the *Astrological Hypothesis Assumption* (AHA!) has been confirmed. All that is left is to better understand how and to what extent these celestial connections affect our lives. Statistical studies suggest that these connections sometimes work in ways that traditional astrology expects and other times in ways that are completely unexpected. But statistics cannot tell us everything. We are at the point where science now needs to talk with those who have been studying these interactions for centuries – with astrologers!

Scientists have long dismissed the experiences of astrologers as amounting to nothing more than anecdotal evidence, but it is now time to call these experiences what they really are – case studies. And just as cultural anthropology in the past and the field of mathematics education in the present have progressed through the use of one-on-one interviews and case studies, so has astrology done the same. Statistics can tell us many things about the properties of an orange, but it can never tell us what an orange tastes like. That final revelation can only come from the human brain, and it is the same with astrology. Scientific experimentation and statistics can guide us in our understanding of astrology, but the final understanding requires an analysis and synthesis by our own brains, the most sophisticated computers on the planet. Thus, we are at a point where astrologers not only need to pay more attention to the results of science, scientists, likewise, need to start listening more to astrologers.

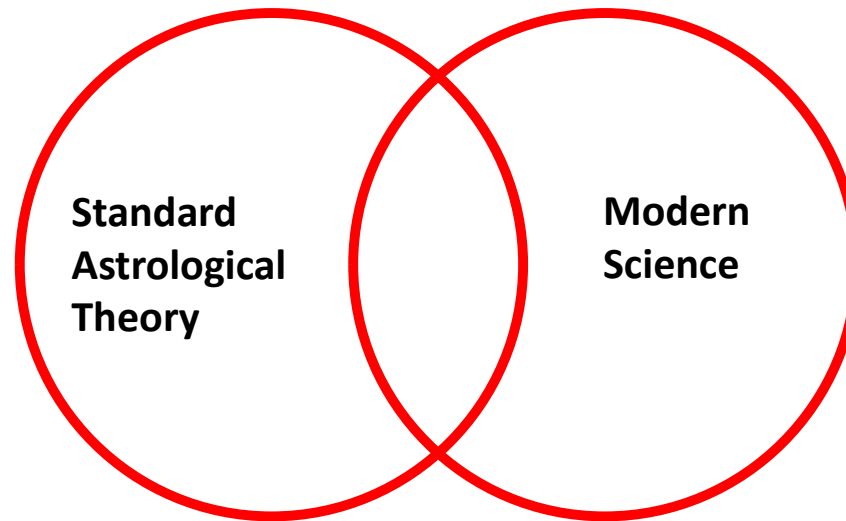
FINAL CONCLUSIONS AND THE ROAD AHEAD

From the evidence shown, I can now draw the following conclusions:

- Studies on sunspots may explain “hard aspects”**
- Gravitational voids called Lagrange points may explain “soft aspects”**
- Small gravitational forces appear to be capable of driving larger processes – what is known as the *Butterfly Effect***
- Biological life on Earth can be affected by lunisolar cycles, light, tides, and gravity**
- The Sun affects us in more ways than we realize and may even imprint certain conditions on us prior to birth**
- Statistics confirms some things that astrologers believe, fails to confirm others, and also appears to reveal effects of which we were unaware**
- And to make additional progress, scientists and astrologers now need to work together**

I often liken astrology to the practice of modern medicine. In each, there is a core set of practices that appear to work well. There are also in each beliefs that may need to be modified, discarded, or replaced as new evidence emerges. Core concepts that have been well-vetted in western astrology include the basic ten planets, Ptolemaic aspects, signs, houses, and transits. Other things have, perhaps, been well-vetted by individuals, but not yet by the entire community. And as in medicine, some current practices may be modified, discarded, or replaced as we learn more. I strongly suspect that the future of astrology lies in a better understanding of harmonic, heliocentric, & mundane astrology and that the future of physics will see new models that are vastly different from those used today. Additionally, astrology needs to reestablish the deep relationship with math and physics that it had in the past. And as history has repeatedly shown us, if it exists in mathematics, then it exists in reality!

THE ASTROLOGICAL HYPOTHESIS ASSUMPTION



So has our hypothesis that there exist connections between celestial and terrestrial events been confirmed? Absolutely! Furthermore, as best as science can determine at this point, these connections can occur through gravity, changes in light, changing tides, changes in the Sun's activity, and through other mechanisms currently unknown. Nonetheless, these connections exist, and the findings of science often overlap with those of traditional astrology, and over time we will likely see the area of their intersection get much larger.



The End



The End

BEGINNING!

March Madness – The Signs They Are A Changin'!

Presentation by Christopher P. Benton, Ph.D.
Sunday, March 5th at 3pm

March is going to be a very active month astrologically!
This presentation will focus primarily on the repercussions of Saturn's ingress into Pisces, the impact of the upcoming conjunction of Jupiter and Chiron, and Pluto's long-awaited entry into Aquarius, as well as some other notable events along the way.

\$25 via PayPal

 Buy Now



Christopher "Doc" Benton has a doctorate in mathematics from the University of Houston, and he taught undergraduate-level mathematics for over 36 years before retiring. He also has a background in statistics, has worked as a statistical consultant for the Texas State Library and Archives, and is a former president of the Texas Association for Institutional Research.

Additionally, he is on the Research Advisory Committee for the Cosmobiology Institute, has had two papers recently published in the journal for the International Society for Astrological Research, has published several papers on early Jewish mysticism, and he has been casting horoscopes since 1970.

The common thread for him in all of his interests has been a focus on cycles, symmetry, and permutations.

He currently lives in Scottsdale, Arizona, with his wife, Susan, and is an active member of and presenter for Astrology Arizona. Also, some refer to him as a "mathematical astrologer" due to his propensity to apply advanced mathematical concepts to standard astrological theory.



And did I mention that I will be doing a Zoom presentation for the Houston Astrological Society on March 5th?

www.houstonastrologicalsociety.org

