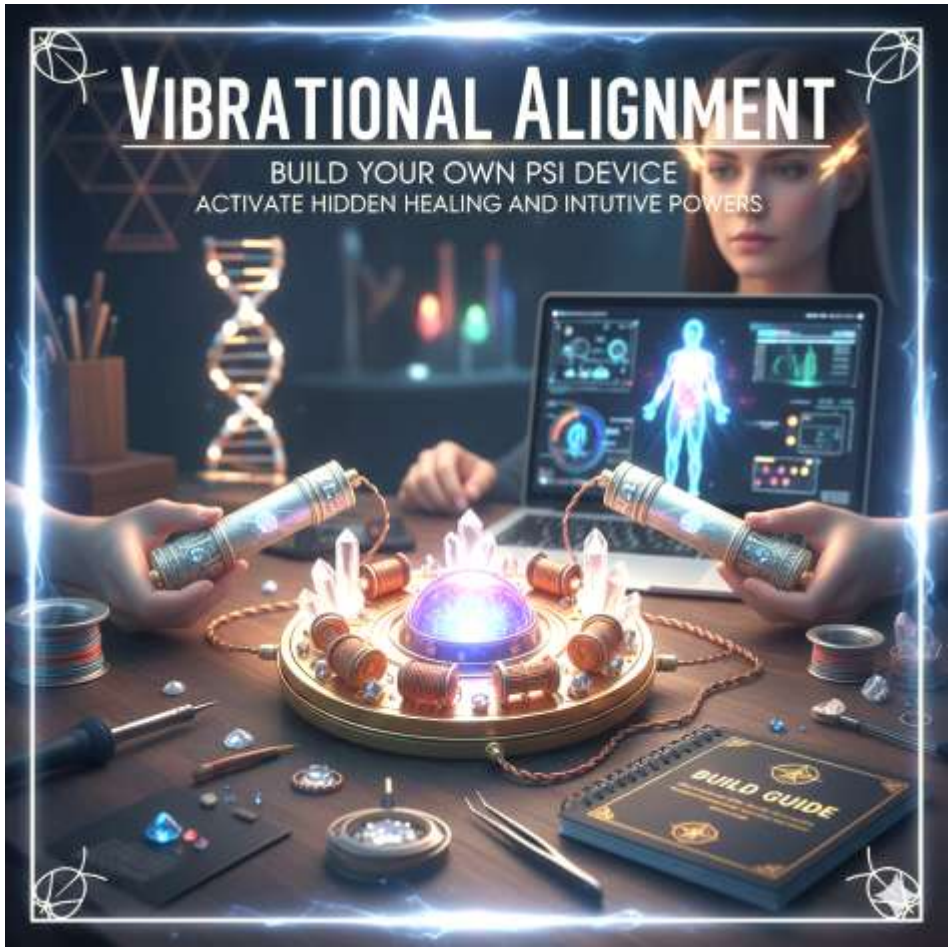
Vibrational Alignment: Build Your Own PSI Device to Activate Hidden Healing and Intuitive Powers

Enhancing Perception with Technology using the Body's Hidden Cycles

Scott Rauvers

ISBN: 9798276234816



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DEDICATION

This book is dedicated to Aldous Huxley, whose writings on philosophical mysticism educated humanity on how mystical experiences provide insight into reality and culture

CHAPTERS

INTRODUCTION

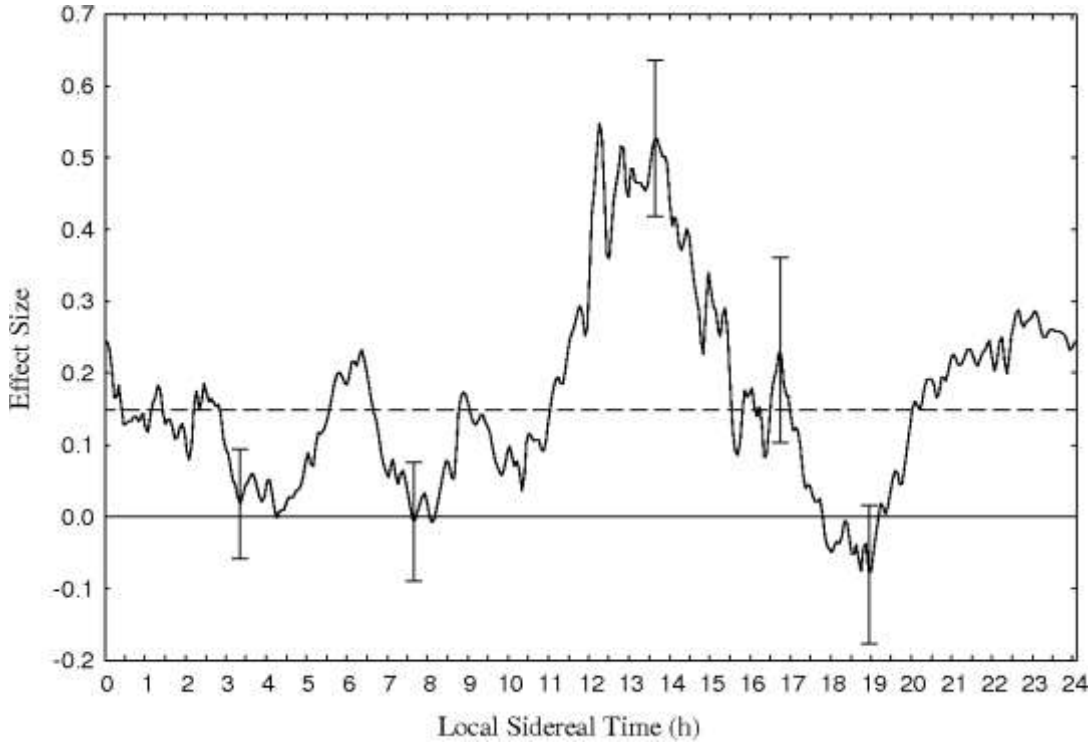
The Resonant Mind: How Your Consciousness Bends Time And Space

For more than a decade, I pursued a singular, impossible quest: the mastery of time itself. My laboratory was the mind, and my discipline was associative remote viewing (ARV)—the rigorous, methodical process of generating descriptions of future events, both near and distant. My early experiments quickly proved the profound potential of human intuition, but also its maddening inconsistency. I needed a key, a tool to unlock and stabilize this temporal sight.

My journey led to the development of a technological marvel: a specialized bioenergetic accelerator, or 'chip,' designed to enhance the initial detection of intuitive information. Yet, the true shock was not the power of the device, but its surprising secondary effect. This technology was not a crutch; it was a catalyst. It quickly taught my body to significantly bypass my own limitations. The chip's true purpose was revealed: it awakened a dormant cosmic sense of knowing within me.

The cosmic clockwork

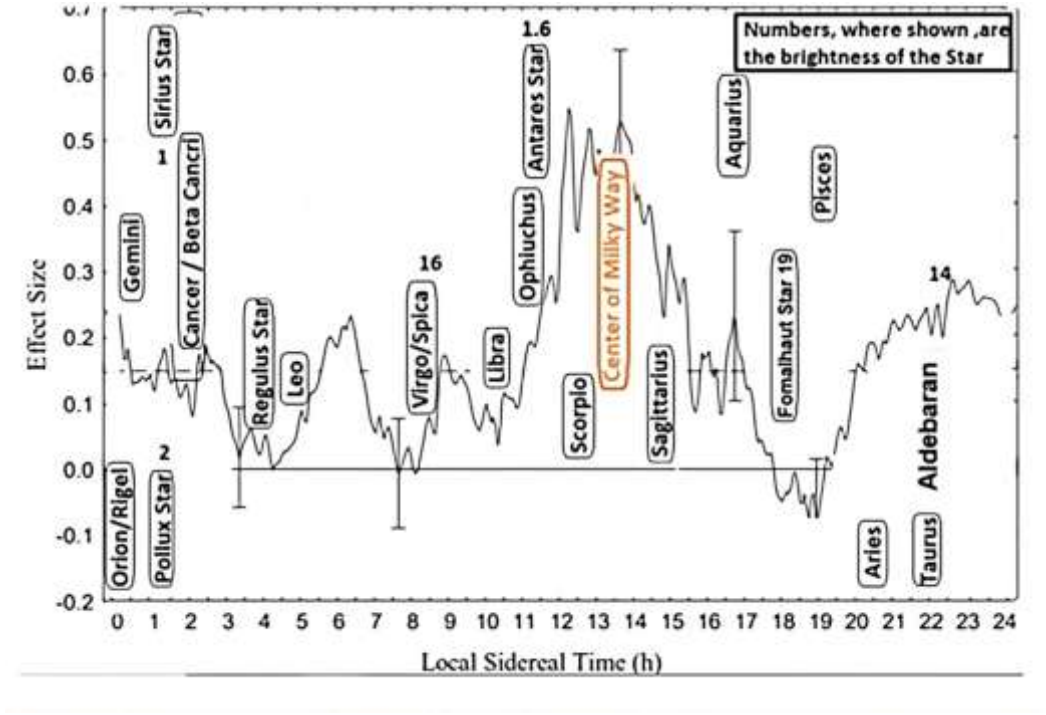
Further research confirmed the existence of profound, predictable cycles governing human intuitive accuracy. Beyond simple biological rhythms, I discovered a cosmic clockwork: 24-hour, monthly, and yearly cycles that govern our actions which are creating our future. This synchronization led me directly to the famed research out of Palo Alto California, which demonstrated that human intuition consistently peaks every 24 hours at the precise moment of 13:30 local sidereal time (LST)—the moment the earth's orientation provides a universally optimized channel.



But it gets even better. When I traced the stars rising in the east at this crucial LST peak (*shown in the following image*), I found not just random celestial bodies, but the magnificent celestial sentinels: Aldebaran and Antares. These two of the four legendary Royal Persian Stars—historically revered as the Guardians of the Sky—align perfectly with our peak of intuitive power. Their presence, I argue, is not merely symbolic, but a physical marker for when our consciousness is optimally aligned with that of the cosmic cycle of life itself.

The four Persian stars are tied to specific constellations:

- Aldebaran in Taurus
- Regulus in Leo
- Antares in Scorpius
- Fomalhaut in Pisces Austrinus



What does LST Time Mean?

LST Time is short for Local Sidereal Time. It is simply the time an object is rising in the east. These objects rise 4 minutes less each day. For the most part you can use with a Google Sky Map Ap by looking at which stars are rising in the east and matching it to the Local Sidereal Time. You can find many LST Aps online. You can also double check an LST time, such as 13:30LST by using a SkyMap Ap and looking what time a star constellation rises in the east. For example, Antares will rise at 13:30LST. Also the two brightest stars in the Aquila constellation that aligned with the Milky Way are the stars Altair and Tarazed, with Altair being the brightest star in the Aquila constellation and overall the 12th brightest star in the night sky. There are also some good LST Time Aps out there such as "Local Sidereal Time" on Google Play that can give you LST Times for dates in the future and for all locations on earth. So it may be that the brightest stars are responsible for intuition and wellness. This means that light is carrying information that the cells of our body respond to. We shall explore this in-depth later on.

Every December during sunrise the center of the Milky Way galaxy is behind the rising sun. In astrology this is called the Sun in Sagittarius and lasts from November 22nd to December 21st. When we look at the previous LST chart, we see that the daily peak of intuition occurs at 13:30LST, which is when the center of the Milky Way, which is very close to the constellation Sagittarius is rising in the east.

If you look closely you will see another peak at 21:00LST. This region of our galaxy is known as the **Galactic Anticenter**, which is part of the constellations Taurus and Auriga (defined by the stars Aldebaran and Capella respectively). This region of sky is also very close to the Orion constellation. This region of sky is located within the direction of the Anti-Galactic Center, which happens to be the point in the sky exactly opposite that of the Milky Way, or 180 degrees opposite that of the center of the Milky Way.

Hence, there is a master gene reset that occurs each year around early December. This reset is also what allows one to have enhanced intuition. The sun is acting as a transmitter of these galactic energies emerging from the center of the Milky Way galaxy with a seasonal peak occurring every year from late November into early December. Hence this may be one way to prove the existence of parallel universes. Later in this book I will prove this theory. The image below is as a metaphor. Imagine earth in the center and at each end is the Center of the Milky Way and at the other end is the opposite.

The Audacious Hypothesis: Galactic Resonation

How is information truly transferred across time and space? The answer lies in the most audacious hypothesis presented in this book: Galactic Resonation. The mechanism for precognition must have two common denominators: the human body, and the vast, powerful center of the Milky Way Galaxy.

Did you know that your heart's magnetic field is a powerful emitter, extending several feet beyond your body, approximately 5,000 times stronger than your brain's electromagnetic field? This magnetic field encodes and transmits emotional information [(1) (2)]. And just like your heart, the center of the Milky Way emits a magnetic field that weakens with distance. To achieve an instantaneous, non-local transfer of information, we don't need overwhelming strength—we only need a resonant frequency match.

This book reveals the astonishing fact: the magnetic field emanating from the human heart is exquisitely close to the microgauss strength of the magnetic field generated by the Milky Way as its magnetic field bathes earth in its presence.

The magnetic fields generated by the Human body are created by tiny electrical currents flowing through nerves and muscles, most notably the heart and brain.

- **The magnetic field raid produced by your heart is the 1uG.**

- **The magnetic field raid produced by your brain is 0.1uG**

When an individual achieves a coherent state—a state of profound calm and focus—this internal magnetic field elevates, creating a perfect, resonant instantaneous match. When a group of people enters this state of coherence, the field is amplified, achieving a perfect, undeniable resonant carrier wave.

Galactic Resonation of the Human Body

Now how close is this to the magnetic field from the center of the Milky Way when experienced on earth?

The key takeaway is that the magnetic fields of the Milky Way, at least in the local solar neighborhood, are **comparable to the strongest magnetic fields generated by the human body (the heart)**, both being on the order of a few μG:

Source	Approximate Magnetic Field Strength (Near Source)	Equivalent in Tesla (T)
Milky Way (Local)	$\sim 6\mu\text{G}$	$\sim 6 \times 10^{-10}\ \text{T}$
Human Heart (MCG)	$\sim 1\mu\text{G}$	$\sim 1 \times 10^{-10}\ \text{T}$
Human Brain (MEG)	~ 0.01 to $0.1\mu\text{G}$	$\sim 10^{-12}$ to $10^{-11}\ \text{T}$

Proof: The Consciousness That Changes the World

This galactic resonance is not just a theory; its staggering power has already been proven in the most dramatic arenas of human conflict. Let's look at some crucial evidence to support this hypothesis.

So we can see that it is very close. However, when a person goes into a coherent state of being, such as that from when Heart Math is practiced, this magnetic field will create a very close match to that of the Milky Way. Even more interesting is when a group of people go into coherence, the bio-magnetic field will become slightly more elevated creating a perfect match with that of the Milky Way. Let’s take a look at how this has been taken advantage of.

The mass Transcendental Meditations (TCM), which occurred in Washington D.C., involved 4,000 participants from the Transcendental Meditation Project [(3)]. These people meditated on peace and harmony in Washington D.C. from June 7 to July 30, 1993. After doing so, crime dropped 25%.

Hence a resonating match occurred between both external and internal magnetic fields. This effect has been called the “*Maharishi Effect*”. At the heart of the "Maharishi Effect" (*or Field Effect of Consciousness*) lies a compelling hypothesis: that collective meditation can tangibly improve society. The touted threshold for this effect is often cited as the square root of 1% of the population.

In another remarkable study [(4)], the height of the Israel-Lebanon war in the 1980’s became an improbable backdrop for an experiment in collective consciousness. Drs. Charles Alexander and John Davies of Harvard University organized groups of seasoned meditators across Jerusalem,

Yugoslavia, and the United States. For 27 months, these individuals engaged in focused meditation upon the war-torn region at predetermined intervals. The findings were compelling: each time a meditating group was in place, violence in Lebanon demonstrably decreased by 40% to 80%, with the most significant reductions occurring when meditator numbers were at their peak. During these periods of collective meditation, the daily average of war fatalities dropped sharply from 12 to 3 (a decrease exceeding 70%), war-related injuries plummeted by 68%, and the very intensity of the conflict itself receded by 48%.

Similar published studies related to the Maharishi Effect.

- Reduction in U.S. Urban Murder Rates. *Science Publishing Group* (2017). This experiment **(5)** resulted in an estimated 28.4% total reduction (7.1% annually) in the homicide rate trend across 206 large U.S. urban areas during the intervention period (2007–2010).

- Crime Reduction in Metropolitan Merseyside, England. This experiment **(6)** resulted in a 13.4% drop in crime in a single year (March 1988).

- Decreased Crime in a Sample of Forty-Eight Cities. Journal of Crime and Justice (1987). In this study **(7)**, cities that achieved a meditating group of 1% of their population practicing the technique alone showed a decreased crime rate in the following year compared to matched control cities.

How to Find Human Life on Other Planets

Just as simple life requires a habitable Goldilocks Zone for temperature and water, this there must also exist a Galactic Goldilocks Zone—a range of orbital distance from a galaxy's center that is perfectly tuned for conscious life to flourish. Ok, so we now know the prime mechanism. How can we apply this to Astronomy in the search for human life on other planets? Just as there exists a Goldlilocks zone for simple life to occur on an exoplanet, there must also exist a Goldilocks Zone that is dependent upon how far that planet is from its center of its Galaxy. This distance is dependent upon the match of magnetic field strength of its distance to the planet, as we just explained

earlier. This would mean higher evolved life forms may even have a stronger heart magnetic field emanating from them on some planets due to a variation of distance from the center of their galaxy, or perhaps there exist a series of planets in that solar system with people choosing to live a more evolved existence on planets that are closer to their Galaxy Center. This book is not just predicting the future; it reveals a new, fundamental law of the universe that guides us where we have never gone before.

One way to experience how 13:30LST affects dawn is when it occurs at sunrise, which takes place a few days each year, you will always find that the weather is much more calmer

The Latitude Longevity Sweet Spot

A notable hotspot for human longevity has been identified in the mid-latitude region, spanning 20° to 35°. This geographic band consistently demonstrates exceptional health outcomes compared to other areas. But what drives this phenomenon? One key factor is the biological impact of latitude. As it turns out, latitude plays a crucial role in shaping our environment, particularly during the winter months. The angle, duration, and spectral quality of winter sunrises vary significantly with latitude, influencing the amount and type of sunlight we receive. For instance, the geometry of sunrise in early December differs dramatically across latitudes, setting the stage for a complex interplay between environmental factors and human health.

The following are blue zones, regions where people live longer than average lifespan. You can see they all fall within a 25N to 40N latitude "*sweet spot*."

- Okinawa, Japan 26N
- Loma Linda, California 34N
- Ikaria, Greece 37N
- Sardina, Italy 40N

Latitude Band	Example Regions	Avg Lifespan Pattern
0°–15°	Equatorial Africa, Amazon	Lower / unstable
20°–35°	Okinawa, Sardinia, Ikaria, Loma Linda	**Highest longevity**
40°–50°	Northern Europe, Canada	Moderate–high
>55°	Arctic regions	Declining

As sunlight strikes these latitudes, the light becomes more scattered causing more through absorption of harsh light rays. In the southern hemisphere, these rays of light occur strongest around the September equinox each year. If we look at the months of the year of the births of people, we see that people born in autumn (October–December) in the Northern Hemisphere live longer than those born in spring (April–June) with Australia the pattern being shifted by half a year **(9)**.

What is interesting is that the autumn born data shows this effect is twice as large in Austria, which happens to be at the latitude of 47N (*Gabriele Doblhammer and James W. Vaupel. Feb 2001*).

So what's significant about this? As you travel toward higher latitudes, the sun's rising point shifts progressively southward, altering the sky's geometry beneath the horizon. Consequently, the first rays of dawn arrive at a lower, flatter angle, casting elongated shadows and bathing the landscape in gentler, more diffused light. This phenomenon extends the duration of natural illumination within enclosed spaces—such as buildings or interiors—because the sun's prolonged approach to its overhead arc allows sunlight to penetrate and linger deeper into architectural structures, even before reaching peak brightness. Populations living between 25N and 40N experience these rays of light, especially during dawn.

Latitude	Avg Lifespan	Circadian Quality
0-10°	65-70	Low
20-30°	82-88	High
35-45°	78-82	Medium
50°+	72-78	Low-medium

Latitude	Winter melatonin rhythm
Equator	Blunted
20-35°	Strong, clean offset
40-50°	Phase drift
> 55°	Prolonged / dysregulated

Latitude	Cortisol awakening response
Equator	Flat
20-35°	Moderate, stable
40-50°	Elevated
> 55°	Dysregulated

This specific spectrum of light peaks in its intensity during 13:30LST when the sun is rising at dawn. Many ancient builders were aware of this and built temples In the majority of locations around the globe 13:30LST occurring at sunrise takes place from late November into early December each year. This approximate 2 week period is a special time of year where the rays of the sun

have special properties and ancient builders built many structures to align with the rising sun during this time of the year. Let's check the data for any clues as to what may have been built around this time.

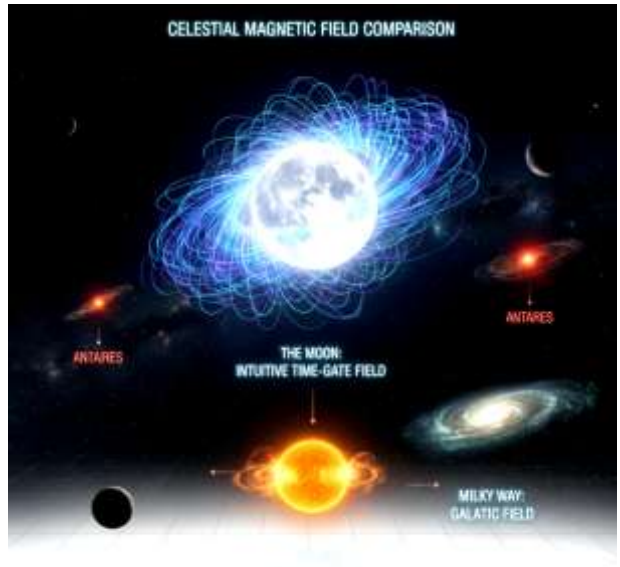
Temple of Apollo at Delphi. Greek sanctuary. (Greece). Built around 330 BCE.

During early December light enters the inner adyton. The Oracle of Apollo at Delphi, a pivotal spiritual hub in the ancient world, held unparalleled authority as the foremost source of prophetic insight. Presided over by the enigmatic priestess known as the Pythia, the sanctuary became the conduit through which seekers of omens received cryptic messages, allegedly transmitted by Apollo himself. This revered site fused mysticism and influence, shaping decisions of emperors, generals, and commoners alike with its enigmatic pronouncements. This is just one example, in the chapter titled: *Exploring Ancient Structures that align with the rising sun at 13:30LST*, I list the full number of temples that have been built to align with the rising sun at 13:30LST. One specific temple has what's called an "oracle hole" that was used by priests to gain divine insight. Below is a simple summary of some of these temples with the light occurring in early December.

Site	Region	Alignment Type	Dec 1–11 Active
Mnajdra South	Malta	Rising Sun Axis	✅ Strong
Hagar Qim	Malta	Dawn Illumination	✅
Delphi (Apollo)	Greece	Inner Sanctum Light	✅
Karnak (Amun-Ra)	Egypt	Solar Corridor	✅
Philae (Isis)	Egypt	Sanctuary Axis	✅
Chankillo	Peru	Solar Horizon Tracking	✅
Abu Simbel	Egypt	Solar Approach Phase	🔲 Partial

Many people get distracted by the solstice of December 21st, but the reason the ancient peoples aligned these temples about 3 weeks before the winter solstice was as a way to listen to what the universe was telling them, so their future would be free of adversity. Perhaps this is why these cultures survived for thousands of years and this knowledge is now only starting to be rediscovered. Could some of these structures have been a way to communicate with future or past ancestors? A type of genetic time machine? As recounted in the *book Spiritwalker: Messages from the Future* by University of California Berkeley Anthropologist Hank Wesselman where he discusses his experiences of communicating with an ancestor in the future.

Chapter 1
Light and Life: The Science behind Natural Coherence



Peaks of accuracy regarding using the PSI Chips to forecast stocks

I have discovered that this magnetic energy has distinct peaks or goes through its own cycles. The first is the yearly cycle. The most powerful peak is always at 13:30LST at dawn with a second peak occurring when 21:00LST takes place at 12 noon p.m.. These two periods of peak intuition are also confirmed with the research at time-machine.com. There is also a mild peak when 13:30LST occurs at 12 midnight. When we look at what time the star Antares (13:30LST) rises in dawn during the spring equinox we get the 112th meridian west. This line happens to pass directly through the capital cities of three major U.S. states; Arizona, Montana, and Utah.

- Utah: Directly through Salt Lake City.
- Arizona: Directly through Phoenix.
- Montana: Directly through Helena and Idaho Falls.

Interesting facts about these 3 regions, in comparison to the rest of the United States

These regions are situated at high mountainous elevations. States like Utah and Idaho frequently rank in the top half of the country for longevity, with

Idaho Falls being above the U.S. average for life expectancy. This is quite remarkable considering the rural regions of Arizona and Utah have some of the worst air quality.

Time-Gate

There is another object in our solar system that also emits a magnetic field; our moon. After further research I discovered another intuitive window that would occur once per month. I named this the Time-Gate week. These are periods where intuition, on a collective level, is enhanced. Time-Gate weeks are calculated using the moon's lunar node. Below is the moon's magnetic field in comparison to other celestial bodies:

Celestial Body/Location	Typical Magnetic Field Strength	Equivalent Range in nT	Notes
Earth (at surface)	25 μT to 65 μT	25,000 nT to 65,000 nT	The dominant field at Earth's surface, generated by its core dynamo.
Sun (photosphere)	$\sim$ 1 G to 4000 G	100 μT to 400,000 μT	Varies significantly; 1 G = 100 μT. 1 G is typical for quiet regions; **sunspots** can reach 2000 to 4000 G (200,000 to 400,000 μT).
Moon (current local)	$\sim$ 6 nT to 313 nT (crustal anomalies)	6 nT to 313 nT	Currently lacks a global magnetic field; values are for localized **crustal magnetic anomalies**.
Milky Way (near Earth)	$\sim$ 0.1 nT to 2 nT	0.1 nT to 2 nT	The general large-scale magnetic field of the galaxy in our local region.

Weather always changes on the very first and very last days of Time-Gate. However there is also a very minor weather change minus -7 days back from the start of the Time-Gate date. The weather may change from cold to hot, or wet to dry or vice versa. I also have noticed that after watching the weather for the past 15 years and comparing it to the Goes Electron Flux that when these output levels would change, (when the red line undergoes a significant change) the weather would also change. The link is at: https://www.swpc.noaa.gov/products/goes-electron-flux. So what is the mechanism causing this?

The Moon can causes changes to the GOES electron flux, affecting the solar flux (the Sun's direct radiation). This occurs as the moons crosses Earth's Magnetotail (the long, stretched-out part of the Earth's magnetic field

on the night side). For about four to five days each month, the Moon passes through the magnetotail's plasma sheet. As it does so, this interaction causes the Moon's to create a wake type effect, similar to that of a boat's wake, creating a weak electromagnetic effect [8].

I hypothesize that this wake effect is what causes changes in Earth's weather. I shall go into Time-Gate in more detail later on in this book. For now we are just connecting the dots. Now let's learn how the cycles of intuition are related to health and aging.

Richard Donchian's Weekly Rule System

Just as Time-Gate occurs once every 4 weeks, stocks also exhibit a 4-week cycle. The Four-Week Rule (4WR), often referred to as the "weekly rule," is a foundational trend-following strategy pioneered by Richard Donchian, a trailblazer in modern commodities trading. This system is designed to capture sustained price movements by reacting to new extremes in a stock's four-week price history.

How It Works

Entry Signal: Traders initiate a long position when a stock's price surpasses its highest closing level over the past 28 days.

Exit Signal: A long position is closed or a short position is initiated if the price drops below its lowest closing level in the same four-week period.

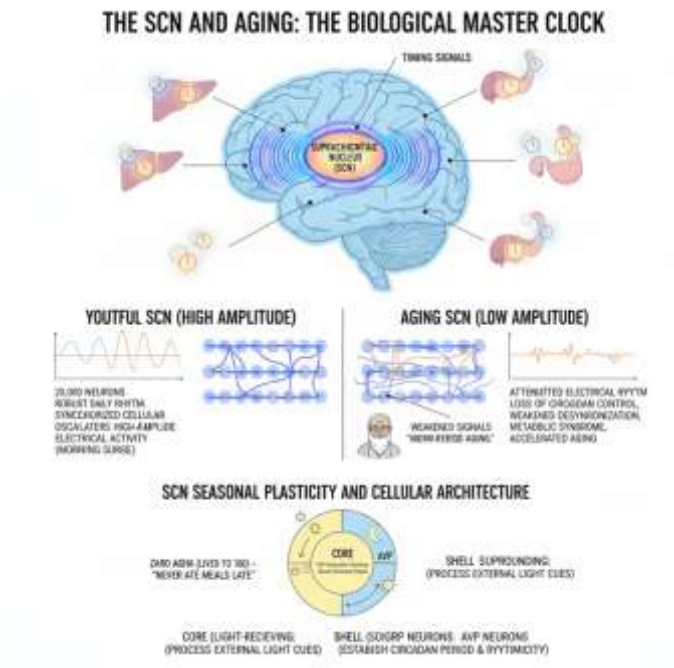
Core Assumption

The 4WR operates on the premise that markets often persist in established directions after hitting fresh highs or lows. By entering trades at breakout points, the strategy aims to benefit from trends that may extend significantly.

While the system is straightforward, it typically yields a relatively low win rate (around 30–40%). However, its effectiveness lies in the potential for substantial gains from successful trades, which often outweigh the smaller losses from losing positions, making it a durable tool for trend-following investors despite its simplicity.

Chapter 2
How Anti-Aging and Intuition are both Interconnected

The SCN and Aging



Composed of approximately 20,000 neurons, the human body's Suprachiasmatic Nucleus (SCN) is the body's master clock, orchestrating a robust daily rhythm by intricately synchronizing your cellular oscillators. This coordination generates high-amplitude electrical activity that surges each morning and wanes at night. However, with advancing age, this vital electrical rhythm severely attenuates. This substantial decline, consistently observed across various studies, signifies a profound loss of circadian control over the ion currents—including critical voltage-dependent potassium channels—that underpin the SCN's precise timing. This diminished SCN output isn't confined to the brain; its weakened timing signals propagate throughout the body to your main organs. When the master clock's signal becomes weak or "noisy," peripheral clocks—in your organs like your liver, pancreas and muscle—struggle to maintain proper synchronization. This widespread misalignment is particularly exacerbated when eating habits are irregular and is strongly linked to the development of metabolic syndrome and accelerated aging. It is interesting to note that Zaro Agha, who was reported to have lived to 160 years of age, never age meals late.

This rewrite focuses on making the neuroscience description more dynamic

and technical, then clearly separates the speculative, experiential observation to maintain clarity and originality in both sections.

The suprachiasmatic nucleus (SCN), is your brain's consummate timekeeper. It does not merely regulate; it dynamically adapts to seasonal flux by meticulously remodeling its cellular architecture and neurochemistry. This essential seasonal plasticity is orchestrated by two primary, spatially segregated neuronal populations: those expressing arginine vasopressin (AVP) and those defined by vasoactive intestinal peptide (VIP). These critical cell clusters are strategically partitioned within your SCN's structure: VIP- and **gastrin-releasing peptide** (GRP)-containing cells firmly anchor the light-receiving 'core,' while the AVP-expressing neurons form the surrounding 'shell.' This structural segregation dictates function: AVP neurons are indispensable for establishing the precise duration of the circadian period and sustaining rhythmicity even under constant light conditions. Conversely, the VIP population specializes in processing exogenous light cues.

The Experiential Contrast

Moving from established neurobiology to experiential timekeeping, my observational data, compiled over nearly fifteen years of practicing Qi Gong, I have documented a distinct energetic phenomenon: a surge of Qi energy consistently reaches its seasonal zenith at sunset during the month of October. Could this specific autumnal energetic apex betray an underlying relationship—perhaps involving retrocausality or a non-linear interpretation of Time—linked specifically to the transitional months spanning August through October?

If we look at the months of the year of the births of people, we see that people born in autumn (October–December) in the Northern Hemisphere live longer than those born in spring (April–June) with Australia the pattern being shifted by half a year **(9)**.

When we look at the spectrum of light according to hour of day and solar minimum, we get the following:

Light Type	Light Behavior
Sunrise/Dawn	Atmospheric Extinction (Long path through air)
Autumn	Geometric Extinction (Lower solar angle all day)
Solar Minimum	Reduced Solar Emission (Less UV/EUV from the Sun)

Getting back to the SCN. Your Suprachiasmatic Nucleus (SCN) is not structurally static; it undergoes profound changes during the seasons. Critically, the cell populations expressing key neuropeptides—vasopressin (AVP) and vasoactive intestinal polypeptide (VIP)—swell dramatically, with **neuron counts peaking between August and October** compared to spring levels [(10)]. This significant neuronal proliferation, interwoven with synchronous seasonal shifts in core clock gene expression and neurotransmitter output, is the crucial adaptive mechanism enabling the SCN to precisely track and synchronize the body's internal rhythms with the annual cycle of changing photoperiods.

Neurons at Work: The Hidden Power of Gut Intelligence

Did you know that the neurons in your stomach are similar to the neurons in your brain? They generate electrical signals and use similar neurotransmitters. The neurons in your stomach produce the following:

- Acetylcholine
- Dopamine (About 50% of the body's dopamine is in your stomach.)
- Serotonin (More than 90% of the body's serotonin is in your stomach.)

Ever had that "*gut feeling*" that something didn't feel right? Well this may be the result of chemical reactions taking place that send signals to your brain. Your brain has approximately 86 billion neurons and your gut has between 100 and 600 million neurons. Vagal nerve fibers directly innervate the stomach, releasing Gastrin Releasing Peptide (GRP) to stimulate gastrin production. The GRP-SCN-Light axis is an integrated system that synchronizes fundamental biological processes. This precise temporal

regulation is vital because it determines both genomic integrity and metabolic efficiency—factors that scientists now consider the absolute bedrock of human lifespan extension.

Chronoregulation of Genomic Integrity

Longevity is strongly linked to the robustness of DNA repair mechanisms and efficient metabolism. The SCN master clock exerts chronocontrol over the Nucleotide Excision Repair (NER) system, which is the primary defense mechanism responsible for removing solar ultraviolet (UV) photoproduct damage from DNA.

DNA Repair

The capacity for DNA repair is not constant throughout the 24-hour cycle. Evidence suggests that UV exposure in the evening corresponds to higher DNA repair capacity, which leads to reduced skin cancer risk. However DNA repair capacity is at its lowest in the morning **(11)**.

Solar maximum may have a negative impact on human lifespan, with studies showing people born during these peaks living on average 1.5 years less, particularly males. The likely cause is the effect of increased solar radiant energy, particularly ultraviolet (UV) light, during early gestation. This energy may affect the maternal immune system through the dermis, potentially altering the fetal genome or epigenome, with consequences that are evident later in life. Hence during solar maximum, it may be best to avoid spending excess amounts of time in early morning sunlight **(12)**.

DEC1&2 Genes

Okay, so now we are starting to see how light plays a major role in not only intuition, but physiology. So what is the prime mechanism driving SCN and how can we keep it healthy? The DEC1 and DEC2 genes are important for relaying clock signals to peripheral tissues. DEC1 can be induced by light to adjust the SCN's phase. To ensure our cells defend themselves most effectively through the evening and night, their timing must be impeccably synchronized. This precision hinges on a well-tuned morning entrainment, which sets the body's internal clock. A key mechanism for this morning calibration **(13)** is the phase advance driven by the GRP-SCN axis. Our body actively uses **morning light to set** this master clock – an essential anti-aging signal – guaranteeing that its peak repair capabilities are perfectly scheduled

for the darker hours, thus maximizing DNA protection and repair. Furthermore, the deterioration of 24-hour rhythmicity is recognized as a significant risk factor for several age-related pathologies, including neurodegenerative diseases such as Alzheimer's disease (AD).

Aging fundamentally weakens the suprachiasmatic nucleus (SCN), our brain's central timekeeper, diminishing its rhythmic amplitude and synchronized activity. This critical insight underscores the potential of targeted chronotherapeutic strategies. By focusing on fortifying the GRP-SCN-Light pathway—the essential biological link between external light signals and our internal clock—we may unlock new ways to extend healthspan. Interventions, whether herb based or behavioral based, that restore or enhance the internal clock's robustness will be pivotal in combating age-related central nervous system diseases.

So could herbs that stimulate the DEC1&2 Genes, which in turn stimulate the SCN exhibit anti-aging properties? Research shows that Ginseng influences the DEC1 and DEC2 genes [(14)]. As we stated at the very beginning of this book, the yearly peak of enhanced intuition always occurs during dawn, when it is 13:30LST.

The Secret to Mr. Run Run Shaw's Longevity

In Roger Moore's 2014 autobiography [(15)] titled: Last Man Standing. Tales from Tinseltown, he recounts the meeting of Mr. Run Run Shaw. Mr Shaw founded a film company that filmed Kung Fu movies. Roger Moore stated that the secret to Mr. Shaw's health and longevity was from taking 3 ginseng pills every morning after getting up and another 3 before bed. He would take the ginseng pills with Scotch whisky. Mr. Shaw stated to Roger that this allowed him to do everything at 70 years of age, the same as if he was 30 years of age. Mr. Shaw stated that the Ginseng came from remote mountains in mainland China where it would be dug out with small spoons when harvested so that the root was preserved intact when it was harvested. Mr. Shaw stated that the powder was ground up into a powder and made into capsules before Mr. Shaw consumed it. This is because grinding up the entire root and making it into a powder all at once would cause the special rejuvenation nutrients in the ginseng to be lost. It is very likely that the ginseng root was made into powder every few days directly from the harvested root and then taken fresh, leaving the rest of the root intact to make more powder from. This is because Mr. Shaw had showed Roger a ginseng

root that he kept in a special wooden box. Mr. Shaw passed away in January 2014 at 106 years of age.

Also Li Ching-Yuen, associated with living to an age of 256 years [16], attributed his longevity diet to herbs such as goji berries, ginseng and He Shou Wu. He also practiced Qi-Gong exercises. The imperial Chinese Dynasty governments had been sending him documents confirming his 100th 150th and 200th birthdays [16]. The problem with this is most modern civilizations only last a few hundred years, with most records being destroyed by war or revolution. Who knows how many other people lived to extreme ages in the past. Luckily the Chinese dynasties lasted thousands of years, so we have good records of Mr. Ching-Yuen's lifespan.

Research has shown that eating certain foods after slicing them enhances their nutrient content. This is because the slicing wounds the plant's cells, which than causes an increase in the production of beneficial compounds like polyphenols, which the plant produces as a defense mechanism.

Top 5 Foods Whose Nutrients Increase the *Most* When Sliced

1. **Garlic** – massive boost in allicin (hundreds of percent increase).
2. **Broccoli & all crucifers** – sulforaphane activation.
3. **Onions** – quercetin availability rises.
4. **Tomatoes** – lycopene becomes more accessible.
5. **Carrots** – more carotenoid absorption.

Study involving Ginseng and Dec 2 Genes

A research study [17] conducted a comprehensive study to investigate the effects of Korean Red Ginseng (KRG) on the expression levels of the DEC1 and DEC2 genes in aging mice. The study findings revealed that KRG treatment resulted in a significant reduction in the expression of their DEC1 and DEC2 genes, indicating its potential role in anti-aging mechanisms. The study also included evaluations of hearing function and cognitive ability in these mice. Interestingly, the older mice treated with 200 mg/kg KRG demonstrated better hearing. The researchers in the study concluded the DEC1 and DEC2 genes play crucial roles in the regulation of circadian rhythms.

I would like to point out here, that the herbs that influence the DEC1 and DEC2 Genes are also some of the most potent anti-aging herbs. For example being an author of writing over 5 books on anti-aging, with having written over 1,000 pages on this topic, I can confidently confirm that the following herbs that influence the DEC class of genes are also some of the most powerful anti-aging genes.

Herbs that influence circadian clock genes, including DEC1 and DEC2	
Resveratrol	Astragalus
Licorice root	Rehmannia glutinosa
Curcumin	Eleutherococcus senticosus
Quercetin	Siberian Ginseng
Berberine	Ashwagandha (ot directly shown to bind DEC genes but influences peripheral clock gene expression)
Ginkgo biloba	Anthocyanins (found in wine)
Rhodiola rosea	
Salvia miltiorrhiza	
Danshen	
Magnesium	
Vitamin D	
Omega-3 DHA / EPA	

.

The twenty-four-hour cycle begins as the BMAL1 and CLOCK proteins drive the transcription of the Per and Cry genes. The resulting PER and CRY proteins then bind to form a complex, acting as the system’s molecular safeguard. This new complex re-enters the nucleus and directly inhibits the BMAL1/CLOCK genes that created it—a classic negative feedback loop. Once transcription is halted, the inhibitory complex degrades, lifting the block and allowing the cycle to reset and initiate the next day’s rhythm. Every dawn the proteins of PER and CRY peak, due to them being synthesized during the previous day. This accumulation occurs due to the circadian clock's negative feedback loop, This peak is what is responsible for the body’s reaction to foreign substances. For example, the field toxicity (morbidity and mortality) of anticancer agents fluctuates dramatically depending on the time of day it is administered. For example, there is a 20%

mortality when a chemical used to treat leukemia is administered at sunset. However, when given at dawn, mortality is 100% [(18)] and when a person takes a flu shot between 9 and 11 a.m. the body develops 4 times as many antibodies; especially in older adults [(19)]. This is a major discovery and as we showed earlier at 13:30LST dawn weather is calmer. Later on we will reveal its connection to enhanced perception.

Intuitive Genes

So the DEC1 and DEC2 genes are responsible for intuition. However, just like the aging process itself, where not a single gene is responsible, the same is true for intuition. Research by Dr. Dean Radin [(20)] discovered that certain people are more psychic compared to other people due to a specific gene (TNRC18 gene). It is my hypothesis that each one of us carries this gene to some degree, but is more active in certain people. This gene may undergo a 30 day circadian rhythm.

Interestingly when the TNRC18 gene undergoes a mutation, it has been linked to eye diseases. This is fascinating because as shown throughout this book the early morning light of dawn is a key period for enhanced awareness and perception. Also the TNRC18 gene supports a stronger immune system [(21)]. So does the TNRC18 gene and the class of DEC genes have similarities? Let's explore the data for clues.

1. Nuclear and Chromatin Interaction

The TNRC18 and DEC1/DEC2 proteins exhibit striking functional parallels as nuclear regulatory factors. Nuclear Factor represent genes involved in immune system responses, reductions in inflammation and cell survival and proliferation. Let's explore these in-depth.

TNRC18: This gene functions as a chromatin regulator which allows it to bind to trimethylated histone H3 lysine 9 (H3K9me3) – a critical epigenetic mark associated with **gene silencing** and heterochromatin formation. It silences endogenous retrotransposons.

DEC1 (BHLHE40) & **DEC2** (BHLHE41): These are basic helix-loop-helix (bHLH) transcription factors. Their primary mode of action involves binding to specific DNA sequences, known as E-boxes, within the nucleus to modulate gene transcription.

Shared Role in Gene Repression
Crucially, a unifying theme for all three of these genes is their direct involvement in gene repression or silencing:

TNRC18 directly contributes to gene silencing by acting as a co-repressor complex platform, effectively shutting down transposable elements.
DEC1 & DEC2 are well-established transcriptional repressors. They typically dampen the activity of the CLOCK/BMAL1 complex in the circadian feedback loop, thereby diminishing the transcription of clock-controlled genes.

> When we boil it all down, these genes enhance the mind's ability to sort through noise more effectively by silencing external distractions and interference.

Foods and Herbs that influence circadian clock genes (Per2) including DEC1 and DEC2:

Passionflower Extract (Passiflora incarnata) - Jiao-Tai-Wan (TCM Herbal Blend): This blend, which contains Rhizome coptidis and Cortex cinnamomi (Chinese cinnamon), has been shown to upregulate CRY1 and CRY2 proteins, another pair of negative regulators in the core clock loop alongside Dec1/2.

Nobiletin (A flavonoid in citrus fruits): Nobiletin, found in abundance in mandarins and tangerines, has been studied for its effect on circadian rhythm, specifically increasing the amplitude and lengthening the period for the PER2 gene.

DHA (Docosahexaenoic Acid - an Omega-3 fatty acid, often from fish oil.

Studies suggest that DHA can counteract the negative effects of certain saturated fats on the BMAL1 circadian rhythm, hinting at an overall regulatory role in the core clock mechanism.

Berberine-containing herbs: Berberis vulgaris, Coptis chinensis, Phellodendron amurense and Hydrastis Canadensis.

Foods That Support DEC1/DEC2 and Per2 Gene Regulation
Blueberries, Pomegranates, Broccoli, Kale, Cabbage, Salmon, Sardines, Golden Flax Seeds, Kimchi, Yogurt, Fermented Soy.

Other Compounds That Affect, PER, CRY, DEC1 and DEC2 genes:

Caffeine - Caffeine affects circadian rhythm lengthening the period and causing a phase shift of peripheral clocks. This allows it to help with the resetting of internal peripheral circadian clocks.

So does a healthy resetting of circadian clocks enhance lifespan? Let's check the data for the answer.

Foods That Activate Bitter & Gut-Neuroendocrine Pathways: Polyphenols. These bitter compounds activate T2R receptors, which stimulate neuropeptides such as GRP, CCK, GLP-1.

Bitter Polyphenol Foods	
Grape seed powder	Green tea
Grapefruit	**Coffee**
Dark leafy greens (dandelion, arugula, mustard greens)	Dark chocolate (70–90%)
Cranberries	Pomegranate

Top 15 Foods/Herbs Most Likely to Promote GRP Neurons	
Gentian root	Jerusalem artichoke
Dandelion greens & root	Asparagus
Artichoke leaf	Fermented foods
Green tea	Seaweed
Dark chocolate	Sardines / salmon (omega-3s)
Coffee	Beef liver (vitamin A for
Ginger	enteroendocrine cells)
Turmeric	Garlic

What three things are common here? Caffeine causes a phase shift of peripheral clocks and Coffee influences GRP. We shall cover GRP in greater detail later on.

Doug Skrecky (www.cryonet.org) is famous for his hundreds of longevity experiments on fruit flies. Out of his hundreds of longevity research experiments over the course of many years, he discovered the food Wax Gourd (Benincasa hispida) and standard coffee extended lifespan the most [(22)]. Below is one of the snapshots from his study.

Run #101	Percent Survival on Day													
supplement	3	9	15	20	25	31	36	41	48	54	59	64	70	76
control	100	90	81	62	57	52	48	33	10	5	0	-	-	-
+(dark)	100	100	100	88	88	76	65	35	18	6	6	0	-	-
basil seed drink	100	95	91	82	82	77	77	59	41	14	5	0	-	-
+(dark)	100	89	89	89	89	89	78	61	56	28	11	6	0	-
coffee/milk	100	100	100	86	81	71	62	48	48	19	5	0	-	
+(dark)	100	100	100	92	92	85	69	69	62	54	46	15	0	
sterchlia drink	100	92	96	84	84	84	56	52	32	12	0	-	-	-
+(dark)	100	100	100	85	85	77	77	69	69	38	8	8	8	0
tamarind juice	100	96	88	88	88	83	83	79	59	8	0	-	-	-
+(dark)	100	100	100	100	94	94	89	83	39	6	0	-	-	-
wax gourd drink	100	85	80	75	70	65	65	55	45	30	20	5	0	-
+(dark)	100	100	100	100	100	88	82	65	47	29	12	6	0	-

I would like to point out that Zaro Agha, who was reported to have lived to 160 years of age, worked in a coffee shop for many years and also ate a lot of cumin seed and yogurt. He also had children that lived to very old ages [(23) (24)].

The physiological contrast between coffee and winter melon is stark, defining them as antithetical agents in cellular and systemic regulation. Caffeine functions primarily as a robust central nervous system (CNS) stimulant, immediately impacting the cardiovascular system and boosting metabolism. Conversely, winter melon is defined by its deep hydration and gentle diuretic action, aligning it more closely with subtle metabolic regulation.

Both of these substances strongly influence the body's metabolism. However their mechanisms diverge significantly: winter melon subtly modulates glucose and lipid handling, potentially offering hypoglycemic effects that affect enzyme activity or insulin sensitivity. In contrast, coffee's relationship with blood glucose is complex and personalized, sometimes causing a temporary spike due to reduced insulin sensitivity. However drinking 3 to 4 cups of coffee daily has been linked to long-term improvements in glucose management [(25)].

Preliminary research, encompassing studies on diabetic rats and limited human trials, suggests winter melon may aid glucose management. It appears to do so by reducing blood glucose levels, boosting insulin sensitivity, and moderating glucose absorption [(26)].

> The key to health and longevity is slowing the body's absorption of glucose

So what is the prime mechanism here? Both green coffee beans and Winter Melon contain chlorogenic acid (CGA) [(27)] [(28)] and chlorogenic acid has been shown to extend lifespan [(29)].

Further Reading

Anti-aging effects of coffee. Keita Takahashi and Akihito Ishigami. August 2017.

Okay. Now that we have covered biology and chemicophysiology, let's now explore how electromagnetism and perception are both interconnected.

Chapter 3
Emotional Awareness: The Key to Elevated Perception

Emotions exist outside of Space Time

Research has shown that when the body is in a state of calm and it senses fear, the body's intuition acts as a warning mechanism to avoid danger. This is clearly demonstrated by the studies conducted by Dr. Dean Radin [(30)] where participants were seated in front of a blank computer screen. Electrodes monitored their unconscious physiological responses. The computer would than display a chosen image after a short delay. The data showed that physiological measures (EDA/GSR) showed a change when the computer randomly selected an emotionally charged image. The fascinating thing about this study was that their body responded BEFORE the image was visible on the computer screen; suggesting an electromagnetic effect. The researchers concluded that the human body is able to distinguish between a future emotional state of being before the conscious mind—or even a binary computer image displayed it on the screen. The study showed a significantly greater heart rate deceleration occurred prior to the future emotional images compared to when the heart was calm. The study also showed that the information came from the heart, which than sent the signals to the brain. Dean's experiments have been replicated over 30 times by independent research institutions from all over the world. This makes sense because as shown earlier in this book, the magnetic field of the Milky Way is similar to the human heart, which when coherent, becomes more sensitive to future stimuli. Other research, like that of Dr. Rollin McCraty [(31)], confirmed

that changes in heart rates occurred before a traumatic emotional event.

Dr. McCraty has also been instrumental in showing how self-induced positive emotions increase the coherence in bodily processes. Later in this book I will clearly outline how coherence is the key to all Intuition and expanded awareness.

Research consistently suggests that a reduced resting heart rate variability in the high-frequency range (HF-HRV) serves as an early warning sign for developing Post-Traumatic Stress Disorder (PTSD) [(32)]. This low HF-HRV indicates a weaker "rest and digest" nervous system response (parasympathetic or vagal tone) and less adaptability in the body's automatic regulation. Consequently, individuals with this physiological profile may struggle more to manage their emotions and adapt to the overwhelming stress of trauma, predisposing them to the profound psychological and physical disruptions seen in PTSD.

Do our genes have an emotional connection with our future ancestors in that they allow for an emotional communication link between two points in time? Berkeley Anthropologist Hank Wesselman recounts his story of being in contact with a future family ancestor named Nainoa 5,000 years in the future while he was living on the Big Island of Hawaii [(33) (34) (35)].

In his memoir titled: *Spiritwalker: Messages from the Future* (Bantam, 1995), he states a particularly painful account where his future ancestor was badly mauled by a wild bull which almost killed his future ancestor. It may have been this traumatic emotional experience that acted as the catalyst for the communication link between both these genes separated by distant points in time. The geographical location may also have played a role.

Further Evidence to support the hypothesis that future emotional trauma may be acting as the catalyst for genetic communication across space and time comes from the experience of Julia A Mossbridge, PHD of Northwestern University. In an interview by Gaia she stated that when she was a child she experienced a shadow of her future 40 year old adult self visiting her from the future, while undergoing a traumatic experience. It was not until she was approximately forty years old and undergoing therapy to deal with the past trauma that she made the connection that it was her future self that was present with her in the room when she was a child [(36) (37)].

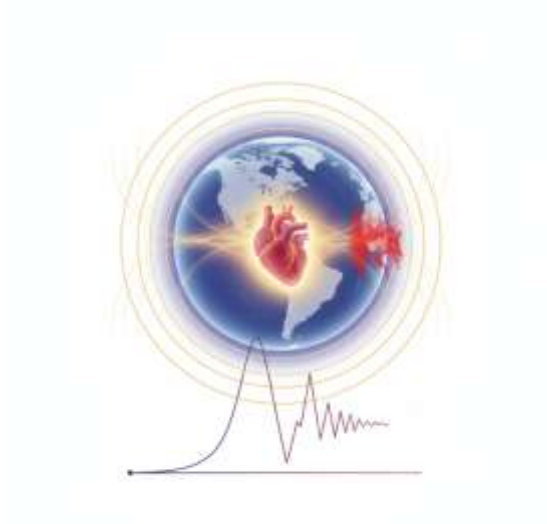
A similar story was told when a mother experienced her yet to be born daughter visiting her while she was in the dream state. The mother at the time had been undergoing emotional trauma in her life at the time. After

she left the traumatic relationship, her daughter was born [38].

Further Reading

Predicting the unpredictable: critical analysis and practical implications of predictive anticipatory activity. Julia A Mossbridge et al. Mar 2014.

Chapter 4
Resonance and Response: The Heartbeat of Our Planet

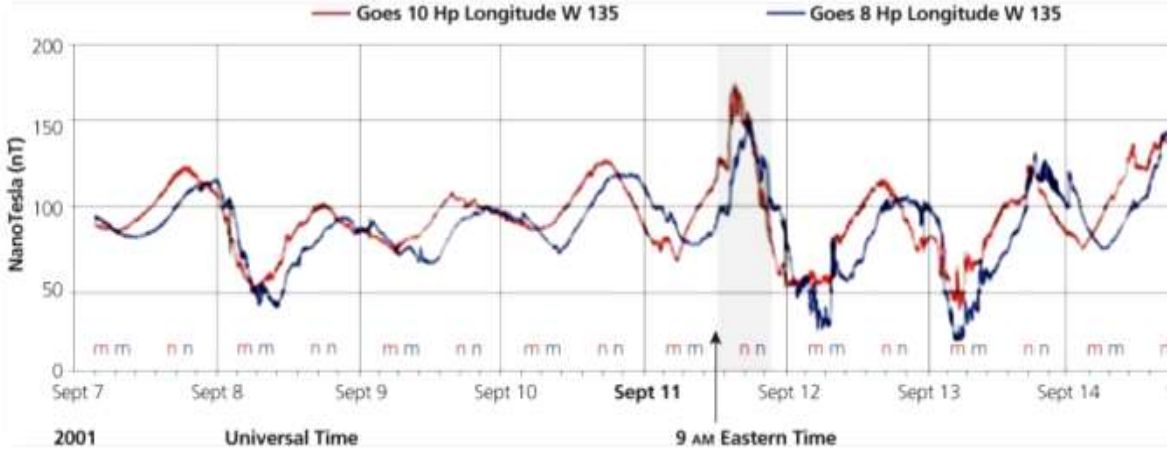


As we explored earlier where the magnetic field of our hearts is very close to the same magnetic field frequency of the Milky Way, could these fields intermingle with earth's magnetic Fields?

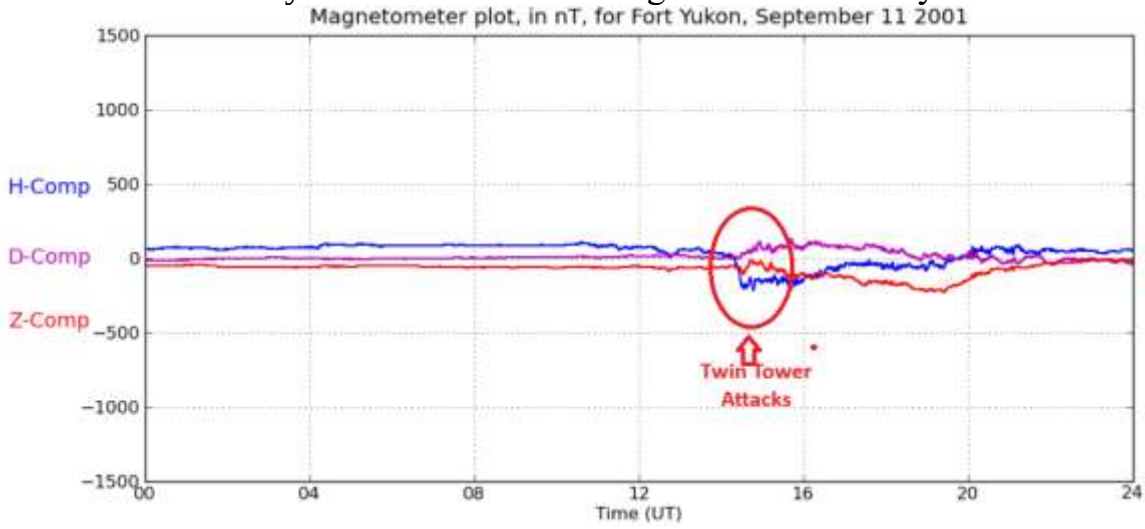
In this chapter I shall prove that even though earth's magnetic field is far stronger than our own, it responses to traumatic emotions.

How Emotions Interact with earth's magnetic field

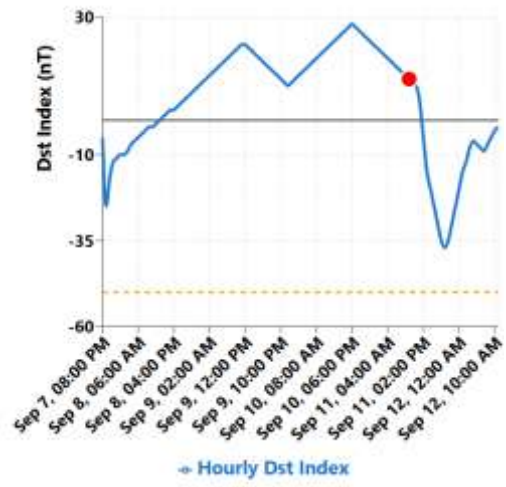
Earth's electromagnetic field will change when a large number of people are experiencing a traumatic event together in a single location. Clear evidence of this is shown during the 9/11 incident which showed measurable changes in earth's magnetometer readings and also from GOES satellite data [(39)].



This was also clearly reflected in earth's magnetometer activity [40].



This effect is also shown quite clearly in earth's ring currents, officially called the DST Index. The DST Index, which tracks the strength of Earth's ring currents, offers a compelling visual of this effect. Imagine a powerful, invisible river of charged particles flowing within our planet's magnetic embrace – that's the ring current. Its intensity dramatically shapes the electrical behavior of the atmosphere during geomagnetic storms, and during these events, this charged particle population surges.



Using data from the World Data Center for Geomagnetism [41], Kyoto, I assembled all the DST readings from September 8–14, 2001. Most of the data from NOAA is next to impossible to find, so the data from Japan was the only source I was able to use. Let's walk through the presentiment step by step over the week of Sept 8th to 14th of 2001.

1. Sept (8th to 10th). The line is mainly in the 0 to — range, rising to + (UT 01-18, 09-10), showing quiet to minor disturbances.

2. Sept 11 Main Phase Start: The line suddenly jumps to ++ and then

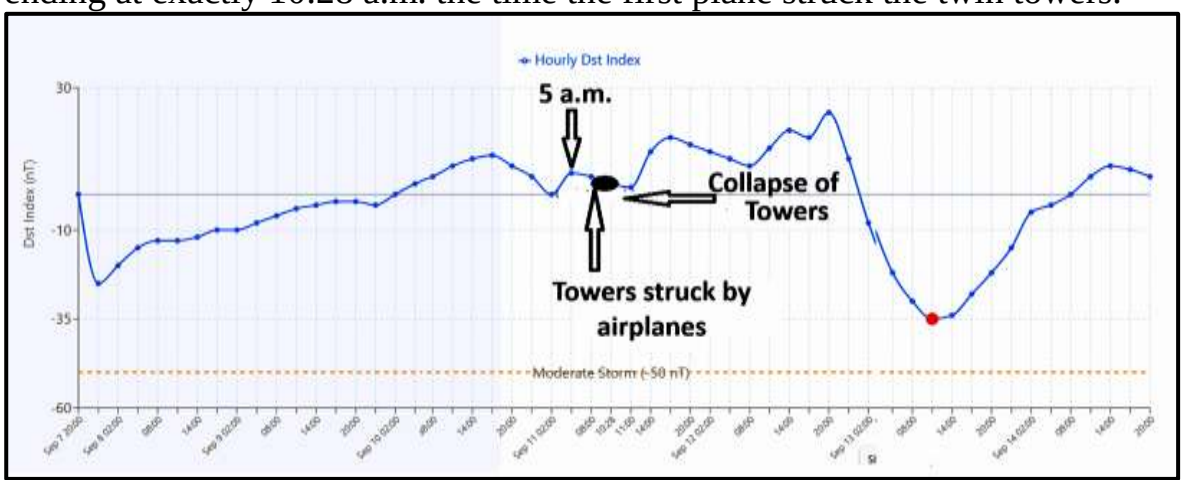
drops sharply from ++ to = in the span of a few hours (UT 16-20). This is the sharp wave of the storm's arrival.

3. Sept 12: The line remains consistently in the = and = ranges, marking the initial depression of the storm.

4. Sept 13 (Storm Peak): The line plunges into its deepest trough, hitting — — — and the extreme x x values (UT 07-08), representing the peak intensity of the Moderate Geomagnetic Storm.

5. Sept 14 (Recovery): The line rapidly rises from the negative range back through 0 and into the positive • range, showing the recovery of Earth's magnetic field as it into the sweet spot of benefical geomagnetic activity.

The following image shows the same plot, but in greater detail. All times are in New York Time. The dot is an approximate time span of 45 minutes, ending at exactly 10:28 a.m. the time the first plane struck the twin towers.



The data shows that the peak of the geomagnetic storm happened AFTER the attacks (Sept 13th). What is interesting is there is a slight dip in the activity. This slight depression is key as I show in my book titled: Long Term Health Effects of Solar Flares, Sunspots, CME's and the Schumann Resonance that almost all terrorist attacks take place just as geomagnetic activity is in decline. Speaking from personal experience, I have always received better intuitive information and make far better decisions when earth's geomagnetic activity readings are quiet or completely calm. Geomagnetic readings fluctuate throughout the day with some days having more activity due to

geomagnetic storms taking place. I have a list of the best real time online Magnetometers in the reference section of this book. Including a 3-day Geomagnetic Storm Forecast provided by NOAA [42] [43] [44].

Chapter 5
The Time-Gates: Secrets of the Pleiadian Travelers

How a Time Travelling Alien Civilization Would Navigate Time

To travel in time one must first understand that as our universe expands, the space between the atoms that make up light also expand. Hence it is simply a matter of developing the right technology that can detect changes in the spaces between the atoms that make up light, as they occur from expansion (travel to the future) or contraction (travel to the past) of the universe, than calibrate the equipment and use it to transport a ship or person to that specific moment in time.

Hence to access the past one only makes a calculation as to how much matter has contracted from their present position. The math shows that our Universe has a speed-per-unit-distance, that is equivalent to frequency. This is why if you do the math, calculating the expansion rate, you can calculate the "time" that you get out. In theory the expansion "frequency" would be easier to detect during events that create more intense light waves such as supernova explosions. Another example would be solar flares. This would mean that solar flares are a by-product of the reactions caused by the expansion of the universe. Another method would be to use gravity waves, especially those emitted from a supernova about to occur in the near future. The resulting gravity waves from the future supernova would give a quite strong signal. One only need to calculate the time that the star goes supernova

to get the future date, than use technology to tap into those altered gravity waves as a way to calculate a future date to travel to or to access information from.

Time-Gate

When I explored lunar node data I discovered some very interesting correlations. I named this period the Time-Gate period which occurs for 1 week every month.

How to find the week of Time-Gate

Ha! You must buy the book to learn how to find the amazing Time-Gate.Links for immediate download are located at the end of this free preview.

When I researched what important events occurred during these times I discovered the following:

Major Long Term Events that occurred during Time-Gate Weeks:

Time-Gate Week: April 1st to April 7th 1976

Apple was founded on April 1st, 1976 and was launched at the very last date of a 7-day Time-Gate.

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Time-Gate Week: May 3, 2004 to May 10 2004

Facebook (May 10, 2004) was launched at the very last date of a 7-day Time-Gate.

Time-Gate week: Sept 4th to Sept 10th, 1998.

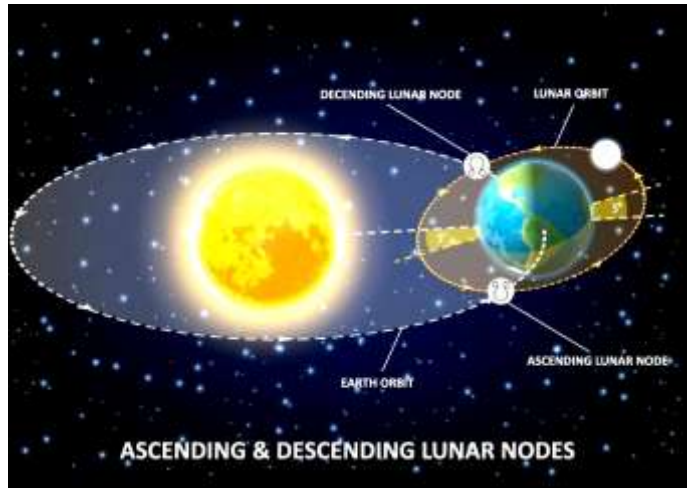
Google was officially founded on September 4, 1998, at the very start of a Time-Gate Week.

Many of these occurred close to Solar Maximum, a time where new technology that impacts the masses occurs most often.

What is most interesting is that the Farmer's Almanac states that planting on the exact date of a Lunar Node is not recommended because it will be harder to grow crops. If one was a Biodynamic Gardener, than on the exact date of a Lunar Ascending Node, it may be the best time to destroy weeds and

pests. Interestingly the Sept 9/11 attacks occurred on the exact day of a Lunar Ascending Node.

Also it would be interesting to match Time-Gate weeks to crop circles. Perhaps there may be a type of communication occurring during these times.



Real Life Time Traveler's Using Time-Gate for Time Travel

There is an interesting account of a person named Eduard Albert Meier (born 3 February 1937), nicknamed Billy, who has been having secret night contacts with an extraterrestrial civilization for over 40 years from an extraterrestrial civilization called the Pleiadians who reside in the Tauurs constellation just outside of our dimension. Many of these contacts the last few decades have taken place in Switzerland. This civilization is so advanced they have mastered Time Travel and have taken Billy onboard their spaceships and travelled through time. Although it is hard to pinpoint many of the exact dates of the Time Travel departures, I did manage to find one such date. It is March 18, 1978.

During this time travel trip, Billy was taken on a trip into the future to witness and photograph the aftermath of a major earthquake that occurred in San Francisco's distant future **(45)**. The photographs of the cars in the images showed no side mirrors. Hence, we are only a few years away from cars that are using cameras for side view mirrors. Two very interesting correlations I would like to point out here.

1: Whenever they take a time travel jump, their spaceship leaves earth's orbit and parks a short distance from earth to make the time jump.

2: The date of the Time Jump to witness the San Francisco earthquake was March 18, 1978.

What's so significant about March 18, 1978**? <u>IT IS THE EXACT DATE OF</u>**

TIME-GATE WEEK. This lends further credibility to my hypothesis that there are natural windows occurring in time that an advanced alien civilization is taking full advantage of. Perhaps the Pleiadians are going to the exact point where the Lunar Ascending Nodes occur and are tapping into some type of energy that they are taking advantage of. NO BLACK HOLE OR WORMHOLE NECESSARY!. And of course I have been using this technology to gain information for the stock market, although it still needs refining. I will also go into detail later on in this book how I am able to use it for anti-aging. What is the prime mechanism that is being used by these Time Travelers? Gravity of course. Let's look at the data.

Natural Magnetic Fields in Nature where Time Travel is Realistically possible

Achieving a usable distortion in spacetime—necessary for stabilizing a wormhole or powering a functional warp drive—hypothetically requires magnetic field strengths of an unimaginable magnitude. Highly speculative discussions suggest field intensities approaching 10^{15} Tesla (T). The most powerful known natural magnetic fields are found on magnetars, a type of neutron star, which peak at roughly 10^{11} T.

Nature offers only one analogue for mobilizing energy on the required scale: the cataclysmic **merger of binary neutron stars**. These events release gravitational binding energy approaching 10^{46} Joules (J). The energy footprint is so extreme that the gravitational wave burst emitted during the final seconds of the coalescence momentarily surpasses the combined light output of every star in the observable universe. Crucially, the extreme turbulence of the merger dramatically amplifies and reorganizes the magnetic field, generating transient intensities that eclipse the typical magnetar limit. This colossal magnetohydrodynamic energy, while a fraction of the total merger output, is massive enough to cause spacetime ripples (gravitational waves) that can warp the very fabric of space time. A BNS merger often collapses into a black hole (or a massive, short-lived neutron star that collapses later). In theory you could send a

message into these extreme environments and with the right calculations send it forward in time, or perhaps even backwards in time. If a part of the merger's complex gravitational or magnetic signal could travel $v > c$, it could theoretically propagate backward in time. Information could first be encoded subtly into the resulting black hole parameters—such as the final spin or the precise amount of mass ejected—allowing the merger products themselves to serve as low-bandwidth message carriers.

A far more dramatic signaling method is Gravitational Waveform Modulation. An advanced civilization might actively introduce a manufactured distortion into the signal. They could program a sharp, unnatural 'blip' into the final fractions of a second before coalescence, effectively creating an unmistakable binary cipher within the gravitational waveform. After observing a binary neutron star (BNS) merger, an advanced civilization initiates a groundbreaking temporal communication attempt. They aim to backcast a simple, unambiguous message to a period preceding the merger's original detection. This message serves as either a "Do not look" warning to avert future peril, or a "Look for X signal" beacon to guide crucial astronomical discovery. So how can this relate to the Lunar Nodes?

Interestingly, the most significant correlation is that a solar or lunar eclipse only occurs when the Moon is near one of its nodes (Ascending or Descending). If the Moon is too far above or below the ecliptic plane, its shadow will miss Earth (solar eclipse) or Earth's shadow will miss the Moon (lunar eclipse). The nodes slowly move westward along the ecliptic in a cycle called Nodal Precession or the Saros cycle. A lunar eclipse occurring near apogee, the Moon's farthest point from Earth, results in a longer duration for the total eclipse because the Moon's orbital speed is at its slowest.

In Chapter 29 I go into how to find Time-Gate for the past, as well as two experiences of people who experienced Time-Gate that came from the future back to the past when Time-Gate week was exhibiting past energy.

Similarities between the Galactic Center and Lunar Nodes (Ketu/South Node)

The Galactic Center (GC), located around 27° Sagittarius, is often linked to the South Node (Ketu) due to their shared themes of Source, Past, and Transcendence.

Feature	Galactic Center (~27° Sagittarius)	South Node (Ketu)
Theme	**Source/Origin/The Great Return**	**Past Lives/Karmic Residue**
Direction	Inward focus, concentration of energy (supermassive black hole)	Release, letting go, the path of least resistance (past patterns)
Vedic Link	Falls within **Mula Nakshatra**, which is ruled by **Ketu**	Is the planet/point of **Ketu** (the Dragon's Tail)
Influence	Collective karma, profound spiritual insights, connection to universal wisdom, and the *root* of the "Tree of Life."	Accumulated talents, familiarity, and the *lessons to be released* from the soul's past journey.
Transformation	A powerful point of **death and rebirth**, where energy is stripped down to its core to emerge transformed (like a Phoenix).	A point of **dissolution**, where old energies and patterns must be let go for evolution to occur.

Similarities between the Anti-Galactic Center and Lunar Nodes (Rahu/North Node)

The Anti-Galactic Center (AGC), located exactly opposite the GC around 27° Gemini, is linked to the North Node (Rahu) due to their shared themes of Future, Expansion, and the Unknown.

Feature	Anti-Galactic Center (~27° Gemini)	North Node (Rahu)
Theme	**The Father/Boundless Space**	**Destiny/Future Evolution/Unfamiliar**
Direction	Outward focus, expansive energy, looking out to the edge of the galaxy	Intake, drive, desire, the path of **growth** (new patterns)
Vedic Link	Falls near **Ardra Nakshatra**, which is ruled by **Rahu**	Is the planet/point of **Rahu** (the Dragon's Head)
Influence	Expands ego and desire, pushing beyond limits; a place that can be "blinded" but also shocked into new awareness.	The ultimate hunger, symbolizing the lessons, experiences, and growth the soul is **striving for** in the current lifetime.
Transformation	Associated with the destructive, boundary-breaking force of **Rudra/Shiva**.	Associated with an **insatiable drive** and the **unfoldment of life** with its highs and lows.

Thank you for reading this fine and unique one-of-a-kind book. You may **download it now** or order the Paperback from Amazon or you can request the paperback edition from your favorite bookstore.

Scott Rauvers, author

As you close this book, may you carry forward not only knowledge, but a renewed sense of connection. May you look at the world around you and recognize the invisible harmony you are part of. May you allow your intuition to guide you, trust your body to speak to you, and welcome the subtle energy that has always been supporting you.

And may you remember, always, that longevity is not measured merely in years lived—but in coherence, awareness, and the radiant vitality that comes when we live tuned to the deeper rhythm of life.

This is the beginning, not the end.
Because now you know how to listen.
And once you learn to hear the field—your field—
you cannot help but live longer, clearer, and more fully alive.

Scott Rauvers

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Dates of Lunar Ascending and Descending Nodes until 2100
All times are in Greenwich Mean Time (GMT)

Year	Ascending Node	RA	Dec.	Descending Node	RA	Dec.
2025	Jan 05 19:46	00h01.6m	+00°10.6'	Jan 19 01:48	11h56.8m	+00°20.8'
	Feb 01 22:06	23h53.3m	-00°43.6'	Feb 15 06:53	11h51.0m	+00°58.3'
	Mar 01 05:40	23h50.5m	-01°01.7'	Mar 14 13:45 t	11h50.4m	+01°02.6'
	Mar 28 16:29 P	23h50.6m	-01°01.2'	Apr 10 19:56	11h50.4m	+01°02.5'
	Apr 25 02:23	23h48.7m	-01°13.5'	May 07 23:44	11h46.6m	+01°27.3'
	May 22 08:05	23h41.9m	-01°57.8'	Jun 04 01:33	11h37.8m	+02°24.3'
	Jun 18 09:41	23h31.6m	-03°04.2'	Jul 01 03:46	11h27.2m	+03°32.3'
	Jul 15 10:42	23h22.4m	-04°03.2'	Jul 28 08:30	11h19.6m	+04°21.1'
	Aug 11 14:53	23h17.7m	-04°32.9'	Aug 24 15:41	11h17.0m	+04°37.5'
	Sep 07 23:08 t	23h17.1m	-04°36.9'	Sep 20 23:13 P	11h17.3m	+04°35.7'
	Oct 05 09:20	23h16.8m	-04°38.5'	Oct 18 04:34	11h15.8m	+04°44.9'
	Nov 01 17:46	23h12.4m	-05°06.2'	Nov 14 06:38	11h09.0m	+05°28.0'
	Nov 28 21:33	23h02.3m	-06°09.7'	Dec 11 07:35	10h57.6m	+06°38.9'
	Dec 25 22:03	22h50.8m	-07°20.7'			
2026				Jan 07 11:22	10h47.2m	+07°42.9'
	Jan 22 00:03	22h43.7m	-08°03.8'	Feb 03 19:18	10h42.5m	+08°11.1'
	Feb 18 06:19 A	22h42.2m	-08°13.1'	Mar 03 04:35 t	10h42.3m	+08°12.1'
	Mar 17 15:22	22h42.3m	-08°12.2'	Mar 30 11:34	10h41.6m	+08°16.4'
	Apr 13 23:43	22h39.1m	-08°31.2'	Apr 26 14:36	10h36.3m	+08°48.3'
	May 11 04:36	22h30.6m	-09°21.9'	May 23 15:26	10h26.2m	+09°47.3'
	Jun 07 06:19	22h19.5m	-10°25.7'	Jun 19 17:57	10h15.6m	+10°47.8'
	Jul 04 07:51	22h11.0m	-11°13.5'	Jul 17 00:27	10h09.1m	+11°24.1'
	Jul 31 11:54	22h07.7m	-11°31.9'	Aug 13 09:56 T	10h07.5m	+11°32.7'
	Aug 27 18:47 p	22h07.8m	-11°31.3'	Sep 09 19:17	10h07.7m	+11°31.9'
	Sep 24 02:40	22h06.9m	-11°36.2'	Oct 07 01:19	10h04.9m	+11°47.0'
	Oct 21 08:53	22h01.0m	-12°08.6'	Nov 03 03:02	09h56.6m	+12°32.0'
	Nov 17 11:49	21h49.7m	-13°08.2'	Nov 30 03:34	09h44.7m	+13°33.9'
	Dec 14 13:04	21h38.3m	-14°06.2'	Dec 27 07:55	09h35.2m	+14°21.8'
2027	Jan 10 15:58	21h32.3m	-14°35.7'	Jan 23 17:26	09h31.8m	+14°38.5'
	Feb 06 21:44 A	21h31.7m	-14°38.7'	Feb 20 04:40 n	09h31.8m	+14°38.2'
	Mar 06 04:41	21h31.6m	-14°39.1'	Mar 19 13:05	09h29.9m	+14°47.7'
	Apr 02 10:17	21h27.0m	-15°01.3'	Apr 15 16:31	09h22.6m	+15°22.2'
	Apr 29 13:24	21h16.9m	-15°48.3'	May 12 17:03	09h11.4m	+16°13.2'

May 26 15:22 21h05.5m -16°39.1' Jun 08 19:23 09h01.4m +16°56.6'
Jun 22 18:25 20h57.8m -17°11.6' Jul 06 02:14 08h56.4m +17°17.5'
Jul 19 23:33 20h55.6m -17°20.7' Aug 02 12:33 T 08h55.8m +17°20.3'
Aug 16 05:51 n 20h56.1m -17°18.8' Aug 29 23:01 08h55.4m +17°21.7'
Sep 12 11:26 20h54.2m -17°26.4' Sep 26 06:04 08h50.9m +17°40.1'
Oct 09 14:58 20h46.7m -17°56.6' Oct 23 08:15 08h40.6m +18°19.9'
Nov 05 16:54 20h34.5m -18°42.5' Nov 19 08:34 08h28.5m +19°03.8'
Dec 02 19:38 20h23.5m -19°21.2' Dec 16 12:21 08h20.5m +19°31.3'
Dec 30 00:51 20h18.6m -19°37.6'

2028 Jan 12 21:27 p 08h18.4m +19°38.2'
Jan 26 07:31 A 20h18.6m -19°37.7' Feb 09 08:56 08h18.4m +19°38.1'
Feb 22 13:11 20h17.8m -19°40.0' Mar 07 18:06 08h14.8m +19°50.0'
Mar 20 16:19 20h11.5m -20°00.2' Apr 03 22:08 08h05.1m +20°20.0'
Apr 16 17:56 19h59.8m -20°35.1' Apr 30 22:47 07h52.8m +20°54.5'
May 13 20:46 19h48.1m -21°06.9' May 28 00:41 07h43.7m +21°18.0'
Jun 10 02:18 19h41.4m -21°23.7' Jun 24 06:42 07h40.3m +21°26.3'
Jul 07 09:34 p 19h40.1m -21°26.8' Jul 21 16:09 T 07h40.3m +21°26.2'
Aug 03 16:20 19h40.4m -21°26.0' Aug 18 02:04 07h39.0m +21°29.2'
Aug 30 20:39 19h37.2m -21°33.4' Sep 14 09:06 07h32.3m +21°44.4'
Sep 26 22:21 19h27.9m -21°54.0' Oct 11 11:37 07h20.2m +22°09.4'
Oct 23 23:55 19h14.9m -22°19.1' Nov 07 12:08 07h08.1m +22°30.8'
Nov 20 04:34 19h04.5m -22°36.5' Dec 04 15:14 07h01.5m +22°40.9'
Dec 17 12:41 19h00.7m -22°42.1' Dec 31 22:49 t 07h00.7m +22°42.2'

2029 Jan 13 21:21 P 19h00.9m -22°41.8' Jan 28 08:40 07h00.4m +22°42.6'
Feb 10 03:07 18h59.1m -22°44.5' Feb 24 16:44 06h54.8m +22°50.3'
Mar 09 05:00 18h50.8m -22°55.3' Mar 23 20:28 06h43.0m +23°04.1'
Apr 05 05:50 18h37.8m -23°09.1' Apr 19 21:27 06h30.2m +23°15.2'
May 02 09:41 18h26.3m -23°17.9' May 16 23:31 06h22.3m +23°20.3'
May 29 17:34 18h21.0m -23°20.9' Jun 13 04:49 P 06h20.3m +23°21.2'
Jun 26 03:09 t 18h20.5m -23°21.1' Jul 10 12:33 P 06h20.7m +23°21.0'
Jul 23 11:12 18h20.1m -23°21.2' Aug 06 20:21 06h18.2m +23°22.2'
Aug 19 15:32 18h15.3m -23°23.3' Sep 03 01:43 06h09.6m +23°25.0'
Sep 15 16:33 18h04.6m -23°25.8' Sep 30 04:00 05h56.8m +23°25.9'
Oct 12 17:59 17h51.7m -23°25.2' Oct 27 05:23 05h45.5m +23°23.6'
Nov 08 23:44 17h42.9m -23°22.6' Nov 23 08:55 05h40.6m +23°21.6'
Dec 06 09:51 P 17h40.4m -23°21.5' Dec 20 15:21 t 05h40.6m +23°21.5'

2030 Jan 02 20:31 17h40.5m -23°21.6' Jan 16 22:41 05h39.7m +23°21.1'
Jan 30 03:28 17h37.1m -23°19.9' Feb 13 04:07 05h32.6m +23°17.1'

Feb 26	05:23	17h27.2m -23°13.3'	Mar 12	06:43	05h19.9m +23°06.8'
Mar 25	05:48	17h14.1m -23°01.0'	Apr 08	08:29	05h07.8m +22°53.4'
Apr 21	09:46	17h04.3m -22°49.1'	May 05	11:55	05h01.4m +22°45.1'
May 18	18:32	17h00.8m -22°44.2'	Jun 01	17:30 A	05h00.6m +22°43.9'
Jun 15	05:24 p	17h00.8m -22°44.1'	Jun 28	23:50	05h00.8m +22°44.2'
Jul 12	14:42	16h59.3m -22°42.0'	Jul 26	05:01	04h57.0m +22°38.8'
Aug 08	19:44	16h52.6m -22°31.8'	Aug 22	08:09	04h47.4m +22°23.2'
Sep 04	20:52	16h41.1m -22°11.8'	Sep 18	10:12	04h34.9m +21°59.6'
Oct 01	22:00	16h29.6m -21°48.5'	Oct 15	13:20	04h25.2m +21°39.0'
Oct 29	03:24	16h23.1m -21°34.1'	Nov 11	18:45	04h21.9m +21°31.2'
Nov 25	13:32 T	16h22.0m -21°31.5'	Dec 09	01:17 n	04h22.3m +21°32.1'
Dec 23	00:54	16h21.6m -21°30.7'			

Year	Ascending Node	RA	Dec.	Descending Node	RA	Dec.
2031				Jan 05 06:37	04h20.5m	+21°27.9'
	Jan 19 08:51	16h16.5m	-21°18.3'	Feb 01 09:25	04h12.2m	+21°07.6'
	Feb 15 11:21	16h05.2m	-20°49.0'	Feb 28 11:02	03h59.3m	+20°32.5'
	Mar 14 11:38	15h52.8m	-20°13.4'	Mar 27 14:22	03h48.4m	+19°59.8'
	Apr 10 14:56	15h45.2m	-19°49.9'	Apr 23 20:23	03h43.6m	+19°44.8'
	May 07 22:55 n	15h43.4m	-19°43.9'	May 21 03:26 A	03h43.5m	+19°44.3'
	Jun 04 09:20 n	15h43.5m	-19°44.2'	Jun 17 09:18	03h43.1m	+19°42.9'
	Jul 01 18:35	15h40.7m	-19°35.0'	Jul 14 12:38	03h38.1m	+19°26.5'
	Jul 28 23:54	15h32.3m	-19°06.7'	Aug 10 14:10	03h27.8m	+18°50.6'
	Aug 25 01:21	15h20.6m	-18°24.2'	Sep 06 16:34	03h16.0m	+18°06.7'
	Sep 21 02:24	15h10.7m	-17°46.1'	Oct 03 22:04	03h08.1m	+17°35.7'
	Oct 18 06:54	15h06.4m	-17°28.6'	Oct 31 06:09 n	03h06.0m	+17°27.2'
	Nov 14 15:32 H	15h06.2m	-17°28.0'	Nov 27 14:01	03h06.3m	+17°28.5'
	Dec 12 01:37	15h05.2m	-17°24.0'	Dec 24 18:44	03h03.5m	+17°16.8'
2032	Jan 08 08:58	14h58.5m	-16°56.1'	Jan 20 20:00	02h54.2m	+16°37.8'
	Feb 04 11:35	14h46.5m	-16°03.6'	Feb 16 21:13	02h41.6m	+15°41.4'
	Mar 02 12:11	14h35.2m	-15°11.6'	Mar 15 02:16	02h32.2m	+14°57.2'
	Mar 29 15:09	14h29.5m	-14°44.7'	Apr 11 11:00	02h29.0m	+14°41.8'
	Apr 25 21:52 t	14h28.9m	-14°41.5'	May 08 20:11 A	02h29.1m	+14°42.5'
	May 23 06:27	14h28.8m	-14°41.0'	Jun 05 02:41	02h27.7m	+14°35.9'
	Jun 19 13:56	14h24.7m	-14°21.0'	Jul 02 05:24	02h21.5m	+14°05.1'
	Jul 16 18:15	14h15.4m	-13°34.4'	Jul 29 06:13	02h11.0m	+13°11.6'
	Aug 12 19:55	14h04.2m	-12°36.1'	Aug 25 09:01	02h00.5m	+12°16.4'
	Sep 08 21:41	13h56.1m	-11°52.8'	Sep 21 16:10	01h54.6m	+11°44.3'
	Oct 06 02:03	13h53.4m	-11°38.0'	Oct 19 02:27 t	01h53.5m	+11°38.5'

Nov 02 09:04 P 13h53.8m -11°39.7' Nov 15 12:07 01h53.4m +11°37.8'
Nov 29 16:30 13h52.0m -11°30.1' Dec 12 17:34 01h49.2m +11°14.9'
Dec 26 21:36 13h44.4m -10°47.5'

2033 Jan 08 18:31 01h39.4m +10°19.3'
Jan 22 23:41 13h32.5m -09°39.5' Feb 04 19:25 01h27.8m +09°12.0'
Feb 19 01:22 13h22.6m -08°41.4' Mar 04 01:01 01h20.3m +08°27.8'
Mar 18 05:18 13h18.5m -08°17.2' Mar 31 11:09 T 01h18.5m +08°16.8'
Apr 14 11:28 t 13h18.6m -08°17.5' Apr 27 21:57 01h18.6m +08°17.3'
May 11 17:56 13h18.0m -08°13.9' May 25 05:37 01h15.9m +08°01.6'
Jun 07 22:45 13h12.8m -07°42.8' Jun 21 08:42 01h08.5m +07°16.1'
Jul 05 01:29 13h03.1m -06°43.5' Jul 18 09:20 00h58.1m +06°12.4'
Aug 01 03:38 12h52.9m -05°39.5' Aug 14 11:54 00h49.4m +05°17.9'
Aug 28 07:12 12h46.4m -04°59.0' Sep 10 19:07 00h45.4m +04°52.9'
Sep 24 12:46 P 12h44.9m -04°49.6' Oct 08 05:55 t 00h45.2m +04°51.1'
Oct 21 19:04 12h45.3m -04°51.8' Nov 04 16:35 00h44.3m +04°45.6'
Nov 18 00:01 12h42.6m -04°35.0' Dec 01 23:03 00h38.6m +04°09.3'
Dec 15 02:35 12h34.2m -03°41.1' Dec 29 00:23 00h28.0m +03°01.1'

2034 Jan 11 04:21 12h22.5m -02°26.2' Jan 25 00:56 00h17.5m +01°53.3'
Feb 07 08:04 12h13.8m -01°29.8' Feb 21 05:47 00h12.0m +01°17.6'
Mar 06 14:21 12h11.0m -01°11.4' Mar 20 15:22 T 00h11.2m +01°12.5'
Apr 02 21:12 n 12h11.3m -01°13.5' Apr 17 02:12 00h10.9m +01°10.6'
Apr 30 02:20 12h09.9m -01°04.1' May 14 10:17 00h06.7m +00°43.6'
May 27 04:57 12h03.5m -00°22.7' Jun 10 13:46 23h57.8m -00°14.6'
Jun 23 06:36 11h53.3m +00°43.7' Jul 07 14:33 23h47.4m -01°21.6'
Jul 20 09:54 11h43.7m +01°46.2' Aug 03 16:44 23h40.2m -02°08.2'
Aug 16 16:01 11h38.5m +02°19.5' Aug 30 22:58 23h37.9m -02°23.6'
Sep 12 23:47 A 11h37.8m +02°24.0' Sep 27 08:33 p 23h38.0m -02°22.7'
Oct 10 06:34 11h37.8m +02°23.8' Oct 24 18:23 23h36.2m -02°34.4'
Nov 06 10:15 11h34.0m +02°48.6' Nov 21 00:41 23h28.8m -03°22.0'
Dec 03 11:15 11h24.5m +03°49.6' Dec 18 02:21 23h17.2m -04°35.8'
Dec 30 13:10 11h12.8m +05°03.8'

2035 Jan 14 03:01 23h07.5m -05°37.4'
Jan 26 19:11 11h05.1m +05°52.5' Feb 10 07:03 23h03.4m -06°02.6'
Feb 23 04:20 n 11h03.2m +06°04.3' Mar 09 15:01 A 23h03.4m -06°02.8'
Mar 22 12:53 11h03.4m +06°02.8' Apr 06 00:06 23h02.5m -06°08.7'
Apr 18 17:57 11h00.7m +06°19.4' May 03 06:54 22h56.7m -06°44.5'
May 15 19:31 10h52.9m +07°07.8' May 30 10:00 22h46.4m -07°47.3'
Jun 11 20:42 10h42.1m +08°13.4' Jun 26 11:14 22h36.2m -08°48.7'

Jul 09 01:03 10h33.2m +09°06.3' Jul 23 13:46 22h30.2m -09°23.7'
Aug 05 09:20 10h29.3m +09°28.9' Aug 19 19:18 p 22h29.0m -09°30.8'
Sep 01 19:14 T 10h29.2m +09°29.9' Sep 16 02:58 22h29.3m -09°29.5'
Sep 29 03:21 10h28.4m +09°34.1' Oct 13 10:19 22h26.3m -09°46.8'
Oct 26 07:11 10h23.1m +10°05.2' Nov 09 14:55 22h17.5m -10°37.3'
Nov 22 07:40 10h12.5m +11°05.2' Dec 06 16:36 22h05.4m -11°44.1'
Dec 19 09:33 10h01.2m +12°07.3'

2036 Jan 02 18:21 21h56.5m -12°32.5'
Jan 15 16:39 09h54.7m +12°41.7' Jan 29 22:45 21h53.6m -12°47.7'
Feb 12 03:38 t 09h53.7m +12°47.3' Feb 26 05:24 P 21h54.0m -12°45.8'
Mar 10 13:58 09h53.4m +12°48.7' Mar 24 11:54 21h52.1m -12°55.4'
Apr 06 19:59 09h49.1m +13°11.3' Apr 20 16:14 21h44.7m -13°33.7'
May 03 21:32 09h39.6m +13°59.8' May 17 18:30 21h33.5m -14°29.9'
May 30 22:23 09h28.5m +14°53.9' Jun 13 20:47 21h23.6m -15°17.3'
Jun 27 02:46 09h20.9m +15°29.9' Jul 11 00:53 21h18.8m -15°39.7'
Jul 24 11:36 P 09h18.4m +15°41.3' Aug 07 06:48 t 21h18.4m -15°41.3'
Aug 20 22:29 P 09h18.5m +15°40.9' Sep 03 12:59 21h18.4m -15°41.5'
Sep 17 07:43 09h16.6m +15°49.7' Sep 30 17:36 21h14.0m -16°01.2'
Oct 14 12:21 09h09.2m +16°22.7' Oct 27 20:06 21h03.8m -16°45.9'
Nov 10 12:58 08h57.4m +17°13.0' Nov 23 22:06 20h51.6m -17°36.9'
Dec 07 14:24 08h46.9m +17°55.6' Dec 21 02:03 20h43.4m -18°09.0'

2037 Jan 03 20:54 08h42.1m +18°14.1' Jan 17 08:20 P 20h41.5m -18°16.3'
Jan 31 07:43 t 08h41.8m +18°15.3' Feb 13 14:49 20h41.9m -18°14.8'
Feb 27 18:35 08h40.6m +18°19.8' Mar 12 19:15 20h38.8m -18°26.5'
Mar 27 01:19 08h34.0m +18°44.1' Apr 08 21:20 20h29.6m -19°00.0'
Apr 23 03:14 08h22.6m +19°24.3' May 05 23:13 20h17.3m -19°41.5'
May 20 03:56 08h11.4m +20°00.4' Jun 02 03:23 20h07.8m -20°11.4'
Jun 16 07:41 08h05.2m +20°19.2' Jun 29 10:01 20h04.1m -20°22.6'
Jul 13 15:35 T 08h04.0m +20°22.8' Jul 26 17:23 p 20h04.2m -20°22.2'
Aug 10 01:40 08h04.0m +20°22.8' Aug 22 23:10 20h03.4m -20°24.7'
Sep 06 10:34 08h00.5m +20°33.1' Sep 19 02:02 19h57.3m -20°41.9'
Oct 03 15:23 07h50.8m +20°59.6' Oct 16 03:12 19h45.7m -21°12.8'
Oct 30 16:21 07h37.9m +21°31.7' Nov 12 05:59 19h33.2m -21°42.3'
Nov 26 17:38 07h28.2m +21°53.2' Dec 09 12:36 19h26.1m -21°57.7'
Dec 23 22:59 07h24.9m +21°59.9'

2038 Jan 05 21:32 A 19h25.0m -21°59.9'
Jan 20 08:06 n 07h25.2m +21°59.4' Feb 02 05:08 19h24.9m -22°00.0'
Feb 16 17:30 07h22.8m +22°04.2' Mar 01 08:52 19h20.2m -22°09.3'
Mar 15 23:29 07h14.0m +22°20.7' Mar 28 09:42 19h09.1m -22°29.0'
Apr 12 01:27 07h01.0m +22°41.6' Apr 24 11:37 18h56.2m -22°48.3'
May 09 02:33 06h50.2m +22°55.9' May 21 17:34 18h47.6m -22°58.9'
Jun 05 06:06 06h45.4m +23°01.4' Jun 18 02:42 n 18h45.1m -23°01.8'
Jul 02 12:47 A 06h45.2m +23°01.7' Jul 15 11:58 n 18h45.3m -23°01.6'
Jul 29 20:50 06h44.7m +23°02.2' Aug 11 18:25 18h43.2m -23°03.8'
Aug 26 03:40 06h39.5m +23°07.5' Sep 07 20:51 18h35.3m -23°11.1'
Sep 22 07:26 06h28.2m +23°16.6' Oct 04 21:28 18h22.8m -23°19.9'
Oct 19 08:51 06h15.3m +23°23.2' Nov 01 00:41 18h11.2m -23°24.6'
Nov 15 11:00 06h06.9m +23°25.5' Nov 28 08:54 18h05.7m -23°25.7'
Dec 12 16:05 n 06h05.0m +23°25.8' Dec 25 19:56 T 18h05.2m -23°25.8'

2039 Jan 08 23:18 06h05.4m +23°25.7' Jan 22 05:13 18h04.2m -23°25.8'
Feb 05 05:55 06h01.8m +23°26.0' Feb 18 09:34 17h57.6m -23°25.9'
Mar 04 09:49 05h51.4m +23°25.2' Mar 17 10:05 17h45.4m -23°23.5'
Mar 31 11:40 05h38.0m +23°20.4' Apr 13 11:46 17h33.2m -23°17.4'
Apr 27 14:05 05h28.4m +23°14.2' May 10 18:11 17h26.5m -23°12.6'
May 24 18:40 05h25.1m +23°11.5' Jun 07 04:24 p 17h25.2m -23°11.7'
Jun 21 00:51 A 05h25.4m +23°11.8' Jul 04 14:57 17h25.1m -23°11.6'
Jul 18 06:48 05h24.2m +23°10.8' Jul 31 22:26 17h21.3m -23°08.3'
Aug 14 10:57 05h17.5m +23°04.4' Aug 28 01:19 17h11.8m -22°58.4'
Sep 10 13:18 05h05.7m +22°50.8' Sep 24 01:47 16h59.4m -22°42.3'
Oct 07 15:37 04h53.7m +22°33.5' Oct 21 04:37 16h49.8m -22°27.4'
Nov 03 19:55 04h47.0m +22°22.4' Nov 17 12:34 16h46.3m -22°21.1'
Dec 01 02:11 p 04h46.1m +22°20.9' Dec 14 23:54 T 16h46.3m -22°21.2'
Dec 28 08:24 04h46.2m +22°21.1'

2040 Jan 11 10:06 16h44.1m -22°17.3'
Jan 24 12:28 04h41.3m +22°12.3' Feb 07 15:18 16h35.4m -22°00.7'
Feb 20 14:18 04h30.0m +21°49.4' Mar 05 16:03 16h22.6m -21°33.0'
Mar 18 16:29 04h17.1m +21°19.8' Apr 01 17:18 16h12.0m -21°07.1'
Apr 14 21:15 04h08.9m +20°59.1' Apr 28 22:56 16h07.4m -20°55.1'
May 12 04:05 P 04h06.9m +20°53.6' May 26 08:27 t 16h07.2m -20°54.4'
Jun 08 10:51 04h07.3m +20°54.6' Jun 22 18:43 16h06.4m -20°52.4'
Jul 05 15:32 04h05.0m +20°48.5' Jul 20 02:18 16h00.9m -20°37.1'
Aug 01 17:44 03h57.1m +20°26.1' Aug 16 05:30 15h50.1m -20°05.2'
Aug 28 19:18 03h45.1m +19°49.6' Sep 12 06:11 15h38.3m -19°27.4'
Sep 24 23:04 03h34.4m +19°14.2' Oct 09 08:33 15h30.8m -19°01.7'

Oct 22 06:09 03h29.4m +18°56.7' Nov 05 15:13 P 15h29.0m -18°55.1'
Nov 18 14:37 t 03h29.2m +18°55.8' Dec 03 01:02 15h29.2m -18°55.6'
Dec 15 21:13 03h28.6m +18°53.6' Dec 30 10:13 15h25.7m -18°43.2'

Year Ascending Node RA Dec. Descending Node RA Dec.

2041 Jan 12 00:01 03h22.5m +18°31.4' Jan 26 15:09 15h15.6m -18°05.4'
Feb 08 00:39 03h10.6m +17°45.8' Feb 22 16:13 15h02.9m -17°14.5'
Mar 07 03:29 02h58.6m +16°56.6' Mar 21 17:35 14h54.0m -16°36.8'
Apr 03 10:39 02h52.3m +16°29.3' Apr 17 22:27 14h51.2m -16°24.4'
Apr 30 20:05 T 02h51.3m +16°25.0' May 15 06:22 p 14h51.4m -16°25.7'
May 28 04:17 02h51.2m +16°24.9' Jun 11 14:42 14h49.8m -16°18.5'
Jun 24 08:57 02h47.7m +16°09.1' Jul 08 20:45 14h42.9m -15°47.7'
Jul 21 10:19 02h38.9m +15°28.9' Aug 04 23:33 14h31.9m -14°56.1'
Aug 17 11:36 02h27.5m +14°34.9' Sep 01 00:51 14h21.5m -14°05.1'
Sep 13 16:25 02h18.7m +13°51.3' Sep 28 03:42 14h15.9m -13°37.2'
Oct 11 01:30 02h15.4m +13°34.4' Oct 25 09:31 A 14h15.2m -13°33.8'
Nov 07 12:05 p 02h15.4m +13°34.6' Nov 21 17:04 14h15.2m -13°33.5'
Dec 04 20:02 02h13.8m +13°26.1' Dec 18 23:35 14h10.7m -13°10.1'
Dec 31 22:59 02h06.5m +12°48.3'

2042 Jan 15 03:00 14h00.1m -12°14.5'
Jan 27 23:09 01h54.9m +11°45.9' Feb 11 04:28 13h48.3m -11°09.9'
Feb 24 02:02 01h44.6m +10°49.1' Mar 10 07:08 13h41.1m -10°29.3'
Mar 23 10:11 01h40.2m +10°23.8' Apr 06 12:20 n 13h39.6m -10°20.5'
Apr 19 21:10 T 01h39.9m +10°22.4' May 03 18:54 13h40.0m -10°22.7'
May 17 06:49 01h39.1m +10°17.8' May 31 00:41 13h37.4m -10°08.0'
Jun 13 12:16 01h34.1m +09°48.9' Jun 27 04:23 13h29.7m -09°23.1'
Jul 10 13:42 01h24.6m +08°53.5' Jul 24 06:34 13h19.0m -08°19.8'
Aug 06 14:42 01h14.4m +07°52.3' Aug 20 09:13 13h10.0m -07°25.8'
Sep 02 19:23 01h07.8m +07°12.0' Sep 16 13:51 13h06.1m -07°01.7'
Sep 30 04:41 n 01h06.0m +07°00.8' Oct 13 20:03 A 13h06.1m -07°01.7'
Oct 27 16:01 01h06.0m +07°01.3' Nov 10 01:54 13h05.5m -06°58.3'
Nov 24 01:03 01h03.1m +06°43.3' Dec 07 05:37 13h00.0m -06°24.0'
Dec 21 04:46 00h54.4m +05°49.5'

2043 Jan 03 07:24 12h49.2m -05°16.5'
Jan 17 04:57 00h43.0m +04°37.7' Jan 30 09:53 12h38.2m -04°07.0'
Feb 13 07:12 00h34.7m +03°44.3' Feb 26 15:03 12h32.4m -03°30.0'
Mar 12 14:36 00h31.9m +03°26.4' Mar 25 21:58 t 12h31.7m -03°25.4'
Apr 09 01:17 T 00h32.0m +03°27.0' Apr 22 04:12 12h31.8m -03°25.7'

May 06 11:10 00h30.2m +03°15.4' May 19 08:03 12h28.1m -03°02.1'
Jun 02 17:02 00h23.5m +02°32.2' Jun 15 09:52 12h19.4m -02°06.2'
Jun 29 18:46 00h13.2m +01°26.1' Jul 12 12:01 12h08.9m -00°57.8'
Jul 26 19:43 00h04.0m +00°25.9' Aug 08 16:43 12h01.1m -00°07.4'
Aug 22 23:42 23h59.2m -00°05.3' Sep 04 23:58 11h58.4m +00°10.3'
Sep 19 07:48 t 23h58.5m -00°09.7' Oct 02 07:39 A 11h58.7m +00°08.6'
Oct 16 17:59 23h58.3m -00°11.1' Oct 29 13:05 11h57.3m +00°17.7'
Nov 13 02:29 23h53.9m -00°39.3' Nov 25 15:09 11h50.5m +01°01.6'
Dec 10 06:19 23h43.9m -01°44.7' Dec 22 16:01 11h39.2m +02°15.0'

2044 Jan 06 06:50 23h32.5m -02°58.5' Jan 18 19:49 11h28.9m +03°21.6'
Feb 02 08:49 23h25.5m -03°43.4' Feb 15 03:48 11h24.3m +03°51.0'
Feb 29 14:57 A 23h23.9m -03°53.2' Mar 13 13:10 t 11h24.1m +03°52.2'
Mar 27 23:51 23h24.1m -03°52.2' Apr 09 20:15 11h23.4m +03°56.5'
Apr 24 08:06 23h21.1m -04°11.4' May 06 23:24 11h18.3m +04°29.1'
May 21 13:03 23h12.8m -05°03.7' Jun 03 00:16 11h08.6m +05°30.5'
Jun 17 14:53 23h02.1m -06°11.3' Jun 30 02:39 10h58.2m +06°35.1'
Jul 14 16:24 22h53.6m -07°03.4' Jul 27 09:02 10h51.7m +07°15.2'
Aug 10 20:20 22h50.2m -07°24.1' Aug 23 18:33 T 10h50.1m +07°25.2'
Sep 07 03:06 t 22h50.3m -07°23.7' Sep 20 04:05 10h50.2m +07°24.3'
Oct 04 10:56 22h49.5m -07°28.6' Oct 17 10:18 10h47.6m +07°40.3'
Oct 31 17:08 22h43.7m -08°03.5' Nov 13 12:05 10h39.4m +08°29.4'
Nov 27 20:02 22h32.7m -09°09.0' Dec 10 12:32 10h27.8m +09°37.8'
Dec 24 21:19 22h21.6m -10°13.6'

2045 Jan 06 16:49 10h18.5m +10°31.2'
Jan 21 00:16 22h15.8m -10°46.8' Feb 03 02:18 10h15.2m +10°50.0'
Feb 17 06:00 A 22h15.2m -10°50.2' Mar 02 13:33 n 10h15.3m +10°49.6'
Mar 16 12:51 22h15.1m -10°50.5' Mar 29 22:04 10h13.4m +11°00.0'
Apr 12 18:23 22h10.8m -11°14.9' Apr 26 01:40 10h06.5m +11°38.4'
May 09 21:30 22h01.1m -12°07.5' May 23 02:17 09h55.8m +12°36.2'
Jun 05 23:31 21h50.1m -13°06.0' Jun 19 04:27 09h46.1m +13°26.8'
Jul 03 02:35 21h42.6m -13°44.8' Jul 16 11:05 09h41.1m +13°52.2'
Jul 30 07:42 21h40.3m -13°56.2' Aug 12 21:20 T 09h40.4m +13°55.8'
Aug 26 14:00 n 21h40.7m -13°54.1' Sep 09 07:56 09h40.1m +13°57.3'
Sep 22 19:34 21h39.0m -14°02.6' Oct 06 15:11 09h35.8m +14°18.8'
Oct 19 23:03 21h31.8m -14°38.3' Nov 02 17:28 09h25.8m +15°06.9'
Nov 16 00:56 21h20.0m -15°34.3' Nov 29 17:44 09h14.0m +16°01.2'
Dec 13 03:42 21h09.2m -16°22.8' Dec 26 21:24 09h06.2m +16°35.8'

2046 Jan 09 09:01 21h04.4m -16°43.7' Jan 23 06:24 p 09h04.2m +16°44.5'

Feb 05 15:45 A 21h04.4m -16°43.8' Feb 19 17:48 09h04.2m +16°44.4'
Mar 04 21:25 21h03.7m -16°46.7' Mar 19 03:00 09h00.8m +16°59.2'
Apr 01 00:32 20h57.7m -17°12.0' Apr 15 07:10 08h51.5m +17°37.4'
Apr 28 02:09 20h46.5m -17°57.0' May 12 07:55 08h39.7m +18°23.3'
May 25 04:58 20h35.2m -18°40.0' Jun 08 09:42 08h30.8m +18°55.8'
Jun 21 10:29 20h28.5m -19°03.9' Jul 05 15:30 08h27.4m +19°07.9'
Jul 18 17:49 p 20h27.1m -19°08.8' Aug 02 00:47 T 08h27.3m +19°08.0'
Aug 15 00:43 20h27.4m -19°07.6' Aug 29 10:45 08h26.2m +19°11.9'
Sep 11 05:06 20h24.5m -19°17.8' Sep 25 17:54 08h19.8m +19°33.6'
Oct 08 06:47 20h15.5m -19°47.6' Oct 22 20:31 08h07.9m +20°11.2'
Nov 04 08:16 20h02.7m -20°26.6' Nov 18 21:00 07h55.9m +20°45.9'
Dec 01 12:55 19h52.4m -20°55.3' Dec 16 00:01 07h49.5m +21°03.1'
Dec 28 21:09 19h48.7m -21°05.2'

2047 Jan 12 07:29 t 07h48.7m +21°05.3'
Jan 25 05:56 P 19h48.9m -21°04.7' Feb 08 17:13 07h48.4m +21°06.1'
Feb 21 11:46 19h47.1m -21°09.3' Mar 08 01:12 07h43.0m +21°19.5'
Mar 20 13:43 19h39.1m -21°28.8' Apr 04 05:01 07h31.6m +21°46.0'
Apr 16 14:32 19h26.5m -21°56.8' May 01 06:05 07h19.1m +22°11.4'
May 13 18:17 19h15.3m -22°18.5' May 28 08:07 07h11.2m +22°25.6'
Jun 10 02:05 19h09.8m -22°27.8' Jun 24 13:16 P 07h09.1m +22°29.0'
Jul 07 11:43 t 19h09.3m -22°28.8' Jul 21 20:52 P 07h09.5m +22°28.4'
Aug 03 19:59 19h09.0m -22°29.2' Aug 18 04:37 07h07.1m +22°32.2'
Aug 31 00:29 19h04.3m -22°36.6' Sep 14 10:02 06h58.8m +22°44.7'
Sep 27 01:32 18h53.7m -22°51.5' Oct 11 12:21 06h45.9m +23°00.8'
Oct 24 02:50 18h40.8m -23°06.0' Nov 07 13:43 06h34.6m +23°11.7'
Nov 20 08:31 18h31.9m -23°13.8' Dec 04 17:15 06h29.6m +23°15.5'
Dec 17 18:40 P 18h29.4m -23°15.6' Dec 31 23:38 t 06h29.6m +23°15.5'

2048 Jan 14 05:27 18h29.5m -23°15.6' Jan 28 06:52 06h28.7m +23°16.1'
Feb 10 12:30 18h26.1m -23°18.0' Feb 24 12:13 06h21.7m +23°20.3'
Mar 08 14:31 18h16.3m -23°22.8' Mar 22 14:49 06h09.1m +23°24.9'
Apr 04 14:57 18h03.3m -23°25.9' Apr 18 16:39 05h57.0m +23°25.8'
May 01 18:46 17h53.4m -23°25.5' May 15 20:07 05h50.5m +23°24.9'
May 29 03:20 17h49.7m -23°24.7' Jun 12 01:40 A 05h49.5m +23°24.6'
Jun 25 14:10 p 17h49.7m -23°24.7' Jul 09 07:58 05h49.8m +23°24.7'
Jul 22 23:38 17h48.3m -23°24.3' Aug 05 13:07 05h46.1m +23°23.7'
Aug 19 04:55 17h41.7m -23°21.9' Sep 01 16:14 05h36.5m +23°19.4'
Sep 15 06:06 17h30.0m -23°15.2' Sep 28 18:16 05h23.6m +23°10.1'
Oct 12 07:07 17h18.2m -23°04.9' Oct 25 21:25 05h13.7m +23°00.3'
Nov 08 12:22 17h11.4m -22°57.7' Nov 22 02:54 05h10.1m +22°56.3'

Dec 05 22:27 T 17h10.2m -22°56.5' Dec 19 09:29 n 05h10.5m +22°56.7'

2049 Jan 02 09:51 17h09.9m -22°56.0' Jan 15 14:48 05h08.7m +22°54.5'
Jan 29 17:52 17h04.6m -22°49.4' Feb 11 17:32 05h00.3m +22°43.4'
Feb 25 20:27 16h53.1m -22°32.6' Mar 10 19:09 04h47.2m +22°22.7'
Mar 24 20:47 16h40.5m -22°10.5' Apr 06 22:31 04h36.0m +22°01.7'
Apr 20 23:57 16h32.7m -21°55.0' May 04 04:33 04h31.1m +21°51.5'
May 18 07:42 n 16h30.7m -21°50.8' May 31 11:41 A 04h30.8m +21°51.1'
Jun 14 17:59 n 16h30.9m -21°51.1' Jun 27 17:38 04h30.5m +21°50.3'
Jul 12 03:19 16h28.1m -21°45.1' Jul 24 21:01 04h25.5m +21°39.5'
Aug 08 08:48 16h19.7m -21°25.8' Aug 20 22:31 04h15.0m +21°14.4'
Sep 04 10:20 16h07.5m -20°55.0' Sep 17 00:51 04h02.7m +20°41.8'
Oct 01 11:18 15h57.1m -20°26.0' Oct 14 06:20 03h54.4m +20°17.9'
Oct 28 15:39 15h52.5m -20°12.2' Nov 10 14:33 n 03h52.1m +20°11.1'
Nov 25 00:12 H 15h52.3m -20°11.8' Dec 07 22:33 03h52.4m +20°12.1'
Dec 22 10:13 15h51.3m -20°08.7'

2050 Jan 04 03:20 03h49.5m +20°03.1'
Jan 18 17:33 15h44.4m -19°47.0' Jan 31 04:35 03h40.0m +19°32.6'
Feb 14 20:12 15h32.0m -19°05.5' Feb 27 05:47 03h27.0m +18°47.7'
Mar 13 20:52 15h20.4m -18°23.3' Mar 26 10:48 03h17.2m +18°11.5'
Apr 09 23:48 15h14.5m -18°00.9' Apr 22 19:31 03h13.9m +17°58.4'
May 07 06:21 t 15h13.8m -17°58.1' May 20 04:46 H 03h14.0m +17°58.9'
Jun 03 14:47 15h13.7m -17°57.8' Jun 16 11:27 03h12.7m +17°53.8'
Jun 30 22:15 15h09.7m -17°41.9' Jul 13 14:19 03h06.4m +17°28.7'
Jul 28 02:39 15h00.2m -17°03.0' Aug 09 15:07 02h55.6m +16°43.5'
Aug 24 04:22 14h48.6m -16°12.8' Sep 05 17:45 02h44.7m +15°55.3'
Sep 20 06:06 14h40.0m -15°34.2' Oct 03 00:50 02h38.4m +15°26.5'
Oct 17 10:24 14h37.1m -15°20.6' Oct 30 11:12 t 02h37.2m +15°21.1'
Nov 13 17:21 P 14h37.5m -15°22.1' Nov 26 21:02 02h37.1m +15°20.4'
Dec 11 00:42 14h35.7m -15°13.8' Dec 24 02:37 02h32.8m +15°00.2'

Year Ascending Node RA Dec. Descending Node RA Dec.

2051 Jan 07 05:43 14h27.8m -14°36.1' Jan 20 03:36 02h22.7m +14°10.8'
Feb 03 07:49 14h15.6m -13°35.4' Feb 16 04:27 02h10.8m +13°10.4'
Mar 02 09:34 14h05.5m -12°42.8' Mar 15 09:57 02h03.1m +12°30.3'
Mar 29 13:32 14h01.3m -12°20.5' Apr 11 19:58 P 02h01.2m +12°20.0'
Apr 25 19:39 t 14h01.3m -12°20.6' May 09 06:46 02h01.3m +12°20.6'
May 23 02:03 14h00.8m -12°17.8' Jun 05 14:37 01h58.7m +12°06.8'
Jun 19 06:50 13h55.7m -11°50.2' Jul 02 17:54 01h51.2m +11°25.7'

Jul 16 09:35 13h45.9m -10°55.9' Jul 29 18:33 01h40.7m +10°26.5'
Aug 12 11:44 13h35.3m -09°55.6' Aug 25 20:56 01h31.6m +09°34.6'
Sep 08 15:18 13h28.5m -09°16.3' Sep 22 03:59 01h27.5m +09°10.2'
Oct 05 20:55 P 13h26.9m -09°06.8' Oct 19 14:46 t 01h27.1m +09°08.3'
Nov 02 03:14 13h27.3m -09°09.0' Nov 16 01:34 01h26.3m +09°03.2'
Nov 29 08:08 13h24.6m -08°53.2' Dec 13 08:09 01h20.4m +08°28.5'
Dec 26 10:39 13h16.0m -08°01.9'

2052 Jan 09 09:32 01h09.6m +07°23.1'
Jan 22 12:23 13h04.2m -06°49.9' Feb 05 10:04 00h59.0m +06°17.7'
Feb 18 16:11 12h55.4m -05°55.2' Mar 03 14:47 00h53.4m +05°43.1'
Mar 16 22:32 12h52.5m -05°37.1' Mar 31 00:11 T 00h52.7m +05°38.1'
Apr 13 05:26 n 12h52.8m -05°39.0' Apr 27 10:56 00h52.4m +05°36.4'
May 10 10:36 12h51.4m -05°30.4' May 24 19:07 00h48.3m +05°11.0'
Jun 06 13:15 12h45.2m -04°51.1' Jun 20 22:46 00h39.4m +04°14.7'
Jul 03 14:53 12h35.0m -03°46.2' Jul 17 23:36 00h29.0m +03°08.1'
Jul 30 18:07 12h25.2m -02°43.5' Aug 14 01:39 00h21.7m +02°20.7'
Aug 27 00:15 12h19.9m -02°09.1' Sep 10 07:41 00h19.2m +02°04.5'
Sep 23 08:07 A 12h19.1m -02°04.1' Oct 07 17:11 p 00h19.3m +02°05.5'
Oct 20 15:02 12h19.2m -02°04.4' Nov 04 03:03 00h17.6m +01°54.0'
Nov 16 18:46 12h15.4m -01°39.7' Dec 01 09:24 00h10.2m +01°06.0'
Dec 13 19:44 12h05.9m -00°38.1' Dec 28 11:06 23h58.6m -00°09.0'

2053 Jan 09 21:36 11h54.2m +00°37.6' Jan 24 11:46 23h48.9m -01°12.0'
Feb 06 03:39 11h46.5m +01°27.5' Feb 20 15:44 23h44.9m -01°38.0'
Mar 05 12:51 n 11h44.7m +01°39.7' Mar 19 23:33 A 23h44.9m -01°38.2'
Apr 01 21:29 11h44.9m +01°38.2' Apr 16 08:30 23h44.0m -01°43.8'
Apr 29 02:42 11h42.3m +01°54.7' May 13 15:17 23h38.4m -02°19.8'
May 26 04:22 11h34.8m +02°43.6' Jun 09 18:30 23h28.5m -03°24.2'
Jun 22 05:29 11h24.2m +03°51.5' Jul 06 19:46 23h18.3m -04°28.8'
Jul 19 09:41 11h15.4m +04°47.8' Aug 02 22:15 23h12.3m -05°06.9'
Aug 15 17:54 11h11.4m +05°12.7' Aug 30 03:39 n 23h11.1m -05°15.0'
Sep 12 03:56 T 11h11.2m +05°14.1' Sep 26 11:14 23h11.3m -05°13.4'
Oct 09 12:15 11h10.5m +05°18.3' Oct 23 18:33 23h08.4m -05°31.3'
Nov 05 16:13 11h05.3m +05°51.1' Nov 19 23:07 22h59.8m -06°25.2'
Dec 02 16:41 10h54.9m +06°55.6' Dec 17 00:48 22h48.0m -07°37.6'
Dec 29 18:29 10h43.8m +08°03.1'

2054 Jan 13 02:36 22h39.2m -08°30.5'
Jan 26 01:32 10h37.5m +08°40.6' Feb 09 07:02 22h36.4m -08°47.2'
Feb 22 12:29 t 10h36.5m +08°46.7' Mar 08 13:36 P 22h36.8m -08°45.1'

Mar 21 22:53 10h36.3m +08°48.2' Apr 04 20:01 22h35.1m -08°55.2'
Apr 18 05:03 10h32.1m +09°12.5' May 02 00:18 22h28.0m -09°36.4'
May 15 06:44 10h23.0m +10°05.3' May 29 02:37 22h17.3m -10°38.3'
Jun 11 07:33 10h12.4m +11°05.7' Jun 25 04:56 22h07.6m -11°32.3'
Jul 08 11:43 10h04.9m +11°47.2' Jul 22 09:02 22h02.8m -11°58.7'
Aug 04 20:23 P 10h02.3m +12°00.9' Aug 18 14:57 t 22h02.3m -12°00.9'
Sep 01 07:18 P 10h02.4m +12°00.5' Sep 14 21:07 22h02.3m -12°01.0'
Sep 28 16:44 10h00.6m +12°10.2' Oct 12 01:43 21h58.2m -12°23.2'
Oct 25 21:32 09h53.5m +12°48.3' Nov 08 04:08 21h48.3m -13°15.0'
Nov 21 22:10 09h42.0m +13°47.5' Dec 05 06:07 21h36.4m -14°15.6'
Dec 18 23:30 09h31.8m +14°38.3'

2055 Jan 01 10:10 21h28.4m -14°54.3'
Jan 15 05:53 09h27.1m +15°00.6' Jan 28 16:32 P 21h26.5m -15°03.2'
Feb 11 16:36 t 09h26.8m +15°02.1' Feb 24 23:02 21h26.9m -15°01.4'
Mar 11 03:26 09h25.7m +15°07.3' Mar 24 03:28 21h24.0m -15°15.3'
Apr 07 10:16 09h19.4m +15°36.5' Apr 20 05:33 21h15.3m -15°55.6'
May 04 12:19 09h08.5m +16°25.8' May 17 07:26 21h03.5m -16°47.3'
May 31 13:01 08h57.7m +17°11.8' Jun 13 11:33 20h54.2m -17°26.1'
Jun 27 16:35 08h51.6m +17°36.8' Jul 10 18:14 20h50.4m -17°41.4'
Jul 25 00:16 T 08h50.3m +17°41.9' Aug 07 01:42 p 20h50.5m -17°41.2'
Aug 21 10:18 08h50.4m +17°41.7' Sep 03 07:35 20h49.8m -17°44.0'
Sep 17 19:18 08h47.0m +17°54.9' Sep 30 10:30 20h44.0m -18°06.5'
Oct 15 00:14 08h37.7m +18°30.6' Oct 27 11:35 20h32.7m -18°48.8'
Nov 11 01:13 08h25.0m +19°15.7' Nov 23 14:19 20h20.5m -19°31.2'
Dec 08 02:26 08h15.5m +19°47.4' Dec 20 21:00 20h13.4m -19°54.0'

2056 Jan 04 07:42 08h12.3m +19°57.5' Jan 17 06:04 A 20h12.3m -19°57.5'
Jan 31 16:41 n 08h12.5m +19°56.8' Feb 13 13:45 20h12.3m -19°57.5'
Feb 28 01:59 08h10.3m +20°03.8' Mar 11 17:34 20h07.7m -20°11.6'
Mar 26 07:57 08h01.8m +20°29.1' Apr 07 18:26 19h57.1m -20°42.5'
Apr 22 10:02 07h49.2m +21°03.6' May 04 20:18 19h44.6m -21°15.4'
May 19 11:10 07h38.6m +21°29.8' Jun 01 02:08 19h36.1m -21°35.7'
Jun 15 14:37 07h33.8m +21°40.8' Jun 28 11:14 n 19h33.5m -21°41.7'
Jul 12 21:09 A 07h33.5m +21°41.5' Jul 25 20:38 n 19h33.7m -21°41.3'
Aug 09 05:07 07h33.2m +21°42.3' Aug 22 03:18 19h31.7m -21°45.6'
Sep 05 11:57 07h28.2m +21°53.2' Sep 18 05:52 19h24.1m -22°01.5'
Oct 02 15:45 07h17.1m +22°14.9' Oct 15 06:24 19h11.7m -22°24.6'
Oct 29 17:10 07h04.2m +22°36.6' Nov 11 09:30 19h00.1m -22°42.8'
Nov 25 19:20 06h55.8m +22°48.7' Dec 08 17:42 18h54.6m -22°50.4'
Dec 23 00:24 n 06h53.8m +22°51.3'

2057 Jan 05 04:48 T 18h54.1m -22°51.0'
Jan 19 07:32 06h54.2m +22°50.8' Feb 01 14:12 18h53.1m -22°52.1'
Feb 15 14:03 06h50.7m +22°55.2' Feb 28 18:40 18h46.6m -22°59.9'
Mar 14 17:54 06h40.5m +23°06.3' Mar 27 19:16 18h34.6m -23°11.6'
Apr 10 19:48 06h27.4m +23°17.0' Apr 23 20:52 18h22.5m -23°19.8'
May 07 22:16 06h17.7m +23°22.2' May 21 03:05 18h15.7m -23°22.9'
Jun 04 02:51 06h14.2m +23°23.4' Jun 17 13:09 p 18h14.3m -23°23.5'
Jul 01 09:00 A 06h14.6m +23°23.4' Jul 14 23:47 18h14.3m -23°23.5'
Jul 28 14:55 06h13.5m +23°23.7' Aug 11 07:29 18h10.6m -23°24.6'
Aug 24 19:03 06h06.9m +23°25.2' Sep 07 10:33 18h01.1m -23°25.9'
Sep 20 21:22 05h54.9m +23°25.5' Oct 04 10:59 17h48.5m -23°24.4'
Oct 17 23:41 05h42.6m +23°22.3' Oct 31 13:39 17h38.6m -23°20.6'
Nov 14 04:02 05h35.7m +23°18.8' Nov 27 21:30 17h35.0m -23°18.4'
Dec 11 10:23 p 05h34.8m +23°18.3' Dec 25 08:50 T 17h35.0m -23°18.4'

2058 Jan 07 16:37 05h34.9m +23°18.4' Jan 21 19:04 17h32.7m -23°17.1'
Feb 03 20:37 05h30.0m +23°15.2' Feb 18 00:21 17h24.0m -23°10.4'
Mar 02 22:25 05h18.5m +23°05.4' Mar 17 01:12 17h11.0m -22°57.3'
Mar 30 00:38 05h05.4m +22°50.4' Apr 13 02:25 17h00.2m -22°43.3'
Apr 26 05:25 04h57.1m +22°38.7' May 10 07:50 16h55.5m -22°36.3'
May 23 12:18 P 04h54.9m +22°35.3' Jun 06 17:09 t 16h55.2m -22°35.8'
Jun 19 19:09 P 04h55.3m +22°35.9' Jul 04 03:23 16h54.5m -22°34.8'
Jul 16 23:56 04h53.1m +22°32.6' Jul 31 11:07 16h49.0m -22°25.8'
Aug 13 02:08 04h45.1m +22°19.0' Aug 27 14:29 16h37.9m -22°05.6'
Sep 09 03:37 04h32.8m +21°55.2' Sep 23 15:09 16h25.7m -21°39.9'
Oct 06 07:21 04h21.6m +21°30.6' Oct 20 17:23 16h17.8m -21°21.5'
Nov 02 14:30 04h16.3m +21°17.9' Nov 16 23:56 P 16h15.8m -21°16.6'
Nov 29 23:07 t 04h16.0m +21°17.1' Dec 14 09:40 16h16.0m -21°17.0'
Dec 27 05:49 04h15.4m +21°15.5'

2059 Jan 10 18:48 16h12.4m -21°08.0'
Jan 23 08:38 04h09.1m +20°59.5' Feb 06 23:45 16h02.1m -20°40.3'
Feb 19 09:15 03h57.0m +20°25.7' Mar 06 00:53 15h49.0m -20°01.8'
Mar 18 12:04 03h44.7m +19°47.9' Apr 02 02:16 15h39.8m -19°32.2'
Apr 14 19:11 03h38.0m +19°26.3' Apr 29 07:01 15h36.9m -19°22.2'
May 12 04:37 T 03h36.9m +19°22.6' May 26 14:46 p 15h37.1m -19°23.2'
Jun 08 12:58 03h37.0m +19°22.6' Jun 22 23:01 15h35.6m -19°17.9'
Jul 05 17:49 03h33.4m +19°10.6' Jul 20 05:06 15h28.7m -18°53.8'
Aug 01 19:16 03h24.4m +18°38.6' Aug 16 07:59 15h17.3m -18°11.7'
Aug 28 20:26 03h12.6m +17°53.8' Sep 12 09:18 15h06.3m -17°28.5'

Sep 25 01:07 03h03.4m +17°16.5' Oct 09 12:05 15h00.4m -17°04.2'
Oct 22 10:13 02h59.8m +17°01.7' Nov 05 17:51 A 14h59.7m -17°01.0'
Nov 18 20:56 p 02h59.9m +17°01.8' Dec 03 01:20 14h59.7m -17°00.9'
Dec 16 05:03 02h58.1m +16°54.5' Dec 30 07:45 14h55.0m -16°41.0'

2060 Jan 12 08:04 02h50.6m +16°22.0' Jan 26 11:07 14h44.1m -15°53.1'
Feb 08 08:15 02h38.7m +15°27.9' Feb 22 12:39 14h32.0m -14°56.5'
Mar 06 11:03 02h28.2m +14°38.0' Mar 20 15:22 14h24.6m -14°20.5'
Apr 02 19:04 02h23.6m +14°15.5' Apr 16 20:33 n 14h22.9m -14°12.3'
Apr 30 05:58 T 02h23.2m +14°14.0' May 14 03:03 14h23.3m -14°14.3'
May 27 15:43 02h22.5m +14°10.3' Jun 10 08:48 14h20.8m -14°01.9'
Jun 23 21:23 02h17.5m +13°45.0' Jul 07 12:29 14h13.1m -13°22.3'
Jul 20 22:57 02h07.9m +12°55.4' Aug 03 14:41 14h02.1m -12°24.8'
Aug 16 23:52 01h57.3m +11°59.1' Aug 30 17:20 13h52.7m -11°34.2'
Sep 13 04:20 01h50.4m +11°21.0' Sep 26 21:59 13h48.6m -11°11.0'
Oct 10 13:33 n 01h48.4m +11°10.2' Oct 24 04:14 A 13h48.5m -11°10.8'
Nov 07 00:56 n 01h48.5m +11°10.6' Nov 20 10:05 13h48.0m -11°07.9'
Dec 04 10:07 01h45.5m +10°53.9' Dec 17 13:43 13h42.3m -10°36.0'
Dec 31 13:55 01h36.6m +10°03.4'

Year Ascending Node RA Dec. Descending Node RA Dec.

2061 Jan 13 15:27 13h31.3m -09°32.6'
Jan 27 14:07 01h25.0m +08°55.6' Feb 09 17:58 13h20.1m -08°26.8'
Feb 23 16:18 01h16.5m +08°05.0' Mar 08 23:14 13h14.2m -07°51.3'
Mar 22 23:32 01h13.6m +07°47.8' Apr 05 06:12 t 13h13.5m -07°46.7'
Apr 19 10:03 T 01h13.7m +07°48.3' May 02 12:29 13h13.6m -07°47.2'
May 16 19:55 01h12.0m +07°37.8' May 29 16:23 13h10.0m -07°25.4'
Jun 13 01:57 01h05.4m +06°57.2' Jun 25 18:12 13h01.4m -06°32.5'
Jul 10 03:50 00h55.1m +05°53.5' Jul 22 20:17 12h50.7m -05°25.9'
Aug 06 04:44 00h45.6m +04°54.0' Aug 19 00:57 12h42.7m -04°35.4'
Sep 02 08:31 00h40.6m +04°22.3' Sep 15 08:16 12h39.8m -04°17.2'
Sep 29 16:29 t 00h39.9m +04°17.6' Oct 12 16:05 A 12h40.1m -04°18.8'
Oct 27 02:38 00h39.7m +04°16.4' Nov 08 21:38 12h38.7m -04°10.0'
Nov 23 11:10 00h35.3m +03°48.7' Dec 05 23:41 12h31.9m -03°26.6'
Dec 20 15:02 00h25.2m +02°43.5'

2062 Jan 02 00:30 12h20.5m -02°13.3'
Jan 16 15:36 00h13.8m +01°29.6' Jan 29 04:17 12h10.2m -01°06.3'
Feb 12 17:33 00h06.8m +00°44.3' Feb 25 12:19 12h05.6m -00°36.6'
Mar 11 23:34 P 00h05.3m +00°34.3' Mar 24 21:44 t 12h05.4m -00°35.3'

Apr 08 08:18 00h05.5m +00°35.5' Apr 21 04:56 12h04.8m -00°31.2'
May 05 16:29 00h02.6m +00°16.8' May 18 08:14 11h59.9m +00°00.9'
Jun 01 21:30 23h54.6m -00°35.3' Jun 14 09:08 11h50.4m +01°02.6'
Jun 28 23:25 23h43.9m -01°44.3' Jul 11 11:24 11h40.1m +02°09.2'
Jul 26 00:55 23h35.5m -02°39.0' Aug 07 17:38 11h33.5m +02°51.7'
Aug 22 04:45 23h32.0m -03°01.6' Sep 04 03:11 P 11h31.8m +03°02.9'
Sep 18 11:25 t 23h32.0m -03°01.4' Oct 01 12:54 11h31.9m +03°01.9'
Oct 15 19:12 23h31.3m -03°06.1' Oct 28 19:18 11h29.4m +03°18.4'
Nov 12 01:21 23h25.6m -03°42.3' Nov 24 21:08 11h21.3m +04°09.8'
Dec 09 04:14 23h14.8m -04°51.4' Dec 21 21:32 11h09.9m +05°22.3'

2063 Jan 05 05:33 23h03.8m -06°00.2' Jan 18 01:44 11h00.8m +06°19.2'
Feb 01 08:33 22h58.1m -06°35.8' Feb 14 11:10 10h57.5m +06°39.2'
Feb 28 14:15 A 22h57.5m -06°39.6' Mar 13 22:26 p 10h57.6m +06°38.9'
Mar 27 21:01 22h57.5m -06°39.7' Apr 10 07:03 10h55.9m +06°49.7'
Apr 24 02:28 22h53.3m -07°05.1' May 07 10:50 10h49.2m +07°30.3'
May 21 05:36 22h44.1m -08°01.1' Jun 03 11:31 10h38.9m +08°32.4'
Jun 17 07:39 22h33.4m -09°05.0' Jun 30 13:32 10h29.4m +09°28.5'
Jul 14 10:44 22h25.9m -09°48.7' Jul 27 19:57 10h24.4m +09°57.4'
Aug 10 15:51 22h23.6m -10°02.2' Aug 24 06:07 T 10h23.7m +10°01.9'
Sep 06 22:09 n 22h24.0m -09°59.9' Sep 20 16:51 10h23.4m +10°03.3'
Oct 04 03:43 22h22.4m -10°08.9' Oct 18 00:18 10h19.2m +10°27.1'
Oct 31 07:08 22h15.4m -10°48.8' Nov 14 02:41 10h09.6m +11°21.6'
Nov 27 08:58 22h03.9m -11°52.6' Dec 11 02:54 09h58.0m +12°24.0'
Dec 24 11:46 21h53.4m -12°48.8'

2064 Jan 07 06:27 09h50.5m +13°04.0'
Jan 20 17:11 21h48.7m -13°13.2' Feb 03 15:20 p 09h48.5m +13°14.1'
Feb 16 23:59 A 21h48.7m -13°13.4' Mar 02 02:40 09h48.5m +13°14.0'
Mar 15 05:39 21h48.0m -13°16.6' Mar 29 11:52 09h45.3m +13°31.0'
Apr 11 08:46 21h42.4m -13°45.7' Apr 25 16:11 09h36.4m +14°15.4'
May 08 10:23 21h31.7m -14°38.4' May 22 17:02 09h25.1m +15°10.2'
Jun 04 13:10 21h20.7m -15°30.5' Jun 18 18:43 09h16.4m +15°50.5'
Jul 01 18:41 21h14.1m -16°00.8' Jul 16 00:17 09h12.9m +16°06.1'
Jul 29 02:05 p 21h12.7m -16°07.3' Aug 12 09:26 T 09h12.9m +16°06.4'
Aug 25 09:06 21h13.0m -16°05.7' Sep 08 19:25 09h11.9m +16°10.9'
Sep 21 13:35 21h10.3m -16°18.1' Oct 06 02:42 09h05.7m +16°37.9'
Oct 18 15:14 21h01.6m -16°55.6' Nov 02 05:22 08h54.2m +17°26.5'
Nov 14 16:38 20h49.1m -17°46.7' Nov 29 05:50 08h42.4m +18°12.7'
Dec 11 21:17 20h39.0m -18°25.5' Dec 26 08:47 08h36.2m +18°36.2'

2065 Jan 08 05:38 20h35.4m -18°39.1' Jan 22 16:09 t 08h35.3m +18°39.3'
Feb 04 14:31 P 20h35.6m -18°38.4' Feb 19 01:44 08h35.1m +18°40.3'
Mar 03 20:26 20h33.9m -18°44.7' Mar 18 09:40 08h30.0m +18°58.6'
Mar 30 22:27 20h26.3m -19°11.5' Apr 14 13:32 08h19.1m +19°35.9'
Apr 26 23:17 20h14.2m -19°51.8' May 11 14:42 08h06.9m +20°14.0'
May 24 02:55 20h03.2m -20°25.2' Jun 07 16:41 07h59.1m +20°36.9'
Jun 20 10:37 19h57.8m -20°40.7' Jul 04 21:42 P 07h57.0m +20°42.8'
Jul 17 20:19 t 19h57.1m -20°42.5' Aug 01 05:11 P 07h57.3m +20°41.8'
Aug 14 04:46 19h56.9m -20°43.1' Aug 28 12:53 07h55.2m +20°47.8'
Sep 10 09:27 19h52.4m -20°55.2' Sep 24 18:20 07h47.1m +21°09.0'
Oct 07 10:31 19h42.1m -21°21.5' Oct 21 20:40 07h34.5m +21°39.4'
Nov 03 11:43 19h29.4m -21°50.5' Nov 17 22:02 07h23.2m +22°03.3'
Nov 30 17:19 19h20.5m -22°08.6' Dec 15 01:34 07h18.2m +22°12.9'
Dec 28 03:31 P 19h18.0m -22°13.3'

2066 Jan 11 07:55 t 07h18.2m +22°12.9'
Jan 24 14:22 19h18.1m -22°13.1' Feb 07 15:03 07h17.4m +22°14.4'
Feb 20 21:32 19h14.8m -22°19.3' Mar 06 20:17 07h10.5m +22°26.5'
Mar 19 23:41 19h05.2m -22°35.2' Apr 02 22:54 06h58.2m +22°45.3'
Apr 16 00:07 18h52.4m -22°53.0' Apr 30 00:48 06h46.2m +23°00.3'
May 13 03:46 18h42.6m -23°04.2' May 27 04:17 06h39.6m +23°07.1'
Jun 09 12:08 18h38.9m -23°07.8' Jun 23 09:49 A 06h38.6m +23°08.0'
Jul 06 22:56 p 18h38.8m -23°07.9' Jul 20 16:05 06h38.9m +23°07.7'
Aug 03 08:34 18h37.5m -23°09.0' Aug 16 21:14 06h35.4m +23°10.9'
Aug 30 14:05 18h31.0m -23°14.3' Sep 13 00:19 06h25.9m +23°17.9'
Sep 26 15:21 18h19.3m -23°21.4' Oct 10 02:19 06h12.9m +23°23.8'
Oct 23 16:14 18h07.3m -23°25.1' Nov 06 05:30 06h02.7m +23°25.8'
Nov 19 21:21 18h00.4m -23°25.8' Dec 03 11:04 05h59.1m +23°25.8'
Dec 17 07:22 T 17h59.2m -23°25.9' Dec 30 17:42 n 05h59.5m +23°25.8'

2067 Jan 13 18:46 17h58.8m -23°25.8' Jan 26 22:59 05h57.7m +23°25.7'
Feb 10 02:51 17h53.5m -23°25.4' Feb 23 01:40 05h49.3m +23°24.4'
Mar 09 05:33 17h42.0m -23°22.0' Mar 22 03:17 05h36.1m +23°19.0'
Apr 05 05:55 17h29.3m -23°14.5' Apr 18 06:40 05h24.8m +23°10.9'
May 02 08:57 17h21.3m -23°08.0' May 15 12:44 05h19.6m +23°06.3'
May 29 16:28 n 17h19.2m -23°05.9' Jun 11 19:56 A 05h19.3m +23°06.1'
Jun 26 02:38 n 17h19.4m -23°06.0' Jul 09 01:59 05h19.0m +23°05.7'
Jul 23 12:01 17h16.7m -23°03.3' Aug 05 05:26 05h14.2m +23°00.7'
Aug 19 17:42 17h08.2m -22°53.7' Sep 01 06:54 05h03.4m +22°47.6'
Sep 15 19:19 16h55.7m -22°36.4' Sep 28 09:08 04h50.7m +22°28.4'
Oct 12 20:11 16h44.8m -22°18.3' Oct 25 14:38 04h42.0m +22°13.1'

Nov 09 00:25 16h40.0m -22°09.3' Nov 21 22:58 n 04h39.6m +22°08.6'
Dec 06 08:52 A 16h39.8m -22°09.1' Dec 19 07:06 04h39.9m +22°09.3'

2068 Jan 02 18:49 16h38.8m -22°07.1' Jan 15 11:57 04h36.9m +22°03.4'
Jan 30 02:06 16h31.7m -21°52.8' Feb 11 13:12 04h27.2m +21°43.0'
Feb 26 04:49 16h19.0m -21°24.2' Mar 09 14:23 04h13.9m +21°11.6'
Mar 24 05:33 16h07.1m -20°53.8' Apr 05 19:21 04h03.9m +20°45.1'
Apr 20 08:25 16h01.0m -20°37.0' May 03 04:02 04h00.3m +20°35.1'
May 17 14:48 p 16h00.2m -20°34.7' May 30 13:21 H 04h00.4m +20°35.3'
Jun 13 23:06 16h00.2m -20°34.7' Jun 26 20:13 03h59.2m +20°31.7'
Jul 11 06:33 15h56.2m -20°23.1' Jul 23 23:15 03h52.9m +20°13.2'
Aug 07 11:02 15h46.5m -19°53.7' Aug 20 00:01 03h41.7m +19°38.2'
Sep 03 12:48 15h34.4m -19°13.7' Sep 16 02:30 03h30.3m +18°59.3'
Sep 30 14:29 15h25.4m -18°41.8' Oct 13 09:31 03h23.6m +18°35.4'
Oct 27 18:44 15h22.3m -18°30.3' Nov 09 19:59 t 03h22.4m +18°30.7'
Nov 24 01:37 P 15h22.6m -18°31.5' Dec 07 05:58 03h22.2m +18°30.1'
Dec 21 08:54 15h20.8m -18°24.8'

2069 Jan 03 11:40 03h17.8m +18°13.5'
Jan 17 13:49 15h12.7m -17°53.7' Jan 30 12:42 03h07.3m +17°32.3'
Feb 13 15:55 15h00.2m -17°02.8' Feb 26 13:32 02h55.1m +16°41.3'
Mar 12 17:45 14h49.7m -16°17.8' Mar 25 18:54 02h47.2m +16°06.8'
Apr 08 21:44 14h45.3m -15°58.2' Apr 22 04:46 P 02h45.2m +15°57.7'
May 06 03:49 t 14h45.3m -15°58.1' May 19 15:35 P 02h45.3m +15°58.2'
Jun 02 10:09 14h44.9m -15°56.0' Jun 15 23:37 02h42.8m +15°46.7'
Jun 29 14:55 14h39.8m -15°32.8' Jul 13 03:06 02h35.2m +15°11.4'
Jul 26 17:40 14h29.7m -14°45.5' Aug 09 03:46 02h24.3m +14°18.9'
Aug 22 19:50 14h18.7m -13°51.1' Sep 05 05:58 02h14.9m +13°31.6'
Sep 18 23:24 14h11.6m -13°14.7' Oct 02 12:51 02h10.5m +13°08.8'
Oct 16 05:04 P 14h09.8m -13°05.6' Oct 29 23:39 t 02h10.1m +13°06.9'
Nov 12 11:24 14h10.2m -13°07.6' Nov 26 10:32 02h09.2m +13°02.3'
Dec 09 16:16 14h07.5m -12°53.4' Dec 23 17:14 02h03.2m +12°30.6'

2070 Jan 05 18:42 13h58.7m -12°06.4' Jan 19 18:41 01h52.1m +11°30.4'
Feb 01 20:26 13h46.6m -10°59.9' Feb 15 19:12 01h41.3m +10°29.7'
Mar 01 00:18 13h37.6m -10°08.9' Mar 14 23:47 01h35.6m +09°57.3'
Mar 28 06:44 13h34.6m -09°51.6' Apr 11 09:00 T 01h34.8m +09°52.5'
Apr 24 13:41 n 13h34.9m -09°53.3' May 08 19:39 01h34.5m +09°51.2'
May 21 18:54 13h33.6m -09°45.8' Jun 05 03:55 01h30.5m +09°28.0'
Jun 17 21:35 13h27.4m -09°09.8' Jul 02 07:45 01h21.6m +08°35.4'
Jul 14 23:10 13h17.1m -08°08.6' Jul 29 08:38 01h11.0m +07°31.6'

Aug 11 02:20 13h07.1m -07°07.6' Aug 25 10:33 01h03.4m +06°44.9'
Sep 07 08:29 13h01.5m -06°33.3' Sep 21 16:24 01h00.7m +06°28.5'
Oct 04 16:29 A 13h00.7m -06°28.0' Oct 19 01:49 p 01h00.9m +06°29.5'
Oct 31 23:32 13h00.7m -06°28.4' Nov 15 11:41 00h59.1m +06°18.5'
Nov 28 03:19 12h56.9m -06°04.6' Dec 12 18:04 00h51.6m +05°31.7'
Dec 25 04:13 12h47.3m -05°04.4'

Year Ascending Node RA Dec. Descending Node RA Dec.

2071 Jan 08 19:49 00h40.0m +04°18.0'
Jan 21 06:04 12h35.6m -03°49.8' Feb 04 20:30 00h30.2m +03°15.8'
Feb 17 12:08 12h27.8m -03°00.4' Mar 04 00:24 00h26.2m +02°49.9'
Mar 16 21:22 n 12h26.0m -02°48.1' Mar 31 08:03 A 00h26.2m +02°49.6'
Apr 13 06:06 12h26.2m -02°49.6' Apr 27 16:52 00h25.4m +02°44.4'
May 10 11:27 12h23.7m -02°33.9' May 24 23:39 00h20.0m +02°09.6'
Jun 06 13:14 12h16.3m -01°46.0' Jun 21 02:58 00h10.1m +01°05.8'
Jul 03 14:17 12h05.9m -00°38.1' Jul 18 04:18 24h00.0m -00°00.0'
Jul 30 18:19 11h57.0m +00°19.8' Aug 14 06:42 23h53.9m -00°39.9'
Aug 27 02:29 11h52.9m +00°46.3' Sep 10 12:00 n 23h52.5m -00°48.9'
Sep 23 12:38 T 11h52.6m +00°48.0' Oct 07 19:30 23h52.8m -00°47.1'
Oct 20 21:10 11h52.0m +00°52.1' Nov 04 02:46 23h50.0m -01°05.1'
Nov 17 01:15 11h46.8m +01°25.7' Dec 01 07:18 23h41.4m -02°00.6'
Dec 14 01:42 11h36.5m +02°32.4' Dec 28 08:59 23h29.7m -03°15.9'

2072 Jan 10 03:26 11h25.5m +03°42.8' Jan 24 10:50 23h21.1m -04°11.3'
Feb 06 10:25 11h19.4m +04°22.1' Feb 20 15:17 23h18.3m -04°29.0'
Mar 04 21:20 t 11h18.4m +04°28.5' Mar 18 21:48 P 23h18.7m -04°26.8'
Apr 01 07:46 11h18.2m +04°29.9' Apr 15 04:07 23h17.1m -04°36.9'
Apr 28 14:06 11h14.2m +04°54.9' May 12 08:23 23h10.3m -05°19.3'
May 25 15:57 11h05.5m +05°50.0' Jun 08 10:43 22h59.9m -06°24.7'
Jun 21 16:43 10h55.1m +06°54.4' Jul 05 13:03 22h50.4m -07°23.3'
Jul 18 20:41 10h47.6m +07°40.0' Aug 01 17:10 22h45.5m -07°52.8'
Aug 15 05:10 10h45.0m +07°55.7' Aug 28 23:05 t 22h45.0m -07°55.8'
Sep 11 16:07 T 10h45.1m +07°55.2' Sep 25 05:16 22h45.0m -07°55.6'
Oct 09 01:44 10h43.4m +08°05.5' Oct 22 09:49 22h41.1m -08°19.4'
Nov 05 06:42 10h36.4m +08°47.2' Nov 18 12:11 22h31.4m -09°16.4'
Dec 02 07:21 10h25.2m +09°53.0' Dec 15 14:09 22h19.7m -10°24.2'
Dec 29 08:37 10h15.2m +10°50.0'

2073 Jan 11 18:17 22h12.0m -11°07.9'
Jan 25 14:53 10h10.7m +11°15.2' Feb 08 00:44 P 22h10.1m -11°18.0'

Feb 22 01:28 t 10h10.4m +11°16.8' Mar 07 07:16 22h10.5m -11°16.0'
Mar 21 12:15 10h09.4m +11°22.5' Apr 03 11:42 22h07.8m -11°31.2'
Apr 17 19:11 10h03.4m +11°55.0' Apr 30 13:47 21h59.5m -12°16.3'
May 14 21:24 09h52.9m +12°51.1' May 27 15:39 21h48.2m -13°15.8'
Jun 10 22:06 09h42.5m +13°44.9' Jun 23 19:45 21h39.1m -14°02.0'
Jul 08 01:28 09h36.4m +14°15.3' Jul 21 02:27 21h35.3m -14°21.0'
Aug 04 08:57 T 09h35.1m +14°21.9' Aug 17 10:02 t 21h35.3m -14°21.0'
Aug 31 18:55 09h35.2m +14°21.5' Sep 13 16:02 21h34.7m -14°24.0'
Sep 28 04:00 09h32.0m +14°36.8' Oct 10 18:58 21h29.2m -14°50.7'
Oct 25 09:03 09h23.0m +15°20.0' Nov 06 19:59 21h18.1m -15°42.3'
Nov 21 10:04 09h10.6m +16°16.2' Dec 03 22:40 21h06.2m -16°35.6'
Dec 18 11:14 09h01.3m +16°56.5' Dec 31 05:26 20h59.3m -17°04.9'

2074 Jan 14 16:24 08h58.2m +17°09.5' Jan 27 14:36 A 20h58.3m -17°09.4'
Feb 11 01:16 n 08h58.5m +17°08.6' Feb 23 22:23 20h58.2m -17°09.5'
Mar 10 10:26 08h56.3m +17°17.3' Mar 23 02:17 20h53.9m -17°27.4'
Apr 06 16:25 08h48.3m +17°49.9' Apr 19 03:12 20h43.8m -18°07.4'
May 03 18:36 08h36.2m +18°35.8' May 16 05:00 20h31.7m -18°52.1'
May 30 19:46 08h25.9m +19°12.6' Jun 12 10:42 20h23.4m -19°21.2'
Jun 26 23:07 08h21.1m +19°28.9' Jul 09 19:46 n 20h20.7m -19°30.2'
Jul 24 05:30 A 08h20.8m +19°30.1' Aug 06 05:19 n 20h20.9m -19°29.7'
Aug 20 13:23 08h20.5m +19°31.0' Sep 02 12:11 20h19.1m -19°35.6'
Sep 16 20:14 08h15.7m +19°46.6' Sep 29 14:52 20h11.8m -19°59.1'
Oct 14 00:03 08h05.0m +20°19.7' Oct 26 15:21 19h59.6m -20°35.3'
Nov 10 01:28 07h52.2m +20°55.6' Nov 22 18:20 19h48.2m -21°06.2'
Dec 07 03:38 07h43.9m +21°17.0' Dec 20 02:32 19h42.7m -21°20.0'

2075 Jan 03 08:42 n 07h42.0m +21°21.7' Jan 16 13:41 T 19h42.3m -21°21.1'
Jan 30 15:45 07h42.4m +21°20.8' Feb 12 23:10 19h41.3m -21°23.3'
Feb 26 22:09 07h39.0m +21°28.9' Mar 12 03:46 19h35.0m -21°38.1'
Mar 26 01:58 07h29.1m +21°51.0' Apr 08 04:27 19h23.3m -22°03.0'
Apr 22 03:55 07h16.3m +22°16.3' May 05 05:59 19h11.5m -22°24.8'
May 19 06:26 07h06.7m +22°32.7' Jun 01 11:59 19h04.7m -22°35.8'
Jun 15 11:01 07h03.2m +22°38.1' Jun 28 21:55 p 19h03.2m -22°38.0'
Jul 12 17:08 A 07h03.4m +22°37.7' Jul 26 08:37 19h03.2m -22°38.1'
Aug 08 23:02 07h02.5m +22°39.1' Aug 22 16:33 18h59.7m -22°43.2'
Sep 05 03:09 06h56.1m +22°48.1' Sep 18 19:47 18h50.3m -22°55.5'
Oct 02 05:26 06h44.2m +23°02.3' Oct 15 20:11 18h37.7m -23°08.9'
Oct 29 07:44 06h31.8m +23°13.6' Nov 11 22:42 18h27.7m -23°16.7'
Nov 25 12:09 06h24.7m +23°18.4' Dec 09 06:27 18h24.0m -23°18.9'
Dec 22 18:35 p 06h23.8m +23°19.0'

2076 Jan 05 17:45 T 18h24.0m -23°18.9'
Jan 19 00:50 06h23.9m +23°18.9' Feb 02 04:01 18h21.8m -23°20.1'
Feb 15 04:47 06h19.1m +23°21.5' Feb 29 09:23 18h13.1m -23°23.6'
Mar 13 06:34 06h07.7m +23°25.1' Mar 27 10:20 18h00.1m -23°25.8'
Apr 09 08:47 05h54.6m +23°25.4' Apr 23 11:30 17h49.3m -23°24.4'
May 06 13:36 05h46.1m +23°23.5' May 20 16:43 17h44.4m -23°22.9'
Jun 02 20:31 P 05h43.7m +23°22.5' Jun 17 01:51 t 17h44.0m -23°22.8'
Jun 30 03:27 P 05h44.2m +23°22.7' Jul 14 12:03 17h43.4m -23°22.6'
Jul 27 08:20 05h42.1m +23°22.0' Aug 10 19:54 17h38.0m -23°20.1'
Aug 23 10:33 05h34.1m +23°17.8' Sep 06 23:25 17h26.8m -23°12.7'
Sep 19 11:58 05h21.6m +23°08.2' Oct 04 00:05 17h14.2m -23°00.7'
Oct 16 15:38 05h10.0m +22°56.0' Oct 31 02:13 17h06.0m -22°51.0'
Nov 12 22:52 05h04.5m +22°49.0' Nov 27 08:39 P 17h03.9m -22°48.2'
Dec 10 07:37 t 05h04.1m +22°48.6' Dec 24 18:18 17h04.1m -22°48.5'

2077 Jan 06 14:25 05h03.5m +22°47.7' Jan 21 03:21 17h00.5m -22°43.5'
Feb 02 17:16 04h57.1m +22°38.6' Feb 17 08:19 16h50.0m -22°27.2'
Mar 01 17:53 04h44.7m +22°18.2' Mar 16 09:32 16h36.6m -22°02.9'
Mar 28 20:39 04h32.2m +21°53.7' Apr 12 10:56 16h27.2m -21°43.0'
Apr 25 03:43 04h25.3m +21°38.9' May 09 15:33 16h24.0m -21°35.9'
May 22 13:10 T 04h24.1m +21°36.2' Jun 05 23:08 p 16h24.3m -21°36.6'
Jun 18 21:39 04h24.1m +21°36.3' Jul 03 07:19 16h22.8m -21°33.2'
Jul 16 02:42 04h20.7m +21°28.2' Jul 30 13:27 16h15.9m -21°16.6'
Aug 12 04:14 04h11.5m +21°05.6' Aug 26 16:24 16h04.2m -20°45.9'
Sep 08 05:17 03h59.3m +20°32.4' Sep 22 17:43 15h52.7m -20°12.8'
Oct 05 09:50 03h49.6m +20°03.4' Oct 19 20:28 15h46.4m -19°53.5'
Nov 01 18:57 03h45.8m +19°51.5' Nov 16 02:10 A 15h45.6m -19°50.9'
Nov 29 05:49 p 03h45.8m +19°51.5' Dec 13 09:35 15h45.6m -19°50.9'
Dec 26 14:03 03h44.0m +19°45.8'

2078 Jan 09 15:53 15h40.8m -19°35.3'
Jan 22 17:10 03h36.3m +19°20.1' Feb 05 19:13 15h29.6m -18°57.2'
Feb 18 17:22 03h23.9m +18°36.6' Mar 04 20:48 15h17.2m -18°11.2'
Mar 17 20:05 03h13.2m +17°55.7' Mar 31 23:35 15h09.5m -17°41.1'
Apr 14 03:56 03h08.4m +17°36.7' Apr 28 04:45 n 15h07.7m -17°33.9'
May 11 14:45 T 03h08.0m +17°35.4' May 25 11:12 15h08.1m -17°35.7'
Jun 08 00:37 03h07.3m +17°32.5' Jun 21 16:55 15h05.7m -17°25.8'
Jul 05 06:31 03h02.3m +17°11.8' Jul 18 20:35 14h57.8m -16°52.9'
Aug 01 08:13 02h52.4m +16°29.8' Aug 14 22:47 14h46.5m -16°03.4'
Aug 28 09:02 02h41.4m +15°40.5' Sep 11 01:26 14h36.7m -15°18.5'

Sep 24 13:18 02h34.1m +15°06.4' Oct 08 06:08 14h32.2m -14°57.3'
Oct 21 22:26 n 02h32.0m +14°56.4' Nov 04 12:25 A 14h32.1m -14°56.9'
Nov 18 09:52 n 02h32.1m +14°56.8' Dec 01 18:16 14h31.6m -14°54.4'
Dec 15 19:09 02h29.0m +14°41.9' Dec 28 21:50 14h25.8m -14°26.2'

2079 Jan 11 23:02 02h19.8m +13°56.7' Jan 24 23:31 14h14.4m -13°29.3'
Feb 07 23:17 02h07.9m +12°55.5' Feb 21 02:05 14h03.0m -12°29.6'
Mar 07 01:24 01h59.2m +12°09.4' Mar 20 07:24 13h56.9m -11°56.9'
Apr 03 08:26 01h56.3m +11°53.5' Apr 16 14:26 p 13h56.1m -11°52.4'
Apr 30 18:47 T 01h56.4m +11°54.0' May 13 20:46 13h56.2m -11°53.0'
May 28 04:40 01h54.7m +11°44.8' Jun 10 00:43 13h52.7m -11°33.8'
Jun 24 10:51 01h48.1m +11°08.2' Jul 07 02:33 13h44.0m -10°45.5'
Jul 21 12:53 01h37.6m +10°09.0' Aug 03 04:34 13h33.1m -09°43.0'
Aug 17 13:43 01h27.8m +09°12.2' Aug 30 09:11 13h24.8m -08°54.3'
Sep 13 17:20 01h22.6m +08°41.2' Sep 26 16:35 13h21.7m -08°36.2'
Oct 11 01:09 t 01h21.8m +08°36.4' Oct 24 00:33 A 13h21.9m -08°37.5'
Nov 07 11:17 01h21.6m +08°35.4' Nov 20 06:11 13h20.6m -08°29.3'
Dec 04 19:50 01h17.2m +08°09.0' Dec 17 08:14 13h13.7m -07°47.9'
Dec 31 23:44 01h06.9m +07°06.3'

2080 Jan 13 09:00 13h02.1m -06°37.2'
Jan 28 00:20 00h55.3m +05°54.8' Feb 09 12:47 12h51.7m -05°32.2'
Feb 24 02:16 00h48.3m +05°10.6' Mar 07 20:50 12h47.1m -05°03.1'
Mar 22 08:10 P 00h46.7m +05°00.6' Apr 04 06:19 t 12h46.8m -05°01.7'
Apr 18 16:44 00h46.9m +05°02.0' May 01 13:38 12h46.3m -04°58.0'
May 16 00:50 00h44.1m +04°44.5' May 28 17:05 12h41.4m -04°27.5'
Jun 12 05:55 00h36.2m +03°54.3' Jun 24 18:02 12h32.1m -03°27.5'
Jul 09 07:56 00h25.6m +02°46.0' Jul 21 20:09 12h21.7m -02°21.0'
Aug 05 09:26 00h17.0m +01°50.5' Aug 18 02:15 12h15.0m -01°37.3'
Sep 01 13:10 00h13.4m +01°26.8' Sep 14 11:50 P 12h13.1m -01°25.3'
Sep 28 19:44 t 00h13.3m +01°26.8' Oct 11 21:44 12h13.3m -01°26.3'
Oct 26 03:27 00h12.7m +01°22.3' Nov 08 04:19 12h10.8m -01°09.9'
Nov 22 09:33 00h07.1m +00°46.0' Dec 05 06:12 12h02.7m -00°17.8'
Dec 19 12:25 23h56.2m -00°24.4'

Year Ascending Node RA Dec. Descending Node RA Dec.

2081 Jan 01 06:33 11h51.3m +00°56.2'
Jan 15 13:46 23h45.4m -01°34.9' Jan 28 10:41 11h42.4m +01°54.6'
Feb 11 16:49 23h39.7m -02°11.6' Feb 24 20:03 11h39.2m +02°15.2'
Mar 10 22:30 A 23h39.1m -02°15.7' Mar 24 07:17 p 11h39.2m +02°14.8'

Apr 07 05:10 23h39.1m -02°15.6' Apr 20 16:02 11h37.5m +02°25.6'
May 04 10:34 23h35.2m -02°41.0' May 17 20:00 11h31.1m +03°06.9'
May 31 13:42 23h26.2m -03°38.3' Jun 13 20:45 11h21.1m +04°11.2'
Jun 27 15:47 23h15.7m -04°45.3' Jul 10 22:38 11h11.7m +05°10.7'
Jul 24 18:52 23h08.2m -05°32.5' Aug 07 04:49 11h06.7m +05°42.3'
Aug 21 00:00 23h05.8m -05°47.8' Sep 03 14:55 T 11h05.9m +05°47.6'
Sep 17 06:18 n 23h06.2m -05°45.5' Oct 01 01:46 11h05.7m +05°48.9'
Oct 14 11:52 23h04.7m -05°54.6' Oct 28 09:25 11h01.6m +06°14.1'
Nov 10 15:13 22h57.9m -06°37.1' Nov 24 11:52 10h52.1m +07°13.0'
Dec 07 17:00 22h46.6m -07°46.4' Dec 21 12:04 10h40.8m +08°21.1'

2082 Jan 03 19:51 22h36.3m -08°48.0' Jan 17 15:31 10h33.4m +09°05.0'
Jan 31 01:22 22h31.7m -09°15.0' Feb 14 00:16 p 10h31.5m +09°16.1'
Feb 27 08:13 A 22h31.7m -09°15.3' Mar 13 11:29 10h31.5m +09°15.9'
Mar 26 13:54 22h31.1m -09°18.7' Apr 09 20:43 10h28.4m +09°34.1'
Apr 22 17:02 22h25.7m -09°50.0' May 07 01:12 10h20.0m +10°22.8'
May 19 18:38 22h15.5m -10°48.1' Jun 03 02:08 10h09.0m +11°24.2'
Jun 15 21:23 22h04.9m -11°47.2' Jun 30 03:43 10h00.5m +12°10.7'
Jul 13 02:53 21h58.3m -12°22.7' Jul 27 09:04 09h57.0m +12°29.4'
Aug 09 10:22 n 21h56.8m -12°30.8' Aug 23 18:04 T 09h57.0m +12°29.9'
Sep 05 17:31 21h57.1m -12°29.0' Sep 20 04:04 09h56.0m +12°34.7'
Oct 02 22:05 21h54.5m -12°42.8' Oct 17 11:28 09h50.1m +13°05.7'
Oct 29 23:42 21h46.1m -13°26.5' Nov 13 14:12 09h38.9m +14°03.2'
Nov 26 01:01 21h34.0m -14°27.3' Dec 10 14:39 09h27.4m +14°59.0'
Dec 23 05:41 21h24.2m -15°14.6'

2083 Jan 06 17:32 09h21.3m +15°27.8'
Jan 19 14:07 21h20.6m -15°31.2' Feb 03 00:47 t 09h20.5m +15°31.5'
Feb 15 23:06 P 21h20.8m -15°30.4' Mar 02 10:14 09h20.3m +15°32.6'
Mar 15 05:07 21h19.1m -15°37.9' Mar 29 18:06 09h15.5m +15°54.6'
Apr 11 07:14 21h11.9m -16°10.5' Apr 25 22:02 09h05.1m +16°40.6'
May 08 08:03 21h00.4m -17°00.6' May 22 23:17 08h53.4m +17°29.4'
Jun 04 11:34 20h49.8m -17°44.1' Jun 19 01:15 08h45.7m +18°00.0'
Jul 01 19:10 20h44.4m -18°05.2' Jul 16 06:07 P 08h43.5m +18°08.4'
Jul 29 04:55 t 20h43.6m -18°08.0' Aug 12 13:29 P 08h43.9m +18°07.1'
Aug 25 13:34 20h43.5m -18°08.7' Sep 08 21:09 08h41.9m +18°14.7'
Sep 21 18:27 20h39.3m -18°24.7' Oct 06 02:37 08h34.2m +18°43.4'
Oct 18 19:32 20h29.2m -19°01.1' Nov 02 04:57 08h21.8m +19°26.7'
Nov 14 20:37 20h16.8m -19°43.1' Nov 29 06:19 08h10.7m +20°02.5'
Dec 12 02:09 20h08.0m -20°10.6' Dec 26 09:52 08h05.8m +20°17.4'

2084 Jan 08 12:22 P 20h05.6m -20°17.9' Jan 22 16:11 t 08h05.8m +20°17.3'
Feb 04 23:18 20h05.7m -20°17.6' Feb 18 23:12 08h05.0m +20°19.7'
Mar 03 06:34 20h02.5m -20°27.2' Mar 17 04:22 07h58.5m +20°38.6'
Mar 30 08:50 19h53.3m -20°52.9' Apr 13 07:00 07h46.6m +21°10.3'
Apr 26 09:18 19h40.9m -21°24.3' May 10 08:57 07h34.9m +21°38.3'
May 23 12:47 19h31.3m -21°46.4' Jun 06 12:27 07h28.3m +21°52.8'
Jun 19 20:57 19h27.5m -21°54.5' Jul 03 17:59 A 07h27.1m +21°55.1'
Jul 17 07:42 p 19h27.3m -21°54.8' Jul 31 00:13 07h27.5m +21°54.4'
Aug 13 17:30 19h26.2m -21°57.1' Aug 27 05:21 07h24.2m +22°01.2'
Sep 09 23:14 19h19.9m -22°09.6' Sep 23 08:24 07h14.9m +22°18.9'
Oct 07 00:35 19h08.3m -22°30.1' Oct 20 10:21 07h01.9m +22°39.9'
Nov 03 01:21 18h56.2m -22°47.9' Nov 16 13:34 06h51.7m +22°53.8'
Nov 30 06:21 18h49.3m -22°56.6' Dec 13 19:14 06h48.0m +22°58.2'
Dec 27 16:18 T 18h48.1m -22°58.1'

2085 Jan 10 01:55 n 06h48.4m +22°57.7'
Jan 24 03:41 18h47.8m -22°58.4' Feb 06 07:10 06h46.7m +22°59.7'
Feb 20 11:49 18h42.5m -23°04.2' Mar 05 09:49 06h38.4m +23°08.1'
Mar 19 14:38 18h31.2m -23°14.2' Apr 01 11:26 06h25.4m +23°18.0'
Apr 15 15:03 18h18.5m -23°21.6' Apr 28 14:50 06h14.0m +23°23.3'
May 12 17:56 18h10.5m -23°24.4' May 25 20:55 06h08.7m +23°24.8'
Jun 09 01:14 n 18h08.3m -23°24.9' Jun 22 04:11 A 06h08.3m +23°24.9'
Jul 06 11:16 n 18h08.4m -23°24.8' Jul 19 10:21 06h08.2m +23°24.8'
Aug 02 20:43 18h05.9m -23°25.2' Aug 15 13:51 06h03.4m +23°25.5'
Aug 30 02:34 17h57.5m -23°25.5' Sep 11 15:17 05h52.6m +23°25.0'
Sep 26 04:15 17h44.7m -23°22.9' Oct 08 17:26 05h39.6m +23°20.7'
Oct 23 05:04 17h33.5m -23°17.3' Nov 04 22:57 05h30.6m +23°15.3'
Nov 19 09:10 17h28.5m -23°13.8' Dec 02 07:25 n 05h28.1m +23°13.5'
Dec 16 17:31 A 17h28.3m -23°13.7' Dec 29 15:40 05h28.5m +23°13.7'

2086 Jan 13 03:23 17h27.3m -23°12.9' Jan 25 20:34 05h25.4m +23°11.3'
Feb 09 10:38 17h20.1m -23°06.7' Feb 21 21:51 05h15.6m +23°02.1'
Mar 08 13:24 17h07.3m -22°52.6' Mar 20 23:01 05h02.1m +22°45.7'
Apr 04 14:12 16h55.2m -22°35.5' Apr 17 03:54 04h51.9m +22°30.3'
May 01 17:00 16h48.8m -22°25.3' May 14 12:33 04h48.1m +22°24.0'
May 28 23:15 p 16h47.9m -22°23.7' Jun 10 21:57 T 04h48.2m +22°24.1'
Jun 25 07:25 16h48.0m -22°23.7' Jul 08 05:01 04h47.0m +22°22.0'
Jul 22 14:50 16h44.1m -22°16.8' Aug 04 08:12 04h40.7m +22°10.5'
Aug 18 19:24 16h34.3m -21°57.9' Aug 31 08:57 04h29.3m +21°47.5'
Sep 14 21:12 16h21.7m -21°30.5' Sep 27 11:17 04h17.4m +21°20.0'
Oct 11 22:52 16h12.2m -21°07.2' Oct 24 18:13 04h10.4m +21°02.4'

Nov 08 03:04 16h08.9m -20°58.6' Nov 21 04:47 p 04h09.0m +20°58.9'
Dec 05 09:54 P 16h09.3m -20°59.5' Dec 18 14:55 04h08.9m +20°58.4'

2087 Jan 01 17:04 16h07.4m -20°54.6' Jan 14 20:43 04h04.3m +20°46.1'
Jan 28 21:55 15h59.1m -20°31.5' Feb 10 21:48 03h53.5m +20°15.1'
Feb 25 00:02 15h46.2m -19°52.6' Mar 09 22:37 03h41.0m +19°35.7'
Mar 24 01:56 15h35.5m -19°17.2' Apr 06 03:50 03h32.9m +19°08.3'
Apr 20 05:56 15h30.9m -19°01.3' May 03 13:34 P 03h30.7m +19°00.8'
May 17 11:58 t 15h30.8m -19°01.1' May 31 00:23 P 03h30.9m +19°01.2'
Jun 13 18:16 15h30.4m -18°59.7' Jun 27 08:36 03h28.4m +18°52.4'
Jul 10 23:01 15h25.3m -18°41.5' Jul 24 12:18 03h20.6m +18°24.0'
Aug 07 01:46 15h15.1m -18°03.0' Aug 20 13:00 03h09.4m +17°40.4'
Sep 03 03:54 15h03.6m -17°17.0' Sep 16 15:01 02h59.5m +16°59.8'
Sep 30 07:30 14h56.0m -16°45.2' Oct 13 21:45 02h54.8m +16°39.8'
Oct 27 13:13 P 14h54.1m -16°36.9' Nov 10 08:32 t 02h54.4m +16°38.1'
Nov 23 19:35 14h54.5m -16°38.6' Dec 07 19:31 02h53.5m +16°34.1'
Dec 21 00:25 14h51.7m -16°26.5'

2088 Jan 04 02:18 02h47.2m +16°06.6'
Jan 17 02:46 14h42.6m -15°45.7' Jan 31 03:49 02h35.8m +15°13.9'
Feb 13 04:30 14h30.2m -14°47.4' Feb 27 04:19 02h24.6m +14°20.3'
Mar 11 08:26 14h20.9m -14°02.0' Mar 25 08:46 02h18.8m +13°51.3'
Apr 07 14:55 14h17.8m -13°46.2' Apr 21 17:47 T 02h17.9m +13°46.8'
May 04 21:55 p 14h18.0m -13°47.6' May 19 04:20 02h17.7m +13°45.9'
Jun 01 03:13 14h16.8m -13°41.4' Jun 15 12:42 02h13.8m +13°25.8'
Jun 28 05:57 14h10.7m -13°09.7' Jul 12 16:44 02h04.7m +12°38.6'
Jul 25 07:29 14h00.2m -12°14.2' Aug 08 17:40 01h53.8m +11°39.7'
Aug 21 10:34 13h49.7m -11°17.3' Sep 04 19:26 01h45.8m +10°55.4'
Sep 17 16:44 13h43.9m -10°44.4' Oct 02 01:07 01h43.0m +10°39.5'
Oct 15 00:52 A 13h42.9m -10°39.0' Oct 29 10:27 p 01h43.1m +10°40.4'
Nov 11 08:03 13h43.0m -10°39.4' Nov 25 20:19 01h41.4m +10°30.3'
Dec 08 11:52 13h39.1m -10°17.3' Dec 23 02:43 01h33.7m +09°46.3'

2089 Jan 04 12:45 13h29.3m -09°20.6' Jan 19 04:30 01h21.8m +08°36.5'
Jan 31 14:33 13h17.3m -08°09.8' Feb 15 05:13 01h11.9m +07°37.2'
Feb 27 20:38 13h09.5m -07°22.5' Mar 14 09:03 01h07.8m +07°12.2'
Mar 27 05:54 n 13h07.6m -07°10.5' Apr 10 16:32 A 01h07.8m +07°11.8'
Apr 23 14:43 13h07.8m -07°11.9' May 08 01:13 01h07.0m +07°07.3'
May 20 20:14 13h05.4m -06°57.4' Jun 04 08:00 01h01.7m +06°34.8'
Jun 16 22:07 12h58.1m -06°12.2' Jul 01 11:25 00h51.9m +05°33.5'
Jul 13 23:07 12h47.6m -05°06.4' Jul 28 12:48 00h41.7m +04°28.7'

Aug 10 02:59 12h38.5m -04°08.7' Aug 24 15:08 00h35.3m +03°48.2'
Sep 06 11:05 12h34.3m -03°41.6' Sep 20 20:20 n 00h33.8m +03°38.7'
Oct 03 21:22 T 12h34.0m -03°39.6' Oct 18 03:46 00h34.1m +03°40.6'
Oct 31 06:06 12h33.3m -03°35.6' Nov 14 10:59 00h31.4m +03°23.0'
Nov 27 10:18 12h28.1m -03°02.4' Dec 11 15:27 00h22.8m +02°27.8'
Dec 24 10:45 12h17.8m -01°55.6'

2090 Jan 07 17:09 00h11.1m +01°12.2'
Jan 20 12:25 12h06.9m -00°44.8' Feb 03 19:04 00h02.5m +00°16.2'
Feb 16 19:19 12h00.8m -00°05.1' Mar 02 23:32 23h59.7m -00°01.9'
Mar 16 06:10 t 11h59.8m +00°01.4' Mar 30 05:59 P 00h00.0m +00°00.3'
Apr 12 16:39 11h59.6m +00°02.7' Apr 26 12:13 23h58.6m -00°09.4'
May 09 23:10 11h55.8m +00°27.4' May 23 16:27 23h52.1m -00°51.6'
Jun 06 01:10 11h47.2m +01°22.9' Jun 19 18:49 23h41.8m -01°58.0'
Jul 03 01:54 11h37.0m +02°29.3' Jul 16 21:11 23h32.3m -02°59.3'
Jul 30 05:38 11h29.5m +03°17.4' Aug 13 01:17 23h27.3m -03°31.3'
Aug 26 13:58 11h26.8m +03°34.6' Sep 09 07:13 t 23h26.8m -03°34.9'
Sep 23 00:57 T 11h26.9m +03°34.2' Oct 06 13:25 23h26.9m -03°34.4'
Oct 20 10:45 11h25.2m +03°44.7' Nov 02 17:56 23h23.0m -03°59.0'
Nov 16 15:51 11h18.4m +04°28.6' Nov 29 20:13 23h13.5m -04°59.2'
Dec 13 16:31 11h07.3m +05°38.6' Dec 26 22:11 23h02.0m -06°11.6'

Year Ascending Node RA Dec. Descending Node RA Dec.

2091 Jan 09 17:43 10h57.5m +06°39.7' Jan 23 02:24 22h54.4m -06°58.7'
Feb 05 23:52 10h53.1m +07°06.7' Feb 19 08:56 P 22h52.6m -07°09.7'
Mar 05 10:19 t 10h52.8m +07°08.4' Mar 18 15:30 22h52.9m -07°07.5'
Apr 01 21:03 10h51.8m +07°14.3' Apr 14 19:58 22h50.3m -07°23.4'
Apr 29 04:04 10h46.2m +07°48.7' May 11 22:03 22h42.4m -08°11.3'
May 26 06:27 10h36.0m +08°49.3' Jun 07 23:53 22h31.5m -09°16.0'
Jun 22 07:10 10h25.9m +09°48.8' Jul 05 03:56 22h22.6m -10°08.0'
Jul 19 10:20 10h19.8m +10°23.5' Aug 01 10:40 22h18.7m -10°30.1'
Aug 15 17:38 T 10h18.4m +10°31.4' Aug 28 18:22 t 22h18.6m -10°30.4'
Sep 12 03:32 10h18.5m +10°30.8' Sep 25 00:30 22h18.1m -10°33.5'
Oct 09 12:42 10h15.6m +10°47.6' Oct 22 03:28 22h12.8m -11°03.2'
Nov 05 17:50 10h06.8m +11°36.6' Nov 18 04:24 22h02.1m -12°02.1'
Dec 02 18:52 09h54.7m +12°41.5' Dec 15 07:03 21h50.4m -13°04.0'
Dec 29 20:00 09h45.7m +13°28.6'

2092 Jan 11 13:52 21h43.7m -13°38.5'
Jan 26 01:05 09h42.7m +13°43.9' Feb 07 23:08 A 21h42.7m -13°43.8'

Feb 22 09:49 n 09h42.9m +13°42.8' Mar 06 07:01 21h42.7m -13°43.9'
Mar 20 18:51 09h40.9m +13°52.8' Apr 02 11:01 21h38.6m -14°04.5'
Apr 17 00:51 09h33.2m +14°30.7' Apr 29 12:00 21h29.0m -14°51.6'
May 14 03:08 09h21.7m +15°25.7' May 26 13:44 21h17.4m -15°45.7'
Jun 10 04:20 09h11.7m +16°11.3' Jun 22 19:17 21h09.2m -16°22.3'
Jul 07 07:36 09h06.9m +16°32.5' Jul 20 04:19 n 21h06.5m -16°34.3'
Aug 03 13:51 A 09h06.5m +16°34.3' Aug 16 14:00 n 21h06.6m -16°33.7'
Aug 30 21:39 09h06.3m +16°35.1' Sep 12 21:06 21h05.0m -16°40.8'
Sep 27 04:29 09h01.8m +16°54.4' Oct 09 23:54 20h57.9m -17°10.6'
Oct 24 08:18 08h51.4m +17°37.4' Nov 06 00:18 20h46.1m -17°58.2'
Nov 20 09:44 08h38.9m +18°25.6' Dec 03 03:12 20h35.0m -18°40.3'
Dec 17 11:56 08h30.8m +18°55.4' Dec 30 11:22 20h29.6m -18°59.6'

2093 Jan 13 16:59 n 08h28.9m +19°02.1' Jan 26 22:34 T 20h29.2m -19°01.2'
Feb 09 23:58 08h29.3m +19°00.7' Feb 23 08:08 20h28.3m -19°04.3'
Mar 09 06:15 08h26.1m +19°11.9' Mar 22 12:52 20h22.2m -19°25.0'
Apr 05 10:03 08h16.7m +19°43.4' Apr 18 13:39 20h11.0m -20°01.4'
May 02 12:02 08h04.3m +20°21.7' May 15 15:06 19h59.5m -20°35.4'
May 29 14:36 07h54.9m +20°48.4' Jun 11 20:52 19h52.8m -20°53.9'
Jun 25 19:10 07h51.3m +20°58.1' Jul 09 06:40 p 19h51.3m -20°58.0'
Jul 23 01:17 A 07h51.5m +20°57.5' Aug 05 17:27 19h51.3m -20°58.0'
Aug 19 07:10 07h50.6m +20°59.7' Sep 02 01:36 19h48.0m -21°06.6'
Sep 15 11:15 07h44.5m +21°15.3' Sep 29 05:00 19h38.8m -21°29.1'
Oct 12 13:29 07h32.8m +21°42.7' Oct 26 05:22 19h26.3m -21°56.8'
Nov 08 15:46 07h20.5m +22°08.2' Nov 22 07:46 19h16.4m -22°16.1'
Dec 05 20:16 07h13.4m +22°21.2' Dec 19 15:25 19h12.7m -22°22.5'

2094 Jan 02 02:47 p 07h12.5m +22°22.9' Jan 16 02:40 T 19h12.7m -22°22.5'
Jan 29 09:03 07h12.6m +22°22.7' Feb 12 12:56 19h10.5m -22°26.3'
Feb 25 12:58 07h07.9m +22°30.7' Mar 11 18:24 19h02.0m -22°39.6'
Mar 24 14:44 06h56.7m +22°47.2' Apr 07 19:27 18h49.3m -22°56.6'
Apr 20 16:57 06h43.8m +23°02.7' May 04 20:35 18h38.5m -23°07.9'
May 17 21:46 06h35.3m +23°10.7' Jun 01 01:35 18h33.5m -23°12.2'
Jun 14 04:44 P 06h32.8m +23°12.7' Jun 28 10:31 t 18h33.1m -23°12.6'
Jul 11 11:47 P 06h33.2m +23°12.4' Jul 25 20:41 18h32.5m -23°13.0'
Aug 07 16:45 06h31.3m +23°13.9' Aug 22 04:41 18h27.3m -23°16.8'
Sep 03 19:00 06h23.5m +23°19.0' Sep 18 08:20 18h16.1m -23°22.5'
Sep 30 20:19 06h10.8m +23°24.2' Oct 15 09:00 18h03.3m -23°25.5'
Oct 27 23:56 05h59.0m +23°25.6' Nov 11 11:01 17h54.9m -23°25.4'
Nov 24 07:15 05h53.3m +23°25.1' Dec 08 17:21 P 17h52.8m -23°25.0'
Dec 21 16:09 t 05h53.0m +23°25.1'

2095 Jan 05 02:54 17h53.0m -23°25.0'
Jan 17 23:02 05h52.3m +23°24.9' Feb 01 11:53 17h49.3m -23°24.2'
Feb 14 01:55 05h45.9m +23°23.3' Feb 28 16:51 17h38.8m -23°20.2'
Mar 13 02:33 05h33.5m +23°17.2' Mar 27 18:10 17h25.3m -23°11.3'
Apr 09 05:17 05h20.8m +23°07.2' Apr 23 19:35 17h15.7m -23°02.2'
May 06 12:15 05h13.8m +23°00.1' May 21 00:04 17h12.4m -22°58.5'
Jun 02 21:43 T 05h12.4m +22°58.7' Jun 17 07:30 p 17h12.6m -22°58.9'
Jun 30 06:21 05h12.5m +22°58.8' Jul 14 15:36 17h11.3m -22°57.3'
Jul 27 11:36 05h09.1m +22°54.8' Aug 10 21:46 17h04.4m -22°48.7'
Aug 23 13:13 04h59.9m +22°42.6' Sep 07 00:47 16h52.4m -22°31.1'
Sep 19 14:10 04h47.3m +22°22.7' Oct 04 02:06 16h40.4m -22°10.1'
Oct 16 18:35 04h37.2m +22°03.8' Oct 31 04:49 16h33.8m -21°57.1'
Nov 13 03:43 04h33.2m +21°55.7' Nov 27 10:29 A 16h33.0m -21°55.3'
Dec 10 14:42 p 04h33.2m +21°55.8' Dec 24 17:49 16h33.0m -21°55.4'

2096 Jan 06 23:04 04h31.3m +21°51.8' Jan 21 00:01 16h28.1m -21°44.9'
Feb 03 02:17 04h23.4m +21°34.3' Feb 17 03:18 16h16.6m -21°18.4'
Mar 01 02:31 04h10.8m +21°03.5' Mar 15 04:57 16h03.9m -20°45.1'
Mar 28 05:08 03h59.7m +20°33.3' Apr 11 07:47 15h55.9m -20°22.3'
Apr 24 12:49 03h54.7m +20°18.9' May 08 12:57 n 15h54.0m -20°16.6'
May 21 23:32 T 03h54.3m +20°17.7' Jun 04 19:21 15h54.4m -20°18.0'
Jun 18 09:30 03h53.7m +20°15.7' Jul 02 01:01 15h52.1m -20°10.9'
Jul 15 15:38 03h48.6m +20°00.3' Jul 29 04:42 15h44.1m -19°45.9'
Aug 11 17:28 03h38.5m +19°27.5' Aug 25 06:52 15h32.4m -19°06.6'
Sep 07 18:11 03h27.0m +18°47.6' Sep 21 09:31 15h22.0m -18°29.4'
Oct 04 22:17 03h19.3m +18°19.2' Oct 18 14:16 15h17.3m -18°11.4'
Nov 01 07:19 n 03h17.1m +18°10.6' Nov 14 20:36 A 15h17.1m -18°11.0'
Nov 28 18:48 n 03h17.1m +18°11.0' Dec 12 02:27 15h16.6m -18°09.0'
Dec 26 04:11 03h13.9m +17°58.6'

2097 Jan 08 05:58 15h10.6m -17°45.6'
Jan 22 08:09 03h04.4m +17°20.5' Feb 04 07:36 14h58.9m -16°57.6'
Feb 18 08:27 02h52.1m +16°28.5' Mar 03 10:12 14h47.1m -16°06.4'
Mar 17 10:29 02h43.2m +15°48.6' Mar 30 15:35 14h40.9m -15°37.8'
Apr 13 17:20 02h40.1m +15°34.5' Apr 26 22:40 p 14h39.9m -15°33.5'
May 11 03:30 T 02h40.2m +15°35.0' May 24 05:04 14h40.1m -15°34.2'
Jun 07 13:23 02h38.6m +15°27.5' Jun 20 09:05 14h36.6m -15°18.2'
Jul 04 19:44 02h31.9m +14°56.0' Jul 17 10:55 14h27.8m -14°36.2'
Jul 31 21:54 02h21.2m +14°03.4' Aug 13 12:51 14h16.5m -13°40.0'
Aug 27 22:42 02h11.0m +13°11.4' Sep 09 17:26 14h07.8m -12°55.0'
Sep 24 02:09 02h05.4m +12°42.4' Oct 07 00:55 14h04.5m -12°37.7'

Oct 21 09:50 t 02h04.5m +12°37.8' Nov 03 09:02 A 14h04.7m -12°38.8'
Nov 17 19:55 02h04.4m +12°37.0' Nov 30 14:46 14h03.3m -12°31.4'
Dec 15 04:28 01h59.8m +12°12.8' Dec 27 16:48 13h56.3m -11°53.4'

2098 Jan 11 08:24 01h49.3m +11°14.9' Jan 23 17:32 13h44.5m -10°47.9'
Feb 07 09:03 01h37.5m +10°08.3' Feb 19 21:18 13h33.8m -09°47.1'
Mar 06 10:58 01h30.3m +09°26.7' Mar 19 05:21 13h29.1m -09°19.7'
Apr 02 16:45 P 01h28.7m +09°17.2' Apr 15 14:53 t 13h28.8m -09°18.1'
Apr 30 01:09 01h28.9m +09°18.6' May 12 22:21 13h28.3m -09°14.9'
May 27 09:11 01h26.2m +09°02.8' Jun 09 01:58 13h23.5m -08°47.0'
Jun 23 14:19 01h18.4m +08°16.1' Jul 06 02:56 13h14.1m -07°50.6'
Jul 20 16:26 01h07.6m +07°10.8' Aug 02 04:55 13h03.6m -06°46.4'
Aug 16 17:55 00h58.8m +06°16.2' Aug 29 10:54 12h56.6m -06°03.0'
Sep 12 21:33 00h54.9m +05°52.3' Sep 25 20:31 P 12h54.7m -05°50.7'
Oct 10 04:03 t 00h54.8m +05°52.0' Oct 23 06:35 P 12h54.8m -05°51.6'
Nov 06 11:42 00h54.2m +05°48.0' Nov 19 13:21 12h52.3m -05°35.7'
Dec 03 17:44 00h48.6m +05°12.6' Dec 16 15:17 12h44.2m -04°44.7'
Dec 30 20:34 00h37.7m +04°03.4'

2099 Jan 12 15:35 12h32.7m -03°31.7'
Jan 26 21:58 00h26.8m +02°53.6' Feb 08 19:39 12h23.7m -02°33.8'
Feb 23 01:04 00h21.1m +02°16.9' Mar 08 04:56 12h20.5m -02°13.3'
Mar 22 06:44 A 00h20.4m +02°12.7' Apr 04 16:08 p 12h20.6m -02°13.6'
Apr 18 13:19 00h20.5m +02°12.9' May 02 00:59 12h19.0m -02°03.3'
May 15 18:40 00h16.7m +01°48.4' May 29 05:10 12h12.7m -01°22.8'
Jun 11 21:49 00h08.0m +00°51.8' Jun 25 06:00 12h02.8m -00°18.4'
Jul 08 23:54 23h57.5m -00°16.1' Jul 22 07:44 11h53.4m +00°42.6'
Aug 05 03:00 23h49.9m -01°05.4' Aug 18 13:42 11h48.3m +01°16.0'
Sep 01 08:09 23h47.4m -01°22.0' Sep 14 23:44 T 11h47.4m +01°21.8'
Sep 28 14:28 n 23h47.7m -01°19.7' Oct 12 10:42 11h47.2m +01°23.0'
Oct 25 20:01 23h46.3m -01°28.7' Nov 08 18:31 11h43.2m +01°48.8'
Nov 21 23:18 23h39.6m -02°12.4' Dec 05 21:04 11h33.8m +02°50.1'
Dec 19 01:02 23h28.4m -03°24.7'

2100 Jan 01 21:13 11h22.6m +04°01.5'
Jan 15 03:56 23h18.2m -04°29.5' Jan 29 00:35 11h15.3m +04°47.7'
Feb 11 09:33 23h13.7m -04°58.0' Feb 25 09:12 n 11h13.5m +04°59.3'
Mar 10 16:27 A 23h13.6m -04°58.6' Mar 24 20:18 11h13.5m +04°59.0'
Apr 06 22:10 23h13.1m -05°01.9' Apr 21 05:33 11h10.6m +05°17.7'
May 04 01:19 23h08.0m -05°34.2' May 18 10:11 11h02.5m +06°08.6'
May 31 02:55 22h58.2m -06°35.2' Jun 14 11:14 10h51.8m +07°14.3'

Jun 27	05:37	22h47.7m -07°39.2'	
Jul 11	12:42	10h43.4m +08°05.4'	
Jul 24	11:05	22h41.2m -08°18.8'	
Aug 07	17:51	10h39.9m +08°26.7'	
Aug 20	18:39 n	22h39.6m -08°28.4'	
Sep 04	02:42 T	10h39.7m +08°27.5'	
Sep 17	01:56	22h39.9m -08°26.4'	
Oct 01	12:43	10h38.9m +08°32.3'	
Oct 14	06:36	22h37.4m -08°41.1'	
Oct 28	20:12	10h33.2m +09°06.2'	
Nov 10	08:11	22h29.3m -09°29.1'	
Nov 24	23:00	10h22.1m +10°10.4'	
Dec 07	09:26	22h17.4m -10°37.3'	
Dec 21	23:26	10h11.0m +11°13.3'	

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