



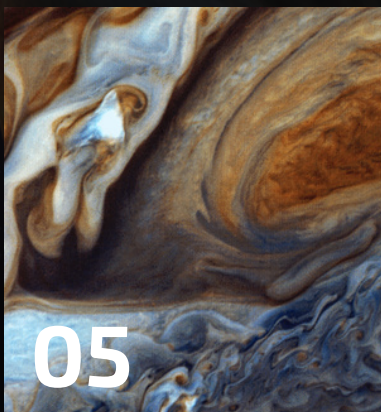
OBSERVER REVIEW

THE JUPITER
SPECIAL ISSUE

ANALYZING THE ONGOING GALACTIC SHEET
AND THE EFFECTS ON JUPITER

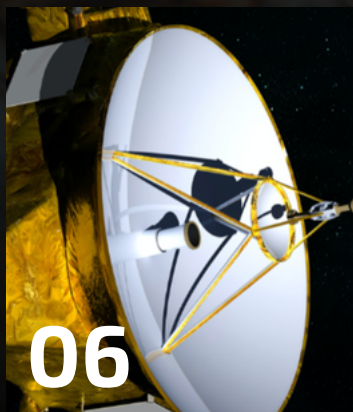
JUPITER SPECIAL ISSUE

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Two new studies have piled-on the overwhelming evidence for the existence and character of the galactic current sheet.



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I'd like to speak colloquially in this article, since I can't imagine any of you getting here without having at least heard about the solar system shift taking place from the sun out to the IBEX ribbon. Because of this presumption, I want to briefly bring up a new discovery that I am beginning to think is another example of that broad-scale disruption.

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We have been examining evidence of a solar system shift. This includes the changes on earth, but paints a broader picture of galactic influence on our solar system when we realize that the entire solar system is changing - some parts far more than earth is changing.

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SUPER-VOLCANO ERUPTION ON IO

BY: BEN DAVIDSON

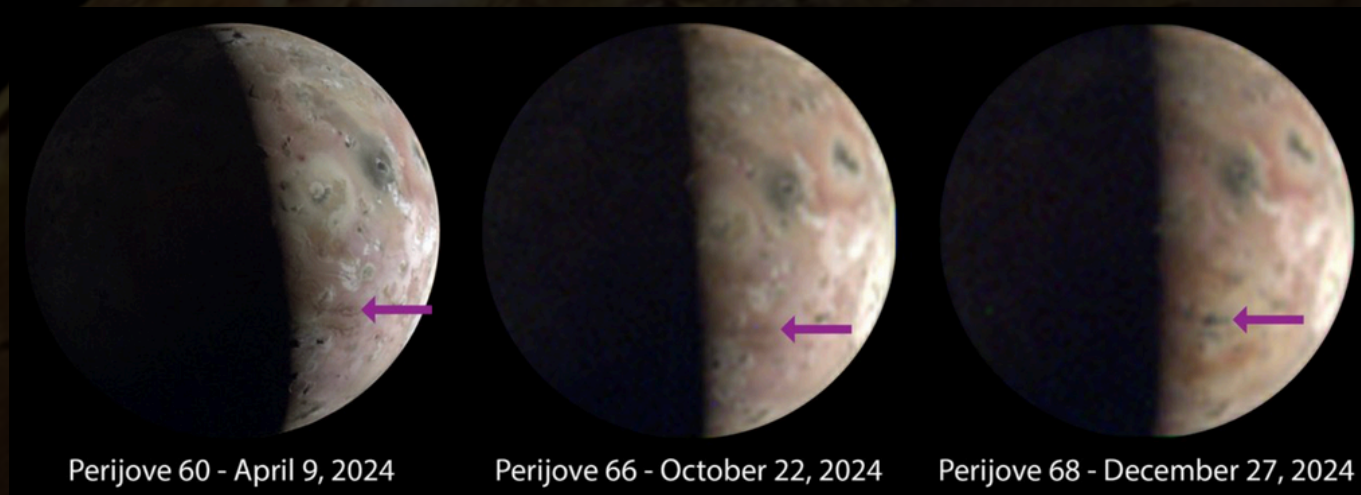
ARTICLE REFERENCED:

NASA JUNO MISSION SPOTS MOST POWERFUL VOLCANIC ACTIVITY ON IO TO DATE

The solar system shift - the impact of the cyclical arrival of the galactic current sheet and galactic magnetic reversal - has covered the sun, the planets, interplanetary space, and even the heliospheric shape. However, it has yet to claim a major shift on a moon (that human have noticed) until now.

BACKGROUND ON IO

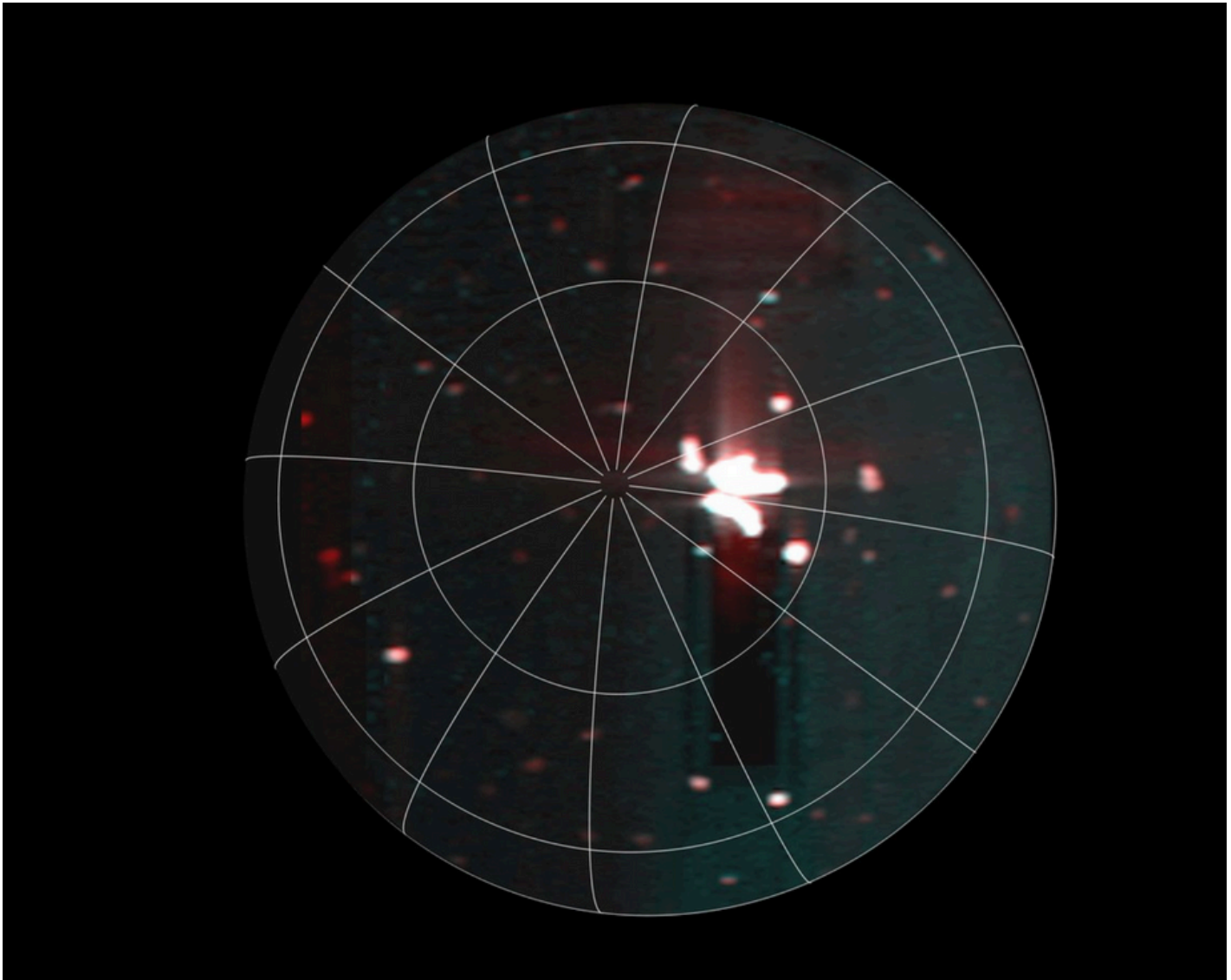
Io is the innermost of Jupiter's four Galilean moons and the most volcanically active body in the solar system. Plumes of sulfur dioxide erupt hundreds of kilometers into space, while lava lakes and flowing lava plains dominate its landscape. Unlike most other moons, Io has very little water due to the extreme radiation environment created by Jupiter's magnetosphere.



Io has had a super-eruption. Humans have been observing and noting 100s of volcanos on Jupiter's most geologically active moon for a long time, and the record event so far covered 20,000 square kilometers. However, this new event covers 100,000 square kilometers. Breaking a record for largest volcanic event witnessed, by a factor of 5, is no small matter.

IMPORTANCE OF THIS FINDING

Super volcano eruptions are part of the disaster cycle on earth, every cycle, so why should that not be the same on other geologically active spheres in the solar system. This could actually be something to watch for on Mars in the years ahead. While Io's eruptions are frequent, a super volcano-scale event would be unusual and could indicate an escalation in internal or external forces affecting the moon.



"A massive hotspot — larger the Earth's Lake Superior — can be seen just to the right of Io's south pole in this annotated image taken by the JIRAM infrared imager aboard NASA's Juno on Dec. 27, 2024, during the spacecraft's flyby of the Jovian moon. Credit: NASA/JPL-Caltech/SwRI/ASI/INAF/JIRAM"

According to the ObserverBot, "changes in the Sun's magnetic field and solar wind intensity could influence Jupiter's magnetosphere, which in turn impacts Io's volcanic activity. Io's volcanism is partially linked to its interaction with Jupiter's powerful and fluctuating magnetosphere. If Jupiter is experiencing magnetic changes (which some evidence suggests), this could drive increased tidal heating inside Io. The galactic current sheet and increased cosmic ray exposure could also be affecting planetary and moon activity across the solar system."

JUPITER'S FIELD IS SHRINKING

BY: BEN DAVIDSON

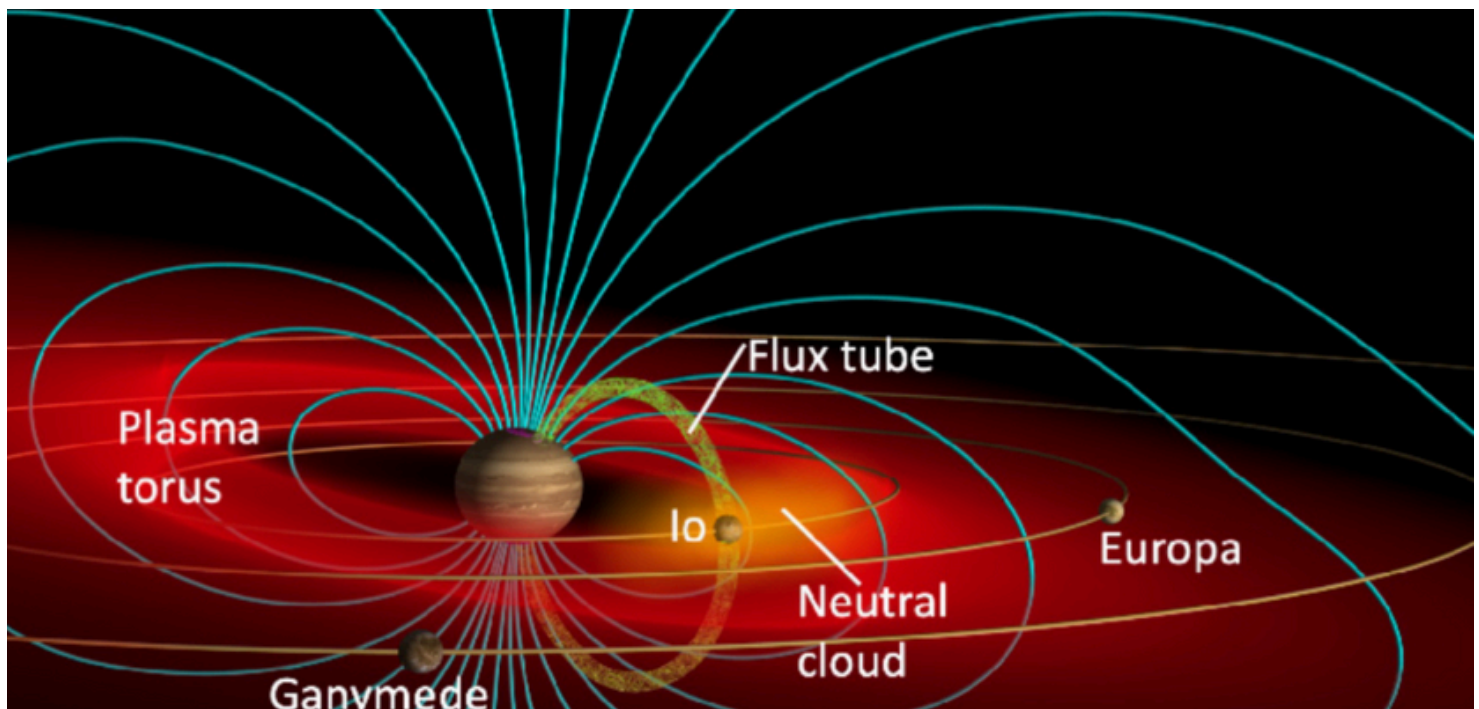
ARTICLE REFERENCED:
NEW MODELS OF JUPITER'S MAGNETOPAUSE AND BOW SHOCK
THROUGH THE JUNO PRIME MISSION: PROBABILISTIC
LOCATION, SHAPE, AND INTERNALLY-DRIVEN VARIATION

A new study reveals that Jupiter's magnetic field, as probed by the Juno spacecraft, is smaller and more irregularly structured than it used to be.

Earlier reports, like those from the Voyager missions, suggested a vast magnetosphere extending up to 100 Jupiter radii (R_J) at its boundary, driven by a robust internal dynamo and solar wind interaction. However, Juno's observations during polar cyclones and thundercloud events show the magnetopause—the boundary where the magnetic field meets the solar wind—closer to the planet, at times as near as 50–70 R_J , with a patchier, less uniform field than the anticipated smooth, dipole-dominated structure.

The surprise came from the energetic electron fluxes (>100 keV) and X-ray aurorae tied to atmospheric storms rather than a stable magnetospheric configuration, indicating a dynamic, weather-influenced field that doesn't buffer the solar wind as effectively as thought.

The Jovian contribution to the solar system shift is pretty robust. This marks the 2nd direct piece of magnetic-change evidence at Jupiter (the other being the radio emission changes) to be the icing on dozens of atmospheric anomalies already documented.



NEW HORIZON FOR NEW HORIZON

BY: BEN DAVIDSON



There has been a major shift in a major space mission. Some scientists are very unhappy about it... but I'm thrilled. The "New Horizons" satellite has been integral in studying Pluto and several other Kuiper belt objects, but is now going to refocus its scientific analysis to study space weather and the heliosphere.

Understandably, planetary scientists are unhappy- this mission has been the most informative one about the outer reaches of our solar system since the Voyager space craft, and while Juno and Cassini have offered in-depth data about Jupiter and Saturn, New Horizons was their window into better understanding of Pluto and other minor planets past the reach of Neptune.

The rationale for the mission shift to studying how the solar wind behaves at such far distances, and the activity of the heliosphere (the sun's large scale magnetic field that wraps around the entire solar system) is now a moot point- the decision has been made. So why do I love this idea?

AS MUCH AS 20% OF THE INFORMATION WE HAVE ABOUT THE IMPACT OF THE GALACTIC CURRENT SHEET ON OUR SOLAR SYSTEM HAS COME FROM THE VOYAGER CRAFT

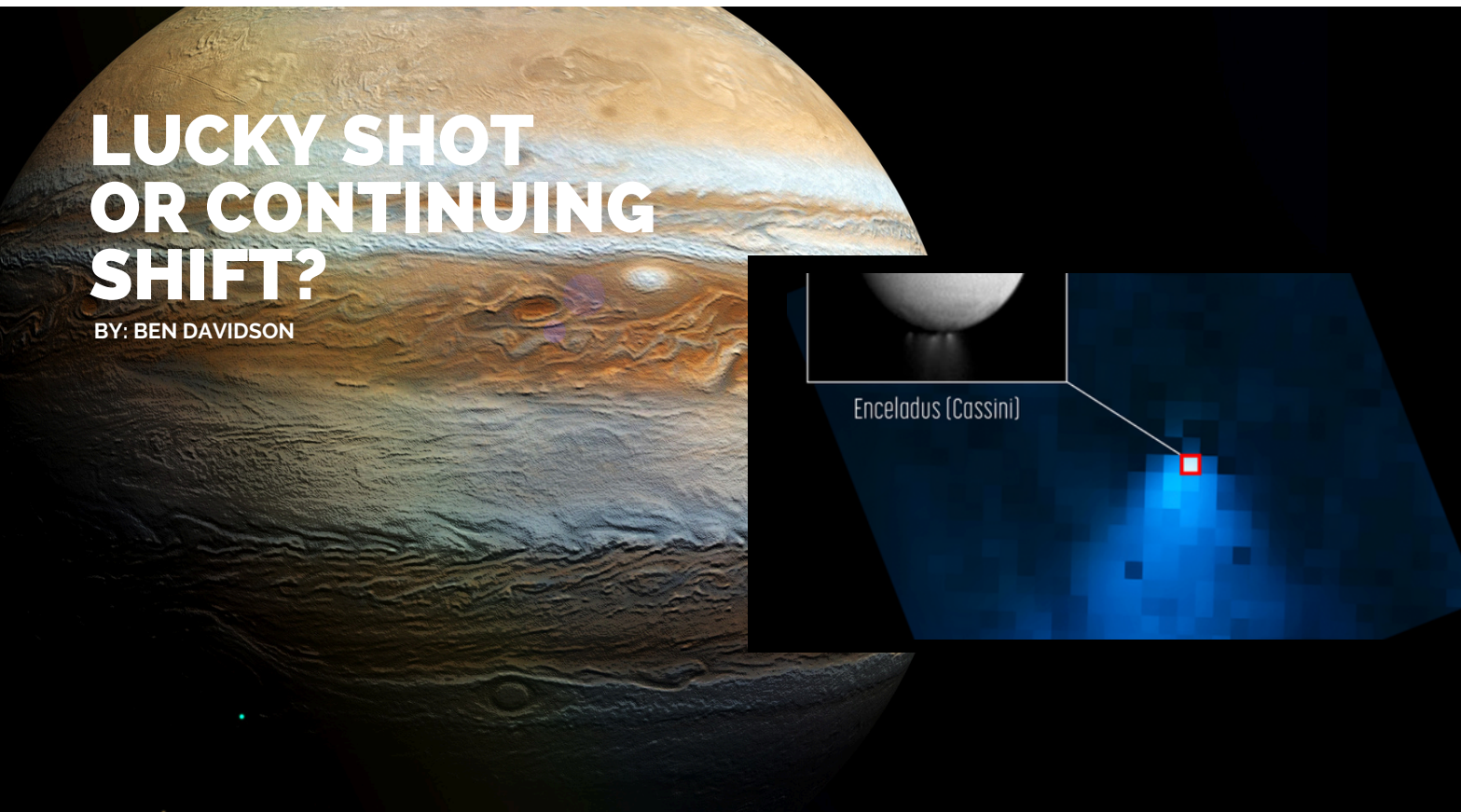
The magnetic boundaries, the pressure fronts and shocks, the interstellar pickup ions and energetic neutral atoms - all critical to completing the picture of how the galactic magnetic field is impacting us right now.

By repurposing New Horizons to focus on the interaction of solar wind, the heliosphere and interplanetary space, we have the best opportunity to confirm these data points, and discover new ones. While BepiColumbo will soon visit Mercury, and our window into changes in the inner solar system is wide open, I had truly believed we had received about all we were going to get in terms of the outer solar system - now that may not be the case.

Three cheers for the new mission of New Horizons... and whatever it will show us about our local neighborhood of the galaxy.

LUCKY SHOT OR CONTINUING SHIFT?

BY: BEN DAVIDSON



I'd like to speak colloquially in this article, since I can't imagine any of you getting here without having at least heard about the solar system shift taking place from the sun out to the IBEX ribbon. Because of this presumption, I want to briefly bring up a new discovery that I am beginning to think is another example of that broad-scale disruption.

It has been 3 years since I suggested that the moons of Jupiter and Saturn should provide evidence of the ongoing shift as well, but they may evade detection, or wait until closer to the peak-disruption time of the entire system. I had mentioned three moons specifically in a YouTube video- Ganymede, Titan and Enceladus.

Ganymede is the largest moon in the solar system, it's bigger than the planet Mercury, and it has its own magnetic field, which makes it a prime candidate for noticeable shifts. Unfortunately, Juno is less focused there and more-so on Europa and Jupiter itself. Titan is still an excellent candidate due to its thick atmosphere and therefore its susceptibility to electromagnetic modulation, but we haven't seen that data there. However, the recent Enceladus plume is about as perfect a candidate as we can hope for.

It has been known for many years that the south pole jets at Enceladus spew water out into space, but the most recent plume is the biggest one they have ever seen. Not only is it tremendously large - shocking the astronomers- but the rate of water expulsion is beyond what anyone thought was possible.

Just like volcanic activity at extreme levels seems to accompany all the major disaster cycle events in earth's geology, one might expect the Enceladus version of the same phenomenon. That is exactly what we have now. While it is possible that this was a lucky observation of a major event, and it isn't related to the ongoing solar system shift, such a doubt could be expressed about any of the solar system changes - it is the fact that all of them are happening at the same time, and are exactly what we would expect, that tells us we can only ignore so many coincidences. It is now my firm opinion that the record Enceladus plume is the first detected example of the solar system shift on a moon.

JUPITER AND THE SUNSPOT CYCLE

ARTICLE REFERENCED:

BISTABILITY IN THE SUNSPOT CYCLE

BY: BEN DAVIDSON

There have been many papers in the past investigating the impact of the planets on solar activity. These have included orbital periods and alignments of the planets. The most interesting and perhaps the most certain to be real, is the correlation between the orbit of Jupiter and the ~11 year sunspot cycle.

A new paper claims to fortify these claims, and this makes an incredible amount of sense. The sun's activity spikes when comets dive-bomb into the corona, Saturn's storminess peaks during perihelion (it's closest point to the sun), and the same happens to Neptunian clouds and other atmospheric phenomena on the planets.

In this case, the orbit of Jupiter, which is not a perfect circle, not only makes a complete orbit every 10 to 11 years, but its closest point to the sun comes at that interval as well. With the strongest magnetic field in the solar system, and the thickest interplanetary magnetic field connection to the sun, why would we not expect the Jovian perihelion to impact large-scale magnetic activity on the sun- sunspots, solar flares, and coronal mass ejections.

THIS TOPIC IS STILL CONSIDERED FAIRLY FRINGE IN THE MAINSTREAM, BUT THERE IS MORE THAN ENOUGH EVIDENCE TO SAY IT HAS MERIT.

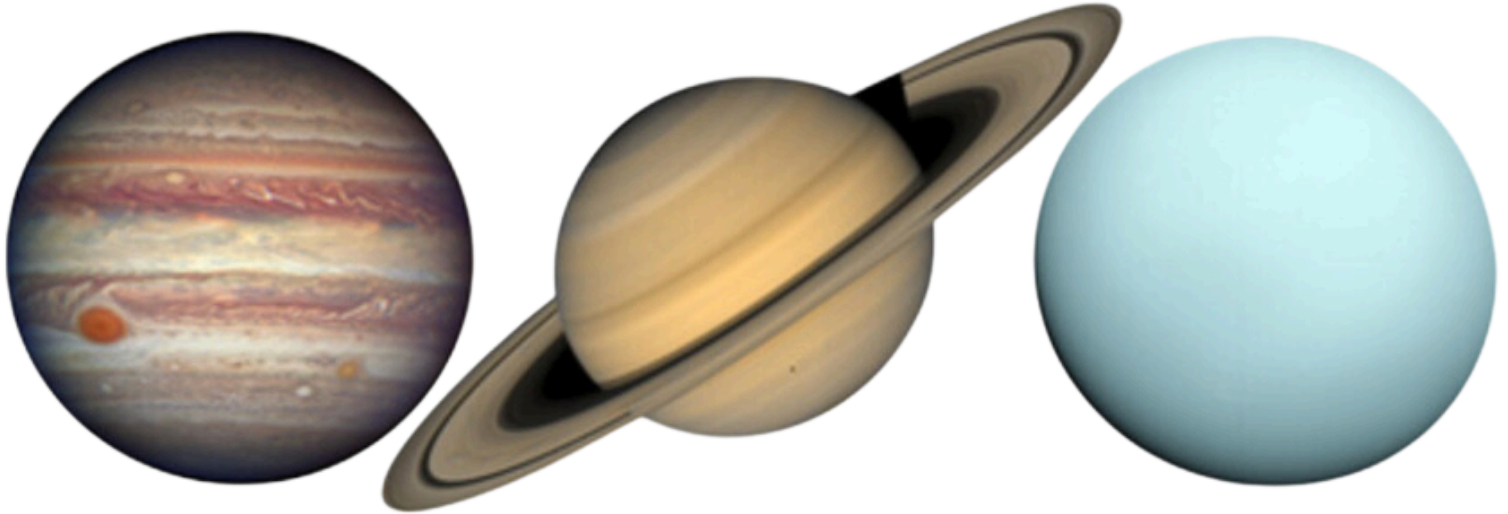


PLANETARY CHANGES

BY: BEN DAVIDSON

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[HTTPS://WWW.ESA.INT/SCIENCE_EXPLORATION/SPACE_SCIENCE/WEBB/JUPITER_5_UPPER_ATMOSPHERE_SURPRISES_ASTRONOMERS](https://www.esa.int/Science_Exploration/Space_Science/Webb/Jupiter_5_upper_atmosphere_surprises_astronomers)



Over the last several years, and in several previous issues, we have gone over the solar system shift, and how the evidence of rapid change can be found throughout the solar system. We've got three more items to add to that list this month, found at Jupiter, Saturn and Uranus.

At Jupiter, they are noticing strange atmospheric activity above the great red spot. While they claim that only James Webb's newest infrared cameras could spot it, I'm doubtful. Hubble looked a lot, and Juno was actually there orbiting the giant planet - seeing this for the first time now may be a key signature of the shift.

AT SATURN, THEY HAVE DISCOVERED AN ENERGY IMBALANCE, WHICH COULD NOT BE A LONG-TERM PERSISTENT FEATURE GIVEN THE STABILITY OF THE PLANET'S ATMOSPHERE OVER THE LAST SEVERAL DECADES. WHAT CAUSES AN ENERGY IMBALANCE IS EITHER A CHANGE IN SOLAR OUTPUT, OR A CHANGE IN THE PLANET'S MAGNETIC FIELD, AND WE KNOW THAT THE SUN ISN'T DOING ANYTHING EXTRAORDINARY. THIS SATURNIAN SIGNAL MAY BE ANOTHER INDICATION THAT ITS MAGNETIC FIELD IS CHANGING.

Lastly, Uranus's cloud brightening is breaking expectations. Astronomers say it is puzzling, and they can't explain it, but a similar magnetic change as we are seeing everywhere else would certainly explain this brightening, just as it would explain the previously-reported record storms and aurora.

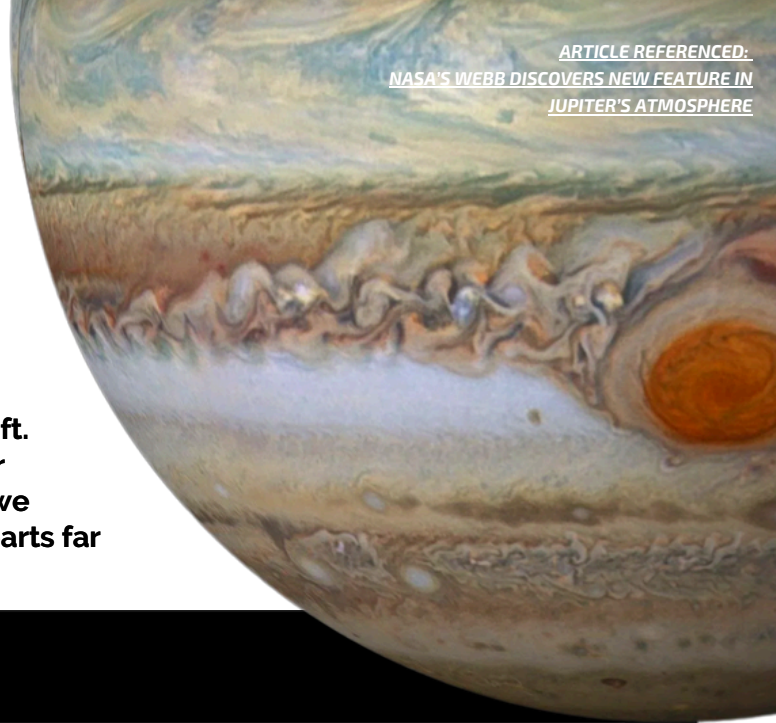
We have been seeing new evidence in the solar system about once every 40 to 60 days - this last month, we got three of them. Without major solar changes, we must assume these are all part of the magnetic solar system shift brought on by the arrival of the galactic current sheet.

JUPITER'S NEW JET STREAM

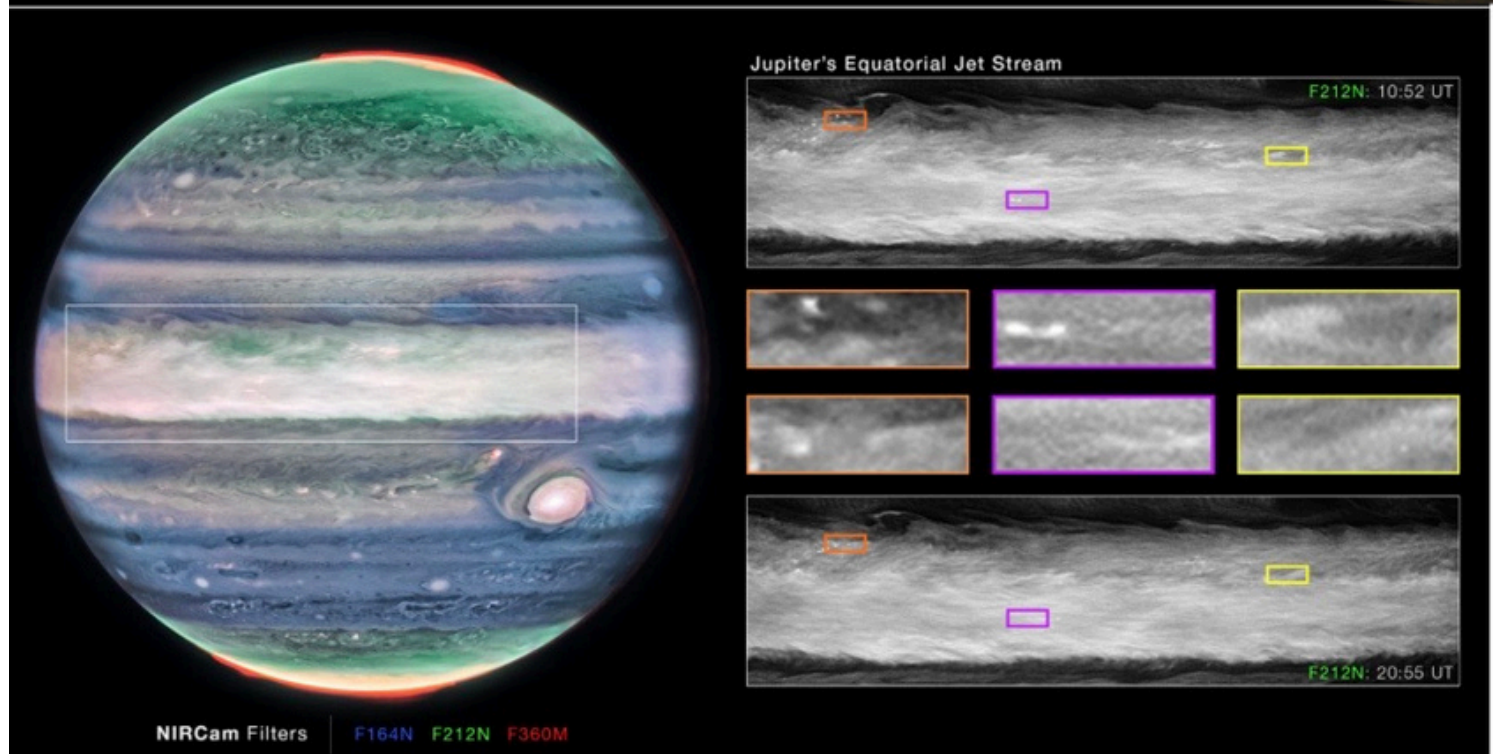
BY: BEN DAVIDON

BACKGROUND:

We have been examining evidence of a solar system shift. This includes the changes on earth, but paints a broader picture of galactic influence on our solar system when we realize that the entire solar system is changing - some parts far more than earth is changing.



JAMES WEBB SPACE TELESCOPE
JUPITER | JULY 27, 2022



NEW SCIENCE:

Despite the Hubble satellite's years of viewing Jupiter, and despite the Juno orbiter being right there at the gas giant, they never saw a jet stream in the upper equatorial region of Jupiter. The James Webb Space Telescope saw it, and now we know of a titanic new feature on Jupiter.

SIGNIFICANCE:

First, it should not be mistaken - Hubble and Juno could have seen this if it was there before. There is very little chance of it being missed by those instruments, which indicates the feature is new to the giant planet. Second, this is now added to the several changes seen on Jupiter, and throughout the solar system, indicating that the major changes are continuing. On earth the upper level winds are strongly modulated by solar activity, and so the same should be true of Jupiter, but without major solar activity changes of late, the best explanation is that the magnetic field of Jupiter is changing, which we've seen evidence for already, and which would allow a greater solar influence of the Jovian atmosphere. The solar system shift continues.

THE SOLAR SYSTEM SHIFT CONTINUES

BY: BEN DAVIDSON

ARTICLE REFERENCED:

HUBBLE MONITORS CHANGING WEATHER
AND SEASONS AT JUPITER AND URANUS

There is much more going on than a simple magnetic pole shift and weakening of earth's magnetic field- the entire solar system is changing. This month we got an update on the largest planet, Jupiter. Each of the planets (and the sun) appear to be going through a similar magnetic shift. Here is a quick review of the solar system shift for those who are new to the topic:

Pluto's atmosphere is collapsing. 20% of the atmospheric pressure disappeared during a 1 year period around 2019-2020, and this is far beyond anything that would normally be expected. It is well understood that Mars lost its atmosphere long ago due to a lack of a magnetic field, and similar studies show the same would happen to earth if the magnetic field disappeared for a long period of time (luckily that's not what happens during earth's rapid magnetic events). This leads us to believe that Pluto has endured a significant magnetic shift causing the loss of its atmosphere.

Neptune's storms follow a very clear and predictable pattern. Hubble and other satellites have been watching them for quite some time, and they always move in a similar fashion, not unlike how hurricanes that form off the coast of Africa tend to move west across the Atlantic Ocean towards the Americas. Except a storm just reversed itself on Neptune, it went the wrong way. This was a first ever event witnessed on the blue planet, and it occurred concurrently with a major drop in temperatures. A reversal of major storm patterns, especially the most electrical types of storms, might be expected with a reversal of the planetary magnetic condition, and a drop in temperature could result from either a loss of atmospheric pressure, or an increase in clouds that reflect sunlight. A weaker magnetic field at a planet allows for the increase in cosmic rays into the atmosphere, which are known to produce clouds (for further information on this, do an internet search for "cosmic ray cloud chamber"). Whether it is a loss of pressure or an increase in clouds, or both, an excellent explanation for both of Neptune's changes is a shift of the planet's magnetic field.



Read the scientific paper for yourself:
<https://www.nasa.gov/feature/goddard/2023/hubble-monitors-changing-weather-and-seasons-at-jupiter-and-uranus>

Uranus has had record aurora the last several years. This is peculiar because the sun is not as active as it was 20 - 40 years ago, and so the auroral activity should be lower. However, a weaker magnetic field at Uranus would allow more solar particles to enter when a coronal mass ejection arrives, which would enhance the aurora.

Saturn has been visible with telescopes for a long time, and even long ago it was known that a superstorm occurs on Saturn's northern hemisphere every 30 years during its closest approach to the sun- when it takes in the most solar energy. However, that storm just appeared 10 years early, and while most scientists say they don't know why it happened, an excellent hypothesis would be that its magnetic field is also weakening, allowing in more solar energy - enough to trigger that storm before it otherwise would have.

Jupiter has had cloud bands change, and the Great Red Spot has been shrinking. These cloud and storm anomalies (again) are expected if the planet's magnetic field is changing, but we actually don't have to make that guess at Jupiter, because its radio frequencies are changing as well. The radio signals of Jupiter result from electrons trapped in its magnetic field, which emit radio waves as they whip around the planet within the magnetic field. A nature of an electron never changes, so the only way to make those electrons sing a different song at Jupiter is to have a change in the magnetic field.

Mars has been enduring climate changes that dwarf what we see on earth, but scientists have also been seeing record seismic activity, and evidence that the planet's mantle is not dead (as previously believed), but is in fact alive and active. We know that atmospheric changes and seismic activity can both be impacted by a planet's magnetic field (and that field's interaction with space weather), and in terms of its mantle- nothing about the past data suggests the mantle was alive before. It appears more likely that Mars' mantle is "waking up" as its magnetic field changes.

At earth we not only have direct measurements of how the magnetic field is changing, but we see several of the atmospheric impacts as well, including a sustained ionospheric disturbance (which should have decreased due to weaker recent solar activity, but remains at high levels), and record storms, ozone loss (despite a halt to ozone-destroying pollution) and weather extremes of all kinds. We are also seeing record lightning activity, and that is expected as more cosmic energy enters the atmosphere with a weaker magnetic field, allowing for higher atmospheric electricity.

Venus' fastest winds are 33% faster, which is well beyond any of the wind-speed changes on earth. Space weather interaction with gaseous atmospheres can affect wind speed- we have seen that at earth, and a changing magnetic field would impact that interaction at Venus. Mercury is the only planet where we still lack solid evidence- but we're about to get it. The Mercury Messenger satellite made detailed measurements of the magnetic field, and when the BepiColumbo satellite arrives in the coming years, we will get a direct comparison of the data. The sun is changing too, not only is its atmospheric (coronal) chemistry changing, but so are its magnetic fields. These shifts were noted (and subsequently confirmed) to be closely related- an increase in Helium as the magnetic fields of the sun are shifting.

The newest news (March 2023) comes from Hubble's latest look at Jupiter. The shrinking of the Great Red Spot has continued. Some scientists had guessed that it might be a temporary anomaly, but it appears to be a sustained shift of the storm system. This means we have changes on all the spheres of our solar system, and there is only one thing that can simultaneously explain them all - that the solar system is going through a fundamental magnetic shift.

Interestingly, there is only one thing that could produce such effects on an entire solar system, and that is the galactic magnetic reversal (moving from one hemisphere of galactic magnetism to the other). That boundary would be polluted with dust, charged particles and neutral gases, and would be simultaneously detectable as these planetary magnetic shifts occurred. It just so happens, several satellite missions are detecting more energetic neutral atoms, more interstellar pickup ions, and more dust. There is more dust in interplanetary space, more in the upper corona, and even here on earth, where approximately 50% more atmospheric dust than there was 150 years ago.

Mainstream scientists like the blame "climate change" and human activity for the increase in dust in earth's atmosphere, but their math can't account for more than a fraction of the increase. The better explanation is the one that also explains the changes on every planet, the sun, and in the chemistry of the solar system space between the planets. This is the solar system shift, due to the galactic magnetic reversal brought by the galactic current sheet, and it is the reason that there is such a solid cycle of these catastrophic changes in the solar system. This is too many coincidences to ignore.