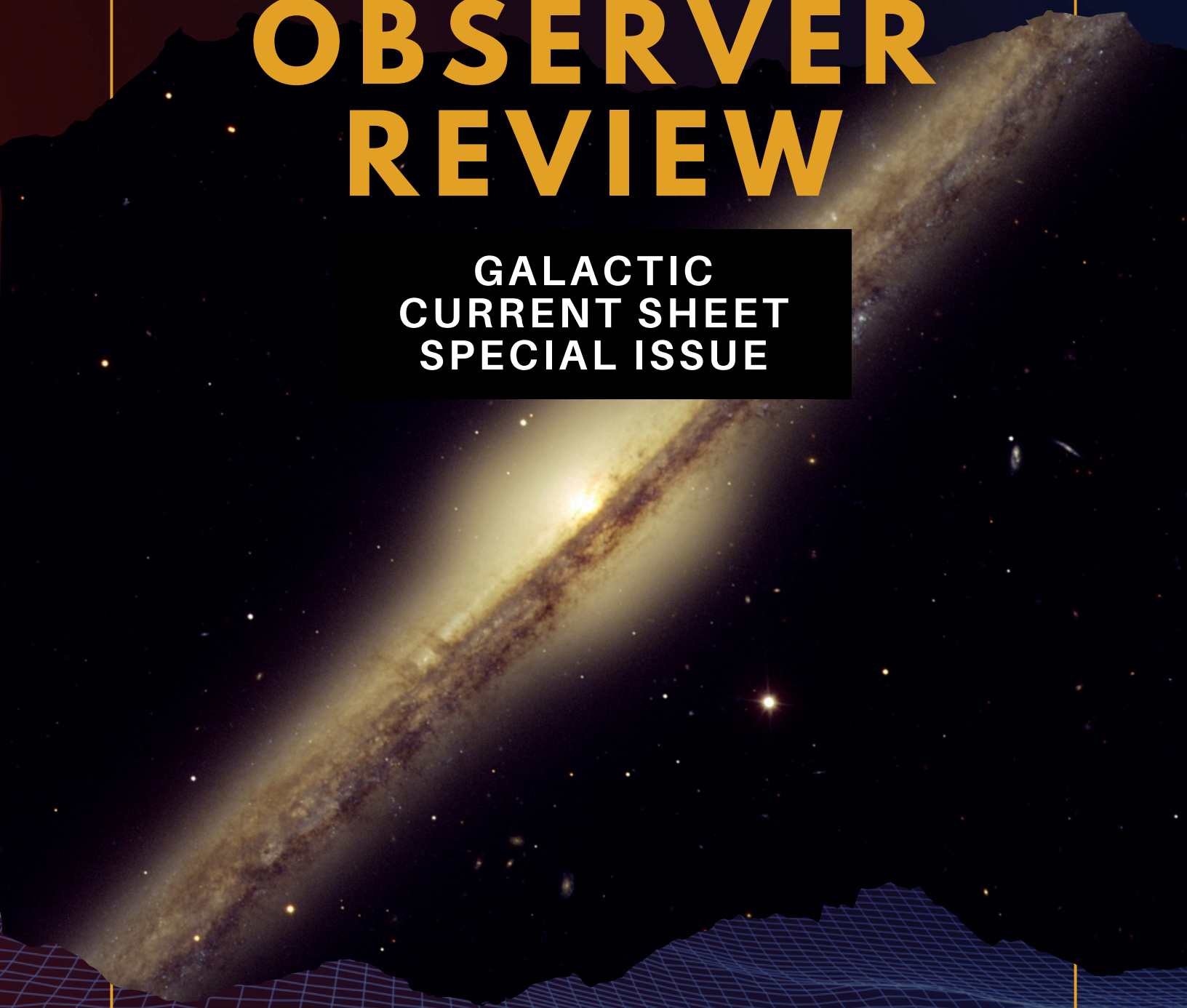
OBSERVER REVIEW

GALACTIC CURRENT SHEET SPECIAL ISSUE



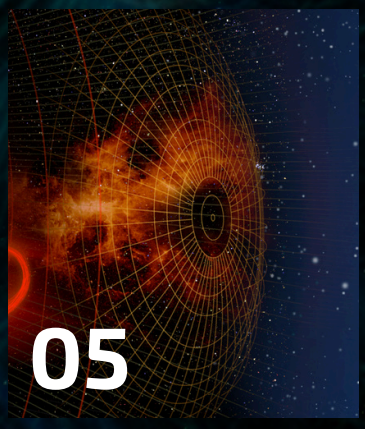
ANALYZING PAST STUDIES ON THE GALACTIC SHEET AND THE EFFECTS ON OUR SOLAR SYSTEM

GALACTIC CURRENT SHEET SPECIAL ISSUE

03 SUN'S CURRENT SHEET IS CHANGING

04 GALACTIC MAGNETIC FIELD

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



05 GALACTIC CURRENT SHEET RADIAL WAVE

The galactic current sheet is the cause of the cyclical disaster cycle in our solar system by delivering the galactic magnetic reversal and an excess of dust, neutral gas, and charged particles.

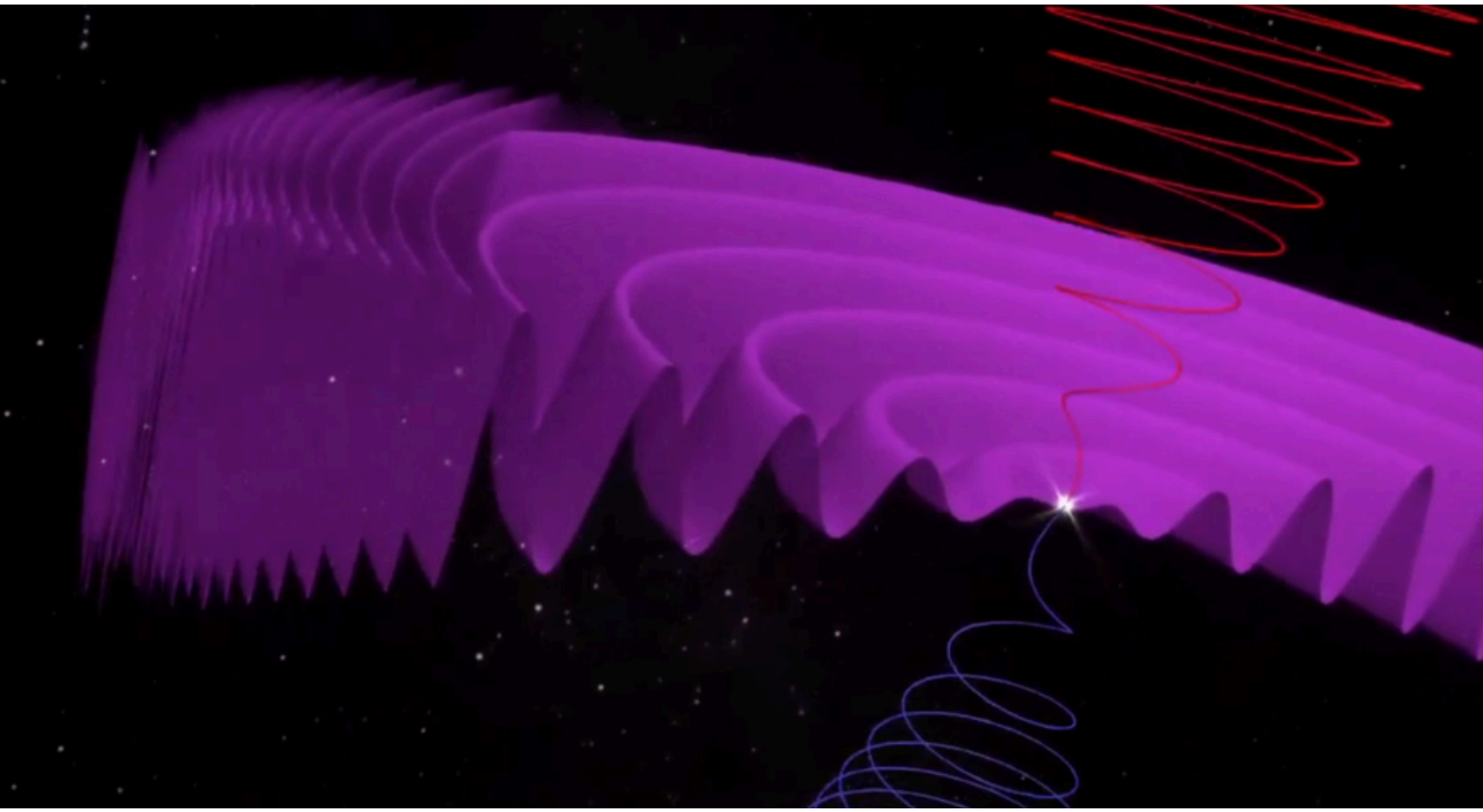
FEATURED ARTICLES

AND MORE THROUGHOUT THE ISSUE!

SUN'S CURRENT SHEET IS CHANGING

BY: BEN DAVIDSON

ARTICLE REFERENCED:
HTTPS://ARXIV.ORG/PDF/2407.06510



There may be a new solar system shift event to add to the already-long list. A new study is confirming a previous observation, and that confirmation now means we can look at the data in a more-certain way.

This study focused on the heliospheric current sheet - the solar-system version of the galactic current sheet. For the entire time of human observational history, the sun's current sheet was tending to shift southward, and this extends to extrapolated data before direct observations - nearly a century of consistent southward shifts. But now, as of 2019/2020, the sun's current sheet is beginning to shift northward - a first-time observation.

Scientists are hypothesizing a centennial or millennial cycle to these variations, but they have no evidence to back-up that hypothesis; it is very possible this is due to the impacting galactic current sheet and impending polarity reversal of the galactic environment underway now.

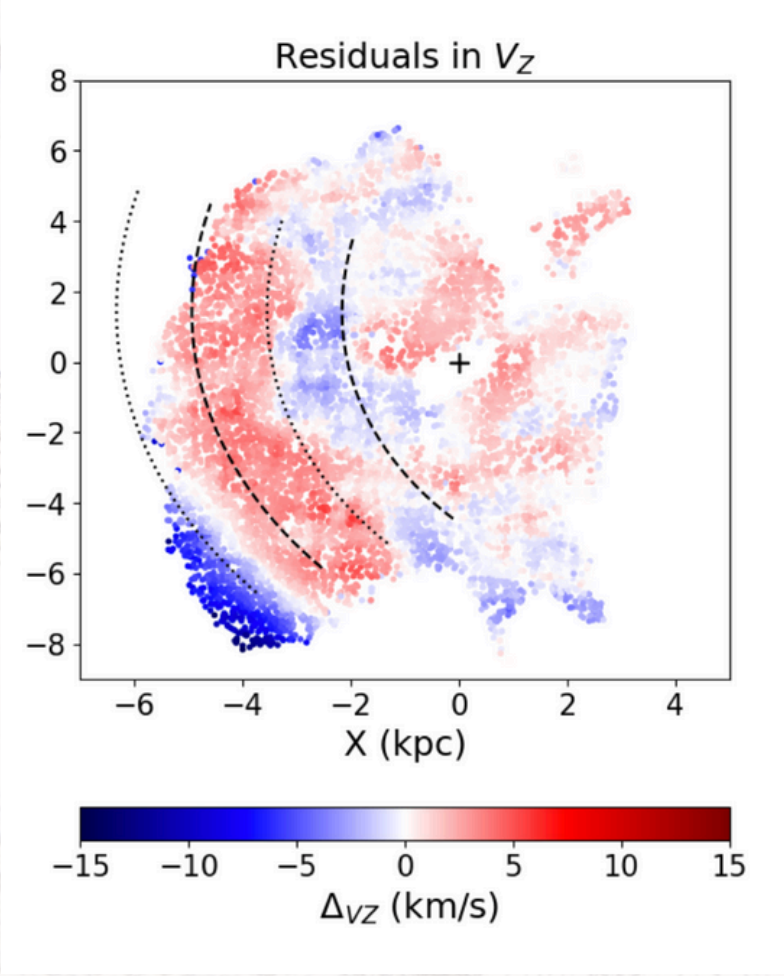
This is added to the coronal magnetic field changes and the coronal helium chemistry changes over the last 20 years, to make three critical solar changes in the broader solar system shift.

GALACTIC MAGNETIC FIELD

BY: BEN DAVIDSON

ARTICLE REFERENCED:

HTTPS://ARXIV.ORG/PDF/2407.05093
HTTPS://ARXIV.ORG/PDF/2407.18659



TWO NEW STUDIES HAVE PILED-ON THE OVERWHELMING EVIDENCE FOR THE EXISTENCE AND CHARACTER OF THE GALACTIC CURRENT SHEET.

IT HAS BEEN OBSERVED IN THE MILKY WAY AND OTHER GALAXIES, CHARACTERIZED IN TERMS OF AMPLITUDE, WAVELENGTH AND THICKNESS, AND WE KNOW IT IS A DUSTY, ELECTRIC SHEET CARRYING THE GALACTIC MAGNETIC REVERSAL POINT.

The new studies investigate two critical aspects of the current sheet- the spiral magnetic field, and the corrugated (wavy/rippling) shape of the sheet. The spiral field is a critical aspect of the galactic magnetic field, as it is in small models and the sun's current sheet. With reversals of magnetism present not only north and south, but within the wave as it ripples up and down.

The corrugated shape is also critical, and although we have seen more than several studies suggesting this character of the sheet, more is always better. The large scale galactic magnetic system is exactly as we have described in our videos and previous issues of this publication - making for the only way to explain every observable change in the solar system explainable with just one forcing factor.

GALACTIC CURRENT SHEET RADIAL WAVE

BY: BEN DAVIDSON

ARTICLE REFERENCED:
HTTPS://ARXIV.ORG/PDF/2403.14953.PDF

BACKGROUND:

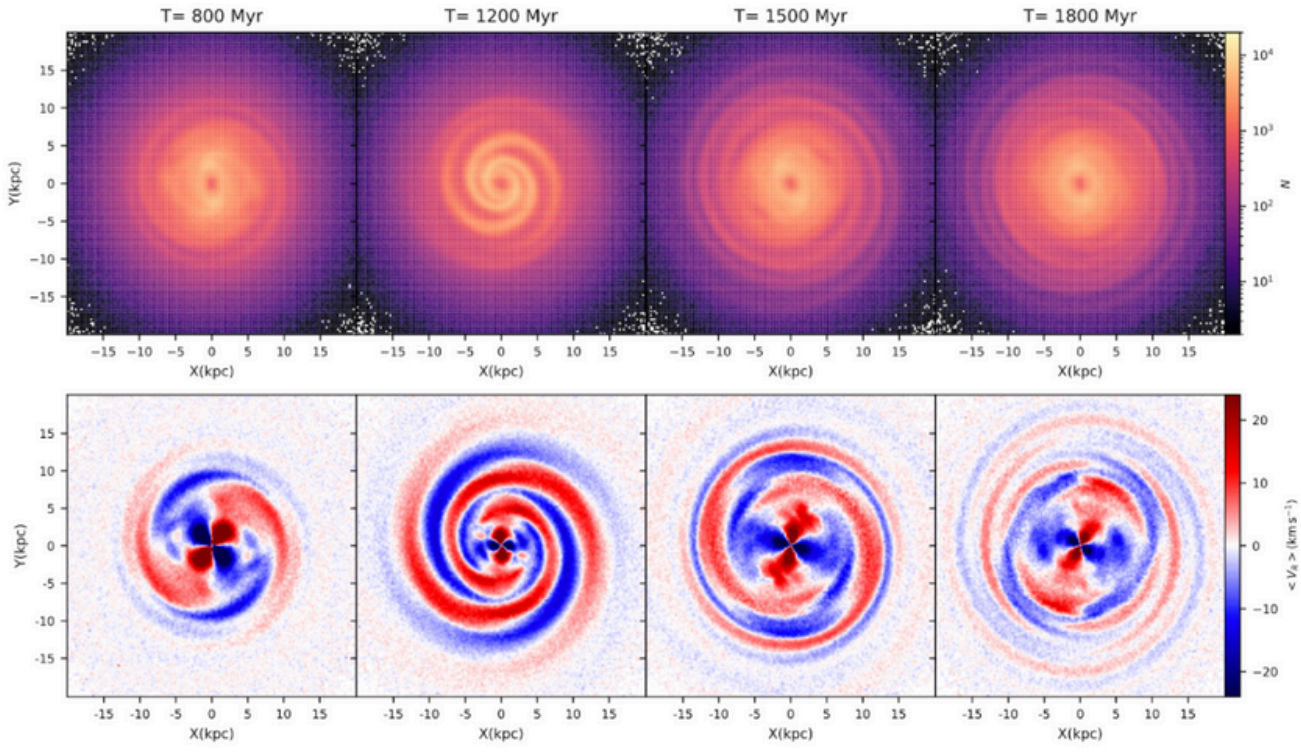
The galactic current sheet is the cause of the cyclical disaster cycle in our solar system by delivering the galactic magnetic reversal and an excess of dust, neutral gas, and charged particles. This sheet has been identified in several galaxies, and the Milky Way sheet has been well characterized in gamma rays, dust polarization and stellar motion, as well as being shown to have sustained amplitude and wavelength throughout the galaxy.

NEW SCIENCE:

The interior zones of the current sheet have been modeled in terms of development and evolution over time. The image here is from the study, showing the tight wrapping of these magnetic sectors in the region encompassing only half the distance from the galactic center to the sun. This is three times the amount of undulation compared to the dusty arms of the spiral itself.

SIGNIFICANCE:

We already knew that the amplitude of the Milky Way current sheet was known, along with the thickness of the sheet, and how it impacts the stars in the galaxy. Now we confirm the tight wrapping of those undulations in the interior of the galaxy, and how they likely evolved over time. It is no longer a matter of speculation that this current sheet exists and has a profound impact on the solar system- we have now moved into the phase of detailed characterization of the galactic magnetic reversal points within the system.



SOLAR GAMMA RAY SURPRISE

BY: BAILEY LAURISSA

IN A NEW DISCOVERY, A TEAM OF PHYSICISTS FROM MICHIGAN STATE UNIVERSITY (MSU), IN COLLABORATION WITH RESEARCHERS FROM AROUND THE GLOBE, HAS UNCOVERED THE HIGHEST-ENERGY LIGHT EVER OBSERVED COMING FROM OUR SUN.

THE SUN EMITS GAMMA RAYS - MUCH HIGHER ENERGIES THAN EXPECTED, AND PRIOR MODELS DID NOT ACCOUNT FOR THIS LIGHT RELEASE FROM THE SUN. WHILE THIS HIGH-ENERGY LIGHT DOES NOT MAKE IT TO GROUND LEVEL, IT IMPACTS THE IONOSPHERE AT THE TOP OF THE SKY. THIS DISCOVERY IS PERTINENT FOR THE TOPICS OF RADIO PROPAGATION, CLIMATE SCIENCE, AND OZONE INTERACTIONS.

WHAT ARE GAMMA RAYS?

GAMMA RAYS ARE A FORM OF ELECTROMAGNETIC RADIATION, JUST LIKE VISIBLE LIGHT, RADIO WAVES, AND X-RAYS. HOWEVER, GAMMA RAYS HAVE MUCH HIGHER ENERGY AND SHORTER WAVELENGTHS THAN X-RAYS. THEY ARE OFTEN DESCRIBED AS "HIGH-ENERGY PHOTONS."

Mehr Un Nisa, a postdoctoral research associate at MSU and the corresponding author of the study published in the journal Physical Review Letters, expressed her surprise, stating, "The sun is more surprising than we knew. We thought we had this star figured out, but that's not the case." – A sentiment Observers have become very familiar with.

The research team used the High-Altitude Water Cherenkov Observatory (HAWC), to make this discovery. Unlike conventional telescopes, HAWC operates 24/7 and uses a unique approach to observe high-energy phenomena. Rather than relying on glass lenses and a tube, HAWC consists of a network of 300 large water tanks, each filled with approximately 200 metric tons of water. Located between two dormant volcano peaks in Mexico at an altitude of over 13,000 feet above sea level, HAWC observes the aftermath of gamma rays colliding with air in the atmosphere. These collisions produce air showers, akin to imperceptible particle explosions.

ARTICLE REFERENCED:
SPARTANS HELP MAKE A SURPRISING DISCOVERY ABOUT THE SUN

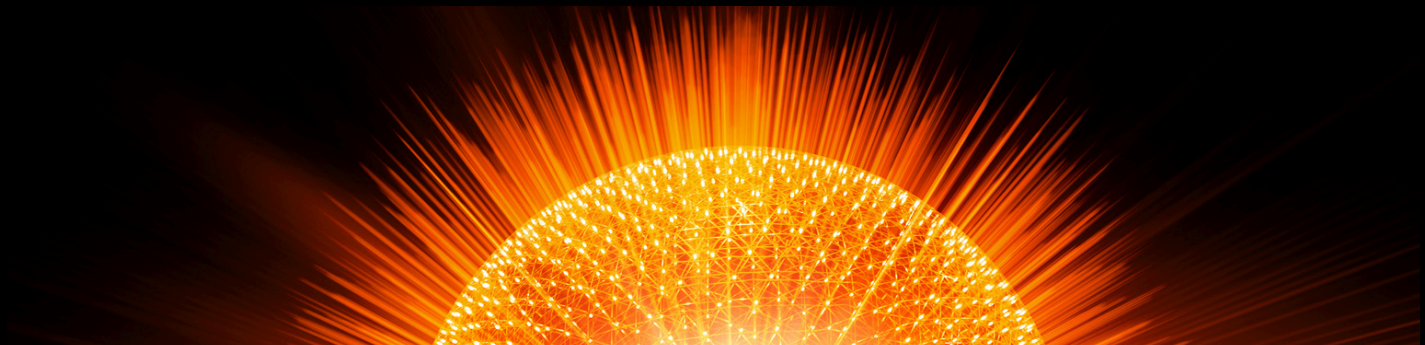
KEY TO HAWC'S OBSERVATIONS FINDINGS IN THIS STUDY

IN ADDITION TO OZONE VARIATIONS, THE KEY TO HAWC'S OBSERVATIONS LIES IN DETECTING CHERENKOV RADIATION, GENERATED WHEN THE SHOWER PARTICLES INTERACT WITH WATER IN ITS TANKS. THROUGH YEARS OF DATA COLLECTION, THE RESEARCH TEAM WAS ABLE TO UNCOVER AN UNEXPECTED EXCESS OF GAMMA RAYS EMITTED BY THE SUN.

Scientists in the 1990s had hypothesized that the sun might produce gamma rays when high-energy cosmic rays, particles accelerated by cosmic phenomena like black holes or supernovae, collided with protons in the sun. However, based on the limited knowledge at the time, they believed such gamma rays reaching Earth would be rare.

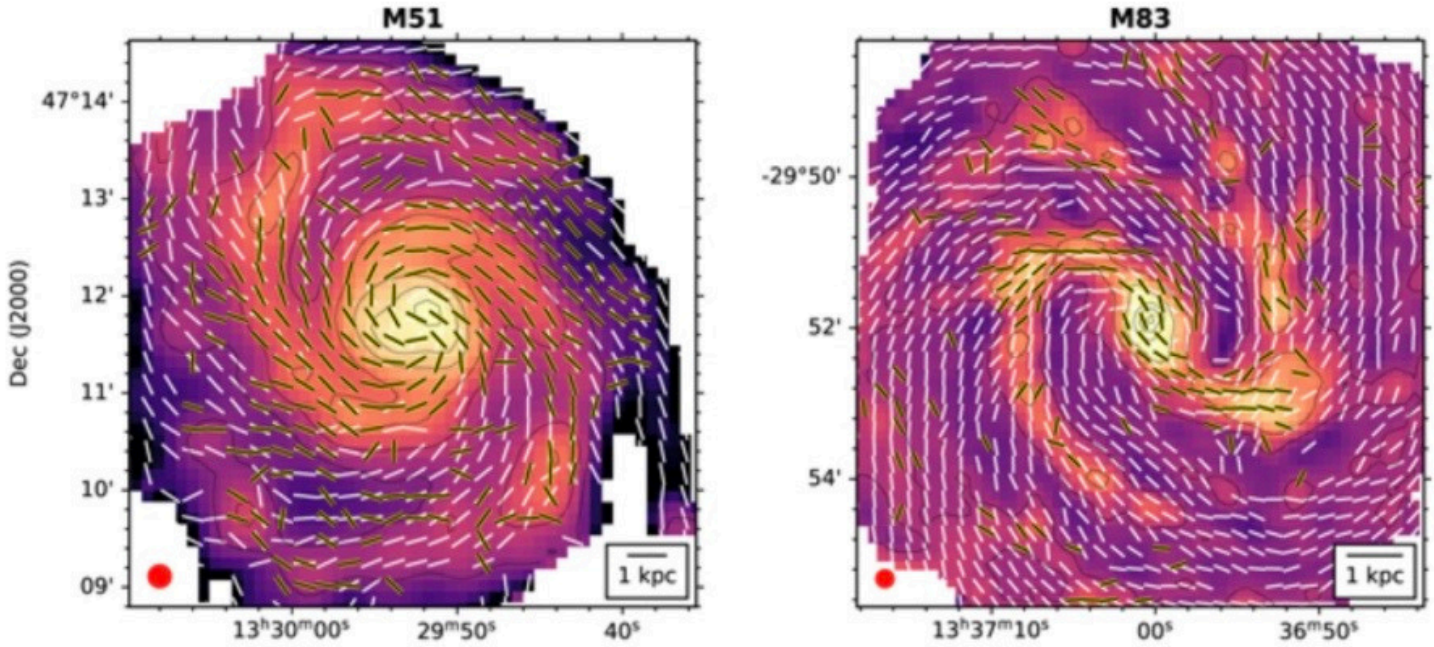
Two additional noteworthy thoughts emerge from this discovery: firstly, it challenges the established models that scientists have relied upon to comprehend the intricate relationship between the sun and Earth. Furthermore, this finding could be attributed to technological limitations of the past. It aligns with shifts in solar helium chemistry and the dynamic evolution of coronal magnetic fields, which may, in turn, account for the previously undetected variations in high-energy light emissions.

BY UNDERSTANDING THIS, IT SHOWCASES THE ONGOING TRANSFORMATION WITHIN OUR SOLAR SYSTEM, PROMPTING A REEVALUATION OF MAINSTREAM MODELS. IT ALSO SIGNIFIES THE SHIFT OF OUR SOLAR SYSTEM AS THE GALACTIC CURRENT SHEET AFFECTS US TO GREATER AND GREATER EXTENTS.



GALACTIC MAGNETIC FIELDS

BY: BEN DAVIDSON



BACKGROUND

The galactic current sheet is the large-scale progenitor of the cyclical earth disaster, impacting the entire solar system, and has been seen in our Milky Way and other galaxies as forming a wave that undulates much more rapidly than the tracing of the spiral arms of the galaxy.

NEW SCIENCE

Several other galaxies have now been studied using far-infrared light emitted by dust. They are all showing that same pattern of the magnetic fields not only tracing the arms, but having distinct patterns within the arms in the radial, outward-spiraling nature that Observers have come to recognize.

IMPORTANCE

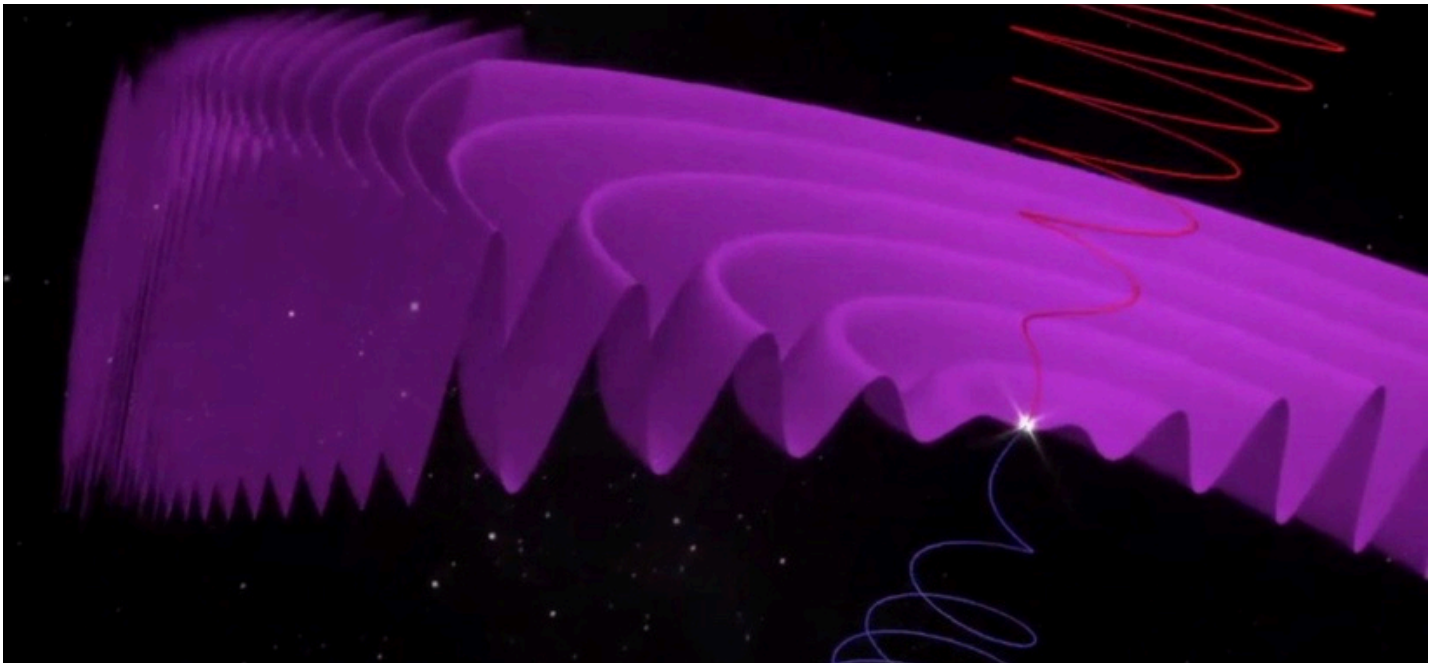
It is obviously important that the form of the galactic current sheet is confirmed to exist at more and more galaxies, since it can only broaden awareness of the galactic trigger of the disaster cycle. However, in this case the use of dust provides a 2nd important indicator of what is happening at the small scale waves.

The dust is what helps trigger the solar micronova, and it is already being seen at excess in the inner solar system and near the sun. We believe there is tremendous evidence for this dust being connected to the current sheet, and in-fact concentrated there. The fact that they were able to confirm the galactic current sheet patterns at distant galaxies using those peaks in dust and light polarization is a double confirmation in Observer-world.

ARTICLE REFERENCED: THE STRUCTURE OF MAGNETIC FIELDS IN SPIRAL GALAXIES: A RADIO AND FAR-INFRARED POLARIMETRIC ANALYSIS

VOYAGER SEES MAGNETIC HUMP

BY: BEN DAVIDSON



BACKGROUND

We have seen numerous indicators that the galactic current sheet is currently impact the solar system, and have expected to continue to see other particle and magnetic evidence in the data collected by Voyager 1 and 2, New Horizons and others.

NEW SCIENCE

A “magnetic hump” was seen by Voyager 1 in various ways between 2020 and 2023, accompanied by an increase in particle density (protons). The study guesses that the space weather events of sunspot cycle 24 were to blame.

2nd Opinion: In just a few weeks the coronal mass ejections on the sun reach Plutonian space, which means that at most, we should be looking at a few months between solar activity and arrival at the Voyager craft. The scientists guess that 2015-2017 solar events caused these magnetic signatures in 2020-2023 lacks confidence from several standpoints.

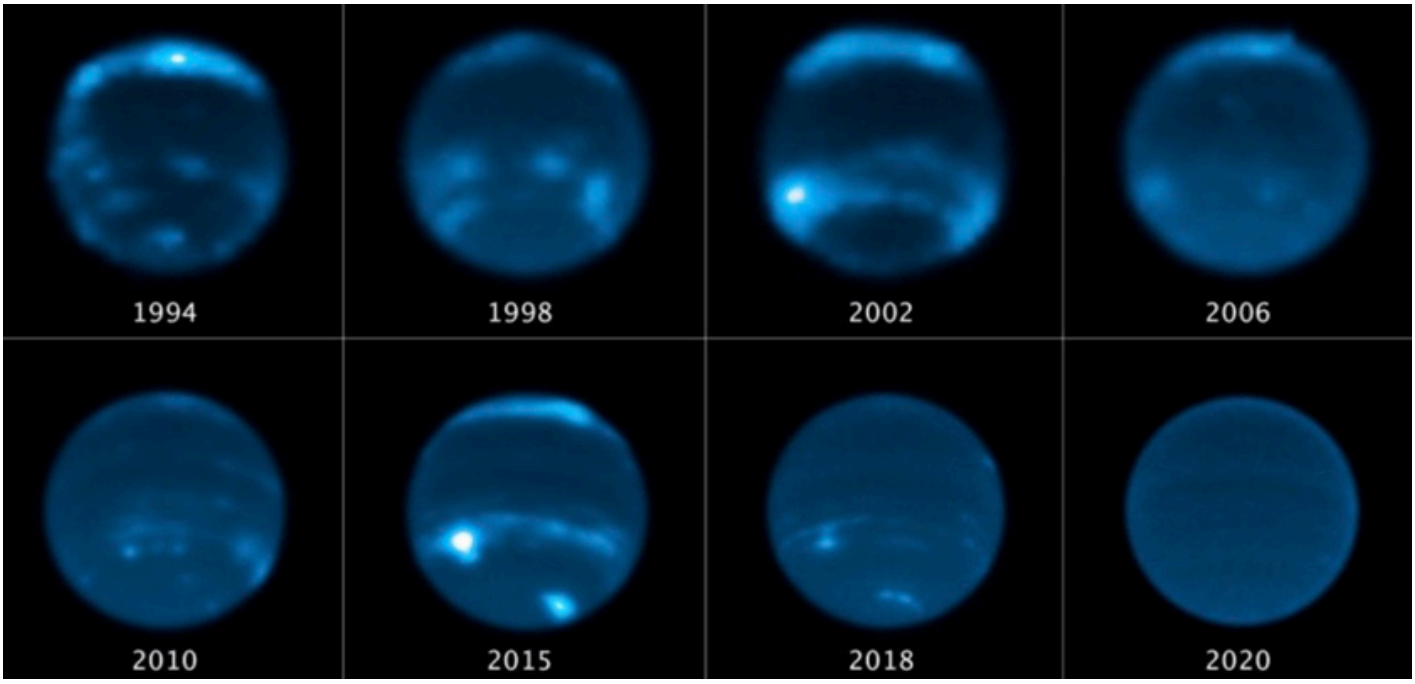
IMPORTANCE

If indeed we cannot blame the sun for these magnetic humps, it must be the galactic current sheet, which is also the best explanation for the magnetic shocks, plasma pressure fronts, interstellar ions, neutral atoms and dust that have also been seen. My opinion is that this is yet another sign the current sheet is impacting our solar system now.

ARTICLE REFERENCED: A LARGE MAGNETIC HUMP IN THE VLISM OBSERVED BY VOYAGER 1 IN 2020–2022

THE GALACTIC CURRENT SHEET AND NEPTUNE

BEN DAVIDSON



There were two fascinating updates on Neptune's condition this past month, but if you just read the headlines of either (or both) you won't be getting the full, true story of what is happening.

First, a major study concluded that Neptune's disappearing clouds were linked to the solar cycle. While this appears loosely true, and while the clouds are reduced on Neptune, there is no evidence that the current reduction of Neptunian clouds has ever been seen before - what is happening now is to a far greater extent than before - the question is why.

SECOND, MAJOR HEADLINES DESCRIBED A DARK SPOT SPOTTED ON NEPTUNE FOR THE FIRST TIME. THE PROBLEM IS THAT IT WAS SIMPLY THE FIRST TIME EARTH-BASED TELESCOPES HAVE SEEN IT. ANOTHER ISSUE IS THAT THE BIG PART OF THE DISCOVERY IS THAT THEY ALSO DETECTED SUPER-BRIGHT SPOTS, AND THESE HAVE NOT BEEN SEEN FROM EARTH, OR SPACE, ON NEPTUNE OR ON ANY PLANET EVER. IT WAS A FIRST-EVER DETECTION OF SUCH A PLANETARY ANOMALY... AND IT DIDN'T MAKE THE HEADLINE.

In reality, these new phenomena are likely related to the super-storm reversal seen on Neptune in the last few years, as evidence of the major changes there in the ongoing solar system shift, due to the arrival of the galactic current sheet.

ARTICLE REFERENCED: NEPTUNE'S DISAPPEARING CLOUDS LINKED TO THE SOLAR CYCLE AND MYSTERIOUS NEPTUNE DARK SPOT DETECTED FROM EARTH FOR THE FIRST TIME

THE SOLAR SYSTEM SHIFT CONTINUES

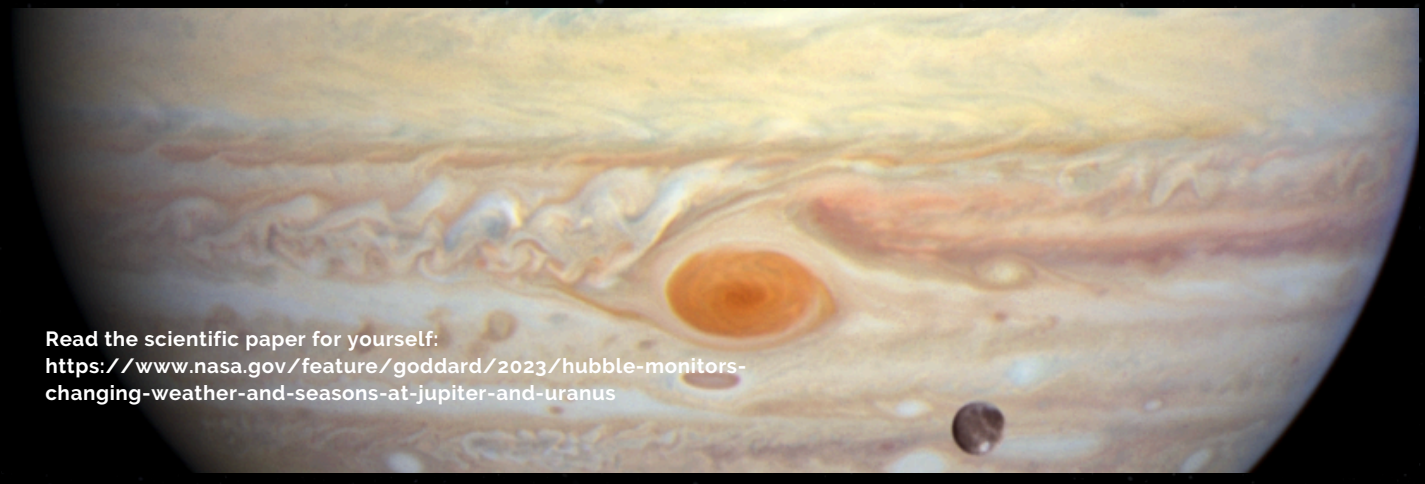
BY: BEN DAVIDSON

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.

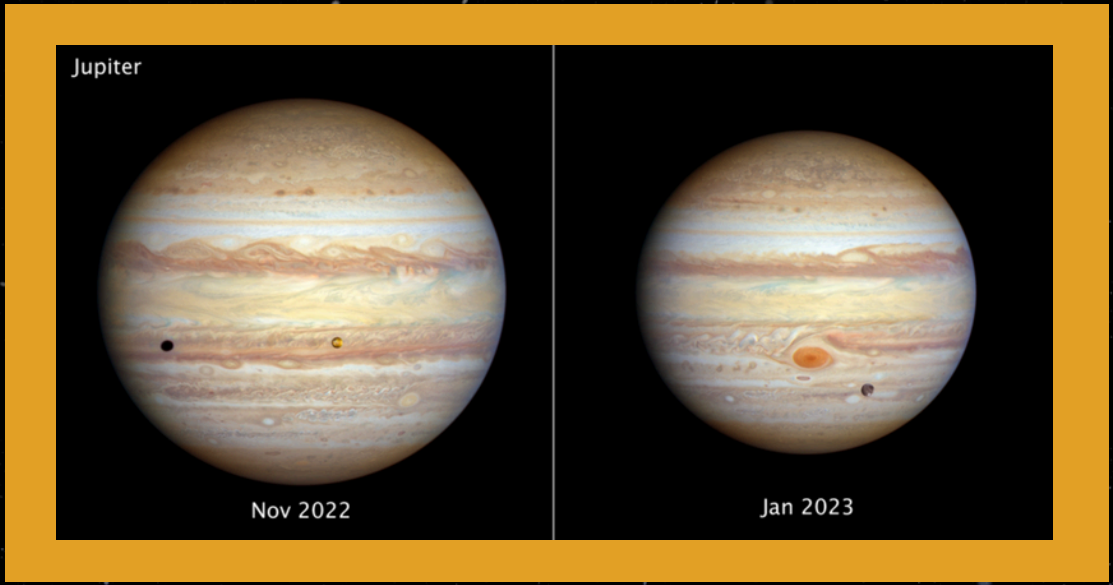


Read the scientific paper for yourself:
https://www.nasa.gov/feature/goddard/2023/hubble-monitors-changing-weather-and-seasons-at-jupiter-and-uranus

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 planets 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.

ARTICLES REFERENCED:
NEW HORIZONS VENETIA BURNEY STUDENT DUST COUNTER OBSERVES HIGHER THAN EXPECTED FLUXES APPROACHING 60 AU

EXTRA DUST IN THE OUTER SOLAR SYSTEM

BY: BEN DAVIDSON

We know the earth is changing, but also the other planets, the sun, and interplanetary space. One of the key changes in interplanetary space is the appearance of more dust. This has been detected in the region around Mars, Earth, Venus, and all the way inwards to the upper corona of the sun.

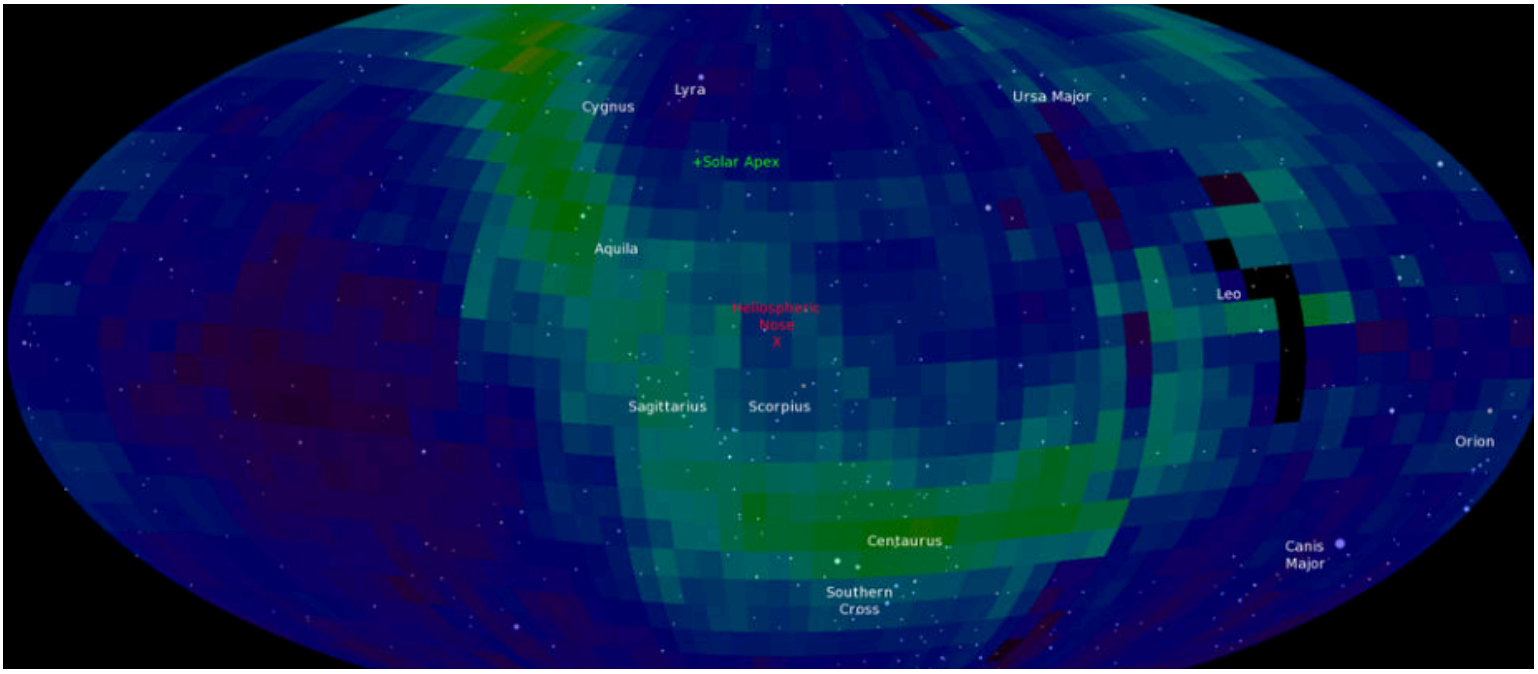
The idea is that this dust is coming with the galactic current sheet, which is the only way to explain the solar system shift we are seeing. While Voyager and New Horizons spacecraft have detected plasma pressure shocks and magnetic switches out past pluto (which are also expected) they have not yet detected the extra dust in the outer reach of the solar system.

THAT JUST CHANGED. A NEW STUDY USING NEW HORIZONS DATA HAS SHOWN GREATER THAN EXPECTED DUST MASS IN THE AREA REACHING NEARLY 60 AU FROM THE SUN. FOR COMPARISON, PLUTO'S OBLONG ORBIT NEVER TAKES IT FURTHER THAN 50 AU FROM THE SUN.

The conclusion is simple: the dust of the current sheet has arrived. Given the several previous studies showing the extra dust in the inner solar system, this was not doubted much by our community, but now that it has been found extending out past pluto, we are settled on our initial conclusion, which confirms that our solar system shift is being caused by the galactic current sheet arrival.

GALACTIC CURRENT SHEET AND THE IBEX RIBBON

BY: BEN DAVIDSON



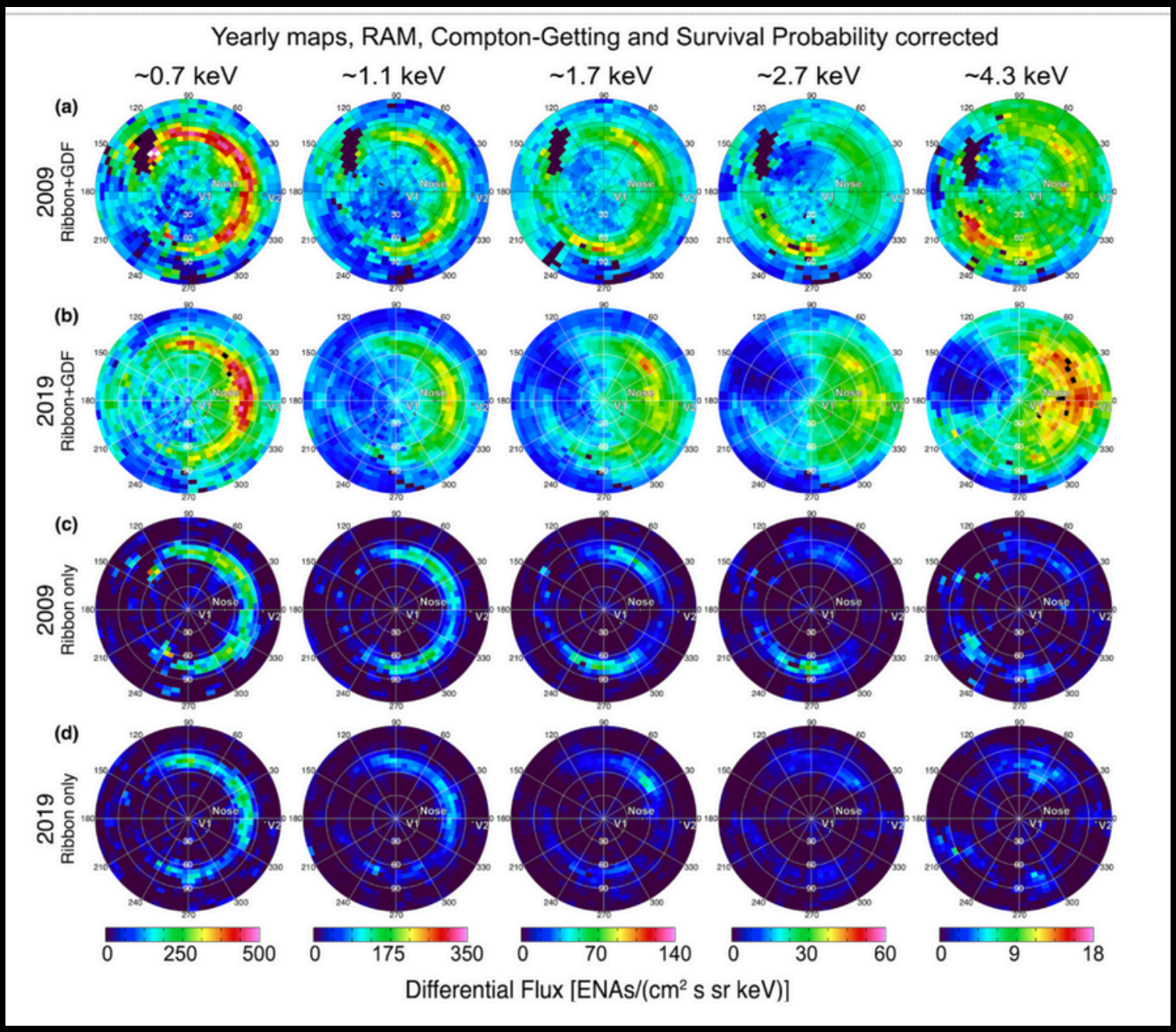
If you pay any attention to the coverage of the 0bservers then you know that we have been tracking a magnetic shift across the entire solar system, including the introduction of excess neutral material, charged particles, and dust. The galactic current sheet, and galactic magnetic reversal, is The Observers' best estimate of the cause of these changes, which have been seen from the outer reaches of the solar system to the sun, and on every planet. If indeed the galactic current sheet is to blame, then the most prominent feature in the outer reaches of the solar system should show signs as well - the IBEX ribbon imprinted on the heliosphere.

The IBEX ribbon is a region of enhanced particle flux imprinted on the heliosphere - the giant magnetic bubble of the sun that surrounds our solar system. The ribbon has been studied in detail, and is known to be driven by an interaction with the interplanetary (galactic) magnetic field. For this reason, a shift in the galactic magnetic environment should produce a significant change in the IBEX ribbon.

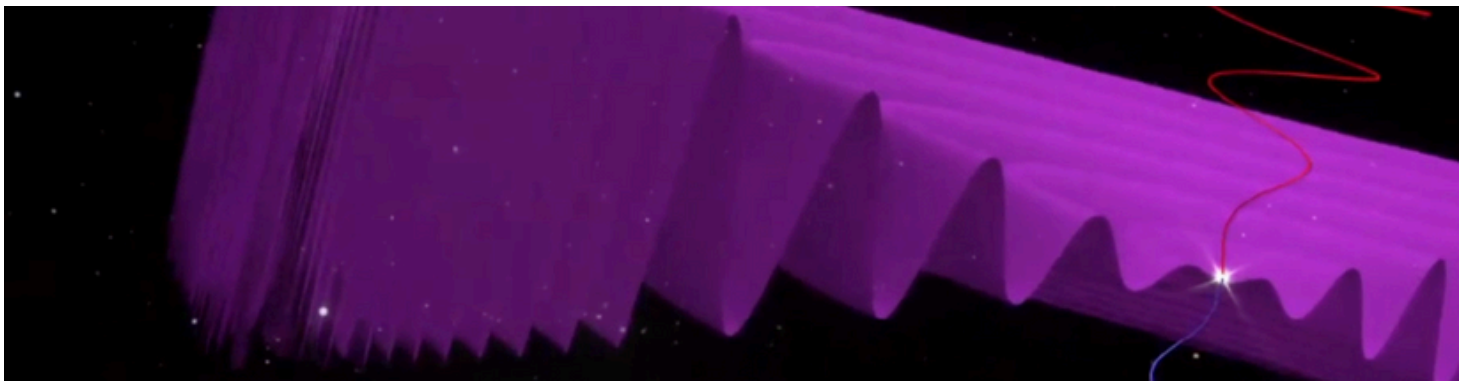
That is exactly what we have now. To suppress the impact of solar activity on the ribbon, the team compared the original 2009 measurements with those in 2019 - both during very low periods of the sunspot cycle where space weather activity was of little to no significance. The differences were profound. At every energy level, the ribbon is showing considerable changes in only a short 10 year period. At massive scales of space, these types of shifts should take much longer - perhaps 1000s of years, unless something else is impacting the situation.

CITED ARTICLE

"On the biospheric effects of geomagnetic reversals"
hhttps://academic.oup.com/nsr/advance-article/doi/10.1093/nsr/nwad070/7076889



As with the changes on the planets and the sun, and the appearance of extra dust and particles, the galactic current sheet provides an explanation for the shift in the IBEX ribbon, and remains the only singular explanation for all of the changes ongoing in our local galactic neighborhood.



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.

FINAL CONCLUSIONS

The galactic current sheet is the driver of the earth disaster cycle, the solar system shift, and the solar micronova.

Understanding how it is impacting our solar system and what its true character is, is pivotal to undestanding the “why” of these disasters, and the cycle itself.

While it can be argued that knowing the”what and when” is all that is necessary to prepare and inform others, when you genuinely understand how something works it always increases your own understanding and your ability to describe the event to your loved ones.

THANK YOU