GRAVITY'S SYNODIC WAVE

Gravity's Mysterious Field Phenomenon

Jim Olsen

Gravity's Synodic Wave

GRAVITATIONAL PHENOMENON OCCURRING AT FORT STEVENS STATE PARK NEAR ASTORIA OREGON
Occurs During Moon's Orbital Cycle. An enormous amount of magnetic iron particles from shipwrecks.
Cause: Doppler Shifted then Heterodyned Gravity Waves from Moon/Earth Orbits.

THE DARK PATCH AREAS ARE IRON-OXIDE PARTICLES TRYING TO STAND ON END MUCH LIKE IRON FILINGS DO WHEN PLACED ON PAPER AND A MAGNET IS HELD BELOW. **The normally clean bluish hue of the surf water has been discolored by pulled-up magnetic particles. A fine slurry of particles forms a sensitive detector similar to a Coherer and a Cat's Wisker Detector. On specific dates, Doppler-shifted gravitational waves from the Moon's elliptical orbit combine with the Earth's resulting in the detected beat frequencies (RF) with longer wavelengths shown above. Proof gravity is an electromagnetic wave. A host of unusual conditions occur as well. Note: 1906 shipwreck Peter Iredale in background.**

Normal Clear Sands with Blue Water

Magnet in Sand

The sedimentology of Sand 2 ft. deep constantly changes. Rust pulled up by intermittent phenomenon events may turn the top surface of the beach dark grey. Then hours later pulled downward leaving a normal smooth sand-colored beach.

See SynodicGravity.com for book and predictions.
Gravity's Synodic Wave, Jim Olsen, ISBN: 979-8-9854401-0-2

Also supporting the theory:
An error is found in the Famous Double Slit Experiment

Gravity's Synodic Wave

Gravity's Mysterious Field Phenomenon

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Thanks to all the men and women in the CompuServe science and Ham.net forums in the late 1980s-1990.
Thanks to Maurice Cotterell who helped by motivating me.
Thanks to my mother and father.
And Christ, by his blood, delivered and guided me. Proverbs 7
And many more that helped me on my way.
Open the Eyes of the Blind.

A lunar standstill or lunistice is the relative position of the Moon furthest north or furthest south from the celestial equator. The Moon comes to an apparent so-called standstill as it changes at t

Doppler Standstill

Note: Since this book has several links to various websites, it is advisable to download the PDF file from SynodicGravity.com. This will assist in reading and understanding the phenomenon.

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ABSTRACT

This study investigates the swash zone of an ocean beach, revealing abnormal behaviors caused by a natural gravitational phenomenon. This phenomenon is hidden within the ripples of the sand and the hydrodynamics of sediment transfer. It occurs during specific dates and times corresponding to the moon's phases and the Earth's orbits.

The beach environment consists mainly of quartz and iron oxide crystals, which are moved across the surface by the motion of the water. As the crystals lightly contact each other during their movement, they generate a transistor/diode amplifier effect due to the trillions of contacts made. In this scenario, the saltwater acts as a conductor. Interestingly, the beach functions similarly to an early radio signal detector known as a Cat's Whisker, which was used to detect radio signals.

Radio-frequency scans conducted during the occurrence of these events revealed a correlation with an electromagnetic field associated with the phenomenon. The electromagnetic component was isolated from normal occurring conditions. The study also examines the orbital mechanics of the Earth, sun, and moon, incorporating principles of Doppler shifting and heterodyning of frequencies. Ultimately, the event is attributed to a rotating torsional electromagnetic helix wave, allowing for the derivation of a gravitational frequency.

Earlier rejections of this theory stemmed from a fundamental error identified in the renowned 'Double Slit Experiment,' particularly concerning the use of ripple tanks to demonstrate how waves can pass through one another without transferring force. This error will be discussed in detail, accompanied by several proofs. The findings presented here challenge the very foundations of physics.

PREFACE

For the broken hearted: God has a spirit that comes to help comfort us in times of trouble. An angel revealed this gravitational phenomenon to help strengthen our faith. Sin separates us from God.

Einstein's century-old theory of gravity has theoretical shortcomings. It is not linked to quantum mechanics, relies on curved spacetime without a true force, and breaks down at black hole singularities. Discover here the rational theory of gravity.

Today, there are several gravitational theories. In Einstein's general relativity, there is no gravity force. General relativity is a theory of gravitation developed by Einstein in the years 1907–1915. The development of general relativity began with the equivalence principle, in which the states of accelerated motion and being at rest in a gravitational field (for example when standing on the surface of Earth) are physically identical. The upshot of this is the inertial motion of an object is free-falling because that is how objects move when there is no force being exerted on them, instead of this being due to the force of gravity, as is the case in classical mechanics. This is incompatible with classical mechanics and general relativity because in those theories, inertial moving objects cannot accelerate with respect to each other, but objects in free-fall do so. To resolve this difficulty Einstein first proposed that space-time is curved. In 1915, he devised field equations that relate the curvature of space-time to the mass, energy, and momentum within it. Like all the early pioneers of science, Einstein assumed light waves were like ripple tank water waves, and they simply passed through another unaffected. Thus, electromagnetic waves were not considered to have the ability to transfer a force directly. This left no alternative, so the curved space-time gravity theory was created.

Today astronomers try to detect perturbations in existing gravitational waves generated by catastrophic stellar events such as black holes colliding, supernovae, or pulsars, looking for perturbations in the existing field. LIGO (Laser Interferometer Gravitational-wave Observatory) is a large-scale, expensive physics experiment operated by Caltech and MIT. LIGO can only detect fluctuations from these catastrophic stellar events in the field, and not the ambient field itself. Why does it only detect perturbations from distant stellar events when the field is ***everywhere***?

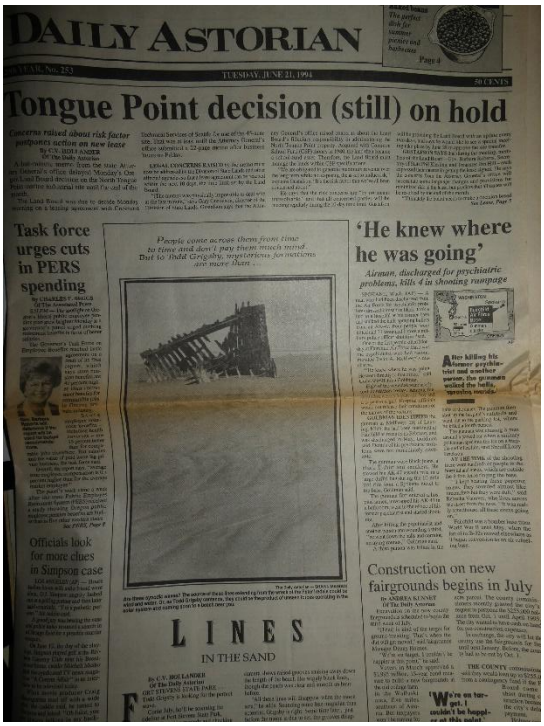
In physics, gravity is called the weak force, but it is strong enough to hold your car down on the road. It is uncharacteristic of modern-day instrumentation that science is only able to detect the fluctuations of a field and not the ambient gravity field itself. Weighing oneself on a bathroom scale is simply the result of the ambient gravity field, not the field itself.

Nikola Tesla, the father of modern electricity, and the inventor of the radio said.
"Today's scientists have substituted mathematics for experiments, and they wander off through equation after equation and eventually build a structure which has no relation to reality." Today's physics institutes, for fear of ridicule, refuse to publish articles that are too far from current views or from men without a Ph.D.

Michael Meo of Portland, Oregon says: "Astronomy is the oldest science, in the sense of a consistent set of mathematical relationships that successfully predict the future, and the other sciences have developed from time to time out of astronomy. The perfect movement to the scientifically literate dwellers of the coast of the Mediterranean Sea during antiquity was the circle. To that was added, by Descartes during the so-called Scientific Revolution of the Seventeenth Century of our era, the conservation of motion in a straight line, which conservation law was gratefully adopted by Newton as one of the laws of mechanics in the Principia Mathematica, from which modern world science dates. The combination of these two thoroughly investigated motions, the motion in a circle and the motion in a straight line, produces motion in a helix, an abstract representation of the ridges of a screw or bolt." The helix is found all through nature.

There is a crisis in cosmology, Ref. 45. Calculations in the Hubble Constant disagree, resulting in conclusions that the Big Bang never happened and that the source of cosmic background radiation is in question. One possibility points to undiscovered phenomena.

The gravitational phenomenon described in this book was on the front page of the Daily Astorian newspaper. On July 5, 1995, the author was interviewed by newscaster Eric Schmidt for local television channel 6 News at Fort Stevens State Park.



DAILY ASTORIAN

TUESDAY, JUNE 21, 1994

50 CENTS

Tongue Point decision (still) on hold

Concerns raised about risk factor postpones action on new lease

By C.V. HOLLANDER
Of The Daily Astorian

Task force urges cuts in PERS spending

'He knew where he was going'

Airman, discharged for psychiatric problems, kills 4 in shooting rampage

Officials look for more clues in Simpson case

Construction on new fairgrounds begins in July

LINES

IN THE SAND

Daily Astorian Newspaper June 21, 1994

Channel 6 newscaster Eric Schmidt and Author

Lines in the Sands article

Occam's Razor:
Newton stated: "We are to admit no more causes of natural things than such are both true and sufficient to explain their appearances."
The most useful statement of the principal scientists use today is "When you have two competing theories that make exactly the same predictions, the simpler one is the better".

Before God there was a small amount of primordial soup, 'the aether'. And the aether became God, and God created the universe of himself. And the aether is still a part of God.
Explanation: (The aether before God created himself, was a small volume of random oscillating electromagnetic fields.)
A self-building structure acquired intelligence from a minute random oscillating electromagnetic field. No longer random, from here he (I am that I am) built the majestic universe with angelic beings to maintain it. Therefore, evolution makes such a strong manifestation, yet these spiritual beings exist correcting and building. This is support for the existence of God, not the reverse.

INTRODUCTION

This topic is considered by some to be genuine. A work in progress. If you are reading a hard copy, go to synodicgravity.com and download the e-book. That way, you can jump to all the links, references, and videos while reading the book. To cognize this work, due to an unusual wave-to-wave mating your sub-conscience mind may require reading a passage from the bible.

This looks like a fictional gravitational phenomenon, but it is not. If you are a researcher, you must check it out thoroughly for yourself. It is difficult to separate the fake from the real parts of this phenomenon, making it difficult to understand. Video logs are available. You must concentrate on the rust part of the phenomenon because it is related to the magnetic wavelength and should be separated out in order to believe the gravitational part of the phenomenon.

While walking along the ocean beach at Fort Stevens State Park near Astoria, Oregon. Suddenly there started appearing humps and grooves with black particles in them, and the wet sand got very soft. There seemed to be no apparent reason why they appeared. Then, moments later, they all disappeared. The beach was once flat again, hard, and void of the humps. What the heck caused that, I asked myself. I wrote this book to explain the phenomenon.

I became curious about what did not seem to be the simple ripples in the sand found with almost all moving water, especially with river water that flows in one direction only. I found there are two ways the sand ripples can be formed at this beach, one from simple wave collisions and the other from what was revealed to me, by synodic movements of nearby heavenly bodies. I studied for many years before coming to my conclusions. As time went by, I uncovered more and more of the phenomenon, eventually attributing much of it to the beat frequencies of heterodyned gravitational waves. In this book, we will explore a phenomenon that detects the field itself, not just the fluctuations that LIGO can only detect. It is important to concentrate mainly on the iron oxide parts of this phenomenon, as it relates gravity to the magnetic field. They are similar but are on different wavelengths. The gravity wave pulses, as can be heard on a radio scanner, thus reducing the force. Part two of this book is proof of the gravity helix electromagnetic wave.

Fort Stevens State Park near Astoria, Oregon (46 deg. 10 min. 28 sec. N. Lat. 123 deg. 59 min. 06 sec W. Long. GPS.) or Latitude 46.199, Longitude -123.955

Astoria is very near the end of the historic Lewis and Clark trail, a trek of discovery across early America in the early 1800s. The treacherous Columbia River bar is known as the "Graveyard of the Pacific" due to the number of shipwrecks of all types there. This area has claimed an estimated 2,000 vessels of all types. A large number of underwater mines were placed around the mouth of the Columbia River during World War II. Hence, there is a high concentration of rust particles in the fine sands, presumably from naval activities as well as shipwrecks. If you run a magnet over dry sand the particle is picked up readily and exists probably as some fraction of the sand up to 5 percent. Very significant is the rusting skeleton of an English sailing ship that beached in a storm in 1906, the PETER IREDALE, permanently stuck in the surf and sand. It appears in the distance in the photos.

No one would study ripples as I have since the 1990s if "ripples in the sand" were all there was to it. Admitting this is a difficult one to believe. How can it be so simple, anyone would ask? I felt the same way, only curiosity kept me going. The author kept looking at the water ripples and said this could not be. What is causing the intermittent occurrence between when the sands are smooth and clear? Curiosity enveloped a long study. I kept doubting my findings and eventually found answers to the complex occurrence of ripples occurring in the swash zone. Still unbelieving, research led to further research into a type of heterodyning, or summation of atomic spectra Ref. 97, 98. Found on the synodicgravity.com web page, all the attributes of Einstein's general relativity were resolved with the theory generated from this study.

Because the explanation or mechanism of gravity is not completely understood, and because Einstein's general theory of gravity has no force, nor has been connected to quantum theory, we will explore within this article another possibility for gravity theory and associate it to quantum theory put a force in and provide a unique way to detect and prove it so that anyone can understand. See the YouTube video: "How we know that Einstein's General Relativity can't be Quite Right"! https://www.youtube.com/watch?v=Ov98y_DCvRY By: Sabine Hossenfelder. There are many others that reject Einstein's General Theory of Gravity.

Why the Theory of Relativity Doesn't Add Up (In Einstein's Own Words)

Dialect. https://www.youtube.com/watch?v=HduM03ZyyKI

RELATIVITY DEBUNKED By MindShock:
https://www.youtube.com/watch?v=WABe9pbA-Hc

Criticism of the theory of relativity
Wikipedia: https://en.wikipedia.org/wiki/Criticism_of_the_theory_of_relativity

The Institute of Art and Ideas
Gravity and the Universe|Sabine Hossenfelder, Erik Verlinde, Priyamvada Natarajan (FULL DEBATE)
https://www.youtube.com/watch?v=1j0Xh9XM34M

The Most Fundamental Problem with Gravity is Solved (Very Important Document)
(Newton's Bucket and Mach's Principle.
https://www.youtube.com/watch?v=BpQ0T7rDWm0

The Axis of Evil:
Our solar system seems to be aligned with the cosmic microwave background radiation. Presently, cosmologists have no explanation for this. However, the Synodic Theory has an obvious answer.
The "Axis of Evil" in the cosmic microwave background {Unsolved Mystery (dubbed the axis of evil). By: Dr. Beck
https://www.youtube.com/watch?v=SDRNvhbrz3k

Does the Axis of Evil Scare You? By: The Action Lab.
https://www.youtube.com/watch?v=yJ5wQF093Rc

This Axis can be explained by gravity wave heterodyning. All the planets of our solar system have a common axis. The plane of the planets of our solar system would then produce an axis of radiation. Synodic electromagnetic (radio) waves similar to the background radiation would naturally align with the plane of our solar system. Providing good proof for the synodic theory.
Also: The background cosmic radiation is not just 2mm wavelength but covers a much broader spectrum.

By: Anton Petrov.
The below can also explained by the Synodic Theory of Gravity.
76 Minute Long Pulses Coming From the Central Black Hole...Why Though?
https://youtu.be/MuBdajXtEZw
Visible in Many Different Frequencies. (No current explanation):
Wow, Something Is Orbiting the Central Black Hole At 100,000 km/s #space #astronomy #blackhole (youtube.com)

Many different frequencies are emitted. This is how the Synodic Gravity phenomenon occurs, except it involves the moon's orbit around the Earth and the Earth's orbit around the sun. Watch these videos and find out that cosmology has no explanation. It is simply from gravity waves, as will be explained in this document.

Mystery Cosmic Static May Cast Light on Formation of First Stars:
https://www.scientificamerican.com/article/cosmic-radio-background/

Gravity affects the elements. Contrary to special relativity, this indicates a type of connection force. Gravity alters the Dynamics of a phase change:
https://physics.aps.org/articles/v17/104?utm_campaign=weekly&utm_medium=email&utm_source=emailalert

Because gravity waves cannot be detected in the usual ways it becomes very mysterious, so science had to produce mysterious explanations for it. Scientists using mathematics solely have decided that warped or curved space and time (general relativity) are correct because the math answers are correct. However, we all know that math can arrive at the same answer in many ways. What makes gravity waves so mysterious is that they pass through everything, they have a cloak of invisibility (so to speak) like air until the wind blows.

Like gravity there is no explanation for magnets.
Richard Feynman: Magnets and Why FUN TO IMAGINE:
https://www.youtube.com/watch?v=Q1lL-hXO27Q&t=12s

This phenomenon presented in this book has been correlated to Doppler-shifted and then heterodyned (mixed) gravitational wavelengths/frequencies, providing definitive proof that gravity is an E.M. (electromagnetic wave). The unique properties of the sands in this area enable heterodyning (adding) of gravitational waves on date and time relationships from the orbits of nearby heavenly bodies.

I first discovered the phenomenon near Earth's apogee date; in previous versions of this book, I concentrated on the Earth's orbit around the sun. However, the moon's gravitational pull is greater than the sun and it completes its orbit every 28.4 days. So, we can predict an event twice a month as opposed to the 360-day Earth orbit around the sun. Combining both the Moon and Earth's orbit around the sun increases the possibility of events. Also, weeks may go by with only clear sand. The moon has an apogee and perigee every 27.55455 days. Weather events have been associated with the Saros Cycle: 6585.32 days.

ELECTROMAGNETIC WAVE TO FORCE CONVERSION EXAMPLE:

A huge solar array satellite once proposed beams energy down to earth. Here energy from the sun is converted to an electromagnetic (microwave) wave beamed to earth and converted to electricity and then to mechanical motion (force) via electric motors. Then, the question we should ask is: If man, using the elements of nature, can convert an electromagnetic wave to mechanical motion (the force), why could not nature? The answer is it most certainly could. A force drawn out of an electromagnetic wave is the foundation of the Synodic theory of gravity and magnetism. An

electromagnetic wave can be converted to a torsional form enabling a direct transmission of a force like physical mechanics, like a propeller on a ship, through electromagnetic wave mechanics.

Ripple tank experiments often incorrectly use stationary waves rather than propagating waves, which actually collide before passing through one another. There is also a mysterious interferometer experiment where precise alignment causes a blackout at the screen where no light reaches the screen, revealing that light waves can bounce off another given unusual circumstances.

As of note: At the distance we orbit the sun, the gravitational pull of the sun is .0006 the strength of the earth's gravity on the surface of the earth. The sun's tidal force here on Earth is less than half the moon. At perigee (the closest to Earth), the moon's tidal gravitational force is nearly twice as strong as at apogee.

It is easy for a person to take one look and reject it on the grounds that flowing water causes ripples. When one can discern the difference between the occurrences of sand ripples formed from simple water flow motions, and from the sand ripples formed by heterodyned gravitational waves, enlightenment takes place. Any electromagnetic wave emitted from a heavenly body is Doppler shifted from the continuously varying separation velocity due to their elliptical orbit. This, of course, would include gravity if it is an EM (electromagnetic) wave.

The other half of the theory is a very common process that happens with all waves, including music. They have beat frequencies when two notes are played together. Anyone who has studied music knows this – it is very simple. Combining the two together 'Doppler' and 'beat frequencies' along with the helix wave, results in the completion of the basics of the theory.

For illustration only, say both the moon and earth are emitting the musical note middle C (which happens to be 261 cycles). So, when we are standing on the earth, we constantly hear the hum of the earth's middle C. The moon is also emitting middle C, but because it orbits us in an ellipse, the note constantly Doppler shifts up and then down as its orbit takes it toward and away from us every 28 days. So now we have two notes that can be heard here on earth, earth's middle C and moons Doppler shifted middle C, which constantly Doppler shifts to new notes like a very slow wow, wow heard from pressing on the vibrato or tremolo bar on the electric guitar. A better example is a train whistle which changes pitch when coming toward an observer and then away. But if we listen carefully, we will hear a third note, which is the beat frequency from adding the two musical notes together.
Beat Frequencies Example: YouTube video by: PhysicsIsFun.
Today, we look at the interference of sound waves! #physics #science #sound #audio #music (youtube.com)

So now we can hear three notes: These are earth's middle C, Moons Doppler shifted middle C, and the beat frequency from hearing the two notes at the same time. It is this beat frequency that can form the beach sand phenomenon but only on specific dates and times. Why it only shows on specific dates and hours requires a bit more understanding of orbital mechanics, and of course, the frequency of gravity is much higher than middle C. Of course, we could never hear musical notes coming from the moon. In radio language, this addition of waves is very common and is called 'heterodyning'. See the YouTube video: 'Weird Terrestrial Sounds KISS'

https://www.youtube.com/watch?v=X2o_Jz_GyZs These signals are very weak, just above background static levels (Radio Noise).
The above applies to radio waves, and the addition of atomic waves applies to gravitational wavelengths. ***The proof for the addition of atomic wavelengths is included in this document.***

Now imagine that these are gravity waves and that they pass right through us and everything around us—sort of like an invisible field. Like the air around us, we don't notice it until it moves. However, we can imagine that something is there because something is holding everything down to earth. Like a prop on a ship, the gravity waves form a rotating helix wave. Our instruments cannot detect the actual waves because they pass through them, leaving only the evidence of their force. However, like playing the musical note middle C in the above example where it Doppler shifts and becomes a beat frequency, there may be times when we can detect a wavelength if we open our eyes and look close enough.

Here is the mystery of the phenomenon solved, as well as the mystery of what gravity is itself, and how the force is put back into gravity.

THE PHENOMENON AREA

Mouth of Columbia River Fort Stevens State Park

Warrenton Or. USGS Maps (Public Domain)

Fort Stevens State Park near Warrenton, Oregon (46 deg. 10 min. 28 sec. N. Lat. 123 deg. 59 min. 06 sec W. Long. GPS.) or Latitude 46.199, Longitude -123.955.
The sand at Fort Stevens State Park consists of black paramagnetic particles along with the natural sand (paramagnetic means that the material is slightly magnetic). The paramagnetic rust particles are assumed to be iron oxide Fe2O3 commonly known as rust. If you run a magnet over dry sand the particle is picked up readily and exists probably as some fraction of the sand up to percent. (Interestingly, the black sand beaches of Curry County south of the Fort Stevens area have a high concentration of zirconium; slightly radioactive, the sand is mined for the manufacture of exotic metals.) Sand particle size is extremely fine, almost like dust, at the park beach, averaging .005-inch diameter. The iron oxide particle is slightly smaller, enabling very subtle forces to work here!

There are two ratios to consider. The beach surface's total concentration of non-magnetic to magnetic particles changes with the moon and earth's orbits combined. See the black sand photograph. The weight ratio by volume of sand to rust is 1 to 1.4 (this changes).

The total concentration of rust seems to have increased considerably since I first began to study this in 1995. When the rust grooves form, the rust deposit line is so deep below the surface, that it is becoming more difficult for the water to wash the last event away.

DESCRIBING THE PHENOMENON

Note that Gravity Sensors 'Gravimeters' cannot measure this phenomenon. Because this is from heterodyned gravitational waves. Gravity sensors are precise instruments that can detect minute local changes in the Earth's gravity. To my knowledge, the new instrument 'Quantum gravity' sensors, which are more sensitive, have not been tested at this site. Such an instrument may be able to detect permutations in this area. I cannot say for certain.

1.1: SYNODIC DEFINITION:
Relating to conjunction; esp.: Relating to the period between two successive conjunctions of the same celestial bodies.

The correct timing of the events is correlated with the moon and Earth's orbits.

This is the best beach to witness the phenomenon. The absence or scant presence of iron oxide particles seems to be the reason why the phenomenon is reduced or even nonexistent on numerous other beaches. Even as little as 5 miles to the south, both the concentration and phenomenon are reduced. The gradual slope of this beach, combined with the high concentration of paramagnetic iron oxide Fe2O3 particles (Hematite), forms a very sensitive detector. Several conditions are in effect forming the detector. Since the particles will not hold a magnetic charge, they cannot be Magnetite which is Fe_2O_4.

This beach has a very low planer slope (gradually sloping) and beach face gradient). In the swash zone at the water line, and only at certain times of the month, a phenomenon occurs. During a receding wave when the water is only several inches deep, these very fine particles, along with the normal sand, churn up into a solution of particles. Due to the unique turbulence that occurs in this receding wave, the magnetic particles align themselves on electromagnetic field lines. The distance between lines (the wavelength) usually is from *12-46 inches.

It took some time before the author became convinced that there was something other than just the usual ripples in the sand forming here. Identifying when they were just sand ripples, or something else was in effect. Only a close study of video records and being there at the correct date and time will convince those with doubts. Several videos are very revealing.

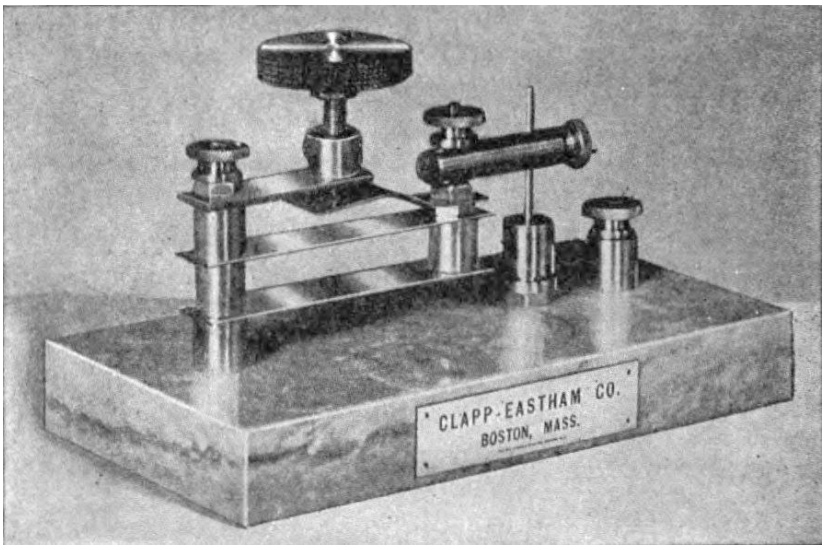
Sand patterns can develop along more than ten miles of coastline, including areas such as Long Beach, Washington. This phenomenon is complex and multifaceted.

How Is it possible this beach can detect heterodyned gravity waves like radio signals? The Cat's Whisker Detector and the Coherer were early methods to detect radio waves. The intermittent contact between the two crystals quartz and iron oxide in the slosh zone wave motion. With trillions of particles in solution, the result is a massive detector. See 'Beach Sand Photo'.

The components of this beach sand act like a cat's whisker, an early radio signal detector. Before the time of electricity-powered radio receivers, a non-powered crystal radio set was used to detect weak radio signals. The signal was detected by a device known as a Cats Whisker Detector, which could operate without an electrical power supply.

As the crystals in the sand are dragged along the beach surface by the slowly flowing water they lightly contact one another creating trillions of Cats Whisker like connections. The crystals lightly contact one another as they travel along the surface. A transistor/diode amplifier results from the trillions of contacts. The saltwater is the conductor.

The contact between two dissimilar materials, in the case of the beach sand components, the quartz and iron oxide particles of the sand, forms a crude semiconductor diode that acts as a rectifier, conducting electric current like the ‘Cat’s Whisker’ shown below. The components of this beach sand act in a similar way. The components are only able to pick up a small portion of the heterodyned gravitational wavelength signal.



Cats Whisker Detector

An early radio signal detector from around 1914. The vertical needle on the right gently touches the face of a crystal of iron pyrite or any dissimilar crystal. The device was very sensitive to the contact between the needle and the crystal. Other versions incorporate a fine wire resembling a cat’s whisker, thus, its name. Silicon, carborundum, rust, galena, and a host of other crystals act in a comparable way.

Rocks that detect radio broadcasts. Cats whisker demonstration: By Grants Pass TV Repair. https://www.youtube.com/shorts/2khSiHOy-qg

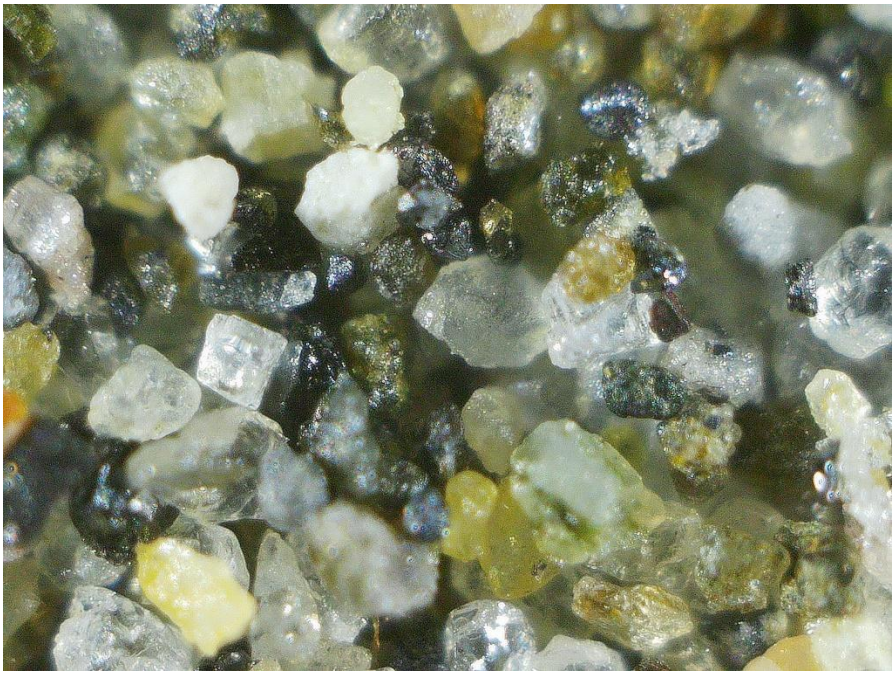
Wikipedia Commons public domain.
https://en.wikipedia.org/wiki/Crystal_detector

The Auto-coherer: Detectors Before Vacuum Tubes. By: Ottawa Vintage Radio Club.
Here you will see the many ways radio waves can be detected.
https://www.youtube.com/watch?v=_vsqIYSy9sQ

Several Cat Wisker radios. Radios that Work for Free
https://www.youtube.com/watch?v=G4YDsvv1DEk See minute 4:43

Amazon book: Radios That Work For Free By: K.E. Edwards
Amazon book: The Voice of the Crystal by H. Peter Friedrichs

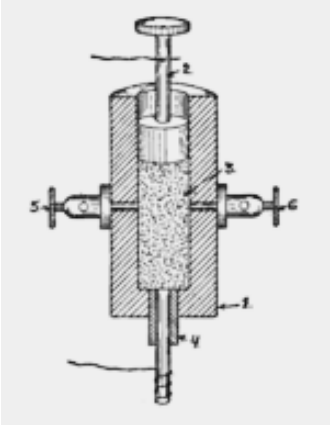
Alfred Powell Morgan (1914) *Wireless Telegraph Construction for Amateurs, 3rd Ed.*, p. 134, fig. 106 on Google Books.



Closeup of Beach Sand in This Area (approx. 1500 magnification)
Iron rust particles (Hematite) lightly contacting quartz crystals, creating temporary diodes similar to the Cats Whisker detector. These crystals simulate weightless conditions when suspended in the saltwater slurry of the ocean wave. As they slowly drop down into the sand and gently slide over one another they lightly contact one another creating a Cats Wisker and a Coherer radio detector.

Suggested experiment: Place two flat plates or rods in the slosh zone then wire to a crystal headphone or VLF radio.

The Coherer invented in 1890 by French scientist Edouard Branly, was an early primitive radio signal detector used in the first radio communications systems. The coherer is simply a glass tube filled with iron filings. When a radio frequency wave passes through the coherer, the iron filings stick together thus conducting electricity. Early devices used to detect sound waves (microphones) or radio waves often used small electrically conducting particles of carbon or iron. Iron oxide is used to record on tape like the early VCR's or tape recorders.



Branly's Coherer
Wikipedia Public Domain https://en.wikipedia.org/wiki/Coherer/

Like Branly's Coherer, the iron oxide particles in the beach sand cohere and then align on an electromagnetic field. Combined with the tremendous number of iron oxide particles allows for visual effects. An alternate but related hypothesis: Telluric currents from the phenomenon also might be partially responsible for the particle alignment formations. Telluric currents are naturally occurring electric currents that pass through the ground. (This is not due to telluric currents). I believe the beach water slurry may be more sensitive than this Coherer.

Even the fillings in your teeth can receive radio signals.

The Addition or heterodyning of gravitational waves from two or more sources:
The moons Doppler shifted gravity wave combines with the earths and or suns by the cat's whisker detector and the auto-Coherer formed from the beach components.
Quartz is a semiconductor found in transistors, and the rust on antenna guy wires (known as the rusty bolt effect) Ref. 14. is well known by ham radio operators to cause interference by heterodyning (adding) of two or more radio signals. Here we find that this beach has similar attributes that common radios use to receive signals like television and radio. Doppler-shifted gravity waves undergo heterodyning to create an electromagnetic field that attracts and aligns particles, much like the Coherer.

Very slight interruptions of the normal particle flow within the water produce the effect.
The ripples referred to here are not the normal ripples forming simply from water flow alone.
The magnetic particles are deposited at regular intervals. When the water slowly glides back out to sea, a mound and rift are left in the wet sand. When the conditions are maximum, from the bottom of the rift to the top of the mound measures approximately ¼ inch or so and is 1 - 1.5 inches wide. One could stumble on them. The black particles form a line attracted to an unusual stationary invisible electromagnetic wave. It is like the type of mound and rift that is formed when water flows over a stationary shallow rod (1/8 diameter or so) resting on the sand. A strange "double" water ripple gouges the grooves. First, one water ripple, then about one inch later, another water ripple with a deep groove between. The pattern placed upon the beach resembles an interference pattern at times and, at other times, fairly uniform wavelengths. These grooves form intermittently, lasting for several hours and longer, wash away, and then reappear repeatedly until the event passes. Appearing then disappearing many times during the window. Sometimes appearing in patches or covering the entire beach. When the phenomenon is maximum, the wet sand becomes much softer (puffy) and more difficult to walk upon, much like the before and after changes of rice when you cook it. I traveled to the beach hundreds of times, but I was unable to catch all the events.

Slurry of Particles Suspended in the Wave

Ring Magnet in Sand

The concentration of rust in the upper layer seems to have an effect. The rust gets pulled up to the surface slowly depending on date and time, changing the phenomenon's appearance. Black granite with mica. The mica is lightweight and sparkles in the sunlight.

Sedimentology of the Sand

In the science of Sedimentology, the heavy particles are normally pulled downward. Here something different is happening as it shows something is intermittently pulling the rust up and then down in date and time-related intervals. This results from a date-related effect as the beach surface changes colors. The principles of general relativity would fail this test, as a heavier element would never end up on top of a lighter element.

A 2-foot-deep pit was dug at the high tide area on 06-23/2021. The photo shows the layers of rust laid down by the phenomenon. The layers are as follows (increments are inches)
6 inches sand, 3 inches rust, 1-inch sand only, 2.5 inches rust, 3 inches sand, 2 inches combo rings, 2 inches rust, 1-inch combo, 3 inches rust very solid 1-inch layers rust/sand, ring of sand, and bottom solid rust.

These layers change daily between the high and low tide where most of the churning occurs. At the time of this photo, the rust particles on the surface had all but disappeared.
Intervals of the phenomenon are recorded in the sand, like geology sedimentology, and are continuously altered by daily, weekly, or longer intervals. The rust is pulled down and then up by the intervals. The rust level depicted here is very dense, packed tight, and almost solid even when dry. Sprinkles of rust are brought in from deeper water and lightly deposited on the surface during low tide, initiating part of the phenomenon when the beach is void of rust particles. 10 days earlier the sediment record was completely different except for the bottom level. A big storm churns all the much deeper levels of the high tide area, resetting the sedimentology layers.
On September 24-2021, another pit was dug. A storm 1 week earlier had completely erased the previous layers. Only four easily identified layers were present. The solid rust bottom layer at 2 feet was not there.

The above photo, taken on 08-16-2022, shows a new sedimentology record. Storms had washed away the last sediment record, allowing a new record to form. These records constantly change throughout the year. This is similar to tree rings, except this record changes with the earth's and moon's orbits.

11-25-2022 Several weeks after storms. The sediment layers start over.

09-08-2023 Notice the 13-inch section of only white sand. Usually, events do not occur when the iron oxide is separated out. Approximately a month of recording. Also, notice the (barely visible) ring magnet stuck on the lower solid rust area. Notice the top black section with a thin white area represents a transition where strong events may start to occur in the following weeks. On this date,

at 6 pm there was an unusual amount of heavy rippling on the surface out at sea and no wind to cause it. A tell-tale sign.

Warning: Beach Access Blocked by Storm and Sneaker Waves.
I had just driven through this area several hours earlier. Notice the white sand-colored beach is not dark. This provides partial proof that a storm is not required to bring in the black-colored rust. A dangerous area as one can get blocked off by logs and trapped on the beach.

BLACK SAND EVENTS (Note all events are intermittent) Please see the black sand photograph. During these events, the rust particles are pulled up from within the sands by gravitational forces and wave motions. These events have been correlated to be near the times of the 'new moon' when the moon and sun are in the same quadrant in the sky. However, this may not always be the case. The events are difficult to predict as it seems topocentric moon-sun angles may be involved. A hypothesis is this may correlate to chemistry as occasionally quartz, mica, or water may be pulled up to the surface. This may occur between high or low tide. When it occurs at low tide, the water will become discolored in part of the surf area and not appear on the beach. However, it then will likely be washed up by wave motion during the transition from low to high tide and deposited on the beach. Soon after the event the beach again becomes sand colored as the heavier iron rust particles are again pulled down by gravitational forces. See sedimentology photos. If the moon is overhead, it may pull the heavier rust upward. Conversely, if the moon is on the other side of the earth, it may pull it downward. However, the moon's orbital separation velocity could cause the opposite effect.

There are several beach webcams. But unfortunately, it is too far south, and the iron oxide (rust particles) concentration is very low, which reduces the phenomenon greatly. Also, the camera is too far away; you cannot use this method to analyze the beach phenomenon, but you can see the motion of the waves, **which may give an indication of coming events.**

http://www.spanishhead.com/liveskycam.htm
https://www.kgw.com/live-cameras
http://65.100.41.14/viewer/live/en/live.html

DIRECTIONS AND BEACH ACCESS:

Fort Stevens or SUNSET BEACH ACCESS: TAKE 101 HWY FROM ASTORIA AND TURN RIGHT ON SUNSET BEACH ROAD approx. four miles from Fred Meyer on 101.
NOTE: Sunset Beach has a lower concentration of rust but easier access to the beach. The further south from Fort Stevens, the less concentrated the rust becomes, reducing the effect. Long Beach in Washington is also okay.

Things you will need: An all-wheel drive car or truck with good ground clearance, tide tables, and the Doppler data found on the synodicgravity.com web page.

The gradual slope of this beach, combined with the high concentration of iron oxide Fe2O3 particles, forms an extremely sensitive detector. Several conditions are in effect forming the detector. The beach has an extremely low planer slope (gradually sloping) and beach face gradient). In the swash zone at the water line and during only certain times of the month a phenomenon occurs. During a receding wave, when the water is only 1 to 10 inches deep, these particles, along with the standard sand, go into solution. Due to the unique turbulence that occurs in this receding wave, the magnetic particles align themselves on electromagnetic field lines. The distance between lines (the wavelength) usually is from *12-46 inches. The slope measured on 5-13-2022 was 7.7 percent with 14.5-inch groove to grove spacing occurring. However, the velocity of the water would seem to be more important to consider with the sluice box effect. The slope changes from 5.1 to 7.7 percent or greater. Sometimes, it appears mostly flat.

Another astonishing and convincing but difficult-to-catch event of the phenomenon occurs when the water flow velocity becomes too great (related to the moon and sun's angles and slope of the beach). Clearly seen, the ripples forming in the water ***instantly*** disappear, resulting in clear sand conditions. The hypothesis is: that water flow velocity increases beyond the attraction force on the iron particles and the phenomenon stops briefly. While watching type #3 patterns forming under the shallow water of a receding wave. Then, almost as if by magic, the ripples forming ***instantly*** disappear under the fast-flowing water leaving clear sands instead of the pattern. The EM field is not strong enough to hold the ripples in place due to the increased water flow. The formation releases and disappears when the water flow velocity becomes too great. This only occurs during exceptionally strong events, when combined with an abnormal water flow velocity. To get such strong events, the moon earth, and sun Doppler must be adding together. The sun-earth Doppler may wash some of the moon's events away, and vice versa.

A strong smell of chlorine was in the air during an exceptionally strong event. Chlorine would result from the electrolysis of the salty sea water and the separation of NaCl. This indicates the presence of an electrical field.

Strong winds have little or no effect on the formation of the grooves. The phenomenon occurs on a calm day as well as on a windy day. It is best to look for the phenomenon when the tide is going out (from high to low), but it is not required. Tide tables are necessary and available at local or fishing, or outdoor stores (Ref 51).

This beach near Astoria, Oregon, has a heavy concentration of paramagnetic particles. Traveling 60 miles south, I found the particles had reduced significantly. The grooves were also much less pronounced. The Long Beach area in Washington also has a significant amount. This is where I first identified the visual with the physical feeling of the phenomenon (See hypothesis and microwave files on aging).

An increase in unidentified radio waves, which can be detected by standard broadband scanners, accompanies this intermittent phenomenon. A massive increase occurs in the weak unidentified radio frequencies when the patterns become very messy and appear to be breaking up. They are most likely absorbed back into the beach elements when the patterns are regular, thus fewer frequencies appear. Also, the frequencies will remain sometime after the groove formation stops. The radio waves can travel back after the phenomenon leaves the beach sand area. The frequencies shift around, but there do seem to be some patterns. Occasionally a barrage or flurry of unidentified wavelengths will appear. Scans were taken from 33 mega Hertz to 1 Giga Hertz.

The resulting radio frequencies from synodic waves seem to quantum jump to new frequencies, charging earthly elements up on one wavelength and then discharging on another, much like a laser or phosphorescent rocks when exposed to black light. This is probably why the beach lines can appear at unpredictable intervals. Without the proper equipment, I was unable to determine with certainty if this quantum jumping was occurring.

Hypothesis: Because the gravity wave pulses on/off, it becomes much weaker than the magnetic force. Often you can hear this pulsing on the radio scanner. It sounds like a crackle at times, a pulsing, or at other times just heavy static. (See Synodic Radio Waves).

Because the forces involved can be very weak, it is difficult to identify the source. To be confident of your findings, look for grooves that are 12 – 36 inches apart. These are most likely not formed by simple water flow. Reject grooves formed by wave collisions (figure 4). ***See new findings regarding the intermittent appearance of iron oxide along with the sluice box effect.***

Of course, sand ripples can be formed by flowing water motions, what I have outlined here is something entirely different. Sand patterns can be caused by both water wave motions and gravitational forces. The gravitational sand patterns can be further separated out into gravitational forces pulling from two separate directions (moon and sun), and into Doppler-shifted then heterodyned gravitational waves. Normally scientists only relate the sand patterns to wind and wave motions. If heavy particles are present in the sand, a sluice box effect occurs during water wave collisions, resulting in a fake or unrelated occurrence of the sand patterns. The black iron particles drop out of the solution when two water waves collide, resulting in fake or unrelated sand patterns.

We all know that the moon and sun control the tides. It is not necessary to be at this beach to witness heterodyned gravitational effects. The effects can also be seen in slow-moving river water or lakes but only on certain dates and times. Rippling water visually changes the texture of the surface dramatically at times here on the Columbia River. I drove by every day for months and looked upon the Columbia River water. The surface was always smooth with normal rippling textures that accompanied a calm or mild breeze. Then, for no apparent reason, the surface took on an unusual appearance, like broken-up ripples popping up and down. Lakes show scattered ripples when air currents are light, though these currents may be affected by heterodyned gravitational waves, complicating analysis. When gravity forces are pulled upward, the winds pull upward as well. This is a rare occurrence, probably only several times a year, but may last for a week or more, lasting for 1-1.5-hour intervals with the start time increasing about 30 minutes each day until the event is over. These are related to the ocean tides but on landlocked water. Some initial water movement seems to be required as I have never seen this motion in a swimming pool. However, with rivers or lakes, it is difficult to separate the slight breezes (air movements) effects as they often occur at the same time. Looking for changes in the type of ripple motions is an important consideration when the wind velocity is at the very minimum. The author believes changes in the ripple motions on small lakes are also part of this effect (again it is difficult to separate the slight breezes out). It is much more difficult to be scientific with river and lake water ripple motions as it is difficult to separate the wind and water flow conditions.

VARIATIONS AND ADDITIONAL ATTRIBUTES OF THE PHENOMENON

There are many dissimilar parts to this phenomenon, making it difficult to understand and predict accurately. It may stop for weeks, leaving only clear sand.

To be certain you are looking at an event, do not consider the high tide area solely as part of the phenomenon. The depth of sand in the high tide area does not get churned or mixed up well, so there is not a clear slate, so it may only be a sluice box effect.

I found it nearly impossible to predict all the events. The rust is becoming more concentrated, and you can add the moon's Doppler to the earth's Doppler + and—another dwell.

Here are a few things to look for:

Dark dirty surf water (iron oxide particles are pulled up from the deep layered sand, making a solution of rusty water).

Clear, sparkling surf water (mica or quartz crystals in solution) reflects light back at you like tiny mirrors. The sparkling effect, almost blinding in bright sunlight, maximizes when mica is pulled up, then dries, and the wind blows the lightweight crystals up on the sand bank. At this time, the sand on top of the bank near the parking lot sparkles much more than normal plain sand. Eventually, the wind blows some of it away, reducing the effect. **Unfortunately, digital cameras can not photograph the sparkle from the mica. A film or high-resolution camera may work.** So far it has been impossible to record this event. Even the pixel screen on a computer will not display sparkling. Hopefully, a close-up photograph can catch the sparkling. The sparkling mica event may be rare but is ***quite spectacular*** to see. You really need to see this event happen. The link below confirms the difficulty of photographing the sparkling effects. It is quite unfortunate that it cannot be photographed.

The link below suggests that an iPhone got some results
https://photo.stackexchange.com/questions/52908/how-to-photograph-sparkly-objects

Normal light tan colored sand with quartz on the surface and iron oxide particles buried below.
Surf sound variations from loud to quiet. A feeling of peace at the beach when the wave motion gets quiet (this is quite pronounced, and you must be alert to catch it). May occur in the hours of the moon Doppler dwell, the passage the zero point, or when the moons pull is low.
The normally hard wet sand gets spongy as you walk along the surface.
Rippling, stirring water, and soliton water waves.
Sand pools
Chlorine smell in the air (very strong events)
The evaporation rate (humidity) increases in the local area (can be very small areas 10 x 10 ft.).
Extremely messy beach patterns with a heavy increase in background radio frequencies.
A weather relationship exists as well.
Background radio frequency slides and jumps (some very strong above background)
Background RF whistler can be located as the moon's topocentric Doppler passes through the zero point. See Burt Youglove's findings.
Beach sand becomes puffy, swells up, then slowly drops about 1-1/2 to 2 feet as the water drains out of the sand and becomes firmer. It happens so slowly that it is almost unnoticeable. If you stand on the beach, you may feel it slowly drop (about 15 to 30 minutes).
The Sun-Earth Doppler may wash some of the Moon's events away, and vice versa. They also may be adding together: Sun/Earth and Moon/Earth.
Leftover deep deposits of rust deep within the sand confuse the timing.
NOTE: 04/24/2020 (The Opposite Effect) Quartz crystal EM wave
On certain dates, the black particles (the heavier black iron oxide particles pulled up to the surface and the entire beach turns a dark grey to black color). Geologists and gold panners know normally the heavier particles are pulled down to lower levels by gravity. This is the opposite of the norm.
Black Sand Events. The iron oxide particles were either pulled upward or downward or the quartz was pulled upward.
Sand ripples showed, but the rust was not part of the phenomenon. The water waves were not colliding. And the surf was a very clean, beautiful light turquoise color. The rust particles were buried deep within the sand, not on the surface.
Heterodyned gravitational waves may match frequencies within quartz, separating them.
Doppler velocity dwell of Moon with respect to Earth
Doppler velocity dwells between Earth and the Sun.

The phenomenon can stop for weeks, or the sand ripples may appear almost continuously, especially at the very edge of the wave crash zone. What we are looking for here are the extreme events as pictured here. Concentrate on a single wave on a constant slope flowing on the beach. It will take a close eye to separate out normal ripples from the weaker events. Dense clouds forming a shielding, or partial barrier may either reduce or increase the phenomenon effects.

Do not consider the high tide area solely as part of the phenomenon. The depth of sand in the high tide area does not get churned or mixed up well, so there is not a clear slate, so it may only be sluice box effects. Also, previously, there were car tracks left in the sand.

The uneven distribution of quartz and rust in the lower levels causes a sluice box effect, complicating the predictions. Also, the earth/sun Doppler combines with the earth/moon Doppler, adding further complications to predicting the events. Also, the Doppler goes from Positive to Negative velocities daily.

SAND PATTERNS THEORY Given assumption: Gravity is a torsional electromagnetic wave.

POSTULATE 1:
Gravity is a rotating helix (rotationally polarized) electromagnetic wave of extremely small wavelength emitted from the proton and or neutron.

POSTULATE 2:
The wave is undetectable by most instruments as it passes through all matter
Thus, it is not detectable by normal means.

POSTULATE 3.
There is an error in present rules of superposition.

A theory unfolded after years of study, based on data from radio scanner, and video logs. Gravity waves emitted from sun and moon, Doppler shift from elliptical orbital motions, then heterodyne in the beach sand slurry along with Earth's gravity waves.

One hypothesis is the slurry acts like billions of transistors or hot carrier diodes. The liquid slurry combination of rust, quartz in the sand, and salt water as a conductor enables multiple Doppler-shifted electromagnetic waves to combine (heterodyne or mix) producing two more signals and a host of harmonics. In this case, it makes the wavelengths much larger. (Ham radio operators have long-known rust on antenna guy wires is a common source of interference from the heterodyning of signals) Ref 14. Quartz, a semiconductor used in transistors, also has piezoelectric properties.

The sand patterns appear when the field lines dwell, which produces a stationary pattern. In a dramatic video, soliton water waves appear when the electromagnetic field slowly sweeps across the area.
The event can be associated with elliptical orbit Doppler relationships of earth and moon orbits, as well as diurnal cycles. Elliptical orbits are the source of Doppler shifts in gravitational frequencies. Near the dates of moon aphelion and perihelion, Doppler shifted velocities near a dwell position. At this time the topocentric separation velocity to the moon goes from positive to negative. The earth/sun has a bi-yearly cycle as well. I have been unable to predict the events completely. It seems there may be moon and sun angles involved. At times, the event stops completely for weeks.

The Moon passes through the 2 extreme points or apsides, the perigee, and apogee about once a month. The time it takes for the Moon to travel from apogee to perigee is called the anomalistic month and takes around 27.55 days. The apogee point has a slower Doppler transition rate. Thus,

the events may last a bit longer. See the Moon Perigee Apogee table in this book or visit: https://www.fourmilab.ch/earthview/pacalc.html

Because the moon and the sun's gravity fields pass through the earth allows the phenomenon to occur when the sun is set, or the moon is not visible being on the other side of the earth.

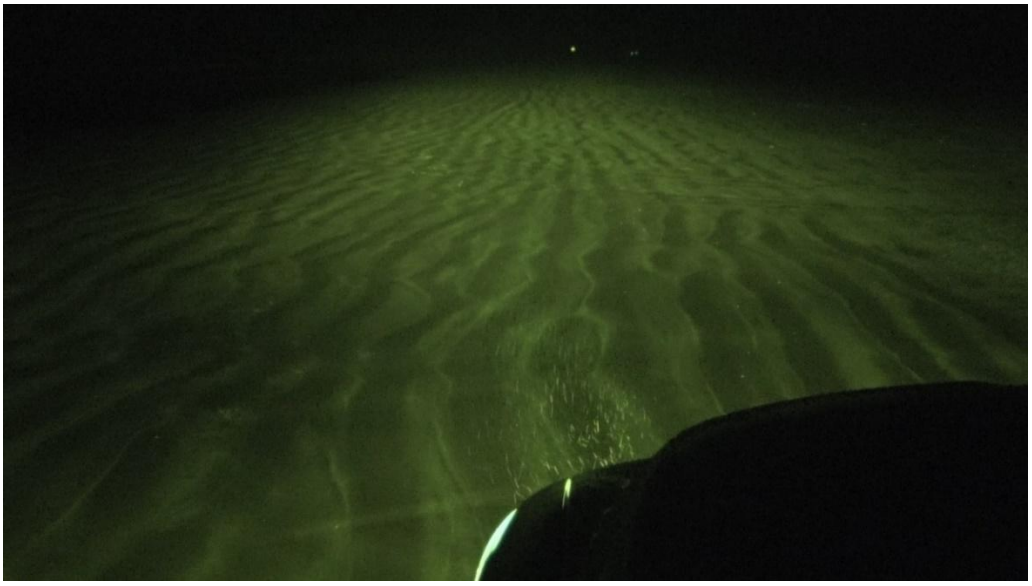
Rust particles are a requirement. Try to find a photograph of an ocean beach with this phenomenon going on. If you find one, it's most likely caused by iron oxide and a synodic event.

Carmarthen Bay: A lot of shipwrecks and rust in sand. Same phenomenon.
51.725376, -4.370785 GPS coordinates
https://www.youtube.com/shorts/KHmkURoAedc

There has been some confusion about what is causing these sand patterns. The author wants to make it clear that there are two types, a fake formed by simple water movements, and a real occurrence formed by heterodyned gravitational waves.

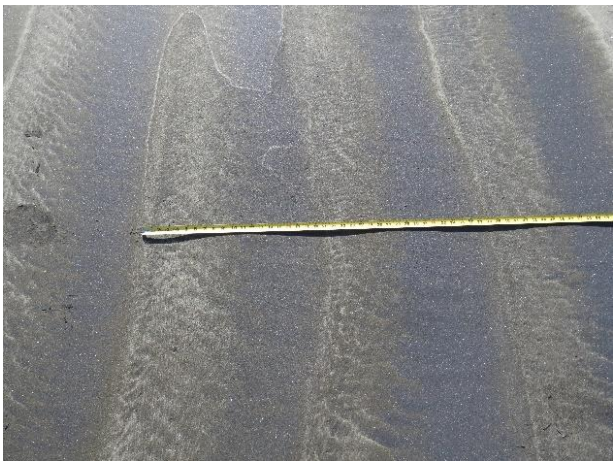
FIGURE 1. ***THE DARK PATCH AREAS ARE IRON OXIDE PARTICLES TRYING TO STAND ON END MUCH LIKE IRON FILINGS DO WHEN PLACED ON A PAPER AND A MAGNET IS HELD BELOW.*** The normally clean bluish hue of the surf water has been discolored by black iron-oxide particles. This only occurs during strong iron oxide wavelength (magnetic) gravitational events. PHOTO DATE: January 3rd, 1995, 17:00 hrs. Solar time. UTC: Jan 4th 1:03 am moon Doppler shift -209 Hz – -241 Hz. 3+ days after moon perigee. This strong of an event may be considered rare (I have only seen it one time this strong and was able to slightly feel it). Electrolysis of the salt water may occur with a slight odor of chlorine gas.

18-inch spacing



05-14-2022 12:05 am Consistent 14.5-15 inch spacing with corresponding RF 814.4 MHz strong background frequency.

09-29-2023 Night Photo. 19-20 inch wavelengths.



Measure 2 sections then divide in half

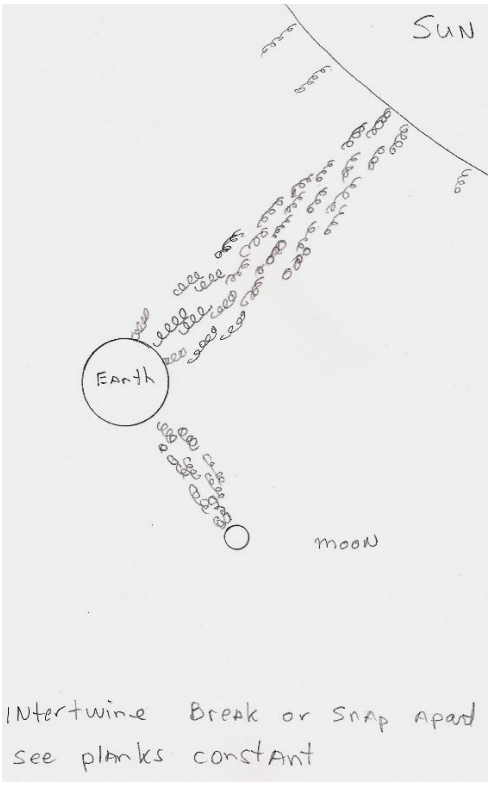
FIGURE 4. This normal clear sand condition occurs outside the phenomenon dates as well as in between its intermittent appearances. Fort Stevens State Park, Astoria, Oregon, USA. The 1906 shipwreck Peter Iredale (in the background) provides an excellent reference point for the phenomenon. Notice the clean blue water void of the darker particles indicates a change in the phenomenon.

Beach Sand is so smooth and flat that clouds can be seen reflecting in wet sand. 01-18-2023

FIGURE 2. Dry Sand Panoramic Photograph from type 2 conditions. Black lines are a concentration of paramagnetic rust particles. This natural detector provides visual proof of gravity waves. An increase in unidentified radio waves often accompanies this phenomenon. Proof gravity is an electromagnetic wave. Reveals a relationship between the gravitational field and the magnetic field. These patterns can occur only on specific dates and times. These are not drainage patterns; water has flowed across the grooves, not down them. Mica or black granite can confuse one studying the event.

→ ← → ←

Figure 2. The end of the 'Swash Zone' is shown between the arrows. Only the last part of the wave that washes up upon the beach is of importance in the phenomenon. An exception is the sand pools event which occurs in 2 to 5 feet of water.



Helix Spring Gravity Emission sketch. See details in Planks Constant theory file at synodicgravity.com. Note: Represented incorrectly here moon's field is much stronger than the sun's.

The above drawing shows an electromagnetic wave connection viva gravity waves emanating from the proton and or neutron. The articles below relate to this connection.
Changes in the decay rates of radioactive elements have an effect that no one understands.
https://www.sciencedirect.com/science/article/abs/pii/S0927650510001234?via%3Dihub
https://phys.org/news/2010-08-radioactive-vary-sun-rotation.html

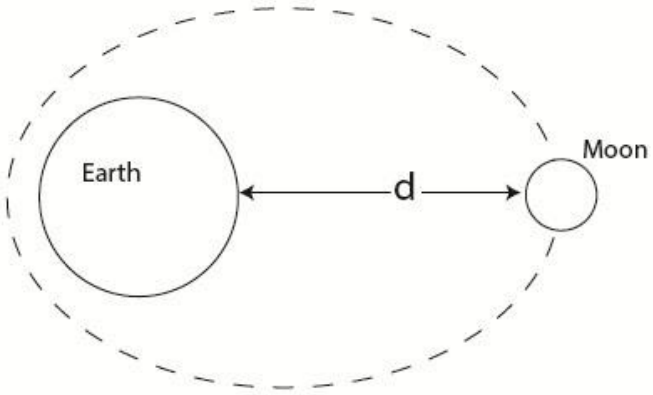


Figure1. Moon's elliptical orbit around Earth. The changing distance creates a Doppler shift in the moon's gravitational frequency. The earth's orbit around the sun is similar.

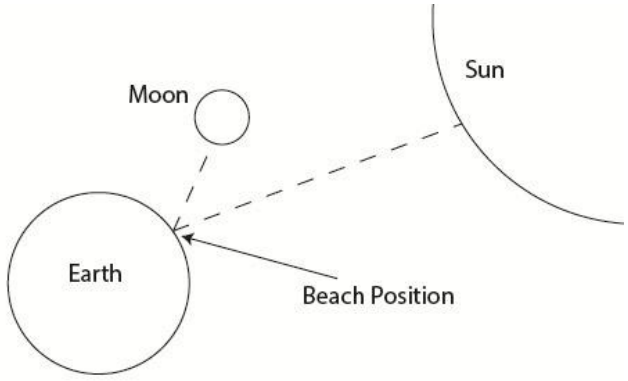


Figure 2. The sun and moon should be in the same quadrant in the sky, otherwise, waves from opposing directions will collide, forming the fake occurrence of the phenomenon. See Figure 4. This applies to night-time conditions also.

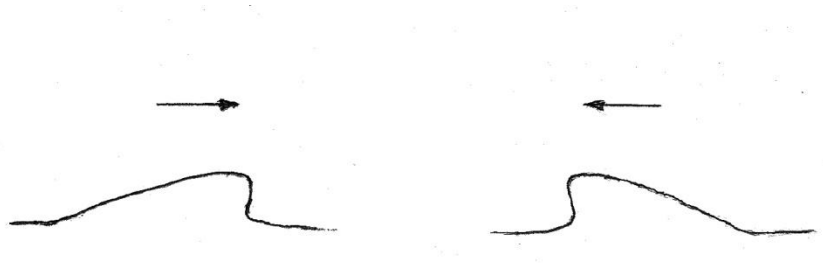


Figure 4. *Wrong.* The sand patterns left by the collision of two small-sized water waves traveling in opposing directions are NOT part of the phenomenon. The collision temporarily stops the water flow motion drops the suspended particles in place creating a fake occurrence of the phenomenon.

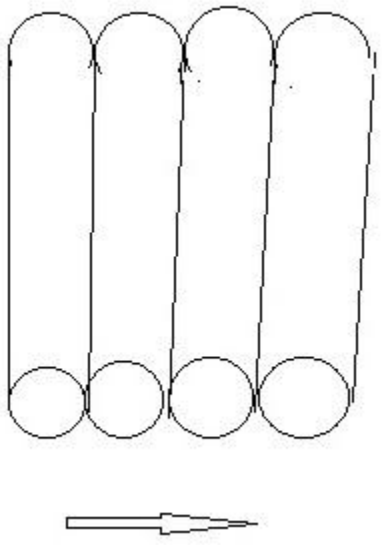
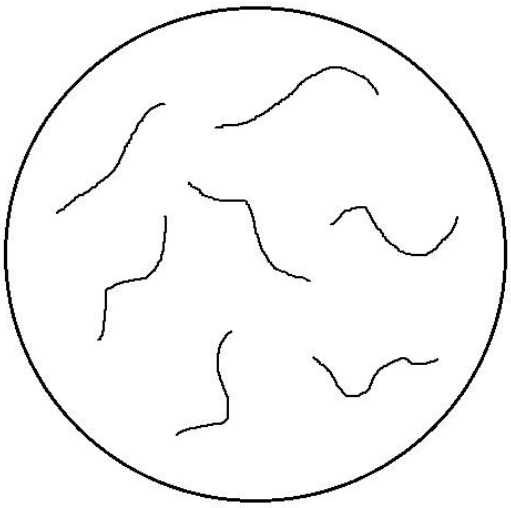


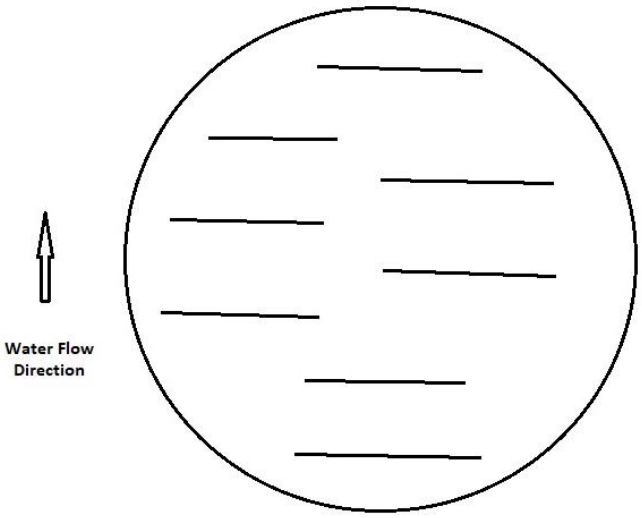
Figure 3. *Correct illustration:* EM helix field lines. The Helix field is represented by cylinders. Humps left in the sand by water flow (arrow) passing through temporarily stationary (standing EM wave) electromagnetic field partially (approx. half) buried in the wet sand (the cylinders).
The wavelength can be measured by the grooves left in the sand.
(Note: the field normally moves but can become stationary long enough to leave a series of lines). Multiple field lines form the complete patterns. There must be no wave-to-wave collisions, as shown in Figure 4, occurring in order to identify this event. For no apparent reason, a water ripple

appears. Humps in the sand may also be increased by the temporary slowing of water flow at the ripple and groove.

Why are the beach lines aligned? Radio waves emitted from a huge flat plate antenna take on a random direction. During the phenomenon, the water flow being a conductor organizes and pulls the electromagnetic waves into parallel rows.



Radio Waves Emitted from a Huge (size of beach) Flat Plate Antenna



Radio Waves Emitted from a Huge Flat Plate Antenna when Aligned by Flowing Conducting Salt Water as on the Beach Surface.

The electro-magnetic field is aligned by the direction of the water flow which results in the parallel rows shown in the beach photographs. Note: The swash zone water wave height is approximately 1-6 inches high. The electrical conducting saltwater pulls the rows into order as it flows across the surface.

NEW LOGS: 6-16-2021.

Rust was down buried below the surface about ten inches deep. I drove my car into the water's edge. The field lines, which were a very uniform 12-inch intervals, were disrupted by my car's presence. When I drove away, they came back. I assume the magnetic steel of my car had left a path and disrupted the field lines.

Illuminated by a powerful light bar, when I drove over the field lines when they were forming at 3:45 am the field lines were disrupted in a large swath around my car. As I drove through the incoming waves from 1 to 6 inches deep. The field lines broke up, and some disappeared completely. My car made a clear path or trail in the middle of the forming phenomenon.
The steel (magnetic) from my car seemed to shield the area around the car preventing and or reducing the formation. I kept driving over a 50-foot section. Then I found I had to back off toward land to allow the formation to regain its strength and start appearing in its uniform pattern again. When I drove back several minutes later it happened again. *A week later when I tried to disrupt the field with my car it did nothing.* This phenomenon has many unusual attributes.

Orrery Planetarium: Planetary Alignments
Uranus and Moon alignment 9-24-2021 unusual event Puffin clouds and messy beach.

Measuring Groove-To-Groove Wavelengths

Often a radio frequency appears with a wavelength that matches the groove-to-groove distance. Imagine large coils of spirals buried within the sand at different angles with various amounts exposed much like a bunch of logs buried at different levels. You can only see the widths (the grooves), so the measurement is dependent upon how much of the coil is buried. Sometimes the grooves extend hundreds of feet maintaining their position from one wave to the next as though something stationary was forming them. Something impeding the normal flow of water remains in position wave after wave but slowly migrates until the forces pull it apart whereby it grabs hold in another nearby area. Using the local tide table, the phenomenon is easiest to witness between high and low tides. So, pick events between high and low tide. At low tide, the wave motion is uneven causing confusion. Reject the high tide area as it may not have churned up well enough lower level to erase the previous patterns.

The groove-to-groove wavelength jumps from long to short dimensions in steps. They do not seem to follow the Doppler shift heterodyne wavelength that would change slowly from a low frequency to a higher one. Instead, they appear in steps like quantum jumps do.

Some common groove-to-groove distances are 12.3, 14, 18, 20, 24, 26, 29, 30.5, and 46 inches.
Divide 11803 by the groove-to-groove distance to find the frequency in mega Hertz.
Note: Not always applicable due to the quantum transition level emissions (hypothesis). The wavelength of the level is rarely the emission wavelength. It is easiest to look for the increase in RF coinciding with the beach phenomena.

Radiofrequency relationships were found (brief).
397.325 MHz = 29-inch groove
386.025 MHz = 30.5-inch groove
256.725 MHz = 46" 10-30-94 12 pm, the only EM wave found at that time between 350-200 MHz

Please note: (Abbreviation: RF = radio frequency)
Regarding: The exact groove measurement to frequency correlation. Often it is difficult to make exact frequency-to-wavelength correlation. The groove patterns are often formed from the heterodyning of three different wavelengths. The resulting groove dimensions stretch from one wavelength to another and another (Visible results of the heterodyning process). This makes the exact measurement to frequency match difficult. Another factor is the immediate re-absorption of the wavelength resulting in very weak signals. Many other accompanying radio wavelengths from quantum jumps appear in RF but not as sand grooves. Another RF relationship might be found in the snapping apart of the heterodyned waves. This emission should correlate to the difference between the two grooves that are heterodyning. Use of the energy level transition jump method to find frequency relationships should be helpful. i.e., The difference between groove-to-groove dimensions of stretched grooves may reveal the radio frequency (the corresponding photon).
Standard radio frequency emissions cannot duplicate the groove formation. This is due to the alternation of the poles during normal RF propagation. A standing wave may, however. These grooves are probably formed by an unusual type of rotation of the polarity of these waves.
You should find the groove-to-groove distance maintains specific sets of dimensions. Recognizing certain patterns and sets, for example, the 12-inch often occurs alone. The 18 and 24-inch formed at the same time. The very wide often occur alone. One must determine that they formed at the same interval. Sets found on the entire beach from high to low tide may vary.

WATER WAVE AMPLIFICATION:
It is well known that the moon pulls on water causing the tides. Less apparent however and not well recognized it also pulls on all mass including the atmospheric air and the water in clouds. A dwelling of topocentric Doppler velocities of gravitational waves at specific times slows down the gravitational waves sweeping across the earth’s surface and enables effects not seen in simple tidal six-hour intervals. Eventually, when examined long enough, it becomes obvious that something more than a light wind is causing the rippling of the water.

Abnormal undulating movements in small water ripples occur for no apparent reason. A close study of rivers and lakes reveals that at certain times something other than wind is causing or enhancing minute ripple motions. Accompanying light wind conditions (at specific times) the water ripple motions on small lakes or ponds and smooth flowing rivers the ripple motions observed are amplified by Doppler-shifted and heterodyned gravitational waves. Self-sustaining rippling motions more than the light wind could produce and appear to enhance or amplify the ripple motions. This effect can also be seen on calm ocean sea conditions. This condition was observed out beyond the surf just before the sand pools event at Fort Stevens State Park as well on small lakes and smooth-flowing rivers when the wind conditions were light and not sufficient to form the ripples alone. This related phenomenon is apparent in two-hour cycles and the six-hour tidal cycle and is altered by the position of the moon and or sun. A 12-hour cycle also appears in the moon Doppler data of 'MoonSked[10]' Moon bounce software.

River Water:
The sky position of the moon may minutely drag the ripple wave crests in other directions.
Unless one has a very critical eye a video camera is required to record the changes. It may be difficult to separate the rippling from wind from gravitational effects; however, the effect at times can be dramatic and easy to identify. Here one must separate out how much rippling a light wind would produce. In the case of a calm river that flows east to west (same as the earth's rotation) at the time when the moon and or sun both are in the easterly direction the ripples convolute and the crests will slightly convolute to the easterly direction or upstream direction (toward the pulling bodies the sun and moon). This direction is contrary to the normal direction a water ripple will take when simply flowing downstream. The Columbia River along Marine Drive is well suited for this analysis. Several river cams are helpful, but an in-person view is best. The link: http://zappers.camstreams.com/ provides an excellent viewpoint on the Columbia River near the Portland Airport.

TWO TYPES: THE FAKE AND THE REAL

Since it is easy to dismiss this phenomenon as forming from simple water flow motions, the author wants to be certain without a doubt it is known that there are two types of conditions that form the sand patterns. Many of the patterns are simply formed by the collision of shore waves coming from opposite directions. The collisions of opposing water waves produce a sluice box-like effect. This is not a part of the gravitational phenomenon as described here. Prospectors use sluice boxes to separate gold from river sand. The sluice box-like effects mimic the formation of the sand patterns by depositing the heavier rust particles during the collision. The slowing of the water during the collision allows the heavier rust particles to drop onto the surface of the sand forming a dark-colored line of rust. In addition, the water ripple digs a groove in the sand resulting in patterns that are nearly identical-but not so. The 'wet' sand remains hard and easy to walk upon unlike the 'wet 'sand when the phenomenon if forming by heterodyned gravitational waves. Another fake type occurs when there has been a strong event 6 – 12 hours earlier. The last event leaves an uneven, soft sand layer inches below the current

surface. In this case, a fake occurrence is built upon the sand that had a prior event resulting in a bumpy surface that collects particles like a sluice box.

Water that flows in both directions (in and out) does not normally form sand ripples. Only single direction flowing water (river water) will form ripples in sand.
Ripple marks - Wikipedia These are not the same conditions. Ripples can be formed in a tank by oscillating the water (lifting one end then the other in a controlled manner) back and forth.

CONDITIONS FORMING RIPPLES ON A GRADUAL SLOPE OF SAND:

The sand groove producing part of the phenomenon is concerned only with low profile shore water waves from 1 to 8 inches deep. Only the last 30-40 feet of the water wave as it approaches the shore and flows back out is of importance.

IMPORTANT NEW CONCEPT MODEL:

There seems to be a correlation between when the rust is brought up to the surface and the velocity of the water flow. The rust is brought up to the surface by unseen forces then creates a sluice-box effect related to the water flow velocity. The water flow velocity could be related to the spacing between the black-colored humps and grooves. If this is the case radio frequencies could appear only temporarily then the spacing is due to the water flow velocity and slope of the beach. However, this would not negate the phenomenon.

Unlike river sand ripples formed by constant velocity water flow in one direction only.
Beach wave motion is different. The water flows back and forth, and the velocity goes from a maximum to zero and then reverses direction. The back-and-forth washing-like motion working alone on a gradual slope result in clear sand conditions Figure 4. The unrestricted (no collisions) back-and-forth washing motions of small shoreline waves on a gradual slope will flatten out the sand. However, the collision of two water waves from opposing directions will form a hump in the sands and drop the heavier iron oxide particles.

As a single water wave comes in, the water flow stops and lays out flat on the ***gradual slope*** of this beach, then the water begins to flow back out to sea. It is important to note the surface of the water has laid out flat. At this point, if there are no other factors present such as the collision of two water waves and the stationary electromagnetic fields are not occurring, then the particles of sand and iron oxide are distributed evenly and result in clear sands (figure 4).

There are several ways to determine when the patterns are forming from gravitational waves. We can be certain the sand patterns are caused by heterodyned gravity waves when the rust particles are standing on end (See figure 1), also when the timing of the water waves is such that when the incoming waves are not colliding with the outgoing waves. The sand pools are part of this phenomenon, and when the surf normal blue hue becomes deeply discolored by black iron oxide particles.

The water waves concerned here are shore water waves ranging from 2 – 4 inches high only and are not part of the crashing surf. The final waves which reach the shore then proceed back out to sea.

My original YouTube video of the phenomenon: The video was taken with an analog camera and then converted to digital, so the quality is not very high.
(Synodic Gravity Wave of the Future). https://www.youtube.com/watch?v=kP6i5us9vac&t=8s
New videos are available.

GUIDELINES TO IDENTIFY AND SEPARATE THE PHENOMENON

To keep from confusing the actual phenomenon from the appearance of lines in the sand from flowing water like in a river, or simple wave-to-wave collisions, the below guidelines are given.

The normal sand patterns we associate with flowing river water require a continuous flow of water in one direction only. Here the continuous undulation in the water slowly builds up the sand from below resulting in a sand hump to hump distance of about 5 inches. It takes some time for the sand patterns to develop depending on the water velocity and depth. The wave-to-wave distance is related to the velocity and depth of the water.

It may take about 5 -10 seconds for the water to come to a complete stop before it begins to flow back out. The in-and-out water flow continuously erases any previous patterns left in the sand.

The patterns produced by the phenomenon are both humps and grooves, not just a series of waves in the sand and crest direction. The wet sand becomes very soft and can be compressed or impressed, collapsing the particle alignments within the sand. See the photo of rust particles standing on ends.

An unusual ‘blink on and off’ makes the water ripples suddenly appear and then disappear within seconds. There may or may not be a groove pattern left in the sand depending on when the event occurred within the in or outgoing wave.
This occurrence may require many hours of watching, and the best I can figure out is that it is from a momentary gravitational bulge on the Earth or a mountain on the moon’s surface temporarily altering the Doppler shift.

As in type one patterns. Two opposing direction water waves often occur causing a collision and dropping the particles enabling a stationary water ripple at the point of collision and leaving a dark line in the sand. The type one patterns may be Doppler-related but are not considered part of the phenomenon as described. There may be no associated radio frequency match with this type. It is important to locate dates and times when incoming waves are not colliding with outgoing waves. When the sun and moon are in opposing positions in the sky, opposing water waves collisions may occur. Conversely, when both the sun and moon are in relatively similar positions in the sky the water waves are pulled from a single direction reducing wave-to-wave collisions.

Figure 2 shows the results of alignment after the sand has dried. These were formed by type #2 conditions. Drying causes the domains to tip over. The patterns arranged in the sand are immediate and visual due to the forming of a liquid slurry of fine piezoelectric quartz, and rust particles suspended in salt water. A slightly agitated motion allows the particles to float in the slurry and self-align leaving the visual pattern.

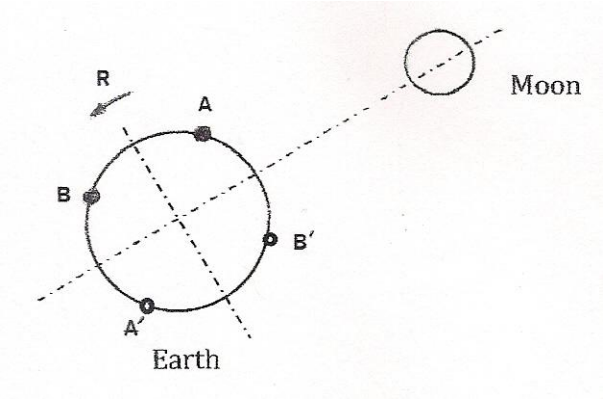
The particles are free to orient and align completely unrestricted due to the slurry which suspends them temporarily until they drop into position. This is like a compass needle floating in the water, only free to rotate in three dimensions. Floating in this lightly agitated solution, the particles are in pseudo-weightless suspension.

Figure 1 shows the alignment immediately after it occurs when the sand is still wet. Proof a strong electromagnetic field is present, the black patch areas are paramagnetic particles trying to stand vertically on end, much like iron filings do when placed on a paper and a magnet is held below.

TIMING OF THE EVENTS

The best time to witness the events when it is occurring might be approximately six days before and six days after the moon's apogee perigee dates, or near the center of the moon's apogee perigee. This may not always be true, however.
The proper date/time to witness is when the sun and moon are in the same relative position in the sky (see Doppler Calculation Example) I.E., they are both pulling from the same direction. At this time a single very small shore water wave will be occurring without collisions. The phenomenon has an orbital Doppler and a diurnal cycle.

Picking a negative Doppler value may be required for a frequency reduction.
Reason: A higher frequency than the proton may not heterodyne correctly or will result in a frequency that cannot show up at the beach. This is required to reduce the frequency into a magnetic frequency (sub-millimeter).



Topocentric Timing of the Phenomenon by Earth's 24-Hour Rotation

PREDICTING AN EVENT DATE:
(Be sure to work with 24 Hr. UTC time only)
Predictions are very difficult. The best way to prove the event is when the rust particles are standing on their ends. However, this event is rare.
There are several methods to help predict events.

1. Moon Doppler data.
2. Days near the moon apogee and perigee
3. King Tides (Nov. 20- Feb 20) when the moon is closest to Earth approx. 12 days apart. Be wary of Sneaker Waves during the King Tides.
4. Super New Moons

Earth Moon and Sun Orrery

The Orrery simulator may be helpful to visualize how the moon orbits and when the sun and moon are in the same quadrant in the sky. See YouTube video: "Phases of the moon explained using an Orrery." https://www.youtube.com/watch?v=1sj2otIjZfM

Sun, Earth, and Moon Position – 3d Simulator
https://en.tutiempo.net/astronomy/sun-earth-moon-3d.html#UTC20220224T2300

MoonSked EME Software
What is EME (Earth-Moon-Earth) or Moonbounce in Amateur Radio?

MoonSked is free now and you can download it at:
http://www.gm4jjj.co.uk/MoonSked/moonsked.htm

'MoonSked' EME software is incorporated. The Earth-Moon-Earth (EME) Communications, also known as Moon bounce, is a radio communications technique that sends a radio signal from Earth to the Moon. The signal bounces a signal like an echo off the surface of the Moon and is received by a Ham radio receiver on the far side of the earth making it possible to have long-distance communications. One sends on one wavelength, and the other receiver is on a Doppler-shifted wavelength. As the moon orbits and the earth turns, the signal is Doppler shifted to another wavelength. I use the same software only set the send and receive location is the same. The software calculates the Doppler shift but, in this case, the signal is a gravity wavelength only coming from the moon. Note: Several years of data output from 'MoonSked' can be found at SynodicGravity.com. I found MoonSked very helpful in predicting the occurrence of sand upheaval within several hours. **THE DAY OF THE WEEK IS NOT ALWAYS CORRECT IN MOONSKED.**

It is difficult to predict events. Here we will be incorporating software to make predictions. The method is as follows:

1. **It is best to pick a day that has a low tide or a good elevation separation between the high and low tides. That way you can see more occurring.**
2. Set both stations on MoonSked to Latitude 46.199, Longitude -123.955 (**do not use GPS coordinates**).
3. **(IMPORTANT) Set the min EL at zero and the max elevation (EL) at 90. The program will not work correctly without this setting.**
4. Using 'MoonSked' moon bounce data near this date look for Doppler frequency shifts passing through the zero-point, or Doppler frequency dwells. The data should reveal close proximity times to see something happening in the sand. Note 'MoonSked' is topocentric Doppler data, which will give a more precise time than simple Perigee Apogee date time.

Since "MoonSked" software was designed for EME (Earth-Moon Communication). The moon bounce Doppler data from "MoonSked" stops when the moon sets, then picks up again when the moon rises. However, the moon's gravitational field passes around and directly through the Earth. This allows the phenomenon to occur even when the moon is not overhead.
The data can be interpolated to fill in the missing hours when the moon is not in the sky. One method is to set both MoonSked locations to the Caspian Sea (longitude 303.83, latitude 46.3). See the **"Missing Data from MoonSked Table".**

Print out the below converter then fold over the paper long edge and align it up against the MoonSked output for a quick conversion

HOUR CONVERTER UTC TO PST for MoonSked conversion

Subtract -8 from UTC to get PST at Astoria Or.

When UTC is before 8 it is the previous day in PST
00:00 is midnight in UTC and when the UTC day changes
08:00 UTC is midnight in PST time. SAME DAY

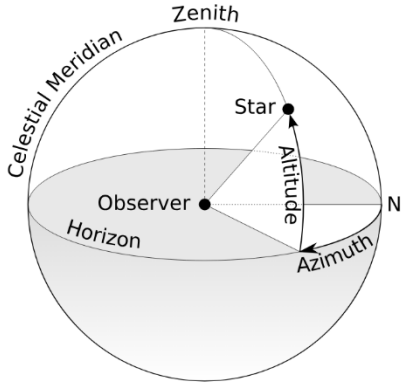
UTC	PST		
00:00	04:00	PM	The PREVIOUS DAY in PST ----------
00:30	04:30		
01:00	05:00		
01:30	05:30		
02:00	06:00		
02:30	06:30		
03:00	07:00		
03:30	07:30	PM	
04:00	08:00		
04:30	08:30		
05:00	09:00		
05:30	09:30		
06:00	10:00		
06:30	10:30		
07:00	11:00	PM	
07:30	11:30	PM	PREVIOUS DAY ^
08:00	00:00	Midnight	08:00 UTC is midnight in PST time. SAME DAY BELOW----------
08:30	00:30	AM	
09:00	01:00	AM	
09:30	01:30		
10:00	02:00		
10:30	02:30		
11:00	03:00		
11:30	03:30	AM	
12:00	04:00		
12:30	04:30		
13:00	05:00		
13:30	05:30		
14:00	06:00		
14:30	06:30	AM	
15:00	07:00		
15:30	07:30		
16:00	08:00		
16:30	08:30		
17:00	09:00		
17:30	09:30	AM	
18:00	10:00		
18:30	10:30		
19:00	11:00		
19:30	11:30		
20:00	12:00	PST NOON	
20:30	12:30		
21:00	13:00	1 PM	
21:30	13:30		
22:00	14:00	2 PM	
22:30	14:30		
23:00	15:00	3 PM	
23:30	15:30		SAME DAY ABOVE ^
24:00	16:00	4 PM	----------

Watch for a change in the type of materials on the beach surface, whether rust, or quartz on top surface, when the Doppler frequency data before and after changes from positive to negative.
The 12-hour cycle is evident in the visual phenomenon formed in the sands. Since gravity waves can pass directly through the earth it creates a 12-hour cycle. Another approx. 6-hour cycle appears in the computer-generated Doppler data. A UTC, and a PST or PDT (Pacific Time) 12/24-hour clock will be required, as the tide tables are Pacific Time, and MoonSked is UTC. Time must be in the 24-hour military format. After finding a moon Doppler date, it may be helpful to use this On-Line Converter (UTC to Pacific Time): www.worldtimebuddy.com Be sure to change it to 24-hour format (upper right-hand corner)

The Sun and Moon conjunctions amplify the effects. When the moon and sun are near the same position in the sky the gravitational pull from the two sources add together, which may increase the effects. Extremely high or low tides occur during these events. These also occur on the opposite side of the Earth near the Caspian Sea. Need solar elevation and azimuth of Moon for Portland Oregon. During a solar eclipse, the Moon is directly in front of the Earth. The next one occurs on 2022 May 16th.

The beach grooves formed on a 1-2-hour basis twice each day assuming the Doppler shifts and bodies alignments are correct which is date and time related.

The Moon's gravity field is stronger than the Earth's and occurs much more frequently. The phenomenon should not be confused with 'type one' patterns.



Astoria is at -123 degrees longitude, and the prime meridian starts at Greenwich England. Anything west of the prime meridian is a negative (-) longitude.

By TWCarlson - Azimut altitude.svg, CC BY-SA 3.0,
https://commons.wikimedia.org/w/index.php?curid=17727911

Meters	Freq MHz	Inches	Meters	Freq MHz	Inches
.25	1199.16	9.84	.54	555.17	
.305	982.93	12	.55	545.00	
.33	908.46	13	.56	535.3	22
.34	881.74		.57	525.95	
.35	856.54	14	.58	516.88	
.36	832.7		.59	508.12	
.37	810.2		.60	499.65	
.38	789	15	.61	491.46	24
.39	768.7		.62	483.54	
.40	749.5	16	.63	475.86	
.41	731.2		.64	468.42	
.42	713.8		.65	461.22	
.43	697.2	17	.66	454.23	26
.44	681.35		.67	447.45	
.45	666.2		.68	440.87	
.46	651.72	18	.69	434.48	
.47	637.86		.70	428.27	
.48	624.57		.71	422.24	28
.49	611.82		.72	416.37	
.50	600		.73	410.67	
.51	587.82	20	.74	405.12	
.52	576.5		.75	399.72	
.53	565.6		1Meter	299.79	39.37

Wavelength to Radio Frequency Chart

For accuracy, measure 3 groove-to-groove distances divide by 3 then find the frequency.
https://www.everythingrf.com/rf-calculators/wavelength-to-frequency
https://wiki.radioreference.com/index.php/Television_Frequencies

Multiply inches by .0254 to get meters.
.0254 meters per inch. 39.37 inches per meter.
Scan from 500 MHz to 680 MHz with a spectrum analyzer. Spectrogram: The spectrum monitor or waterfall setting should be helpful.
https://www.hamradiosecrets.com/antenna-calculator.html

The energy from the moon's gravity field hitting the earth's surface is approximately:
$6.8\ mW/m^2$ or (6.8 milliwatts per square meter). Looks high, so, one answer would be that not all the gravity waves are heterodyning, else the background noise would be much higher.
Inversely proportional to the square of the distance to the source.
Compare to a 200 mW LED at x distance and use the inverse square to distance. This much energy would overload a radio receiver.
Gravitation of the Moon - Wikipedia

1/5000 of the sunlight energy at noon.
The amount of sunlight at noon is approximately 1000 watts per square meter so is 5000 times greater then the energy from the sun.

Complications making predictions:
As mentioned before, the resulting radio frequencies from synodic waves seem to quantum jump to new frequencies, charging earthly elements up on one wavelength, and then discharging on another, much like a laser or phosphorescent rocks when exposed to black light. This is probably why the beach lines can appear at unpredictable intervals. Without the proper equipment, I was unable to determine if this quantum jumping was occurring with certainty.

ASSOCIATED WHISTLER (Hypothesis)

It is not necessary to be at the beach to detect Doppler-shifted heterodyned gravitational frequencies, they are everywhere. They heterodyne with iron and internal components of radio frequency equipment resulting in a weak but trackable signal when one knows how to search for them.

A whistler or packet of static might be tracked and correlated to the heterodyned Doppler shifted frequencies of nearby heavenly bodies. One can solve for the wavelength of gravity given the topocentric velocities of the sun and moon with respect to the Earth (see the example given). Calculations incorporating the whistler frequency will result in a more accurate wavelength for gravity. The elevation above sea level is required for topocentric Doppler velocity.

Doppler data near earth's apogee and perigee dates show that a radio frequency whistler could be associated with the phenomenon and has been located by Burt Younglove WA7HI. The synodic whistler passes up through the radio spectrum at differing rates from below 4 MHz to 900 MHz and beyond. The whistler is a very weak signal just above the background level. This whistler is not related to lightning or atmospheric effects. The attributes are not fully known yet. It may disappear briefly into the background noise and then reappear further up or down the spectrum. You will have to keep your eyes open to keep track of it. The whistler is a very weak signal just above the normal static background level- tune in on a peak that is moving up or down in frequency within the natural background radiation (NOT COSMIC). The rate and direction it moves through the spectrum is related to the date, time, longitude, and latitude position. The intensity of the peak may vary, rising up out of the natural background radiation and then dropping back into it. This whistler is related to the earth's rotation and orbit around the sun or the moon's orbit and travels upward through the spectrum from sunset to Midnight. Burt Younglove WA7HI tracked the Earth-Sun whistler for several hours in the early part of January, between 8 and 10 p.m. Burt was using an ICOM 756 Pro with an integrated spectrum display. A spectrum display will be required. I have used the term whistler here loosely. In reality, it is a signal that passes up or down through the spectrum. I have found that it normally has a pulsing sound, not a whistle.

Radio equipment incorporates super-heterodyning circuitry. High and low intermediate frequencies are used to build the tuning circuits. Manufacturers may use different intermediate frequencies. Thus, differing radio circuits will detect different frequencies from the phenomenon as it heterodynes within the circuit. However, the original source frequencies will still exist on each radio.

Sun only: Look for a whistler or a packet of static that passes downward from high frequency to low between the hours of 12 noon and midnight for several weeks before and after earth apogee and perigee January 2nd and July 3rd approx.

In general, tracking the **SUN'S** whistler and or static packet will have four cycles as follows: The wavelength gets smaller (radio frequency becomes higher) from sunrise to noon. The frequency decreases from noon to sunset. Frequency increases from sunset to midnight and decreases from midnight to sunrise. Topocentric velocities will be required to determine exactly which direction within the spectrum the whistler will be traveling. Diurnal Extremely Low Frequency at sunrise [6.]

Using a Spectrum Analyzer:
Possible Molecular Quantum Radio Frequency Transitions.

These may not always be associated with the visual beach grooves part of the phenomenon. Since we are studying rf with the new spectrum analyzer instruments (see below) as a source of beach frequency emissions we can look more closely and expand the solution to the phenomenon.

Can quantum jumps emit radio wave frequencies in the range we are studying here?
Yes, they can, here in the below reference we find that molecular quantum jumps are a strong possibility in the formation of the phenomenon.

https://www.britannica.com/science/spectroscopy/Radio-frequency-spectroscopy
Transitions can occur in atoms and molecules. From one state to another. The resulting spectra are known as radio-frequency (rf) spectra or microwave spectra. They range from 10 6th to 10 11th Hertz. (1 Mega Hertz to 100 Giga Hertz). This is within the range we are studying here. These transitions can have delays so may not occur immediately. The emission can be delayed.

Due to the complexity and size of the (rf) spectrum, I am going to reduce my scans to match the beach sand wavelengths. However, much lower and higher rf should appear also. As a side note: Planetary motions may play a part in quantum noise which is inherently found in every radio and electronic equipment.

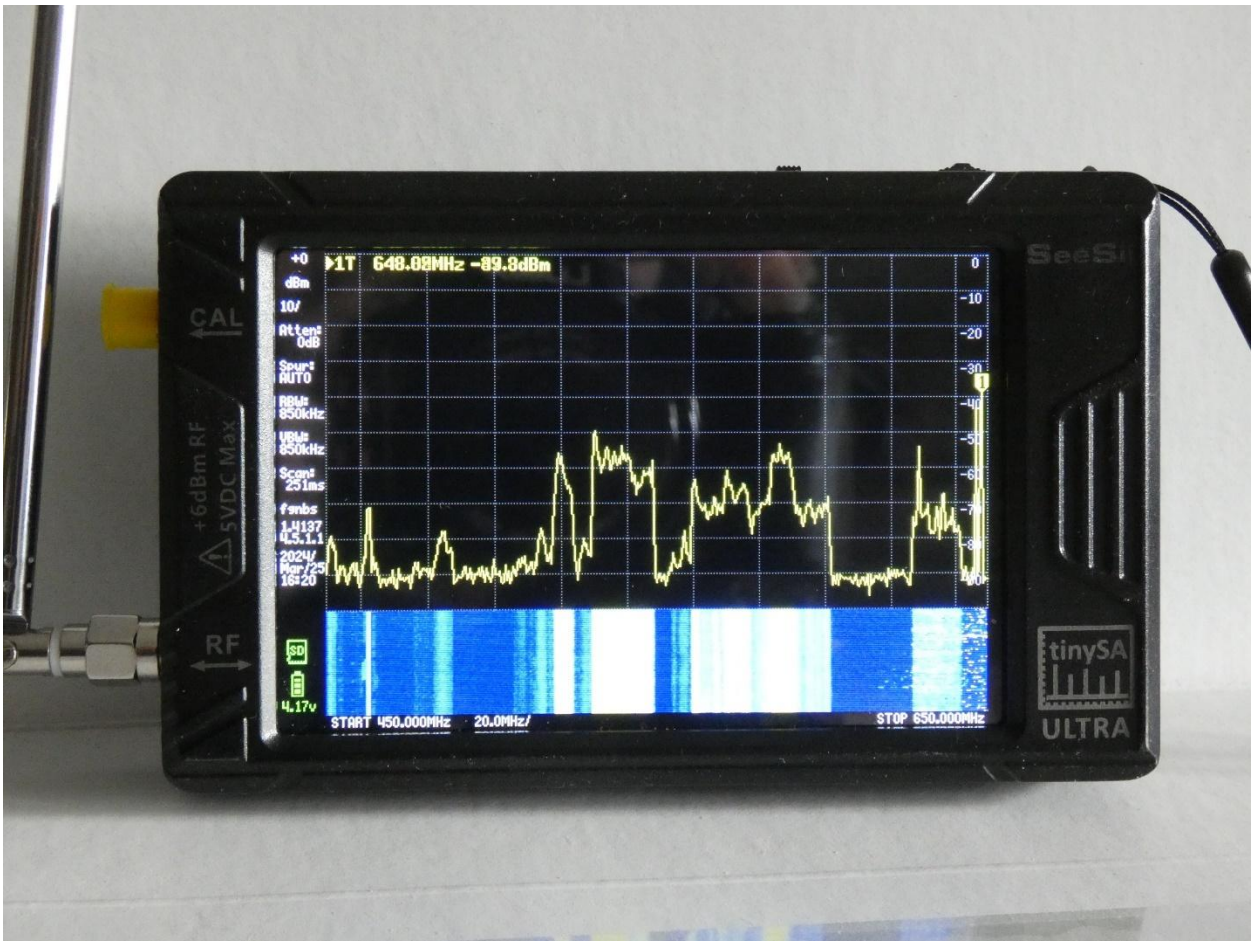
Detecting elements with rf. Prospecting.
https://www.youtube.com/results?search_query=detecting+elements+with+radio+waves

Identify Chemicals With Radio Frequencies.
https://www.youtube.com/watch?v=JO_EHceV9sk

Quantum jump emissions.
The Theory of Complex Spectra
https://link.springer.com/chapter/10.1007/978-1-4613-9083-1_16

Shot Noise:
Different Types of Noise in Radio Frequency #4
https://www.youtube.com/watch?v=9QPVcUiGrjI

The background shot noise at the isolated beach area is approximately -100 Deci-Bells.
In Portland, there is much more background shot noise.

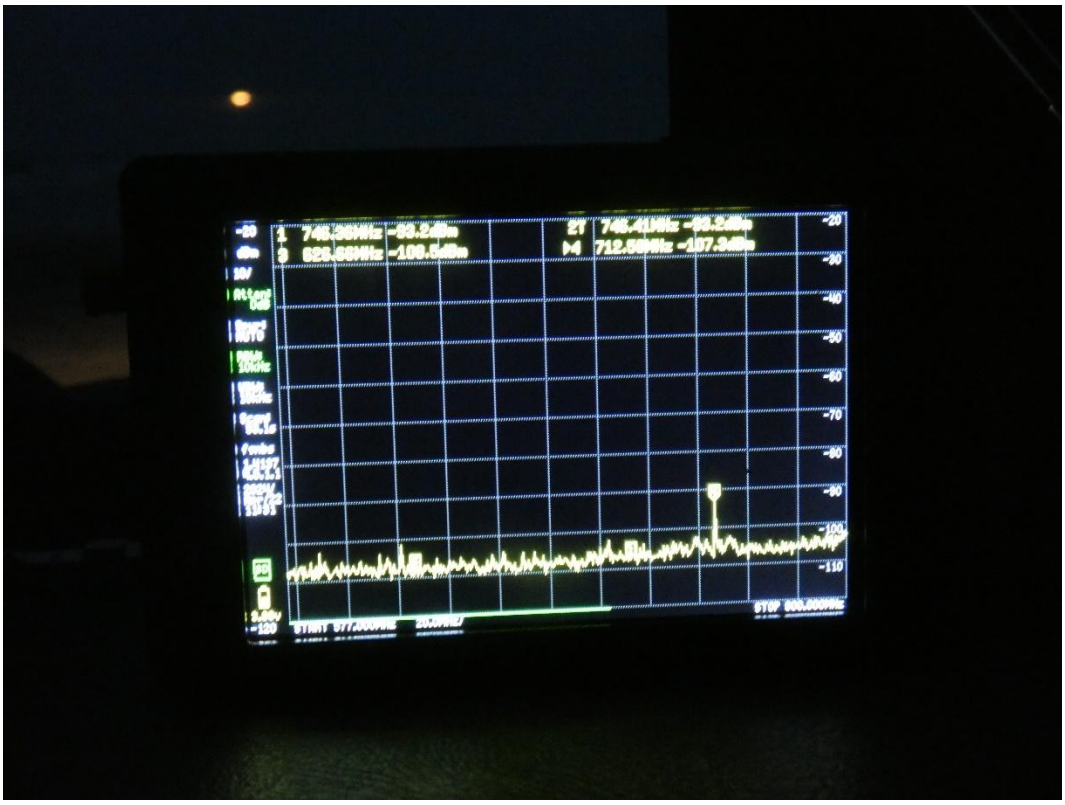


TinySA Ultra Spectrum Analyzer

The scan shown here on the screen was run in Portland Oregon. There is too much going on in town so the phenomenon is lost in the background.

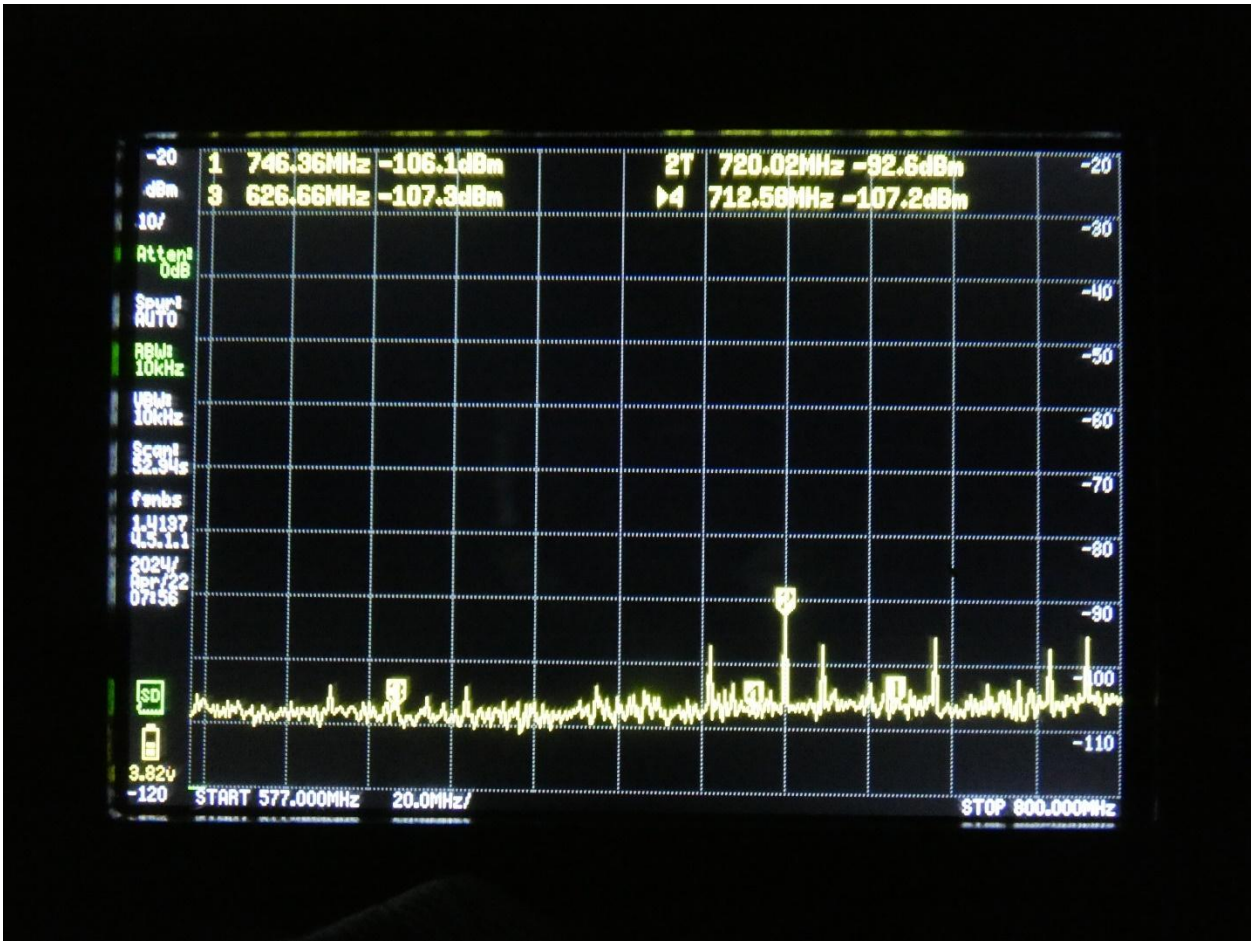
The TinySA Ultra Spectrum analyzer is low-cost ($150) and can be found on AliExpress or Amazon. There are fakes so be sure to get the original. Note the lower part of the screen is the 'waterfall' a record of the spectrum. Remember that the signal may be very weak and might be hidden in the lower background RF. Look for an intermittent moving spike in the blue areas. You can also hear the signal with a pair of headphones with a 3.5mm jack.
I have just got this new instrument so I will update my findings. My old scanner was not adequate.
YouTube videos can be found at:
https://www.youtube.com/watch?v=6C24RnYNOWQ

A better option is the Siglent SSA3021x Plus Spectrum analyzer. This can be found on Amazon for around $1650.00.



Beach Scan April 23rd, 2024. 4:43 AM. Normal low activity scan from 577-800 MHz. Notice the full moon in the background getting ready to set in the horizon.

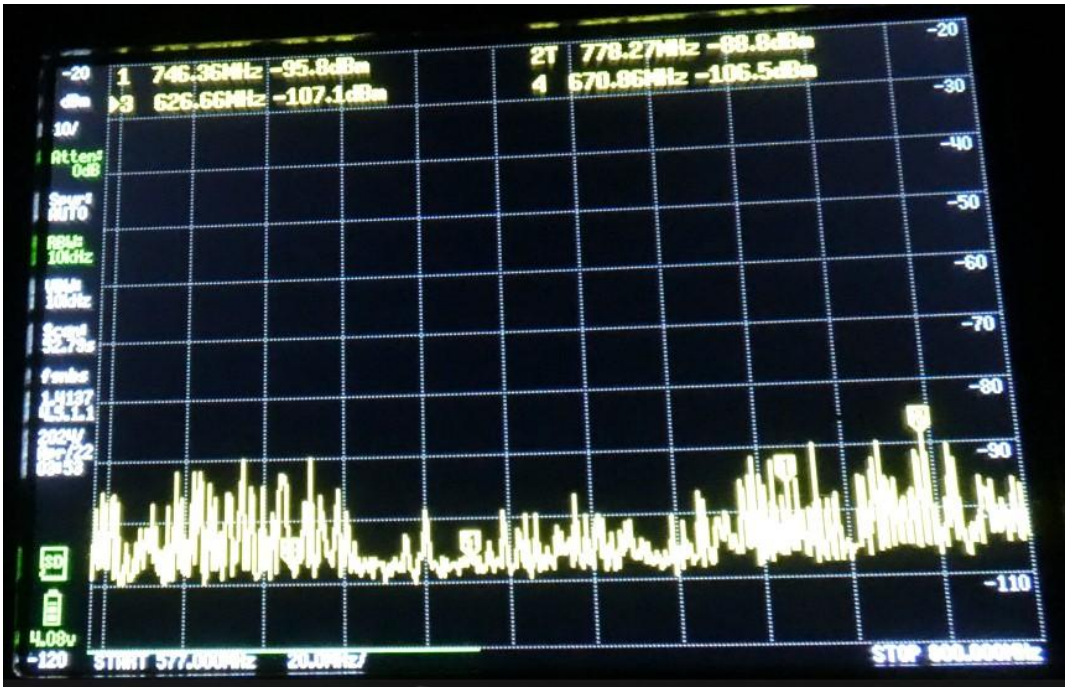
Scan down on the beach against the 15-foot sand bank. The sand bank blocks the RF coming from the east and only the Pacific Ocean RF wavelengths come in. These are easier to identify. This way it is easier to associate the phenomenon to the beach sand.



Beach Scan: 3:12 am. April 23, 2024
Scanning between 577 and 800 MHz. Notice the difference between the upper and lower photos. When the beach sand patterns showed up an increase in background wavelengths appeared.
The wavelengths are only there for a moment then they are gone. At times they get very strong and fill almost the entire bandwidth shown to almost -80 Decibels. They are only there for a moment then they are gone.

To get the TinySA spectrum analyzer to scan above 800 MHz. Enter config, more, enable ultra, then enter the password (4321). However, I did not detect much in this region in four days.

It is helpful to have two or more of these cheap analyzers running at the same time. This way you can tune one in a shorter span and speed up the scan rate, and use one to attach to a headset to hear the signal. There is a small antenna in the parking lot which emits around 774 MHz. Stay well away from it.



Beach Scan: 04-22-2024 4:45 PM 577-800 MHz.

A huge amount of Brief activity with a lot of beach sand patterns. This blitz of activity only lasted 30 seconds and nearly filled the entire scan width then suddenly disappeared. Several minutes earlier it was a flat line. Blurry from snip from video.
I was not fast enough to get a photograph, so I had to snip it from a video.
Sunspot activity as of the year 2024 is near a solar high. Sunspot activity normally affects only the lower frequencies
https://www.spaceweatherlive.com/en/solar-activity.html

Note: The Hydrogen spectra line is 1.42 GHz.

MOON WHISTLER: (the term whistler is misused; it normally has a pulsing sound)

A whistler may also originate from the moon's orbit. This whistler will pass through the spectrum at rates related to the Earth-Moon Doppler shift gravity frequency. Since the moon's orbit occurs every 27.32 days and is stronger it should be easier to detect. MoonSked[10] Moon bounce scheduler amateur radio software is required. The best time to track the Moon Whistler is at night and well away from the city where there is less background noise. As the moon Doppler frequency shift passes through the zero point the ELF should follow the MoonSked data.

Note: UTC time must be converted, for example, Portland Oregon time (-8 hours from UTC during standard time and -7 during daylight savings time).

Note: The whistler or static packet as described within this document will be easiest to associate with the phenomenon allowing a more accurate wavelength calculation.

New Moons and Super New Moons:
These increase the gravity fields emitted from a single direction.
A New moon occurs when the moon is in close sky alignment with the sun. It may be nearly invisible at this time. When the moon is in alignment with the sun the gravity fields from the sun and moon add together, increasing tidal effects and possibly the phenomenon. A Super New Moon occurs when the moon's orbit takes it closest to earth (apogee). A Tellurium is a model to demonstrate the movement of the Earth and Moon around the Sun can be helpful. Good Tellurium Simulation:
Http://TimeandDate.com/astronomy/moon/location.html/

Moon chart for Portland Or:
https://www.timeanddate.com/moon/usa/portland-or/

New Moon Phases (When the moon lines up with the sun)
https://www.timeanddate.com/moon/phases
It is hypothesized these times are near black sand events.

Super New Moon (apogee closest to Earth)
Yr.: 2021 Dec 3rd 11:43 pm Portland Oregon

Year 2022 Time adjusted for Portland Oregon
Jan 2 10:33 am
Jan 31 9:46 pm
Other new Moons (not super)
Mar 2 9:34 am (This was a black sand event)
Mar 31 11:24 pm

Apr 30 1:28 pm
May 30 4:30 am
Jun 28 7:52 pm
Jul 28 10:54 am
Aug 27 1:17 pm
Sep 25 2:54 pm
Oct 25 3:48 pm
Nov 23 2:57 pm
Dec 23 2:16 am

Note the Doppler data below can reveal times when sand pools might form, special wave motions, and stirring water.

Astoria
Oregon

Lat: 46.1879
Long: 123.8313

MoonSked by MoonBounce Software © GM4JJJ
Moon Data for [redacted] in Locator CN86ce on 144 MHz with [redacted] in Locator CN86ce

Date	UTC	AZ	EL	MNR	POL	AZDX	ELDX	GHA	DEC	DGR	TSky	Rge Km	Doppler
2021-01-27	Wednesday00:00	063°	+8°	0 dB	0°	063°	+8°	20°	+25°	4.0dB	352°K	389104	+311 Hz
2021-01-27	Wednesday00:30	068°	+12°	0 dB	0°	068°	+12°	27°	+25°	4.0dB	350°K	389013	+319 Hz
2021-01-27	Wednesday01:00	072°	+17°	0 dB	0°	072°	+17°	34°	+25°	3.9dB	347°K	388922	+322 Hz
2021-01-27	Wednesday01:30	077°	+22°	0 dB	0°	077°	+22°	41°	+25°	3.9dB	344°K	388831	+321 Hz
2021-01-27	Wednesday02:00	082°	+27°	0 dB	0°	082°	+27°	48°	+25°	3.9dB	342°K	388741	+315 Hz
2021-01-27	Wednesday02:30	087°	+32°	0 dB	0°	087°	+32°	56°	+25°	3.8dB	339°K	388650	+305 Hz
2021-01-27	Wednesday03:00	092°	+37°	0 dB	0°	092°	+37°	63°	+25°	3.8dB	337°K	388559	+291 Hz
2021-01-27	Wednesday03:30	098°	+42°	0 dB	0°	098°	+42°	70°	+25°	3.8dB	334°K	388468	+273 Hz
2021-01-27	Wednesday04:00	104°	+47°	0 dB	0°	104°	+47°	77°	+25°	3.7dB	332°K	388378	+251 Hz
2021-01-27	Wednesday04:30	111°	+51°	0 dB	0°	111°	+51°	85°	+25°	3.7dB	329°K	388287	+226 Hz
2021-01-27	Wednesday05:00	119°	+56°	0 dB	0°	119°	+56°	92°	+25°	3.7dB	326°K	388196	+197 Hz
2021-01-27	Wednesday05:30	129°	+60°	0 dB	0°	129°	+60°	99°	+25°	3.6dB	324°K	388106	+166 Hz
2021-01-27	Wednesday06:00	141°	+64°	0 dB	0°	141°	+64°	106°	+25°	3.6dB	321°K	388015	+133 Hz
2021-01-27	Wednesday06:30	155°	+67°	0 dB	0°	155°	+67°	113°	+25°	3.6dB	319°K	387925	+99 Hz
2021-01-27	Wednesday07:00	172°	+68°	0 dB	0°	172°	+68°	121°	+25°	3.5dB	316°K	387834	+64 Hz
2021-01-27	Wednesday07:30	190°	+68°	0 dB	0°	190°	+68°	128°	+25°	3.5dB	313°K	387744	+28 Hz
2021-01-27	Wednesday08:00	207°	+66°	0 dB	0°	207°	+66°	135°	+25°	3.5dB	311°K	387653	-7 Hz
2021-01-27	Wednesday08:30	221°	+63°	0 dB	0°	221°	+63°	142°	+25°	3.4dB	308°K	387563	-42 Hz
2021-01-27	Wednesday09:00	232°	+60°	0 dB	0°	232°	+60°	150°	+25°	3.4dB	306°K	387472	-75 Hz
2021-01-27	Wednesday09:30	242°	+55°	0 dB	0°	242°	+55°	157°	+25°	3.4dB	303°K	387382	-105 Hz
2021-01-27	Wednesday10:00	250°	+51°	0 dB	0°	250°	+51°	164°	+25°	3.3dB	300°K	387292	-134 Hz
2021-01-27	Wednesday10:30	257°	+46°	0 dB	0°	257°	+46°	171°	+24°	3.3dB	297°K	387201	-159 Hz
2021-01-27	Wednesday11:00	263°	+41°	0 dB	0°	263°	+41°	178°	+24°	3.2dB	294°K	387111	-180 Hz
2021-01-27	Wednesday11:30	268°	+36°	0 dB	0°	268°	+36°	186°	+24°	3.2dB	291°K	387021	-198 Hz
2021-01-27	Wednesday12:00	273°	+31°	0 dB	0°	273°	+31°	193°	+24°	3.1dB	287°K	386931	-212 Hz
2021-01-27	Wednesday12:30	278°	+26°	0 dB	0°	278°	+26°	200°	+24°	3.1dB	284°K	386841	-222 Hz
2021-01-27	Wednesday13:00	283°	+21°	0 dB	0°	283°	+21°	207°	+24°	3.1dB	281°K	386751	-227 Hz
2021-01-27	Wednesday13:30	288°	+16°	0 dB	0°	288°	+16°	215°	+24°	3.0dB	278°K	386661	-228 Hz
2021-01-27	Wednesday14:00	293°	+11°	0 dB	0°	293°	+11°	222°	+24°	3.0dB	275°K	386571	-224 Hz
2021-01-27	Wednesday14:30	297°	+7°	0 dB	0°	297°	+7°	229°	+24°	2.9dB	272°K	386482	-216 Hz
2021-01-27	Wednesday15:00	302°	+2°	0 dB	0°	302°	+2°	236°	+24°	2.9dB	269°K	386392	-204 Hz
2021-01-28	Thursday 00:30	059°	+3°	0 dB	0°	059°	+3°	13°	+24°	2.1dB	220°K	384707	+301 Hz
2021-01-28	Thursday 01:00	064°	+7°	0 dB	0°	064°	+7°	21°	+24°	2.1dB	219°K	384619	+312 Hz
2021-01-28	Thursday 01:30	069°	+12°	0 dB	0°	069°	+12°	28°	+24°	2.1dB	218°K	384532	+319 Hz
2021-01-28	Thursday 02:00	074°	+17°	0 dB	0°	074°	+17°	35°	+24°	2.0dB	217°K	384445	+321 Hz
2021-01-28	Thursday 02:30	079°	+22°	0 dB	0°	079°	+22°	42°	+23°	2.0dB	216°K	384358	+320 Hz
2021-01-28	Thursday 03:00	084°	+27°	0 dB	0°	084°	+27°	50°	+23°	2.0dB	215°K	384271	+313 Hz
2021-01-28	Thursday 03:30	089°	+32°	0 dB	0°	089°	+32°	57°	+23°	2.0dB	214°K	384184	+303 Hz
2021-01-28	Thursday 04:00	094°	+37°	0 dB	0°	094°	+37°	64°	+23°	2.0dB	213°K	384097	+288 Hz
2021-01-28	Thursday 04:30	100°	+42°	0 dB	0°	100°	+42°	71°	+23°	1.9dB	212°K	384010	+269 Hz
2021-01-28	Thursday 05:00	106°	+46°	0 dB	0°	106°	+46°	78°	+23°	1.9dB	211°K	383924	+246 Hz
2021-01-28	Thursday 05:30	114°	+51°	0 dB	0°	114°	+51°	86°	+23°	1.9dB	210°K	383838	+220 Hz
2021-01-28	Thursday 06:00	122°	+56°	0 dB	0°	122°	+56°	93°	+23°	1.9dB	209°K	383751	+191 Hz
2021-01-28	Thursday 06:30	132°	+60°	0 dB	0°	132°	+60°	100°	+23°	1.9dB	208°K	383666	+159 Hz
2021-01-28	Thursday 07:00	145°	+63°	0 dB	0°	145°	+63°	107°	+23°	1.8dB	207°K	383580	+126 Hz
2021-01-28	Thursday 07:30	159°	+65°	0 dB	0°	159°	+65°	115°	+23°	1.8dB	206°K	383494	+90 Hz
2021-01-28	Thursday 08:00	175°	+66°	0 dB	0°	175°	+66°	122°	+23°	1.8dB	205°K	383409	+54 Hz
2021-01-28	Thursday 08:30	192°	+66°	0 dB	0°	192°	+66°	129°	+23°	1.8dB	204°K	383323	+18 Hz
2021-01-28	Thursday 09:00	208°	+64°	0 dB	0°	208°	+64°	136°	+23°	1.8dB	203°K	383238	-18 Hz
2021-01-28	Thursday 09:30	221°	+61°	0 dB	0°	221°	+61°	144°	+23°	1.7dB	202°K	383153	-52 Hz
2021-01-28	Thursday 10:00	232°	+58°	0 dB	0°	232°	+58°	151°	+23°	1.7dB	201°K	383068	-85 Hz
2021-01-28	Thursday 10:30	241°	+53°	0 dB	0°	241°	+53°	158°	+23°	1.7dB	200°K	382984	-116 Hz
2021-01-28	Thursday 11:00	249°	+49°	0 dB	0°	249°	+49°	165°	+23°	1.7dB	199°K	382899	-145 Hz
2021-01-28	Thursday 11:30	256°	+44°	0 dB	0°	256°	+44°	172°	+23°	1.7dB	198°K	382815	-170 Hz
2021-01-28	Thursday 12:00	262°	+39°	0 dB	0°	262°	+39°	180°	+23°	1.6dB	197°K	382731	-191 Hz
2021-01-28	Thursday 12:30	267°	+34°	0 dB	0°	267°	+34°	187°	+23°	1.6dB	196°K	382647	-209 Hz
2021-01-28	Thursday 13:00	273°	+29°	0 dB	0°	273°	+29°	194°	+22°	1.6dB	195°K	382563	-222 Hz
2021-01-28	Thursday 13:30	278°	+24°	0 dB	0°	278°	+24°	201°	+22°	1.6dB	194°K	382479	-231 Hz
2021-01-28	Thursday 14:00	282°	+19°	0 dB	0°	282°	+19°	209°	+22°	1.6dB	193°K	382396	-236 Hz
2021-01-28	Thursday 14:30	287°	+14°	0 dB	0°	287°	+14°	216°	+22°	1.5dB	192°K	382313	-236 Hz
2021-01-28	Thursday 15:00	292°	+9°	0 dB	0°	292°	+9°	223°	+22°	1.5dB	190°K	382230	-232 Hz
2021-01-28	Thursday 15:30	297°	+4°	0 dB	0°	297°	+4°	230°	+22°	1.5dB	189°K	382147	-223 Hz
2021-01-28	Thursday 16:00	302°	-0°	0 dB	0°	302°	-0°	237°	+22°	1.5dB	188°K	382065	-211 Hz

Page 1 of 1

JAN 27 17:30 PST — Dwell

JAN 28 6AM PST — Dwell

MoonSked Data: UTC. West longitude Locator: CN86ce. Set maximum EL at 90 degrees. Note: In 'MoonSked' west is positive longitude. Note the slow rate of change at this date. This was the black sand event. Data for several years is available at synodicgravity.com.

303 Longitude

MoonSked by MoonBounce Software © GM4JJJ
Moon Data for [redacted] in Locator :N86ce on 144 MHz with [redacted] in Locator :N86ce

Date	UTC	AZ	EL	MNR	POL	AZDX	ELDX	GHA	DEC	DGR	TSky	Rge Km	Doppler
2021-01-27	Wednesday00:00	278°	+26°	0 dB	0°	278°	+26°	20°	+25°	4.0dB	352°K	389104	-219 Hz
2021-01-27	Wednesday00:30	283°	+21°	0 dB	0°	283°	+21°	27°	+25°	4.0dB	350°K	389013	-225 Hz
2021-01-27	Wednesday01:00	288°	+17°	0 dB	0°	288°	+17°	34°	+25°	3.9dB	347°K	388922	-226 Hz
2021-01-27	Wednesday01:30	293°	+12°	0 dB	0°	293°	+12°	41°	+25°	3.9dB	344°K	388831	-222 Hz
2021-01-27	Wednesday02:00	297°	+7°	0 dB	0°	297°	+7°	48°	+25°	3.9dB	342°K	388741	-215 Hz
2021-01-27	Wednesday02:30	302°	+3°	0 dB	0°	302°	+3°	56°	+25°	3.8dB	339°K	388650	-203 Hz
2021-01-27	Wednesday12:00	059°	+3°	0 dB	0°	059°	+3°	193°	+24°	3.1dB	287°K	386931	+300 Hz
2021-01-27	Wednesday12:30	063°	+8°	0 dB	0°	063°	+8°	200°	+24°	3.1dB	284°K	386841	+312 Hz
2021-01-27	Wednesday13:00	068°	+12°	0 dB	0°	068°	+12°	207°	+24°	3.1dB	281°K	386751	+319 Hz
2021-01-27	Wednesday13:30	073°	+17°	0 dB	0°	073°	+17°	215°	+24°	3.0dB	278°K	386661	+322 Hz
2021-01-27	Wednesday14:00	078°	+22°	0 dB	0°	078°	+22°	222°	+24°	3.0dB	275°K	386571	+320 Hz
2021-01-27	Wednesday14:30	083°	+27°	0 dB	0°	083°	+27°	229°	+24°	2.9dB	272°K	386482	+314 Hz
2021-01-27	Wednesday15:00	088°	+32°	0 dB	0°	088°	+32°	236°	+24°	2.9dB	269°K	386392	+304 Hz
2021-01-27	Wednesday15:30	093°	+37°	0 dB	0°	093°	+37°	243°	+24°	2.8dB	266°K	386302	+290 Hz
2021-01-27	Wednesday16:00	099°	+42°	0 dB	0°	099°	+42°	251°	+24°	2.8dB	263°K	386213	+271 Hz
2021-01-27	Wednesday16:30	105°	+47°	0 dB	0°	105°	+47°	258°	+24°	2.7dB	259°K	386124	+249 Hz
2021-01-27	Wednesday17:00	112°	+51°	0 dB	0°	112°	+51°	265°	+24°	2.7dB	256°K	386034	+223 Hz
2021-01-27	Wednesday17:30	120°	+56°	0 dB	0°	120°	+56°	272°	+24°	2.6dB	253°K	385945	+194 Hz
2021-01-27	Wednesday18:00	130°	+60°	0 dB	0°	130°	+60°	280°	+24°	2.6dB	250°K	385856	+163 Hz
2021-01-27	Wednesday18:30	142°	+64°	0 dB	0°	142°	+64°	287°	+24°	2.6dB	247°K	385767	+130 Hz
2021-01-27	Wednesday19:00	157°	+66°	0 dB	0°	157°	+66°	294°	+24°	2.5dB	244°K	385678	+95 Hz
2021-01-27	Wednesday19:30	174°	+67°	0 dB	0°	174°	+67°	301°	+24°	2.5dB	241°K	385589	+59 Hz
2021-01-27	Wednesday20:00	191°	+67°	0 dB	0°	191°	+67°	308°	+24°	2.4dB	238°K	385500	+24 Hz
2021-01-27	Wednesday20:30	207°	+65°	0 dB	0°	207°	+65°	316°	+24°	2.4dB	235°K	385412	-12 Hz
2021-01-27	Wednesday21:00	221°	+62°	0 dB	0°	221°	+62°	323°	+24°	2.3dB	232°K	385323	-46 Hz
2021-01-27	Wednesday21:30	232°	+59°	0 dB	0°	232°	+59°	330°	+24°	2.3dB	228°K	385235	-79 Hz
2021-01-27	Wednesday22:00	242°	+54°	0 dB	0°	242°	+54°	337°	+24°	2.2dB	226°K	385147	-110 Hz
2021-01-27	Wednesday22:30	250°	+50°	0 dB	0°	250°	+50°	345°	+24°	2.2dB	225°K	385058	-138 Hz
2021-01-27	Wednesday23:00	256°	+45°	0 dB	0°	256°	+45°	352°	+24°	2.2dB	224°K	384970	-163 Hz
2021-01-27	Wednesday23:30	263°	+40°	0 dB	0°	263°	+40°	359°	+24°	2.1dB	222°K	384882	-185 Hz
2021-01-28	Thursday 00:00	268°	+35°	0 dB	0°	268°	+35°	6°	+24°	2.1dB	221°K	384795	-203 Hz
2021-01-28	Thursday 00:30	273°	+30°	0 dB	0°	273°	+30°	13°	+24°	2.1dB	220°K	384707	-216 Hz
2021-01-28	Thursday 01:00	278°	+25°	0 dB	0°	278°	+25°	21°	+24°	2.1dB	219°K	384619	-226 Hz
2021-01-28	Thursday 01:30	283°	+20°	0 dB	0°	283°	+20°	28°	+24°	2.1dB	218°K	384532	-231 Hz
2021-01-28	Thursday 02:00	288°	+15°	0 dB	0°	288°	+15°	35°	+24°	2.0dB	217°K	384445	-231 Hz
2021-01-28	Thursday 02:30	292°	+10°	0 dB	0°	292°	+10°	42°	+23°	2.0dB	216°K	384358	-227 Hz
2021-01-28	Thursday 03:00	297°	+6°	0 dB	0°	297°	+6°	50°	+23°	2.0dB	215°K	384271	-219 Hz
2021-01-28	Thursday 03:30	302°	+1°	0 dB	0°	302°	+1°	57°	+23°	2.0dB	214°K	384184	-207 Hz
2021-01-28	Thursday 13:00	061°	+2°	0 dB	0°	061°	+2°	194°	+22°	1.6dB	195°K	382563	+301 Hz
2021-01-28	Thursday 13:30	066°	+7°	0 dB	0°	066°	+7°	201°	+22°	1.6dB	194°K	382479	+312 Hz
2021-01-28	Thursday 14:00	071°	+12°	0 dB	0°	071°	+12°	209°	+22°	1.6dB	193°K	382396	+319 Hz
2021-01-28	Thursday 14:30	075°	+16°	0 dB	0°	075°	+16°	216°	+22°	1.5dB	192°K	382313	+321 Hz
2021-01-28	Thursday 15:00	080°	+21°	0 dB	0°	080°	+21°	223°	+22°	1.5dB	190°K	382230	+319 Hz
2021-01-28	Thursday 15:30	085°	+26°	0 dB	0°	085°	+26°	230°	+22°	1.5dB	189°K	382147	+312 Hz
2021-01-28	Thursday 16:00	090°	+31°	0 dB	0°	090°	+31°	237°	+22°	1.5dB	188°K	382065	+301 Hz
2021-01-28	Thursday 16:30	096°	+36°	0 dB	0°	096°	+36°	245°	+22°	1.4dB	187°K	381982	+286 Hz
2021-01-28	Thursday 17:00	102°	+41°	0 dB	0°	102°	+41°	252°	+22°	1.4dB	186°K	381900	+266 Hz
2021-01-28	Thursday 17:30	108°	+46°	0 dB	0°	108°	+46°	259°	+22°	1.4dB	185°K	381818	+243 Hz
2021-01-28	Thursday 18:00	116°	+51°	0 dB	0°	116°	+51°	266°	+22°	1.4dB	184°K	381736	+216 Hz
2021-01-28	Thursday 18:30	124°	+55°	0 dB	0°	124°	+55°	274°	+22°	1.4dB	183°K	381655	+187 Hz
2021-01-28	Thursday 19:00	135°	+59°	0 dB	0°	135°	+59°	281°	+22°	1.3dB	182°K	381573	+155 Hz
2021-01-28	Thursday 19:30	147°	+62°	0 dB	0°	147°	+62°	288°	+22°	1.3dB	181°K	381492	+120 Hz
2021-01-28	Thursday 20:00	161°	+64°	0 dB	0°	161°	+64°	295°	+22°	1.3dB	180°K	381411	+85 Hz
2021-01-28	Thursday 20:30	177°	+65°	0 dB	0°	177°	+65°	302°	+22°	1.3dB	179°K	381330	+48 Hz
2021-01-28	Thursday 21:00	193°	+65°	0 dB	0°	193°	+65°	310°	+22°	1.2dB	178°K	381250	+12 Hz
2021-01-28	Thursday 21:30	208°	+63°	0 dB	0°	208°	+63°	317°	+22°	1.2dB	177°K	381170	-24 Hz
2021-01-28	Thursday 22:00	221°	+60°	0 dB	0°	221°	+60°	324°	+21°	1.2dB	176°K	381089	-59 Hz
2021-01-28	Thursday 22:30	231°	+56°	0 dB	0°	231°	+56°	331°	+21°	1.2dB	175°K	381010	-93 Hz
2021-01-28	Thursday 23:00	241°	+52°	0 dB	0°	241°	+52°	339°	+21°	1.2dB	174°K	380930	-124 Hz
2021-01-28	Thursday 23:30	248°	+47°	0 dB	0°	248°	+47°	346°	+21°	1.2dB	174°K	380851	-152 Hz

Page 1 of 1

MISSING DATA FROM MoonSked:

By inputting 46.18 Longitude, 303.8313 latitude in MoonSked, the missing data when the moon is set in Astoria may be obtained. This is 180 degrees from Astoria or, exactly halfway around the earth, near the Caspian Sea when the moon is in the sky. Set maximum EL at 90 degrees. Reverse the frequency sign from + to – or from – to + for Astoria Oregon.

EARDOP90.BAS Computes Earth/Sun Doppler Velocity for Synodic Wave Analysis
Program Run Date: 03-05-2021 By [redacted]
FOR LOCATION: LAT: 46 LONG: 124 ELEVATION: 0 EARTH RADII AT LAT: 4438

DATE / SOLAR TIME			DISTANCE TO SUN (AU)	DEC.	GEOCENTRIC VELOCITY	DOPPLER VEL.(Km\Hr)
JAN 27	2021	00:00	.984769	-18.2	-36723	-35127
JAN 27.041	2021	01:00	.984774	-18.2	753	294
JAN 27.083	2021	02:00	.984779	-18.2	755	47
JAN 27.125	2021	03:00	.984784	-18.2	756	-155
JAN 27.166	2021	04:00	.984789	-18.1	757	-298
JAN 27.208	2021	05:00	.984794	-18.1	758	-371
JAN 27.25	2021	06:00	.984799	-18.1	759	-370
JAN 27.291	2021	07:00	.984804	-18.1	761	-294
JAN 27.333	2021	08:00	.984809	-18.1	762	-150
JAN 27.375	2021	09:00	.984815	-18.1	763	55
JAN 27.416	2021	10:00	.98482	-18.1	764	305
JAN 27.458	2021	11:00	.984825	-18.1	765	584
JAN 27.5	2021	12:00	.98483	-18.1	767	872
JAN 27.541	2021	13:00	.984835	-18.0	768	1151
JAN 27.583	2021	14:00	.98484	-18.0	769	1401
JAN 27.625	2021	15:00	.984845	-18.0	770	1606
JAN 27.666	2021	16:00	.98485	-18.0	771	1751
JAN 27.708	2021	17:00	.984856	-18.0	773	1827
JAN 27.75	2021	18:00	.984861	-18.0	774	1828
JAN 27.791	2021	19:00	.984866	-18.0	775	1755
JAN 27.833	2021	20:00	.984871	-18.0	776	1612
JAN 27.875	2021	21:00	.984876	-18	777	1410
JAN 27.916	2021	22:00	.984882	-17.9	778	1162
JAN 27.958	2021	23:00	.984887	-17.9	780	885
JAN 28	2021	00:00	.984892	-17.9	781	599
JAN 28.041	2021	01:00	.984897	-17.9	782	322
JAN 28.083	2021	02:00	.984903	-17.9	783	74
JAN 28.125	2021	03:00	.984908	-17.9	784	-128
JAN 28.166	2021	04:00	.984913	-17.9	786	-271
JAN 28.208	2021	05:00	.984918	-17.9	787	-344
JAN 28.25	2021	06:00	.984924	-17.9	788	-343
JAN 28.291	2021	07:00	.984929	-17.8	789	-268
JAN 28.333	2021	08:00	.984934	-17.8	790	-123
JAN 28.375	2021	09:00	.984939	-17.8	792	82
JAN 28.416	2021	10:00	.984945	-17.8	793	333
JAN 28.458	2021	11:00	.98495	-17.8	794	612
JAN 28.5	2021	12:00	.984955	-17.8	795	901
JAN 28.541	2021	13:00	.984961	-17.8	796	1180
JAN 28.583	2021	14:00	.984966	-17.8	798	1431
JAN 28.625	2021	15:00	.984971	-17.8	799	1636
JAN 28.666	2021	16:00	.984977	-17.7	800	1781
JAN 28.708	2021	17:00	.984982	-17.7	801	1857
JAN 28.75	2021	18:00	.984987	-17.7	802	1858
JAN 28.791	2021	19:00	.984993	-17.7	803	1784
JAN 28.833	2021	20:00	.984998	-17.7	805	1642
JAN 28.875	2021	21:00	.985004	-17.7	806	1439
JAN 28.916	2021	22:00	.985009	-17.7	807	1191
JAN 28.958	2021	23:00	.985014	-17.7	808	914

EARTH/SUN DOPPLER (Pacific Standard Time)
Topocentric Doppler data may be late by 5 hours. So, plan ahead. Note the first line is wrong.
Geocentric velocity decimal is dropped for printout but was included in the Doppler.
Increasing distances = (+) Thus a receding or (-) value is required when used in the relativistic Doppler equation resulting in a frequency reduction,

MOON PERIGEE APOGEE TABLE: See Ref 50.
Moon Perigee/Apogee Year 2022 UTC Time. Subtract -8 hrs. for PST or -7 hrs. for PDT.
Apogee is a slower Doppler rate of change. https://www.fourmilab.ch/earthview/pacalc.html By John Walker
The Perigee and Apogee moon dates maybe when the phenomenon is not occurring, however, the earth's orbit may form patterns on the dates instead. It is exceedingly difficult to predict. Concentrate on times that have a maximum number of Doppler data days. The moon's gravitational pull at apogee is roughly 34% stronger than at perigee. The supermoon occurs when the moon is near its closest point to Earths perigee.

Perigee	Apogee

Apogee Perigee Year 2024

Jan 1 15:29 404910 km F+5d14h
Jan 13 10:36 362263 km N+1d22h Jan 29 8:15 405780 km F+3d14h
Feb 10 18:51 358087 km N+ 19h Feb 25 15:01 406314 km + F+1d 2h
Mar 10 7:07 356893 km -- N- 1h Mar 23 15:45 406291 km + F-1d15h
Apr 7 17:54 358848 km N-1d 0h Apr 20 2:10 405624 km F-3d21h
May 5 22:12 363165 km N-2d 5h May 17 19:01 404639 km F-5d18h
Jun 2 7:24 368107 km N-4d 5h Jun 14 13:37 404077 km F-7d11h
Jun 27 11:46 369291 km F+5d10h Jul 12 8:13 404362 km N+6d 9h
Jul 24 5:45 364913 km F+2d19h Aug 9 1:33 405297 km N+4d14h
Aug 21 5:06 360198 km F+1d10h Sep 5 14:56 406214 km - N+2d12h
Sep 18 13:28 357283 km + F+ 10h Oct 2 19:41 406516 km -- N+ 0h
Oct 17 0:47 357172 km + F- 10h Oct 29 22:51 406163 km - N-2d13h
Nov 14 11:19 360109 km F-1d10h Nov 26 11:57 405314 km N-4d18h
Dec 12 13:20 365358 km F-2d19h Dec 24 7:26 404484 km N-6d15h

New	Full
2024 Jan 11 11:58	2024 Jan 25 17:55
2024 Feb 9 23:01	2024 Feb 24 12:31
2024 Mar 10 9:03	2024 Mar 25 7:02
2024 Apr 8 18:23	2024 Apr 23 23:51
2024 May 8 3:24	2024 May 23 13:56
2024 Jun 6 12:40	2024 Jun 22 1:11
2024 Jul 5 22:59	2024 Jul 21 10:20
2024 Aug 4 11:14	2024 Aug 19 18:29
2024 Sep 3 1:57	2024 Sep 18 2:37
2024 Oct 2 18:51	2024 Oct 17 11:28
2024 Nov 1 12:48	2024 Nov 15 21:30
2024 Dec 1 6:22	2024 Dec 15 9:03

2024 Dec 30 22:28 2025 Jan 13 22:28

New and Full Moons UTC time

CONJUNCTIONS OF MOON WITH PLANETS
I am not certain of these events. However, I witnessed a Uranus and Moon alignment on 9-24-2021 an unusual spectacular event with huge puffy clouds and a messy beach, and an exceptionally low tide.

Guides to the Night Sky: https://in-the-sky.org/

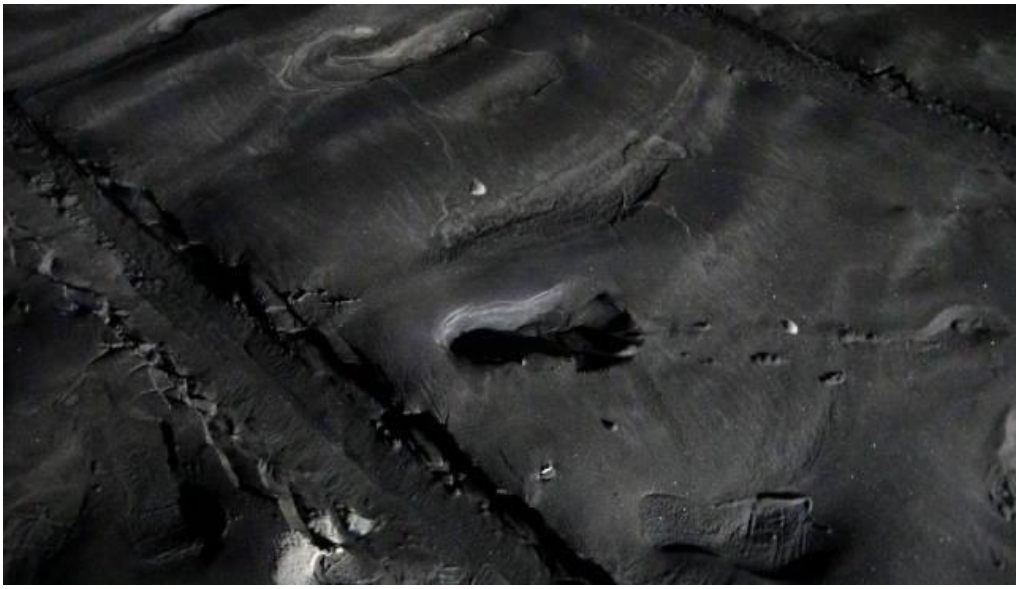
Planetary alignments probably increase the events.
More events will be posted at SynodicGravity.com

https://eclipse.gsfc.nasa.gov/SKYCAL/SKYCAL.html (this one is the better)

NASA - SKYCAL - Sky Events Calendar Yr. 2022 (Pacific Standard Time)
Date Local Time Event
Feb 02 We 13:08 Moon-Jupiter: 4.4° N
13 Su 14:52 Moon-Pollux: 2.8° N
14 Mo 15:42 Moon-Beehive: 3.5° S
27 Su 01:00 Moon-Mars: 3.5° N
28 Mo 12:07 Moon-Mercury: 3.8° N
28 Mo 15:47 Moon-Saturn: 4.3° N
Mar 12 Sa 22:58 Moon-Pollux: 2.6° N
14 Mo 00:55 Moon-Beehive: 3.7° S
27 Su 19:54 Moon-Mars: 4.2° N
28 Mo 02:50 Moon-Venus: 6.9° N
28 Mo 04:43 Moon-Saturn: 4.5° N
Apr 04 Mo 18:16 Moon-Pleiades: 4° N
09 Sa 08:14 Moon-Pollux: 2.4° N
10 Su 09:27 Moon-Beehive: 3.9° S
22 Fr 11:25 Lyrid Shower: ZHR = 20
24 Su 13:56 Moon-Saturn: 4.6° N
25 Mo 15:06 Moon-Mars: 4.1° N
26 Tu 18:51 Moon-Venus: 4° N
27 We 01:23 Moon-Jupiter: 3.8° N
May 02 Mo 07:17 Moon-Mercury: 2° N
05 Th 00:40 Eta Aquarid Shower: ZHR = 60
06 Fr 15:56 Moon-Pollux: 2.3° N
07 Sa 17:23 Moon-Beehive: 4° S
21 Sa 21:43 Moon-Saturn: 4.6° N
24 Tu 12:24 Moon-Mars: 2.9° N
24 Tu 16:59 Moon-Jupiter: 3.4° N
26 Th 19:52 Moon-Venus: 0.2° N

Gravitational forces felt here on Earth from all planets in terms of the moon's force.
Moon: 1
Sun: 0.4
Venus: 6 x 10-5
Jupiter: 3 x 10-6
Mercury: 4 x 10-7
Saturn: 2 x 10-7
Mars: 5 x 10-8
Uranus: 3 x 10-9
Neptune: 8 x 10-10

REMOVED
AM/PM 12/24 HOUR AND MILITARY CLOCK CONVERTER
Required because of all the time units from all the sources. Tide tables, MoonSked, etc.



SOFT PUFFY WET SAND:

06/22/2021 11 pm. Footprint shown in the wet sand along a car track. Almost like quicksand the longer I stood, the deeper my foot went down to about 3 inches. My car with AWD almost got stuck when I paused for a moment. Normally the wet sand is very hard and easy to walk, jog, and drive upon. In this case, it was not. Afterward, the wet part of the beach sunk down several feet. While parked for several minutes, I felt my car slowly slant to the side, startling me, I quickly drove toward the bank. You know something is happening when the wet sand gets spongy as you walk along the surface. What would cause this other than gravitational forces? 'Soft Sand' Reference: Air in sand hypothesis: https://coastalcare.org/educate/exploring-the-sand/
I do not believe this beach sand has air within it. A good way to find out is to place a large plastic sheet down and see if it inflates a bit as the beach slowly drops as previously described.

DESCRIPTION OF FORMATION:

This phenomenon has been overlooked because sand ripples can be formed by other means. Not to be confused with normal ripples forming in the sand, the means forming the patterns have been separated into three distinct categories. All the events shown here are from gravitational forces. It is important to concentrate on the iron oxide events as they are related to the heterodyned gravity waves that result in the magnetic field events.

Type #1: Nothing unusual about type #1 patterns are simply the result of the collision of two water waves. The intersection of the two opposing flows forms a water ripple leaving sand patterns and grooves. Sluice box-like effects separate the black rust particles out. The collision slows the water flow allowing the heavier iron oxide particles to fall out of suspension leaving a dark line. The wet sand remains hard and is easy to walk upon. This is not part of the gravitational phenomenon as described in this document.

Type #2: Produced when a single unobstructed water wave flows back out to sea. Something invisible impeding the water flow produces a ripple and gouges a groove in the sand.

Type #3: Similar to type #2 but produced when water flows in both directions. Increased field strength allows the formation to appear in the higher velocity incoming waves as well as the outgoing water waves. Forces forming them appear much stronger and grooves are more pronounced. This event is strong enough to cause rust particles to stand on end. Wet beach sand becomes very soft and more difficult to walk upon. Both #2 and #3 have been measured and correlate to unidentified radio frequencies (when one knows how to measure the groove-to-groove wavelength).

Formation of type #2 and #3.

During a receding wave, when the water is only one or so inches deep, these particles along with the standard sand go into solution. Due to the unique turbulence that occurs in this receding wave, the magnetic particles align themselves on electromagnetic field lines. Directing attention on lines that are uniform and between 16 and 30 inches (.41- .76 m) apart. These are the ones most easily identified as having come from something other than just flowing water. The electromagnetic field lines as described here cannot be from the earth's magnetic field, as the event is intermittent.

The black-colored paramagnetic iron oxide particles are deposited at regular intervals. When the water slowly glides back out to sea, a mound and rift are left in the wet sand. When the conditions are at maximum, from the bottom of the rift to the top of the mound measures approximately 3/16 inch, and 1 - 1.5 inches wide with a large hump between the grooves. One could stumble on them. The black rust particles form a line attracted to an unusual stationary invisible electromagnetic wave. It is similar to the type of mound and rift that is formed when water flows over a stationary shallow rod (1/8 diameter or so) resting on the sand. An unusual "double" water ripple gouges the grooves. First one ripple appears then about one inch later another water ripple with a deep groove between.

The pattern placed upon the beach resembles an interference pattern at times and at other times fairly uniform wavelengths. These grooves form intermittently, lasting for several hours and longer, wash away then reappear repeatedly until the event passes. Appearing then disappearing many times during the window. Sometimes the patterns appear in patches or cover the entire beach. When the phenomenon is at maximum, the wet sand becomes much softer (puffy) and more difficult to walk upon, much like the before and after changes of rice when you cook it.

Associated radio frequencies have been correlated and accompany the beach patterns. Unusual sounds such as pulsing, snaps, crackling, pops, or static appear at varying strengths, with some frequencies matching groove-to-groove length measurements from the beach. The strongest signals have a clear pulsing (30-40 Hz.) audio detected through a broadband scanner. The signal can be heard on both AM and FM.

There is an art to scanning for these. Human-caused frequencies must have been identified, as well as inherent peculiarities of the scanner itself, (birdies). A barrage of weak (just above the

background level) unidentified radio frequencies was recorded when the groove patterns broke up into erratic multi-fold patterns. They are most likely absorbed back into the beach elements when the patterns are regular. Thus, fewer frequencies appear. Assuming the radio waves travel back after the phenomenon leaves the beach area, is why the radio frequencies remain sometime after the groove formation stops. The frequencies shift but there seem to be some patterns. The most common groove-to-groove distances were between 18 and 33 inches (.46 - .84 meters). On the date (1995) the scans were taken there were only a few television stations and radio AM and FM in this semi-remote area. The entire Pacific Ocean on one side was a radio dead zone and yet many unidentified signals were present, some quite strong. Birdies (signals inherent to the scanner) were excluded.

The resulting radio frequencies from gravitational synodic waves that have heterodyned here seem to quantum jump to new frequencies.

SAND POOLS

Figure 3 shows another related event. A tremendous up-pulling either of rust out of the sands or simply water pulling upward forming large pits or sand pools in the sands. The water full of black iron oxide particles becomes deeply discolored. A narrow band of these sand pools form simultaneously for approximately forty miles due to the huge amount of rust in this region. The tide pools may be formed simply from the moon's pull on the water. When the frequency is magnetic then the water in the surf will become discolored by rust particles. This event can be predicted with the moon bounce Doppler data. The event occurs when the moon Doppler passes through a long dwell or a wide passage through the zero point.

The sand pools event recurred at predictable intervals for approximately three weeks and then disappeared. Swirling water lifts the sand and forms thousands of these pools of water. Soliton water waves accompany the unusual swirling water, as well as perpetual like or self-sustaining ripple motions. Solitons are waves that appear to be self-sustaining and last much longer than normal waves. The pools can be several feet deep and four to ten feet across. The phenomena occurred in shallow water from three inches to several feet deep. Date: 07-15-95 through 07-30-95 approximately two hours after both daily high tides. A striking change in the texture of the ocean surface precedes this phenomenon like a calming of the normal wave-like motions. This is observed while looking out toward the horizon. The normal crashing white sounds of the surf diminish by a perceptible amount.
Video of soliton waves: https://www.youtube.com/watch?v=kP6i5us9vac&t=92s

The soliton waves produced during the sand pool event are small, one to eight inches high, and 10 to 50 feet long. A normal wave would break and come up onto the beach, and then as it began to return back out to sea it would pick up an abnormal velocity for the slope of this beach. After the soliton moved outward toward the sea, it would pawl to the right bucking the 15-20 mph winds at the time as well as passing through incoming waves and traveling up slight inclines while gaining momentum. The soliton waves would literally fight their way along against obstacles normal waves could not. Something was pulling them along. Jetting out pencil-sized squirts of water from

their crest they had quite an unusual appearance. Traveling 100-200 feet, once outside the formation area they quickly dissipate. An important observation of the solitons is that when they move toward the ocean the breaking part of the wave crest is reversed. For example, a normal wave always breaks toward the shore. While the soliton waves which were big or fast enough to break were breaking toward the ocean while traveling out toward the sea. The position of the moon in the sky was not considered. More can be studied regarding the Solitons. About 5-7% of the total waves for the hour the phenomenon occurred were soliton.

SYNODIC POOLS PHOTOGRAPHS

This wide band of pools centered between high and low tide, formed at a re-occurring predictable timing for more than a week. Photo date: 07/15/95 Swirling water lifts the sand and forms thousands of these pools of water. Occurring simultaneously for more than 35+ miles of coastline, accompanying this unusual swirling water are Soliton-like water waves that aid the pool formation. Unusual perpetual-like or self-sustaining ripple motion of the surface water randomly occurs as well. The rippling water leaves the ripples in the sand as shown. Video during formation is available. The earth/sun wavelength can heterodyne with the earth/moon increasing the strength and complexity of the field, which is probably what is happening here. Because the water is only several feet deep, you can walk out into the swash zone during its formation. Something other than currents becomes obvious is causing it. Moons Perigee was Jul 11th Apogee July 23 in the year 1995. This event was a long duration, so may have been a combination of both Earth/Sun and Moon orbits. This event fits the Doppler data dwell and passing through zero point within 2 hours.

Rippling Water Motion. (7-27-2024 7:28 a.m. PST.)
There was no wind on this day, so the rippling was caused by an unknown force. Shown in the circle a brief soliton wave traveling from left to right. There are two types of this event. A clear water, and a dirty rusty water event, the one shown here is clear clean water with no rust. The other type which may be stronger involves the pulling up of rust out of the sand discoloring the water. Also accompanying this event, an increase in evaporation created a fog layer about fifteen feet

high over the wet sand. The Doppler data on this hour indicated a long interval passing through the zero-velocity point. A video will be available on either the web page or YouTube.

SAND POOLS AND SOLITON THEORY

I prefer to concentrate on the rust part of the phenomenon as it seems to be related to the magnetic wavelength of iron oxide. However, this part may be considered later as separate attributes. Often the sand pools are simply tide pools without rust being involved but something is evidently happening possibly with the molecular wavelengths of simply sand or water.

Because the soliton waves can be pulled in the opposite direction from the position of the moon suggests that tidal forces are not responsible for the soliton wave. Could there be a repulsive force similar to that of magnets in effect? The field may change direction much like a radio wave when encountering an obstacle or during interference.

The author formed this hypothesis on what is pulling the Soliton's along: Like the Magno-hydro-dynamic drive of silent propulsion submarines. They are pulled along by very strong slowly moving electromagnetic fields produced by heterodyned gravitational waves. These are the same gravitational electromagnetic field lines laying down the sand patterns (grooves) except they are slowly moving. Because they are moving the sand can no longer record them, but water can latch on and get a free ride, much like surfing. As the gravitational bodies' phases continue to change, the field begins to move too fast for the water to latch on to, and the Solitons disappear. The grooves are formed when the field lines become stationary. An important item to recognize during the sand pool event is the dirty color of the incoming shore waves. Clearly seen on video, it appears something is gripping - latching onto the rust particles and violently pulling them up from the depths of the sand leaving the large pits. The rust concentration gradually diminishes the further south one travels. So, the sand pools may diminish in size with the concentration. However, there may be several types of this event. Some heterodyned gravity waves may pull on all the components of the sand and water.

Doppler data velocity passage through zero points, when topocentric velocity with respect to the heavenly body dwells at zero velocity. Passing through the moon Doppler data zero point and dwelling, sand pools formed. The tide must be going out to see the tide pools; else they will be washed away. Otherwise, you can see the churning activity in the waves, but unless you wade out into the water you will not realize they are forming.
Adding both velocities together (Kilometers/Hr.) of Earth/Sun and Moon/Earth (include negative and positive values) results in more events that cannot be predicted by using each velocity alone. Note: There could be a difference between positive Doppler and negative Doppler in the events. I recommend using Negative Doppler velocities, they may add and subtract better in heterodyning.

Evidence that water Soliton waves are pulled along by a slow-moving electromagnetic field. Sand grooves record stationary electromagnetic waves from a dwell of synodic movements occur on either side of the pool formation times. See the lower photo in Figure 3.

BLACK SAND PHOTO
January 27th, 2021, 11:52 PST after high tide, and six days after the moon's apogee. The entire beach was totally darkened dark grey by iron oxide particles which were pulled up to the top surface leaving the quartz sand some distance buried below. The reverse effect (white quartz particles on top with black below) happened several hours later near low tide. It is stunning to see the beach change from light to dark. Tire tracks marred the beach in this photo.

Black Rust Event 11-29-2022. Even the bank was very dark as high winds blew the rust up on the bank. This is a color photograph.

The beach is in the Process of Changing Back to Sand Color Again. 09-29-2023. The Ocean is on the left, and the Bank is on the Right Side of the Photo. It may take several tidal cycles to complete the full change. The moisture content was similar on either side of the line. 19-inch wavelengths were forming.

Because the phenomenon seems to pull rust up and then down on date related events a simple balance was constructed to detect any weight change. The balance is slightly different than a normal balance. Dissimilar materials are placed on either side. Rust on the right side and glass shards on the left. The beam is aluminum. As the calendar days pass if there was any difference in weight between glass and rust, then the balance would be affected. A year passed and no movement was recorded. The balance was determined to be not sensitive enough to detect any change. However, the internet has revealed experiments are being conducted using more sensitive equipment. The experiment was run with salt water in the solution and no imbalance resulted.

Gravity pulls on both sides of a balance, so it remains balanced unless something changes on either side. However: if only if Earth's magnetic field fluxes the balance the rust side would be pulled down.

Simple Balance Did Not Detect a Change

RELATING THE PHENOMENON TO GRAVITY DOPPLER FREQUENCY SHIFTS

A brief outline of the Doppler shift sources that must be accounted for:
NOTE: TOPOCENTRIC VELOCITIES ARE REQUIRED. Topocentric is a system of celestial coordinates with its origin at a specific point on the earth's surface. **The below geocentric velocities were given for reference only.** See Doppler calculations for topocentric velocities.

Both the earth and moon wobble during rotation which alters the topocentric Doppler velocities, and the attributes of events somewhat. The wobble is not considered in calculations. My findings have concluded that the Doppler values computed by MoonSked software that relates to the phenomenon can be off by 1 to 2 hours.

Originally, I concentrated on the earth's orbit only. However, the moon's orbit around the earth is the central theme now as it occurs more often. The sun and the moon go together. The moon's Doppler separation velocity may combine with the earth/sun's Doppler velocity.

Doppler (will both approaching and increasing frequencies heterodyne?)

Some other facts:
The moon has an apogee and perigee every 27.55455 days.
Earth's geocentric orbital separation velocity with respect to the sun varies from +1790 kilometers per hour then reverses direction becoming a negative value. This velocity becomes zero at aphelion and perihelion. This is a separation velocity, not orbital velocity. Earth's tangential velocity component with respect to both the sun and moon. Earth's tangential rotational velocity at the 46th parallel: 1165 km/hr. This rotational velocity with respect to the sun cycles from zero at noon and midnight to its maximum at 6:00 A.M. and 6:00 P.M. solar time. This is a positive value between midnight and noon and negative between noon and midnight.
Thus, each body has a continuously varying gravitational Doppler shift from their orbital motions. The gravitational Doppler shifted frequencies heterodyne (add and subtract) producing new much larger wavelengths. The paramagnetic rust particles can leave patterns in the sands only when the topocentric Doppler shift dwells long enough for the particles to drop into a single position leaving the patterns on the beach. The particles are attracted to the momentary stationary electromagnetic field lines.

The appearance dates involve determining when the topocentric Doppler velocity is dwelling. When the resulting field is momentarily stationary, patterns are recorded in the beach sands. When the fluxion field slowly sweeps across the area, soliton water waves occur. Establishing when the electromagnetic flux becomes momentarily stationary requires precise astronomy topocentric computer programs.

Only some EM waves combine. One cannot solve every equation by combining the heterodyning of all the wavelengths involved, including the quartz, rust particles, salt water, and the chlorine smell that may show up at times. Molecular interactions seem to be a part of the phenomenon, adding variations to the phenomenon.

Studying the sand patterns in depth, the author discovered they are formed by helix (rotationally polarized) electromagnetic waves. Imagine a bunch of tree logs buried in the sand to various depths and angles. This illustrates the many helixes and the patterns left on the beach. These waves have a special property. They rotate or spin. The waves cinch up, like the threads on nuts and bolts. They also have elastic-like properties, they auger and slip. Similar to a propeller of a ship in the water, they transmit a force. The pulsing on and off gravity waves make it much weaker than the magnetic force.

The magnetic component of these electromagnetic waves may be appearing in the dark areas of the wet sand photograph (figure 1). The magnetic and gravity fields are different wavelengths thus they do not react. Heterodyning of the Doppler shifted waves produces on certain dates a wavelength that is the same as found in common magnets and the visual occurrence of this phenomenon appears. This would be the reason a multitude of radio frequencies of different wavelengths can be picked up that do not measure the same as the groove-to-groove measurements taken off the beach.

GRAVITATIONAL WAVELENGTH CALCULATION
DOPPLER CALCULATION EXAMPLE

This will not be eloquent; it is the best I can do considering I have an associate degree in engineering. This is an attempt to predict the events. It appears to work but is often off by 2 to 4 hours.

NOTE: Only one heavenly body source of Doppler-shifted gravity waves is required for heterodyning, the Earth's gravity field provides the second source. Considering multiple Doppler-shifted sources from all three, the sun, moon, and the earth make the predictions much more complex. THE BELOW CALCULATION IS FOR SUN/EARTH ONLY. However, it is possible that both the earth/moon and earth/sun orbit frequencies combine forming stronger events centered around the earth's apogee and perigee along with the moon's apogee perigee.

THERE ARE 3 WAYS THE DOPPLER SHIFTED SOURCES CAN HETERODYNE

1. **Earth w/Sun 2. Earth w/Moon 3. Combination of the two sources.**

'The following calculations were done to establish a point of reference.' By working backward and using the trial-and-error method, the author arrived at the gravitational wavelength used in the calculations. 'Gravit.bas' computer program by the author was incorporated in the trial-and-error calculations. Trial and error gravity wavelengths are inserted in the program until it matches the results found at the beach at a given time/date. The separation velocities used in the equations are approximate values. More accurate values will be required. See the example below.

January 3rd, 1995, 17:00 hrs. solar time (see figure 1) was used to calculate the below example. On the date chosen for the example, the earth/sun Doppler value held (dwell) at a constant value (1083 km/hr.) for approximately one hour. On this date/time, the moon's location was: Horizontal azimuth: 38 degrees, Altitude: 23 degrees (as astronomers measure not navigators). This places the moon in a similar direction in the sky as the sun. The author believes this results in the single water waves required to satisfy 'type 2' and 'type 3' conditions. The bodies are not in perfect alignment but the pull from the two sources are in a similar direction reducing the possibility of water wave collisions. As it will be shown all factors add up providing definitive mathematical proof. The main factors are an associated dwell of the topocentric separation velocities, and a relative sky position of both the sun and moon. The topocentric separation velocity is calculated using your latitude and longitude position and requires a precise astronomy computer program.[4]

The object here was to determine if the correct Doppler shifted wavelengths were present at this date/time that match the patterns found on the beach as well as the frequencies found in the radio scan taken at the time, as well as determine if a gravitational wavelength might be calculated from the results. As you will see, all the data correlated correctly with the findings resulting in a good conclusion.

For simplicity, the moon's gravitational frequency will be ignored for this calculation as only the earth/sun separation velocity was dwelling.

RELATIVISTIC DOPPLER EFFECT EQUATIONS:

$f = Doppler\ Frequency \qquad fo = Source\ Frequency$

Receding velocities (source and observer are moving away):

$$f = \sqrt{\frac{c - v}{c + v}}\ fo$$

Approaching velocities (source and observer are moving toward each other):

$$f = \sqrt{\frac{c + v}{c - v}}\ fo$$

NOTE: THE BELOW REQUIRES DOUBLE PRECISION - THE CORRECT ANSWER CANNOT BE ARRIVED AT WITHOUT DOUBLE PRECISION. A standard calculator cannot be used.
The 'D' represents the digits held within the computer memory but not shown.
The Double Precision limit used in the calculations: max +308 min -324 digits.

Calculating by working backward is a problem-solving technique that involves starting with the final result and reversing the steps to find the original starting point.

Calculating by working backwards with trial-and-error iterations:

If we assume the heterodyning of earth's surrounding frequency with the suns Doppler shifted frequency produced the 28-inch (.71 m) beach grooves as found in figure 1, then the frequency = c / .71 = 422.5 MHz Thus this frequency is assumed to be the resultant of subtracting the two heavenly body's frequencies This signal frequency was detected on a radio scanner one of several present at this time and date. The signal was much stronger than the normal background level.

Assuming a gravity wavelength of .00713 Angstroms **(arrived at by trial-and-error by incorporating the below).** .00713 Angstroms converts to 4.204662777451454D+20 Hertz.

The final calculation is as follows:

At 17:00 hours solar time on January 3rd, 1995, the earth/sun topocentric velocity dwelled at 1083 km/hr. The earth/moon topocentric Doppler velocity was moving from 238 km/hr. to 237 km/hr. at this hour so will not be considered.

(Note: the topocentric separation velocity dwell is the result of adding the rotation of a point on the earth's rotation to the moon's orbital separation velocity).

At this date and time, the velocities added in such a way that the Doppler shift remained the constant value 1083 km/hr. for approximately one hour).

Inserting the trial gravity frequency and velocity into the receding Doppler equation:
f = ((c - 1083m/s) / (c + 1083m/s)) ^ .5 * 4.204662777451454D+20 Hertz.

f = 4.204662777447235D+20 Hertz.

Subtracting the sun's Doppler shifted frequency from Earth's local stationary gravitational frequency.

f = 4.204662777451454D+20 - 4.204662777447235D+20 (Requires the missing digits, the correct answer is given below)

f = 421,920,768 Hz or 421.9 mega Hertz (Comparable to the groove-to-groove distance and a radio frequency found at the time).

The fact there were two grooves to groove wavelengths simultaneously appearing on the beach at the time indicates there are either two gravity wavelengths, or the beach elements are absorbing then re-emission through quantum jumps, as described previously. The earth/sun Doppler shift in combination with the earth's rotation velocity at the 46th parallel passes through zero approximately every 12 hours. The Doppler frequency from the sun passes through zero (reversing direction) twice daily when earth is near apogee or perigee. At this time the earth's topocentric tangential rotation velocity relative to the heavenly bodies becomes the dominate velocity factor.

This information was taken from Doppler computer programs the author incorporated in his studies [4]. Obviously, this calculation will require further work.

Surprisingly, a different gravitational wavelength may be calculated (not shown here).
Normal heterodyning is the addition of 'frequencies', not wavelengths. It is possible that Zetta wavelengths may heterodyne by wavelengths, not frequencies. More proofs for the addition of atomic spectra by wavelengths can be found at https://synodicgravity.com

The sedentary rust levels and RF events should be traceable to quantum levels of the spectra of iron, once the gravity wavelength accuracy has been improved.

Other wavelengths that may be considered for calculations:
Proton rotation rate: 5 x 10+22 cycles per second. Rotation wavelength = 5.99 x 10-15m
Neutron Compton wavelength = 1.319590898 x 10-15 m.
De Broglie wavelength

WEATHER CYCLE PREDICTIONS
The synodic waves also would pull on the water or air in the atmosphere. This would create high or low air pressure areas which would affect the weather. This would show up in the clouds as well during the correct Moon/Earth Doppler conditions.

SAROS CYCLE PREDICTIONS
Saros Cycle The word "Saros" means repetition or to be repeated.
The Sun, Earth, and Moon return to approximately the same relative geometry, a near straight line, and identical eclipse will occur, in what is referred to as an eclipse cycle. A "sar" is one half of a Saros. Here I am hypothesizing the Saros cycle can be used to predict future beach and weather phenomenon events. See reference 122 on Saros Cycle weather predictions.

Saros Cycle Predictions: 223 synodic months (6585.32 days, or 18.04 years)
Saros Cycle is related to weather events. See Ref 122
The Saros cycle weather prediction
The earth's topocentric position repeats every 3 Saros cycles. While in a single Saros cycle the topocentric position of off. This means that an accurate beach phenomenon prediction may require 3 Saros cycles.

Method to predict future storms, or beach phenomenon events, especially extreme events: It is based on historical weather or beach phenomenon data and the Saros cycle. See attached pdf also, it's based on the Moon' Triple Saros Cycle' which occurs every (6585.32 * 3) = 19756 days
Past weather data:
Find Julian Date of shipwreck: Oct 25th, 1906, = 2417509. Use Julian date calculator.
Then add multiples of Saros cycle to that (7 cycles = approx. year 2021)
Then find the corresponding calendar date. Also check the Moon Doppler data for this date.

Columbus Day storm Oct 10th, 1964, = 2428679 + 19756 (3 Saros cycles) = 2458435 = Dec 11th, 2018. = this is very close to the last storm on Dec 18th (within 10 days or so).

Big Blow storm: Dec. 12th, 1995, 2pm 100+ mph winds
JD = 2450064 + (2021 yr. or so)

To predict a future date of a high wind or beach phenomenon date.

1. Find the date of a previous weather event that occurred approx. 18 years ago.
2. Go to Ref 1. and calculate the Julian Date of that event.
3. Add any whole number multiple of the Saros cycle (6585.32) Multiple 3 you may find is a more accurate prediction.
4. Go back to Ref 1. and enter the resultant Julian Date and find the corresponding calendar date.
5. That date is good for a high wind prediction within 10 days.

Ref 1. Julian date calculator: https://www.aavso.org/jd-calculator
Ref 2. Astoria weather records:
https://www.wunderground.com/history/daily/us/or/astoria/KAST/date/2018-12-18

Ref 122.
https://arxiv.org/ftp/arxiv/papers/1306/1306.0451.pdf -Saros Cycle Manuscript
Climate variability according to the triple Saros cycle gravity cycles.
By: William R. Livingston Olympia Washington. 98501
Saros Cycle: 6585.32 days the Saros cycle is ok.

SUMMARY:

RAINBOW COMPUTER PROGRAM

Supporting the theory for the phenomenon. Proof that atomic spectra wavelengths add. We may then assume that two gravitational wavelengths (one Doppler shifted) may add producing a smaller and larger wavelength (beat frequencies) with their associated frequencies.
The Addition of Atomic Spectra (to my knowledge never been revealed before)

Examining Complex Atomic Spectra for Fundamental Wavelengths

Abstract
Two equations are derived and incorporated to solve for the source of complex emission spectra lines of atoms heavier than hydrogen. The derived equations F1 and F2 (Fundamental 1 and Fundamental 2) solve for the results from the addition and subtraction of any pair of numbers within a large set of numbers.
In this paper, the equations are applied to the known emission spectrum of the sulfur atom. A computerized random search looks for pairs of matches within the existing line spectrum. The sulfur atom reveals an astounding number of matches when compared to comparable random sets. The structure wavelengths appear to be adding in ionization states.
The method does not solve for quantum levels but looks for the source of the complex spectra using known spectra lines. The results show which wavelengths are most active in forming other wavelengths, the author believes these wavelengths may assist in driving and controlling LENR pulsing circuitry.

1. Introduction
The emission spectrum of a chemical element is the spectrum of frequencies of electromagnetic radiation emitted due to an atom's electrons making a transition from a high-energy state to a lower-energy state. The energy of the emitted photon is equal to the energy difference between the two states. There are many possible electron transitions for each atom, and each transition has a specific energy difference. The result of these many transitions makes up the emission spectrum. Each element has its own unique atomic emission spectrum.

Both the Balmer and Rydberg formulas can accurately predict where the lines of the hydrogen spectrum should appear. These equations, however, fail to calculate the entire line spectrum of more complex heavier atoms. There is a gap in the ability to predict heavier atoms spectra.

Photo 1. Hydrogen emission spectrum in Å (Angstroms)

The purpose of this work is to fill in gaps in the source of many atomic spectra lines, and to provide proof that gravitational waves can heterodyne. Presently atomic energy levels are calculated using energy level values. In order to calculate them it is necessary to convert wavelengths to frequencies then multiplied by Planck's constant, converting the wavelengths to frequencies, then to energy levels results in the correct energy levels. The Schrodinger wave equation calculates the energy levels but not the spectra wavelengths. Present methods cannot reproduce the entire set of the emission spectrum of complex atoms.

The process shown herein reveals many of the complex spectra are the result of the addition and or subtraction of wavelengths. The method is nearly the reverse or opposite of the process of Schrodinger wave equation. The Schrodinger equation solves for energy levels which then are matched to energy difference between two lines of spectra or a transition. The Schrodinger wave equation calculates the atomic structure but does not calculate the wavelengths of the spectra itself leaving many spectra lines unaccounted for.

This paper reveals the source of the unaccounted line spectra by means of the existing line spectra wavelengths. The process discussed herein is as follows: The simple addition and subtraction of any two given numbers results in two answers. One resultant derived from addition and the other from subtraction. These two resultants can be used to look back to determine what their two source numbers were. In order to accomplish this, two equations #2 and #3 are derived from the simple addition and subtraction of two numbers.

Not to be confused with frequency, the derived equations are labeled *F1* and *F2,* Fundamental 1, and Fundamental 2 respectively. The two equations 2 and 3 are applied to a computational evaluation to complex atomic spectra of the sulfur atom[1]. Using the derived equations, trial and error calculations are performed on spectra of sulfur. A sample set initially is employed to clarify exactly how the process will later be applied to actual emission line spectra.

The process appears to be similar to heterodyning except only frequencies can heterodyne (add and subtract). Here however the results clearly show proof of the addition and or subtraction of the spectra line wavelengths, not frequencies.

The author wants to make it clear these calculations do not result in energy levels or quantum jumps, instead, presents the possibility many spectra lines presently unaccounted for are the result of the addition and or subtraction of a given atoms spectral wavelengths. The procedure outlined here might be simplified by simple addition and subtraction except the source wavelengths would be unknown thus the extra steps shown herein are taken. The author's hypothesis on the process permitting wavelengths to 'add' or 'sum' will come in a future paper.

2. Derivation Exercise: Adding and Subtracting a 'Sample' Set of Numbers

This exercise is accomplished only to provide an example, later applied to actual spectra values. Four chosen numbers are picked: 3, 7, 13, and 60. The numbers are inserted in equation 1 which adds and subtracts two at a time until all the combinations have been solved. Two numbers are generated each time because the equation is plus and minus, and the lower number is always subtracted from the higher, so we always have a positive result. The number of Possibilities = N * N -1.

$$\lambda n = \lambda_1 \pm \lambda_2 \qquad (1)$$

Note: The numbers were chosen so that when added cannot generate another of the original five (see exception). This will be an important fact for later. The results are the following table I. The complete set is shown below.

Table I
$03 \pm 07 = 04, 10$
$03 \pm 13 = 10, 16$
$03 \pm 60 = 57, 63$
$07 \pm 13 = 06, 20$
$07 \pm 60 = 53, 67$
$13 \pm 60 = 47, 73$

Originals: (3,7,13,60), and Resultant set: 4,10, 10,16, 57,63, 6,20, 53,67, 47,73

A total of 16 numbers, not too astounding but necessary for the sake of applying it to the atomic spectra as shown later in the search for source wavelengths. Later we can locate the original numbers (3,7,13,60) from the full set of 16 numbers in a solve-then trial and error search. The number 10 was generated twice but is not a concern.

3. Derivation of the Two Equations

Now assume we have no knowledge of what the original numbers were. But have the entire set, the originals and all the results. The following derives two equations that can be used to find what the original numbers were, given we have all or most of the set of 16. If some are missing, we can still make some conclusions of what they might be.

Still working with the 'sample set' the following derives two equations that solve for the original numbers (7 & 3) when only the results from

$\lambda n = \lambda_1 \pm \lambda_2$ (4 & 10) are known.

Given two numbers as examples: 7 and 3 and inserting them into the above equation results in the below two numbers.

$7 \pm 3 = 4$ and 10

Subtracting 4 from 10 and dividing by 2 results in one of the original numbers

$(10 - 4) / 2 = 3$ Answer

Take the above result (3) and subtract it from the higher number results in the other original number.

$10 - 3 = 7$ Answer

The resulting two equations (Fundamental 1 and Fundamental 2) are as follows:

$$F_1 = (\text{PickHi} - \text{PickLo}) / 2 \qquad (2)$$

and

$$F_2 = \text{PickHi} - (\text{PickHi} - \text{PickLo}) / 2 \qquad (3)$$

These two equations can locate the original numbers which produced the resultant set of numbers from the previous example. This works with any combination of numbers. The problem is you don't know which pairs go together. The next section will resolve this issue by evaluating every possible combination and searching for a match within the full set of numbers, a trial-and-error process.

4. Applying the Equations (2 & 3) to the 'Sample Set'

Not to over simply, but for the sake of presenting a complete explanation of the procedure. From the previous example: 'original' and 'resultant' sets (3,7,13,60), and 4,10, 10,16, 57,63, 6,20, 53,67, 47,73 respectively. Notice that two tens were generated by two different pairs. This is not only ok but provides an eye-opener later when evaluating spectra.

Assuming we have no idea, which numbers generated the full set and no order is known. If the complete set of 16 numbers are available the original numbers 3, 7, 13, and 60 can be located from the jumbled set using the two source equations (2 & 3) derived above. The trial-and-error procedure as follows untangles the set finding the original set of four numbers.

Entire set is alphabetized in ascending order: 3,4,6,7,10,13,16,20,47,53,57,60,63,67,73.

1. Two numbers are picked a high and low and inserted into the F_1 and F_2 equations
   For example: 57 and 63 $F_1 = (63 - 57) / 2 = 3$ and $F_2 = 63 - (63-57) / 2 = 60$
2. A match using the full set is then attempted (these are matches).
3. When every possible combination of pairs is evaluated, the original set reveals itself, and non-matches are rejected.

Next, we will assume these are atomic spectra (using real spectra values) with the prospect that the results will match them. If this is the case, then some if not all of the source wavelengths can

be found by a trial-and-error method. Comparing the actual results to randomly generated sets provides good proof of the validity of the concept.

5. Procedure Applied to the Atomic Line Spectra of Sulfur

The author employed a computer program[3] as an aid in the evaluation. A similar trial and error procedure as previously outlined above is applied to the atomic spectra of the sulfur atom[1]. A high pick and low pick spectra value from the element sulfur is inserted in $F_{1,}$ and F_2 equations. A search for a spectra match to the result is then performed. A computer loop procedure cycles through all spectra inputting each wavelength into the two equations until all possible combinations are evaluated. The spectra matches are located under the 'Match' column. Further evaluation (not detailed here) can also be accomplished.

Example of two sulfur's wavelengths inserted into F_1 equation #2. (See line 2 Table II)

$F_1 = (1316.618 - 437.4) / 2$
$F_1 = 439.609$ Result matches sulfur spectra 439.60 Angstroms.

Error = 439.609 – 439.6 = .009

The source for the sulfur spectra wavelengths is, the "CRC Handbook of Chemistry and Physics".
[1] Shown in Table II are the compelling results of processing 252 wavelengths of sulfur spectra. Results from equations are rejected if the answer does not match a known spectra value within tolerance of .01 Angstroms. Sulfur's spectra exhibit 2.6 to 3.9 times more matches than random generated sets with similar limits. Sulfur exhibits an astonishing 56 results with a zero error (perfect matches) of a total of 88 matches. Comparable random generated sets only generate 0 to 1 matches with a zero error. The error average of random generated sets is approximately .005 when compared to sulfur .00092, a 5 to 1 ratio. These are substantial differences. The x-ray value 83.4 Angstroms appears as a source wavelength further enhancing the results. Due to the small value of the remaining x-ray spectra the author elected to remove these for this disclosure. *The difference between two spectra wavelengths was not included on this short table. The long table*[2] *designates these results as 'ADD' in the 'Equ.' column.*

Table: Sulfur Spectra Calculation Results.
Ion levels I-V 252 Entries Range 83.4 to 10459 Å. Error Tolerance .01 Å.

Count	Match	PickLo	PickHi	Eqn.	Error
1	83.400	520.100	686.900	F_1	0.0000
2	439.600	437.400	1316.618	F_1	0.0090
3	522.000	2665.400	3709.400	F_1	0.0000
4	522.500	3117.700	4162.700	F_1	0.0001
5	522.500	8694.700	9739.700	F_1	0.0000
6	652.500	55l.200	753.800	F_2	0.0000
7	653.600	7930.300	9237.500	F_1	0.0001
8	653.600	1201.000	2508.200	F_1	0.0000
9	655.900	6384.900	7696.700	F_1	0.0001
10	659.800	655.900	663.700	F_2	0.0001
11	660.900	1077.100	2398.900	F_1	-0.0001
12	660.900	438.200	883.600	F_2	0.0000
13	661.400	1396.112	2718.900	F_1	-0.0061
14	666.100	522.500	809.700	F_2	0.0000
15	677.300	664.800	689.800	F_2	0.0000
16	678.100	519.300	836.900	F_2	0.0000
17	680.300	83.400	1277.216	F_2	0.0080
18	680.900	4925.300	6287.100	F_1	0.0001
19	686.900	680.300	693.500	F_2	0.0000
20	691.700	1077.100	2460.500	F_1	0.0000
21	693.500	1073.500	2460.500	F_1	0.0000
22	738.500	680.300	796.700	F_2	0.0000
23	786.500	666.100	906.900	F_2	0.0000
24	786.500	8882.500	10455.500	F_1	0.0000
25	789.000	693.500	884.500	F_2	0.0000
26	796.700	902.800	2496.200	F_1	-0.0001
27	796.700	1392.588	2986.000	F_1	0.0060
28	798.300	3097.500	4694.100	F_1	0.0001
29	804.000	1110.900	2718.900	F_1	-0.0001
30	804.000	798.300	809.700	F_2	0.0000
31	816.000	748.400	883.600	F_2	0.0000
32	849.200	4120.800	5819.200	F_1	0.0002
33	860.500	658.300	1062.700	F_2	0.0000
34	883.600	902.800	2670.000	F_1	0.0000
35	885.800	663.200	1108.400	F_2	0.0001
36	902.800	693.500	2499.100	F_1	0.0001

37	905.900	1305.883	3117.700	F_1	0.0084
38	910.500	883.600	937.400	F_2	0.0000
39	910.500	678.100	2499.100	F_1	0.0001
40	912.700	824.900	1000.500	F_2	0.0000
41	937.700	798.300	1077.100	F_2	-0.0001
42	996.000	883.600	1108.400	F_2	0.0000
43	1073.000	1014.400	1131.600	F_2	0.0000
44	1073.000	522.000	1624.000	F_2	0.0000
45	1077.100	693.500	2847.700	F_1	0.0000
46	1102.300	1073.000	1131.600	F_2	0.0000
47	1108.400	900.900	3117.700	F_1	-0.0001
48	1131.000	6052.700	8314.700	F_1	0.0000
49	1131.600	1234.100	3497.300	F_1	0.0001
50	1131.600	439.600	2702.800	F_1	0.0000
51	1234.100	660.900	1807.311	F_2	0.0055
52	1250.500	1108.400	1392.588	F_2	-0.0060
53	1250.500	1131.000	3632.000	F_1	0.0000
54	1253.800	883.600	1624.000	F_2	0.0000
55	1303.430	786.500	1820.343	F_2	-0.0085
56	1388.435	1302.863	1473.995	F_2	-0.0061
57	1624.000	654.000	3902.000	F_1	0.0000
58	1629.200	750.200	2508.200	F_2	0.0000
59	1820.343	522.000	4162.700	F_1	0.0071
60	1826.245	789.000	2863.500	F_2	0.0050
61	2387.000	1624.000	6398.000	F_1	0.0000
62	2398.900	849.200	5647.000	F_1	0.0000
63	2489.600	1073.500	6052.700	F_1	0.0000
64	2489.600	836.900	4142.300	F_2	-0.0002
65	2508.200	437.400	5453.800	F_1	0.0000
66	2680.500	4332.700	9693.700	F_1	0.0000
67	2680.500	664.800	4696.200	F_2	0.0000
68	2680.500	691.700	6052.700	F_1	0.0000
69	2691.800	902.800	6286.400	F_1	0.0000
70	2691.800	1014.400	6398.000	F_1	0.0000
71	2731.100	824.900	6287.100	F_1	0.0000
72	2785.500	854.800	4716.200	F_2	0.0000
73	2797.400	1473.995	4120.800	F_2	-0.0024
74	2863.500	2741.000	2986.000	F_2	0.0000
75	2904.300	3933.300	9741.900	F_1	0.0002
76	2904.300	884.500	4924.100	F_2	0.0000
77	3497.300	2741.000	4253.600	F_2	0.0000
78	3632.000	1624.000	5640.000	F_2	0.0000
79	3632.000	664.800	7928.800	F_1	0.0000
80	3867.600	1914.698	9649.900	F_1	0.0010
81	3928.600	1108.400	6748.800	F_2	-0.0002
82	4142.300	2856.000	5428.600	F_2	0.0000
83	4285.000	1102.300	9672.300	F_1	0.0000

84	4694.100	693.500	8694.700	F_2	0.0000
85	4694.100	1073.500	8314.700	F_2	0.0000
86	5640.300	4993.500	6287.100	F_2	0.0000
87	5706.100	3097.500	8314.700	F_2	0.0000
88	6384.900	3097.500	9672.300	F_2	0.0000

Error Average: 0.0009

Note the multiple hits (matches that came from different pairs). See Table II. (short table)
Line count: (4,5) (7,8) (11,12) (23,24) (26,27) (29,30) (38,39) (43,44) (49,50) (52,53) (63,64) (66,67,68) (69,70) (75,76) (78,79) (84,85). Here the same result came from two different sources, 23 matches of this type. Note the results 66,67 and 68, which had three separate sources. Random sets display only 1-4 of these and none with three. **It is highly unlikely these findings are coincidental.**

6. Application of Quantum-Mechanical Vibration Data to LENR

With proper due diligence this knowledge may assist in driving and controlling LENR cells. The results show which wavelengths are most active in building other spectra wavelengths, the author believes these most active frequencies may assist in driving and controlling LENR pulsing circuitry. Preliminary application of data to LENR experiments (in a simplified manner) the author suggests tuning the cell and accompanying components to harmonic frequencies of known transitions. In the case of hydrogen choose a prominent spectra line such as 4861.33 Angstroms. Since spectra frequencies are near the petahertz range the author suggests dividing the spectra frequency by a suitable whole number. This frequency is then used to repeatedly pulse the cell heater.

Converting Angstroms to frequency, the results for the 4861.33 hydrogen line are as follows:

$f = c / \lambda$
$f = c$ / (4861.33 $\mathring{A}$ / 10e+10) $f =$ 6.1669e+14 Hz.

Where f = frequency, 1 meter = 10e+10 Angstroms, c = 299,792,458 meters per second, $\lambda =$ wavelength.
To make the frequency useable for driving a LENR cell we must use a whole number divisor of 6.1669e+14: So, dividing by 10e+8 = 616,690 Hz.

Driver frequencies of elements within an LENR cell may combine or add in such a way as to match one or more absorption spectra wavelengths of the catalyst and or cell components. Pulsing ultrasonic or radio frequencies on and off while producing a repeating ringing and phase, of increasing frequency. Example is similar to sweeping a frequency generator from just below the calculated frequency to just above 616,400 to 617,000 Hz without digital stepping (analog only). The process is similar to pushing a person on a swing. The key is to carefully tune on the harmonics of one or more atomic wavelengths. A circuit that repeatedly rings up in frequency is suggested.

A phase shift might be considered as well. Other methods for driving and controlling LENR may simply be amplifying the existing natural harmonics found within the cell. Here a pulsing on and off of in-phase amplification should increase the output while out-of-phase (wave cancellation) should reduce cell output.

Conclusion

As previously covered in the introduction, frequencies not wavelengths must be used to calculate atomic structure. Here, however, something unusual is occurring as here is evidence that spectra wavelengths are adding. The results show a clear indication that simple addition and subtraction is creating many of the atomic spectra wavelengths. The importance of the large number of computational results showing zero error within the sulfur spectra is overwhelming. When the tolerance is increased to .1 Angstroms all but five wavelengths are engaged. When the match tolerance for sulfur spectra in the search is set at .25 Angstroms 1612 matches show and every one of the 252 wavelength entries[1] are engaged. Comparable random sets[2] generate approx. 960 matches when tolerance is set at .25. Other elements checked thus far helium, carbon and lead exhibit similar results.[2] Hydrogen requires harmonic divisors incorporated into the equations to complete the set of spectra lines.

As a curiosity most elements show only one source equation (F_1 or F_2) solved with any given pair of picks, Helium has several exceptions[2]. There seems to be some significance because there are so many exclusions to the use of only one equation at a time. The author has further work with regard to the addition and subtraction of waves.[2] normally frequency difference (quantum transitions) not wavelengths are incorporated. All elements of all atomic weights complex spectra might be derived by incorporating both the Schrodinger wave equation and the addition of wavelengths shown here.

Combining two elements such as hydrogen and nickel that share the same transition level as a harmonic match between each of the two elements is suggested. The results show which wavelengths are most active in forming other wavelengths, the author believes harmonics of transitions based on these wavelengths may assist in driving and controlling LENR pulsing circuitry. The mechanism creating the addition of wavelengths will be covered in a future paper.

[1] David R. Lide, CRC Handbook of Chemistry and Physics 1st Student Edition ISBN 0-8493-0740-6

[2] http:\\synodicgravity.com /

The Bible describes well the rolling back of the atmosphere as in an atomic-bomb blast and the sun and moon going dark in the middle of the day. In Genesis 9:12 God says to Noah that He has placed the rainbow in the clouds as a sign of His covenant that He will never again destroy the earth by water. The rainbow is the atomic spectra of the elements burning on the sun. The waters shall never again become a flood to destroy all flesh. Is this a warning of the atomic bomb destruction of the earth?

The Earth is making the moon rust theory:
https://www.cnn.com/2020/09/05/world/moon-earth-rust-intl-hnk-scli-scn/index.html
Shuai Li of the university of Hawaii and NASA scientists believe the rust is concentrated on the side of the moon that faces Earth suggesting it was somehow linked to our planet.

A related phenomenon:
Earth's Magnetic Field Does Strange Things to the Moon. – NASA.
https://science.nasa.gov/science-news/science-at-nasa/2008/17apr_magnetotail

This may be related to the very soft and puffy dry sand that can be found on the automobile access ramps to the beach during certain times. Also, in the puffy wet sand near the water.

I built an artificial gravity generator. It appeared to put ripples on a calm lake. It was not coherent enough to pull waves along. I have a new design not built yet it requires a klystron tube. I hope to get some help building it. If you are interested and know this type of electronics, let me know.

The theory and further work will be posted at: https://synodicgravity.com/

CONCLUSION

Connecting the electromagnetic field to gravity and magnetism.
Provides a relationship between gravity and magnetism, and chemistry (the combining of the elements). When the quartz in the sand pulls up it is a quartz or water wavelength. When it's an iron oxide frequency the rust pulls up or down. When it is a mica matching frequency it pulls up (can be seen sparkling in the water). When the mica dries, it can blow up to the upper bank. It is lightweight and can deposit a lot of mica particles on the upper dunes giving them an excessive sparkling effect in the sunlight. When it is an atmospheric (water) frequency, it pulls on the air, influencing the weather. When it is a human body frequency it can be felt.

If one looks at this phenomenon closely, along with the guidelines written here, it is difficult to deny. The author concluded some type of hidden interaction (a unique collision or transferring of force in the case of the rotating helix) between electromagnetic waves of similar wavelength exists. Briefly, this requires extending the rules of superposition to include an energy interaction along with the confirmed appearance to pass directly through one another unaffected.
The Doppler heterodyning calculations concluded the gravitational wavelength at approximately .00713 Angstroms (7.13 x 10-13 meters). The neutron and proton are the basis for atomic weight and stoichiometry (how chemicals combine by their whole number of atomic weight). This is how elements are weighed. It should become clear; that these particles may be related to the wavelength of gravity. Why this wave cannot be detected directly is due to its passage through everything

(including the instruments used to detect it), nulling the results thus altering the experiment's outcome. If the rotational wavelength of the proton and neutron are slightly different, there is the possibility of two gravitational wavelengths.
Other than its resultant pulling force, it is hidden if one attempts to detect the wavelength directly. The author believes the gravity wave is emitted from the proton and or neutron and becomes the ether field. The rotating helix wave passes through everything enabling the properties of inertia, length contraction, time dilation, and the bending of light. The rotating helix wave concept is easily understood but requires enhancing the rules of superposition, which then allows complete comprehension of the double slit and wave-particle duality.
Double Slit Debunked 5: https://www.youtube.com/watch?v=LkGiP6x9tpg

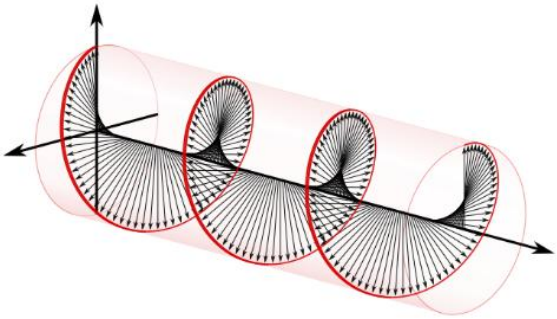
Hypothesis: The gravity helix waves distort or warp the aether field and the light path is curved by this warp. Math terms can be added to Newton's gravity theory to account for the bending of light.

The author sincerely believes once this is understood to be a gravitational phenomenon some difficult physics mysteries become easily understood. Being that this wave passes through everything, and the particles of stoichiometry (relationship to mass) are the source it is not unreasonable the wavelength of gravity is interrelated with the neutron and or proton.

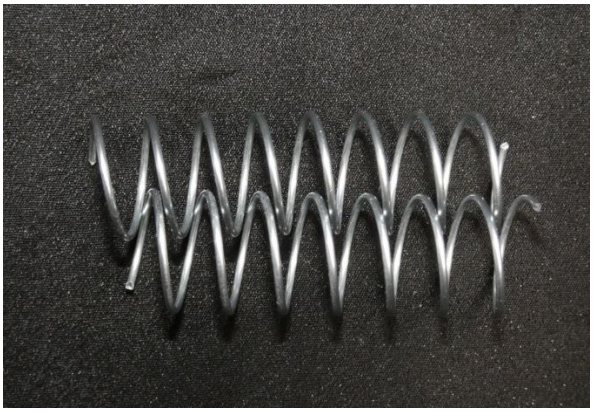
Please see Theory files on these subjects:
Accepting that an electromagnetic wave can transmit a minute force gives us insights into:

1. How the ether field composed of gravitational waves can be undetectable by the Michelson-Morley experiment
2. Looking at superposition and interference in a new light
3. Understanding inertia and magnetism
4. Gravitational lensing.
5. Duality
6. Time dilation and length contraction can easily be understood.
7. Results found in EPR experiments.
8. Chirality: Since it is emitting a helix from one direction and being in a magnetic helix field. gives it one direction of alignment or its handedness. i.e., the helixes align up.

HOW A FREE ELECTROMAGNETIC WAVE CAN PRODUCE A FORCE.



Circularly Polarized (Helix) Electromagnetic Wave (right handed)
Public domain: Dave3457: https://en.wikipedia.org/wiki/Circular_polarization



Example of Two Helix's Electromagnetic Waves Mating.
To fully understand this the Double Slit Videos must be viewed at synodicgravity.com.
An early fundamental error is found in the famous double slit.

Optical Tractor Beam with Chiral Light:
https://www.researchgate.net/publication/270906155_Optical_Tractor_Beam_with_Chiral_Light

(This is contrary to Einstein's curved space-time general theory).
After studying the phenomenon, I came up with this conclusion. Somehow an electromagnetic wave must transfer a force. This led me to the wave or particle study of duality.

Traveling ocean Waves crashing into another
Video: 'Giant waves at Point Lonsdale (interference effects)' by Ben Ryder
https://www.youtube.com/watch?v=6EKZKaWhufI

There are two basic types of water waves. One that simply has an up-and-down motion as it travels across a lake when a pebble is thrown in. Here the water within the wave only has up and down movement which forms ripples while spreading outward across the lake surface. It has the appearance of propagation. It cannot have a breaking crest like traveling ocean water waves have. The other type of wave is generated by pushing a large section of water like that found at the ocean beach. Both types appear to be propagating but the type found in lab ripple tanks are
simple static (not propagating) standing waves are generated in lab ripple tanks and errantly related to light waves. The ripple tank experiment should be modified to the collision of moving water waves, not the stationary standing waves found in ripple tanks. Only then can correct assumptions be related to light waves in which the photons travel. Because they can bounce off each other indicates they may transmit a force.

Here we find an example of radio waves that bounce off another. A photon is similar to a radio wave only of a different wavelength.

Below link: ScienceX.com 'Do radio waves bounce of each other':
sciencex.com/wire-news/166501095/do-radio-waves-bounce-off-each-other.html
-or-
https://sciencex.com/wire-news/166501095/do-radio-waves-bounce-off-each-other.html#:~:text=%EE%80%80Do%20radio%20waves%20bounce%20off%20each%20other%EE%80%81%3F%20The,of%20how%20%EE%80%80radio%EE%80%81%20%EE%80%80waves%EE%80%81%20interact%20and%20exchange%20energy.

Hans G. Schantz states while describing radio waves emitted from a special antenna.
"In the case of mirror-image waves with identical waveforms, all the energy associated with the two waves comes to a rest and then changes direction. If the interaction is purely destructive interference, the electric field goes to zero, the impedance goes to zero, and the energy associated with each wave bounces off the virtual short created by the superposition. If the reaction is purely constructive interference, the magnetic field goes to zero, the impedance becomes infinite, and the energy associated with each wave bounces off the virtual open created by the superposition. "

See also Ref:
FERMAT, Vol. 4, No. 2, July-August 2014 [ART-2014-Vol4-Jul_Aug-002]. See also http://arxiv.org/abs/1407.1800/

NOTE: THE CONCLUSION AND THEORY NOT INCLUDED HERE ARE UNDER FINAL REVISION. (Including monopole description.) See SynodicGravity.com

MICROWAVE TEXT (Aging Hypothesis)
I have definitive proof that natural electromagnetic waves from the universe cause aging. (There are other factors also) They center approximately in the 600-800 mega Hertz range after heterodyning or, adding due to planetary motions.

The electromagnetic waves oscillate within our bodies much like a wave on a string. There are nodes and areas which do not absorb them. Our fingertips are an obvious nodal area where the waves are not absorbed. Visual evidence in the fingertips can easily be seen in older people (their fingertips appear much younger and pinker than the hand or body.
YouTube video: https://www.youtube.com/watch?v=NzfmczEciKs

Subject: Microwave oven absorption. The end of human fingers age more slowly.
Another attribute of the Synodic wave is present. At periodic intervals, the Synodic waves enter the human body and can be felt physically. These waves seem to be present most of the time but can only be felt at certain intervals. Enclosing oneself in a Faraday cage disconnects the wave from the flesh. I made this serendipitous discovery while studying the beach phenomena. I associated the visual phenomenon with a physical feeling. The strange disappearance of seagulls after a very strong event aroused my curiosity as well. They may have flown away to avoid exposure. These waves emanate from all mass, they Doppler shift from planetary motions then heterodyne on non-linear or ionic surfaces forming new wavelengths. A small percentage of these waves have healing properties. Most seem to cause tissue damage. See below photos of noodles and fingertips.

Aging and Healing Waves:
Occasionally these Doppler-shifted waves can be very slightly felt. A very slight buzzing feeling, an uncomfortable or annoying feeling, a very slight momentary pain in joints. Irritability, or possibly even low audio at times, depending on the strength and time of year. I first made this connection while studying the visual beach phenomenon on an exceptionally strong and unusual formation day. Some people can feel cellular phone wave emissions. Causing ringing in their ears in some cases. Ham radio operators claim they can feel effects in their heart.
Depending on your latitude, elevation, and elemental deposits. Intermittent, they fade in and out disappearing for weeks then reappearing. May not be perceptible to everyone. The characteristics change slightly, phasing in and out of your perceptible range. The exact timing of events must be Doppler calculated.
Slow accumulating tissue damage. Inspecting the fingertips of the extreme elderly 90-100 years old. You will find the fingertips look like that of a 30-year-old. See the microwave experiment results. I have compared the uncooked tips of noodles to fingertips.

"END OF FINGERS" Note: microwaves are radio waves at a frequency of 2.4 Giga Hz.
Check the elderly people for young-looking fingertips! An age difference on the ends of their fingers relates to the below microwave absorption characteristics of noodles when placed in the microwave oven. The noodles do not absorb readily at the ends. Hypothesis: Synodic gravity heterodyning may cause aging. Slow cooking so-to-speak. Most people show this; however, several factors may cause a reduction of this effect. One's environment, how often their fingertips touched another, and finger moisture content, are some. Google 'Finger tips of the elderly'.

Experiments with the standard household microwave oven have revealed some interesting microwave absorption characteristics. Using the noodle called Fettuccini. When cooked in boiling water as directed it is perfect for this experiment. After cooking it is about 1/4 inch wide and 12 inches long. From there you can trim it to any length you like.
Here are the results from a recent experiment using Fettuccine: I micro-waved them in a standard oven for about 2 minutes. At least 1 total length (12 inches) was placed in the oven at any one

time. The oven may have been interrupted several times during heating for inspection. Be careful, the shorter lengths do not absorb well, and oven damage could result. 750-watt oven used. Heating was stopped before any dry areas would occur. Lengths are reduced with drying. Do not use wax paper, it melts, altering the results. Place the noodles on microwave wrap with several layers of paper towels underneath for insulation. Be certain that none of the noodles touch each other. That would allow the wave path to continue into the next noodle.
Length (inches)
2 inches Got hot but would not bubble
3 inches all bubbled at the same location.
4 inches all bubbled at the same location
5 inches similar patterns
12 inches nodal patterns appeared, unless overheated

Basically, I looked for bubbling on the noodle which indicated intense absorption areas. Results may differ slightly depending on the wavelength of your oven.
I WOULD LIKE TO EMPHASIZE ONE PARTICULAR PECULIAR THING THAT OCCURRED ON ALL BUT THE SHORTEST SAMPLES: All had NO BUBBLING on the very ends. I repeat NO BUBBLING for approximately 1/2 inch (1 cm) of the ends regardless of their placement within the oven. This I feel indicates the wave nature of a taut string. The two stationary mounting end points of the string are the ends of the noodle so to speak. As the microwave vibrates from one end to the other, when the wave reaches the noodles end its amplitude becomes zero thus no heating occurs there. The wave snaps back and forth within the noodle. This is like a radio wave emitted from an antenna. The end of the antenna is a zero point. This suggests: The noodle length probably should be a whole number of the length of the oven's wavelength. Adjusting the length of the noodles should reveal a better pattern of high and low amplitudes, as well as a better indication of the unheated ends of the noodle's length. Wavelengths at one time were measured using a grid dip meter. This meter shows the high and low phases of an RF wave along a straight wire. These high and low seem to be apparent in the noodle. Please use the noodle Fettuccini; it is ideal for this experiment.

NOODLE PHOTOGRAPH:
White and Green (spinach) fettuccini noodles. (Line spacing in centimeters). The tips are still flexible.

Fingers Photograph

See ‘Fingers Photograph’ of an eighty-two-year-old woman's hand, five foot three inches tall. The entire hand is damaged and swollen except for the fingertips. The fingertips look like those of a 30-year-old. This is common for almost all the elderly. Evidence of electromagnetic wave damage from naturally occurring radio waves in the universe. Compare this photo to the undamaged tips of the noodle.

Standard microwave oven wavelength: 122 mm or 2450 MHz relating the above 1 cm at 122 mm wavelength to the undamaged length of the elderly fingertips should reveal the average damaging frequencies responsible for the human aging hypothesis: Proportion:
1 cm / 2450 MHz = (Length of undamaged fingertips 3-4 cm) / (Damaging Frequency)
Solving for Frequency. Answer: 816 To 612 Mega Hertz.
Performing a radio scan for unidentified frequencies in this range may have some interesting results (Date and time relationships).
Some elderly say that their fingertips feel funny, buzzing, etc. Possibly the rest of their body's nerves have been damaged leaving their fingertips more sensitive. Also: See notes on the galvanized steel Faraday shield. (Not available). Important Fact: An instrument string tuned for a particular note will also readily absorb it. Then re-emit it.
Does this have something to do with aging? I know now that it does. Wearing metal-woven clothing would shield us from this aging radiation. Brief testing reveals that leaving your head or feet unshielded results in concentrated areas where burns occur.

Note: The hypothesized heterodyned gravity waves are rotating helix waves are not the standard electromagnetic waves found in radio waves which are simpler sine waves. Thus, radio waves should have a minimal effect on body tissues (unless heating occurs).

The toes of the elderly, however, show similar or worse damage much like the rest of the body. Why? I might hypothesize the wearing of shoes forces the toes in contact with one another, increasing the overall distance thus allowing for wave damage. Also, toes are much shorter.

"Salt Waterbed Experiment". Add several cups of rock salt to a bag-type waterbed (not the waveless type). Then sleep on the bed for a week. One will be woken up in the night every couple of hours by a water wave that passes through the salt water. Slow-moving synodic gravitational EM waves latch onto the conducting salt water and pull the water producing a small wave-like motion. The danger is that a possible electrical shock could occur if the bed leaks. Salt water will also damage the plastic bag and produce a dangerous gas after about a week. I tried this and had to replace the water bag because the smell got worse. I also could not get a good night's sleep. The wave motion experienced will only occur during the correct planetary synodic events.

Waterbed with EM shield
Like a Faraday Cage, both the water in the bed and the metallic covers provide some protection from human-caused and natural electromagnetic waves. I found that several layers of graphite cloth give a better sleep as carbon is more compatible with the body. Notice the fan on the right side provides ventilation. I could not sleep well with the silver and copper, only the graphite cloth provided a good night's rest. Graphite fibers can be painful if they break off. I had to coat the graphite to stabilize it and sandwich it between two sheets to prevent fibers from breaking off and getting into the bed. The cover should be grounded. I used my house ground in the electrical plug. The water should probably be grounded but mine is not.

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10. MoonSked by GM4JJJ
Moon Sked download (Moon Doppler Data): http://gm4jjj.co.uk/MoonSked/moonSked.htm
11. https://www.youtube.com/watch?v=RRi4dv9KgCg 'MIT video of total wave cancellation or destructive interference
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14. The rusty bolt effect. - Guy wires heterodyning. Rust as a natural diode. Pick up high frequency radio signals. http://www.k5frc.org/training/RUSTY%20BOLT%20EFFECT.pdf

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https://www.youtube.com/watch?v=X2o_Jz_GyZs

50.. Moon apogee perigee dates calculator https://www.fourmilab.ch/earthview/pacalc.html

51. NOAA: Tide Table PDF (Click Download) LST= Local Standard Time
Choose 9439040 Astoria (click - annual published tide tables)
https://tidesandcurrents.noaa.gov/noaatidepredictions.html?id=9439040

https://tidesandcurrents.noaa.gov/

https://tidesandcurrents.noaa.gov/map/index.html?region=Oregon
Below includes the moon phase.
https://www.usharbors.com/harbor/Oregon/Astoria-or/tides

52. MODERN RADIOS USE THE HETERODYNING PRINCIPLE. And a mixer to mix the signals: https://en.wikipedia.org/wiki/Heterodyne122

Saros Cycle Manuscript: https://arxiv.org/ftp/arxiv/papers/1306/1306.0451.pdf
Climate variability according to the triple Saros cycle gravity cycles.
By: William R. Livingston Olympia Washington
The Principle of Relativity By: H. A. Lorentz, A. Einstein, H.Minkowski and H. Weyl

Video of phenomenon: http://youtu.be/kP6i5us9vac

Gravity Wavelength Calculator in synodic3 directory

Julian Date Converter. http://www.onlineconversion.com/julian_date.htm . Universal Time.

Einstein admits the existence of the ether: http://www.mu6.com/einstein.html
http://www.infinite-energy.com/iemagazine/issue38/einstein.html

http://redshift.vif.com/JournalFiles/V08NO3PDF/V08N3GRF.PDF

Rare Atmospheric Gravity Wave Phenomenon Captured on Satellite:
https://www.youtube.com/watch?v=B0bnOKw9K

The Weight of Nothing: https://www.youtube.com/watch?v=szI-HpOScFQ
The expansion of space beyond the cosmos is hypothesized.
Beyond the cosmos there is nothing (the vacuum of space) and it somehow causes the outward acceleration of the mass of the cosmos. This force opposes the force of gravity. What could be causing it?

Similar phenomenon: https://www.youtube.com/shorts/5oAGlkRe10I

Carmarthen Bay : A lot of shipwrecks and rust in sand. Same phenomenon.
51.725376, -4.370785 GPS coordinates
https://www.youtube.com/shorts/KHmkURoAedc

NOTE: Complete theory and further proofs will be posted at: https://synodicgravity.com

ADDENDUM

Gravitational wave canceling. Dr. Eugene Podkletnov
https://www.youtube.com/watch?v=AgyAFElQZcU

High voltage multi-frequency antigravity YouTube video: "The Hutchinson Effect"
https://www.youtube.com/watch?v=elSWT_goNTM
Somehow John Hutchinson using several sources of high voltage has managed to cancel the effects of gravity. His video shows various objects including a cannonball levitating.
https://www.youtube.com/watch?v=ufcsOjy9D1c

The author has built a crude but working prototype artificial gravity wave generator. The output is a rotating rotationally polarized microwave. The device can form small surface ripples about 50 feet out on a normally clear lake. The device was not stable/coherent enough to make propagating water waves only ripples.

GRAVITY'S SYNODIC WAVE

This unusual gravitational phenomenon occurs frequently in the sand on the Oregon near Astoria Oregon. As revealed on the front cover, the dark patch areas are magnetic particles trying to stand on their ends, much like iron filings do when sprinkled on a magnet. The phenomenon has been correlated to the orbital motions of the moon and earth's orbits. The phenomenon has many unusual attributes depending on the date and time. Defying the rules of sedimentology where the heavy elements go downward, astonishingly the heavier magnetic particles can be pulled upward from the depths of the sands turning the entire beach almost black in color. Then several hours later the particles are pulled downward resulting in a normal sand colored beach. Mica particles also at times are pulled up to the surface, then wind can blow them upon the bank making the bank sparkle more than normal. The wet sand may puff up making the beach difficult to walk upon. Self-sustaining Soliton water waves occur pulled around by mysterious gravitational forces. Unusual water undulations and unidentified radio frequencie may appear. A wide band of deep sand pools occurs on predictable intervals.

Occurring during night or day. Known as the "Grave yard of the Pacific" the source of the magnetic particles is from thousands of shipwrecks in the Columbia river bar. The orbital dates of the moon's apogee and perigee center the phenomenon and aid predicting the events. Years of research leads to some amazing conclusions about gravity. Calculations were made from radio frequencies correlated to the groove to groove distance and a gravitational frequency is derived. The resulting wavelength supports the rules of stoichiometry. A unique rotating helix electromagnetic wave type is associated to the phenomenon. Puts the force back into gravity.

By, Jim Olsen

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