

The whirlwind theory
The theory of everything

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Abstract

This is the theory we have all been waiting for: The theory of everything. This is a coherent theoretical explanation of the universe. A universe governed by fractal symmetry. This theory describes a fractal connected universe. It uses fractal geometry to explain and link together several natural phenomena. In this manuscript, I will present fractal models of celestial bodies like stars, binary stars, planets and moons. These fractal models are the "holy grail" of physics. In these models, we will recognize all kind of natural phenomena like atmospheric dynamic and solar activity features. These models offers a variety of cloud structures, we finally have fractal models for clouds. We will also discover the similarities between moons, planets and stars. Solar activity features and Earth's atmospheric dynamic, will be explained and described using the same principles. For example, we are going to learn that sunspots and punch hole clouds are the same phenomenon, and that coronal loops correspond to high Cirrus clouds. Using these models we will explore the anatomy of celestial bodies. We will see how the sun and Earth are physically connected. We are going to discover that electricity is continuous not particulate, and that electric and magnetic field lines are physical, and are the driving force behind Earth atmospheric dynamic and solar activity features. In fact electricity and magnetism, tangled together, shapes the universe. Their nature is finally resolved and with it the nature of light. Phenomena that used to be enigmatic will be explained and related.

The following phenomena will be explained. They are ordered by similarity and close relationship. Also new phenomena and concepts are introduced:

Keywords:

Sunspots, punch hole clouds, coronal loops, Cirrus clouds, sunspots bridges, sunspots light bridges, cirrus uncinus, cirrus fibratus, circumhorizontal arc, rainbow clouds, fire rainbow clouds. Cirrus floccus, cirrus spissatus, jellyfish clouds, hot flow anomaly(HFA), flares, helmet streamers, coronal mass ejection(CME), density cavities, density holes, density depletions, coronal cavities, filament cavities, coronal prominence cavities, polar crown cavities, auroral density cavities, air pockets, bubble chambers, solar plages, wind, clouds, electricity, magnetism, electric plasma, magnetic plasma, electromagnetic plasma, interplanetary magnetic field(IMF), interplanetary electric field(IEF), solar wind, polar plumes, polar rays, spicules, Birkeland current, magnetic alignment, astrophysical jets, prominences, filaments, jet stream clouds, lightning, pixies, ball lightning, magnetic field, electric field, telluric current, dead zones, dead zone density cavities, blue holes, heliospheric current sheet, neutral sheet, aether, coronal holes, anticyclones, electric and magnetic dichotomy, hollow celestial bodies, thermocline, coronal heating problem, soap films, sun magnetic flip, syncline, anticlines, sunspots cycle, tree rings, Maunder minimum(little ice age), Titius-Bode law, elliptic orbits, binary stars, agate stones, geode, centrosomes, microtubules, Belousov-Zhabotinsky chemical reactions, chakras, chakra's field and the aurora Borealis.

Introduction:

This is a dream come true that someday fractal geometry will be used to describe nature. Since the discovery of fractals, with the arrival of computers, many thought that fractals could be the mathematics of nature. But until now fractal geometry has done too little to earn this title. This theory will give fractal geometry the value it deserves, and put theoretical physics back on track. We finally succeeded in applying fractal mathematics in theoretical physics. Using fractals we will explore cosmic bodies interior. This could have never been done without fractal mathematics. Without them, we would never understand the complexity of nature. A simple mathematical formula can generate a celestial body fractal model with an immense variety of natural phenomena. You will be taken in

a journey inside stars and planets. Fractal geometry reveals electric and magnetic fields morphology. Electricity and magnetism nature is finally resolved and with it the nature of light and plasma.

Astrophysics, solar physics and geophysics phenomena will be described using fractals. Phenomena that seemed mysterious will be explained and described with fractals. Furthermore, fractal geometry offers us chakra's morphology and their energy fields. Chakra's fields coexist with the electromagnetic fields of celestial bodies. We are going to discover that chakras are at the heart of every living entity. We will also learn about their relation to solar flares and coronal mass ejections(CME). Finally this theory is mind blowing as it establish a link between the physical matter and life. Stars and planets are not an accretion of dead rocks and dust but rather living bodies. In contrast to theories of physics, in this theory life is the essence of everything. A new science is born. We are finally on our way to a holistic theory, that will improve our understanding of nature. A new way of seeing and understanding the universe lies ahead of us. The crisis of theoretical physics is over. The door is open for series of discoveries. Welcome to a new world.

The observation:

It all started 27 years ago with an observation of a minor whirlwind, about 30 cm high, with a funnel-shape. I named this theory after this observation. It was in the autumn of 1989 during a full moon. I was then 27 years old. I was walking in the street, late in the evening, when I saw multiple wind turbulences on the ground. They were everywhere, vortices about 30 cm of diameter. Very small lightweight tree leaves, and the public lights made them visible. They were stationary and adjacent to each other. It was in the open, away from buildings or any obstacles. They were all spinning counter clockwise seeing from above. I never saw such wind pattern. I sat on a public bench to observe them. I visited this place three evenings in a row watching them for what seemed to be hours. The third evening, a dust minor whirlwind, with a cone-shape, passed by about a meter away from me. It looked like whirlpool in a glass of water. The dust was very fine which made it well visible. A small vortex, a sub-vortex, was hanging to it. The sub-vortex made an angle of 90 degrees revolution around the primary before it vanished. It went so fast, I was not able to see the small vortex spin

direction. It was the first time I saw a look like orbital motion at this scale. So the question raise: what made this sub-vortex orbit around the primary while spinning? It was like a planet orbiting the sun. These vortices and spiral shapes populate the universe at different scales. I decided then to find the relation between these scales. A decade before, I learned about a theory that would unify electromagnetism, gravity, weak and the strong nuclear forces. I was since fascinated and become obsessed by it. I tried to find the relation between electricity and gravity. Gravity is caused by mass whereas electricity is caused by charge. It came down to find the relation between mass and charge, two concept that never appealed to me. I never understood how a particle could have a charge nor how two bodies attracted each other, at a distance, just because they have mass. But what is a charge? In my opinion a charge is a metaphysical concept. There must be a physical connection between two magnets in order for them to attract or repulse each other. According to gravitational theory, planets orbit the sun without any physical connection between them. This also applies to electricity. The connection between the whirlwind main vortex and the sub-vortex was physical. The sub-vortex was inside the main vortex. It was physically attached to it. There was no empty space in-between. So my guess was that there must be a physical connection between the sun and the planets. The observation I made delivered me from the dead end I was in. I was glad and excited to have found a new approach to this enigma. I was finally dealing with a natural phenomenon at a scale I could feel, see and hopefully comprehend someday. The scale of wind turbulences is between particles and celestial bodies scales. So I felt like a particle physicist capable of zooming into the atomic world, he would be able to see electrons orbiting a nucleus of an atom. I was not interested in forces of physics any more. I knew that finding the relation between these scales will lead me to something bigger than unifying forces of physics, namely the theory of everything. So I started the quest of the ultimate theory. Furthermore, I knew I will find the link between the physical world and life. I also knew that it wouldn't be easy. The theory turned out above and beyond all my expectations.

Coriolis effect:

The general explanation of spiral forms of cyclones is air flow

between the poles(high pressure areas) and the equator(low pressure areas) combined with the Coriolis effect. Coriolis effect is a deflection to the right(in the northern hemisphere) of air movement due to the difference of angular velocity between high and low latitudes as Earth rotates. But, Coriolis effect is only significant in large scale like the case of cyclones. The difference of angular velocity between two point in a minor whirlwind is too small to cause air to deviate and spiral so deep. Hence it was evident for me that the turbulences I observed, at that scale, could not be explained by the Coriolis effect. Coriolis effect is used i.a. to correct trajectories of projectiles aimed towards the poles. Applying the Coriolis effect to air flow, even at large scale, did not appeal to me. From the first day I made the whirlwind observation, I was aiming for a model like Russian dolls. I imagined a model with spirals nested inside spirals. I did not know at that time that fractal mathematics existed. Only couple of years later, I discovered fractals and began to study them.

The breakthrough:

I have been watching the clouds for many years trying to solve this puzzle. After many years of research and analysis, I finally succeeded in putting the pieces together. My first thought was that these vortices are coming from space, and are connected to Earth's interior. It took me 27 years to prove it. At an early stage of this research, I was convinced that Cirrus clouds are Earth's magnetic field lines. But, clouds have many complex structures that doesn't correspond to magnetism as we know it. Or, at least as we think we know it. In this theory, we will discover that clouds, wind and solar activity features are electricity and magnetism tangled together. Due to lack of financial support, I was never able to dedicate myself to this theory. Only in July 2015, during a favorable period, I conducted an intensive research and made the most breakthrough's. After many years of research, I came to believe that Earth atmospheric dynamic and solar activity features are the same phenomena. For instance, I was convinced that coronal loops are the same phenomenon as high-level Cirrus clouds and that prominence's should correspond to jet stream clouds. Other phenomena, like solar flares and coronal mass ejections, were difficult to map to Earth's atmospheric observations. Moreover, the sun is far from being an

ideal magnet. Few field lines, coming out of northern hemisphere, enter the southern hemisphere like in a bar magnet. Also prominence's and coronal loops do not cross the mid-plane as you would expect from a dipolar magnet. My knowledge of astrophysics, and solar physics in particular, was elementary. In July 2015, I started learning more about the sun. While studying sunspots, I realized that they are the same phenomenon as punch hole clouds, this was a big breakthrough. In an attempt to understand fractal geometry and it's relation to nature, I was looking for a fractal with sunspots and coronal loops. Or, in case of Earth, punch hole clouds and Cirrus clouds. After a long quest, I found a freeware fractal generator called Tiera-zon, made by Stephen C. Ferguson in 1998. This fractal program has about 100 fractals and their corresponding formula. It had all kind of fractals and about 50 filters. You can also generate your own fractals. So I started playing with it. Somewhere deep in the list of the fractal models, and with the right filter, I found what I was looking for. I could not believe it, there they were, sunspots and coronal loops. These fractals are so complex, they are given the name "Jungle Fractals". The Tiera-zon fractal generator documentation was, as Stephen described it, far from complete. The fractal generator has filters that can be applied to the fractal images such as stalks, bubbles and atan methods. You can also adjust the colors. This made it more divers and difficult to grasp. It took me a while to use these filters to my advantage to find what I was looking for. Later they became of great importance to my research. I started discovering more features, to begin with, electric and magnetic field lines. Then, I discovered prominence's, density cavities, polar plumes, polar rays, spicules, cumulus clouds, synclines, astrophysical jets, sunspots bridges, sunspot light bridges/rainbow clouds, electric plasma, magnetic plasma, electromagnetic plasma, pixies, ball lightning etc.. This fractal model comprise all kind of phenomena. It has the answer to many mysteries I was desperately trying to solve, and others I didn't even know about. To an untrained eye, this fractal has no meaning at all. I realized then that I found a celestial body fractal model. Eureka, this fractal model is the "holy grail" of physics. I also found a fractal that could be a model of a binary star. This is more than I ever dreamed of. I couldn't believe my luck, I was out of my mind.

Next step was to explore these complex fractals and map them to the observations made in the real world, to see how far they match. But, these fractal models are a 2D images and they are not dynamic. They don't answer all questions. I need to use my imagination to explain the nature of light, coronal mass ejection(CME), flares, rainbow clouds, coronal heating problem etc.. All kind of phenomena I need to work on in order to come up with explanations. It's a lot of work. Unfortunately I have very little time to spend on this research. My daily job cost me to much time and energy. In an attempt to dedicate myself to this theory, I wrote a research proposal to couple institutions to gain funding for my research. But, I never received any answer. So I accepted the fact that science will have to wait little longer for this theory. On the other hand, I'm free to think and write without consideration for funding.



Fig 1. A solar eclipse showing the electric and magnetic flux tubes coming out and going into the sun.

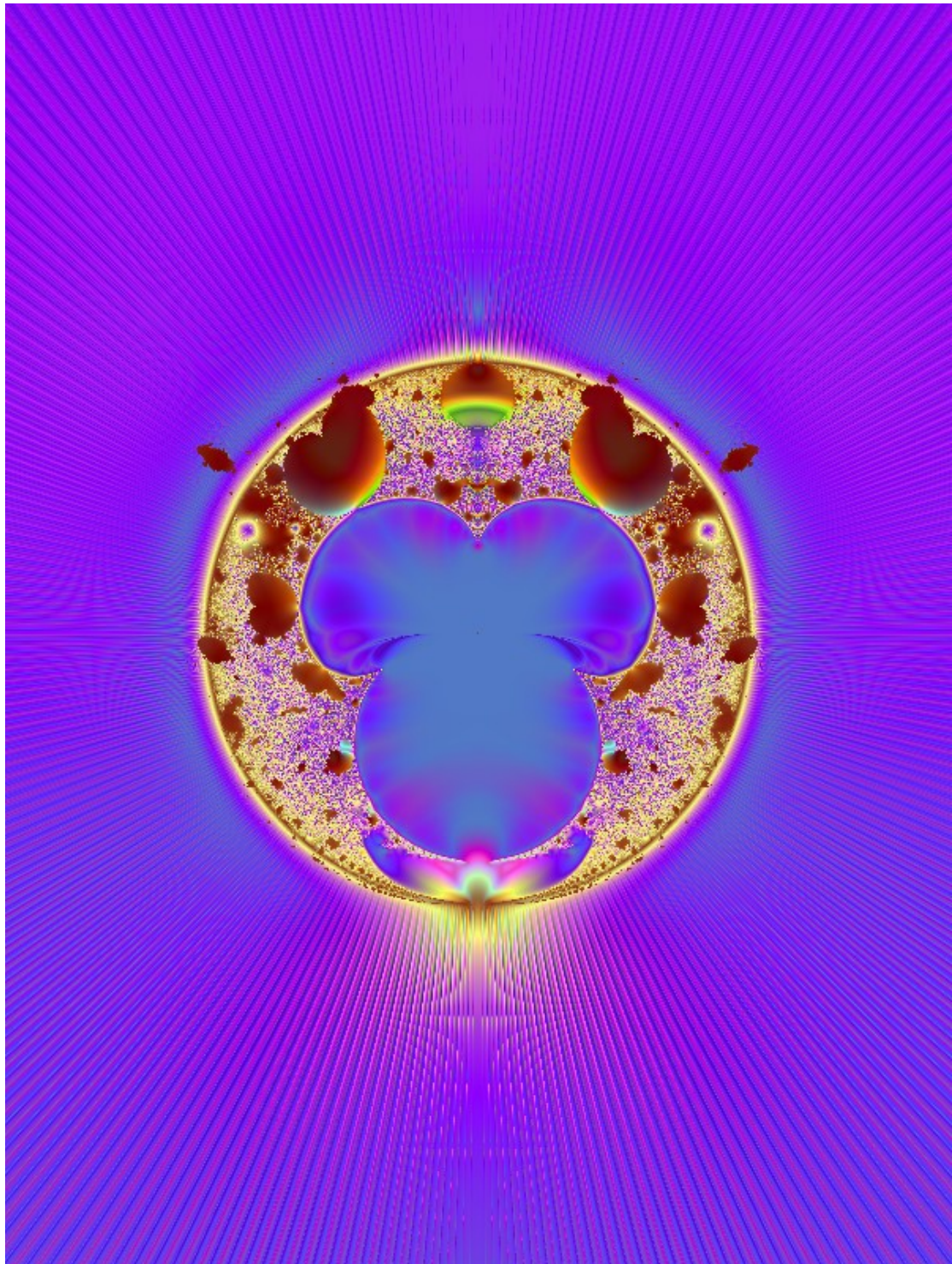


Fig 2a. A fractal model of a celestial body. In this model we see the cavities(in brown colour) all connected with each other and with the main chamber at the centre(blue colour). There are two main opening at the poles. Celestial bodies are spherical and hollow. They are populated by cavities at all scales. There is a main cavity/chamber at the centre. Density cavities may extend to the atmosphere. See above two cavities at about 50 degrees latitude(like

solar prominence density cavities).

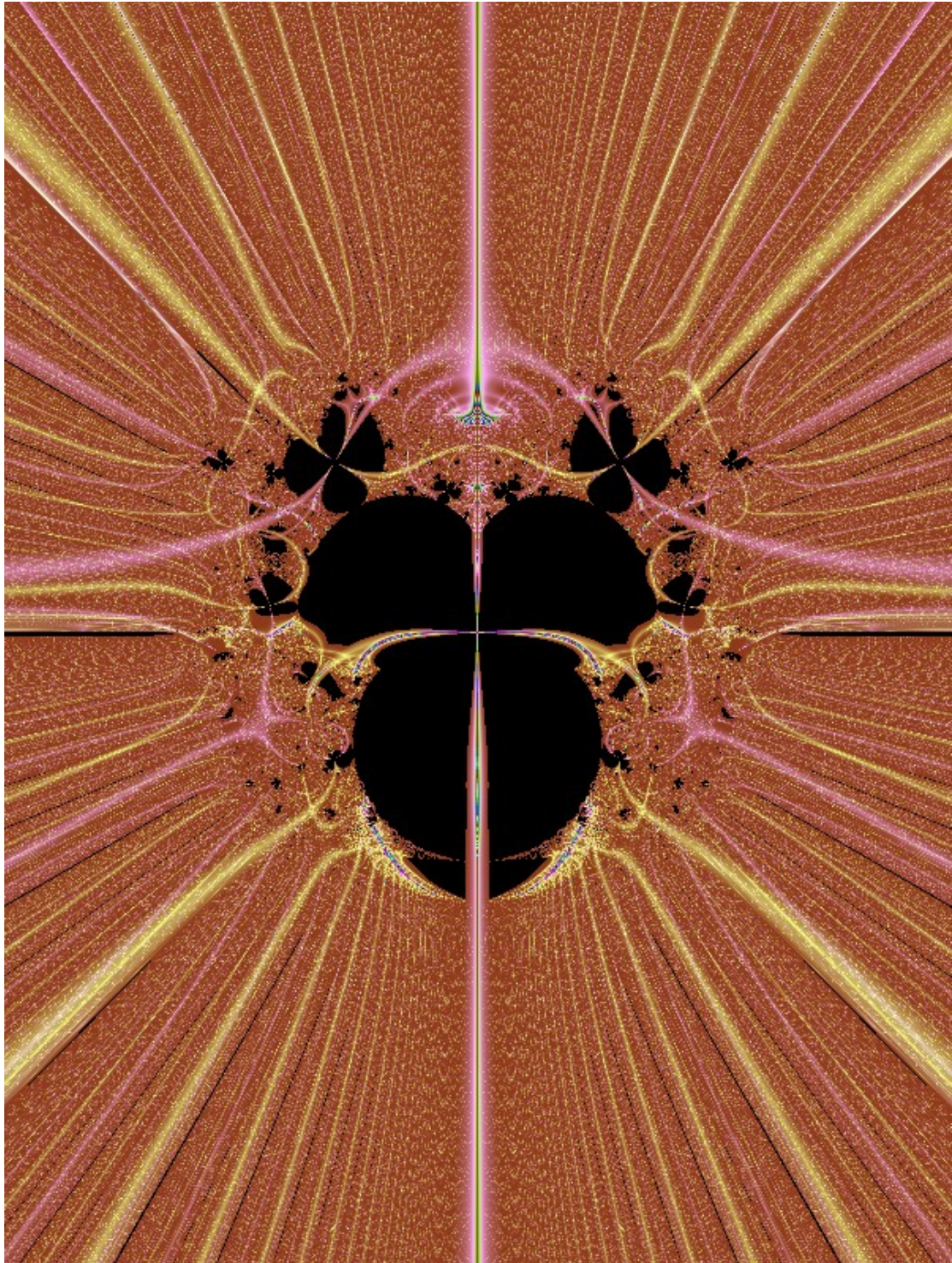


Fig 2b. This fractal image is as model of a celestial body. The yellow lines are the magnetic flux tubes. The white lines are the electric flux tubes. Inside every celestial body is hollow chamber at the centre. The cavities surrounding the central chamber are also hollow.

We will zoom into this celestial body fractal model and watch different aspects of it using filters.

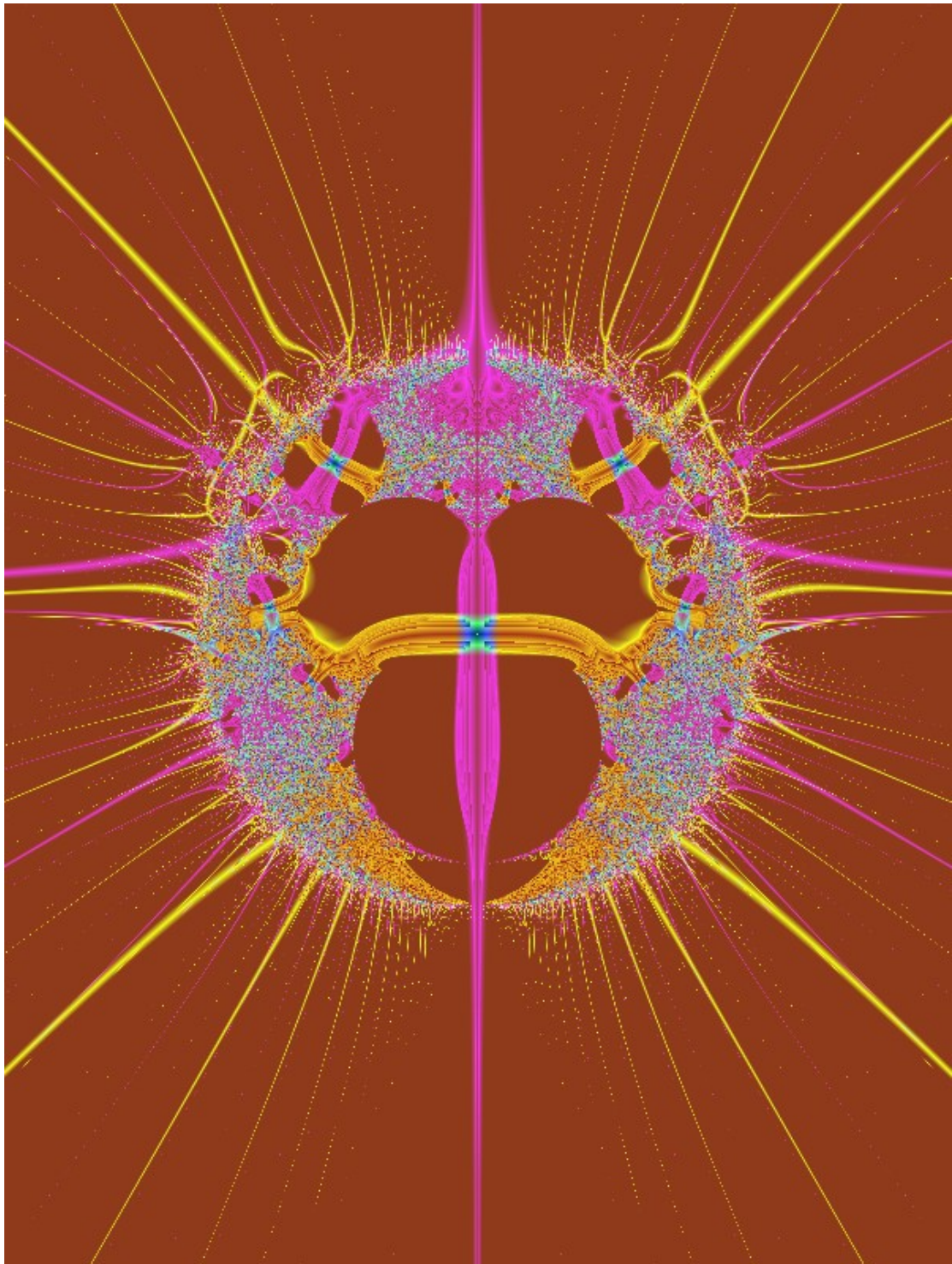


Fig 2c. This image shows the same model as above with different filter(called “Diamonds”). In this model the yellow lines are the magnetic flux tubes. The red/pink lines are the electric flux tubes.

Two prominences are visible in the northern hemisphere east and west. A prominence can reach the size of the radius of the sun.

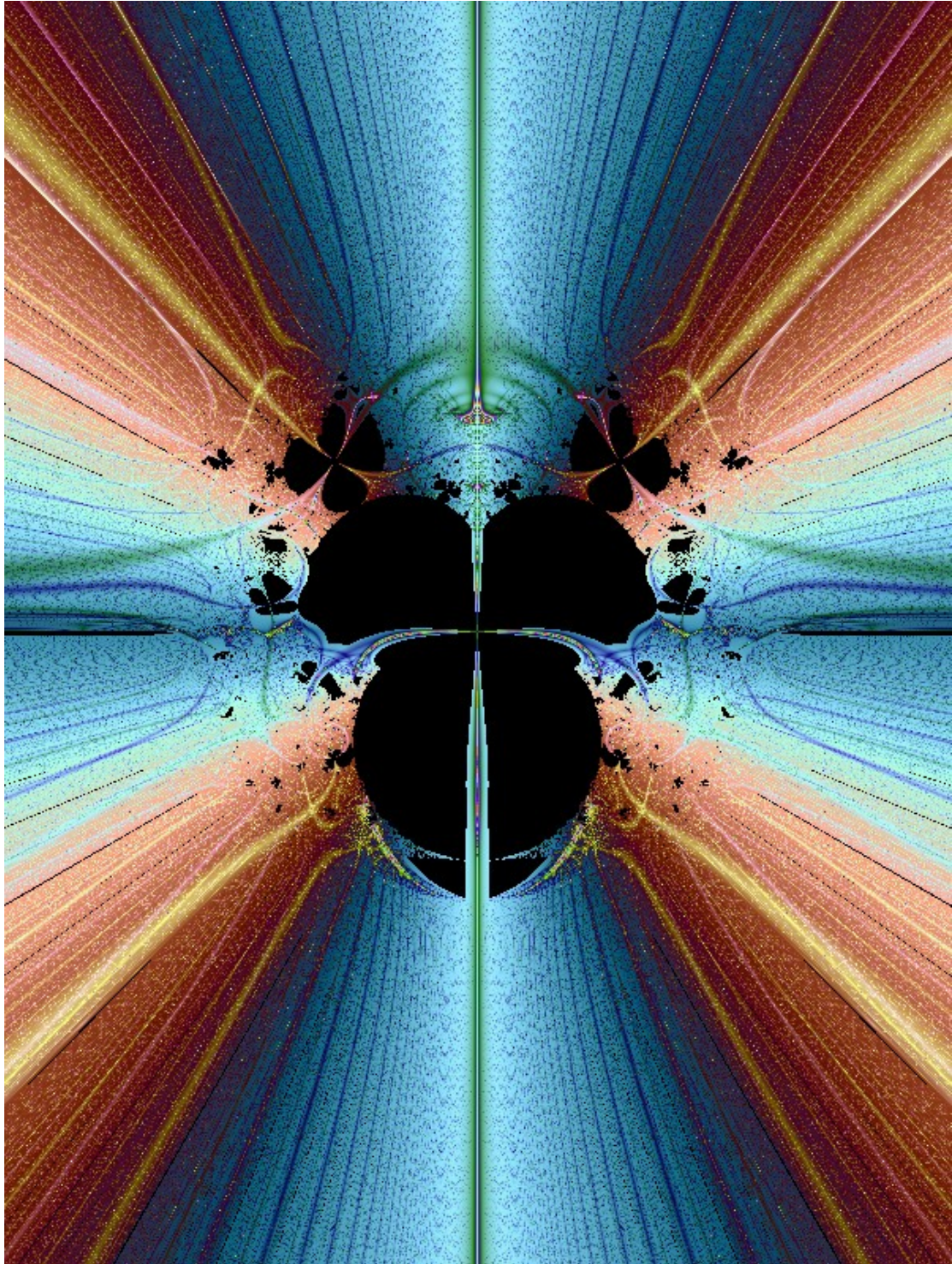


Fig 2d. In a celestial body electric flux tubes dominate the axial and mid-plane whereas the magnetic flux tubes dominate the diagonals. Astrophysical jet outflow.

The whirlwind theory

Where to start in order to explain numerous natural phenomena that are all linked together. It's difficult to explain everything at once. So, some phenomena will be mentioned but only explained later.

Because different phenomena are related to each other, repetition will occur every time I will explain each one of them. Also because I will explain them with the same principles. The good news is, this theory is very pictorial, we have plenty of images to illustrate it. To give it a try, I will first begin with the main picture by describing celestial bodies electric and magnetic fields morphology and how celestial bodies interior looks like.

According to the Dynamo Theory, the solar magnetic field is originate through the action of a hydromagnetic process in the sun's interior. A turbulent environment of convection zones. These convections zones create the solar magnetic field. But the sun exhibit all kind of features and behaviour that has little to do with a dynamo. Solar activity features like sunspots, solar cycle, prominences, coronal loops, coronal mass ejections(CME), flares, sun magnetic flip, solar wind, coronal extreme high temperatures etc., does not fit into a liquid dynamo model. Nowadays, detailed observations of solar activity features urge a great need for a theoretical model. In this theory I will present and describe fractal models of celestial bodies that comprise all these features and activities, including some that hasn't been discovered yet. Also I will advance many interpretations of these models.

Celestial bodies are spherical and hollow:

Celestial bodies are spherical and hollow with two main openings at the poles. They are populated by cavities at all scales. There is a main cavity at the centre, that I will call the "density chamber". We are going to discover that density chambers are at the heart of every

living body. The density cavities are connected to each other and to the density chamber. It is like taking a balloon and creating small balloons from its boundaries, at different scales, leaving an opening between them. So if you enter a cavity of a celestial body, at its surface, you can travel through these cavities, that gets bigger and bigger, till you reach the density chamber. The density inside the celestial body is much lower than the density at the surface. Hence the structures inside the main chamber are less dense and much bigger than those at the surface. The so called gravity, is also weaker. So inside Earth density chamber, for instance, you would feel much lighter.

There are two types of cavities: The density cavities and the dead zone cavities.

Density cavities:

Inside every density cavity, electric and magnetic field lines cross each other, at a right angle at the centre, in plasma form(plasma will be explained later). So the density cavities are the answer to the question why both fields are perpendicular to each other. Inside the cavities the field lines are squeezed against each other creating electric and magnetic plasma. See Fig 10d/e. The density inside these cavities is several times lower than their surrounding. Density cavities have different shapes and are all connected with the density chamber. In the atmosphere of the celestial body, density cavities can form carpets of cumulus clouds. When we watch the clouds, we don't see the cavities but rather the electromagnetic light produced by punch hole clouds. Punch hole clouds covers density cavities. We will see later how they produce radiation. Density cavities can raise and form supercells or cumulonimbus clouds(till 15 km high). Some are so huge they pull the atmospheric layers up hundreds of kilometres forming a bulge at bow shock. They are all loosely connected. On Earth these huge cavities has been observed by satellites and are called "auroral density cavities". The POLAR satellite(Electric field experiment) detected this plasma depletion cavities in a region centred on 70 degrees latitude. The European space agency's Cluster mission, a flotilla of four spacecraft, found these density cavities/holes. They are 10 times less dense and 100 times hotter than their surroundings. In particles collider's they are

called bubbles. The bubble chamber is named after them. They form along the track of particles. Their density is proportional to particles energy loss. They are characterized by a cross inside them. This cross is the electric and magnetic plasma crossing each other at angle of 90 degrees. They are thought to be air pockets and hence insignificant. On the sun, they are called "coronal density cavities" or "prominence density cavities" or "filament cavities". They are associated with coronal mass ejections(CME), which are themselves associated with flares. We will see later what is the relation between these three phenomena. Until now they remained a mystery. When observed at the sun poles they are called "polar crown cavities". When observed on planets, they are called Hot Flow Anomaly(HFA). Plasma suspended in the atmosphere of planets is associated with HFA's. These HFA's are huge cavities with plasma hanging in them. This electric plasma populate the axis of the density cavity. HFA's has been observed on Venus, Mercury, Earth, Saturn, and Mars. In aviation they are called "air pockets". When encountered, they feel like a quick drop, followed by a sudden stop. I have been told by an ex-pilote that this sudden drop can be hundreds of meters deep. Nowadays we think wrongly that air pockets technically doesn't exist. We attribute this sudden drop to a downward flow of air. Hence we consider this appellation of the past. In soap films, density cavities are these dark spots. A close examination shows that they are all connected.

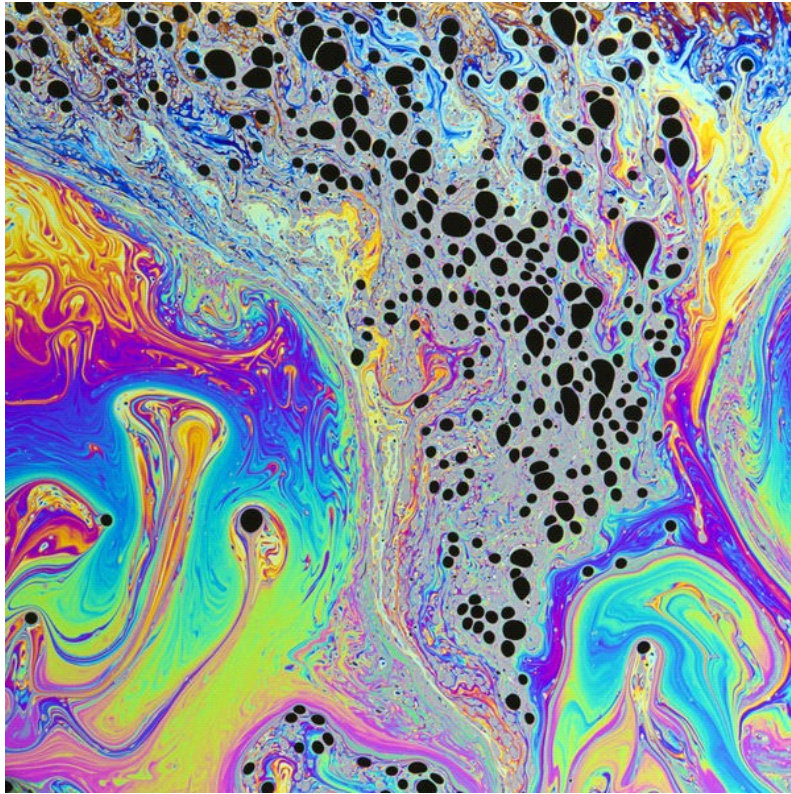


Fig 3. This is a soap film image. Density cavities(in black) pushing the layers up. The density cavities are loosely connected to each other.

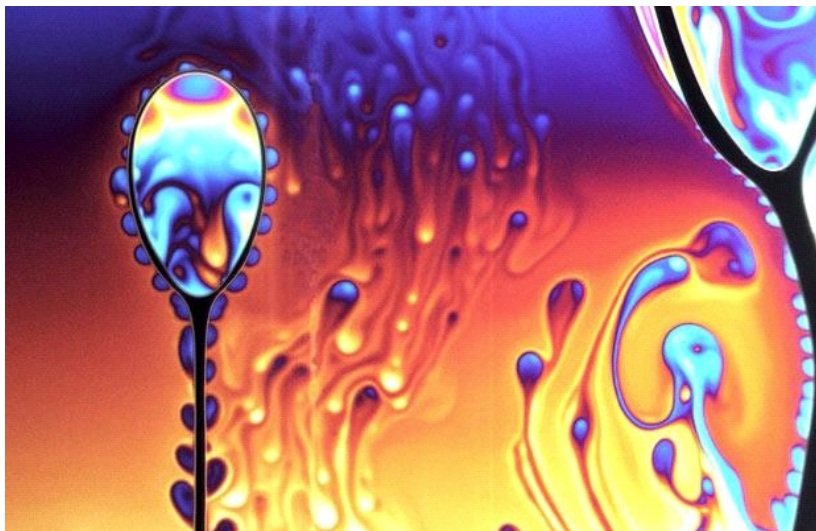


Fig 4. Density cavities are connected to each other. The boundary of the density cavities are populated by smaller density cavities in a fractal fashion.



Fig 5. In this rock, the cavities have this black dark colour with white crystals pointing inwards. These cavities are all connected.



Fig 6. Cavities (light colours area). The cavities are all connected.



Fig 7. A rock with beautiful colours and a density chamber cavity with white crystals pointing inwards.



Fig 8. Cavities are also found in the Belousov-Zhabotinsky chemical reaction. These patterns resembles the ones we see in stones. See image Fig 6/7.



Fig 9. A density chamber cavity. Cavities exist at all scales. The crystals always pointing inwards.

Further more, density cavities populate all kind of stones like agate stones, geodes and Moeraki Boulders(big round rocks). Before I found these fractal models, I always wondered why these stones are hollow.

Although density cavities has been observed, at different scales, on planets, the sun, the atmosphere, bubble chambers, chemical reactions and elsewhere until now no link has been established between these phenomena.

Density cavities has been observed many times from the ground, by satellites and by different spacecraft's. The primary observations are:

- The inside of the cavity is less dense than the outside.
- The density cavities are elliptic and asymmetric.
- Low and high temperatures inside the cavity.
- Cavities contains primarily only hot plasma(auroral density cavities).
- Plasma density gradients perpendicular to the geomagnetic field.
- Sudden jump of electric field at the boundary.
- The boundaries shows an abrupt change in the magnetic fields.
- Narrow parallel electric currents.
- Electric currents are accelerated inside the cavities.
- Electric field current is perpendicular to the magnetic field.
- Electric field current is perpendicular to boundary.
- A rib structures inside the cavities called "low density ribs".
- "low density ribs" location remains approximately fixed inside the cavity.
- "low density ribs" density progressively decreases.

All these features and characteristics can be found in the density cavities of the fractal model. When both fields cross each other inside a cavity they meet at the centre in perpendicular way. Both fields converge towards the centre of the cavity in infinite way. When converging they create this rib structure that has been observed. At the intersection point the thickness of both plasma bundles is zero.

Air pockets, coronal cavities, density cavities or density depletion are all the same phenomenon. I will use these terms interchangeably. To understand density cavities, let us consider a relatively simple fractal model of a density cavity. Inside the density chamber electric and magnetic plasma cross each other at a right angle. See Fig 10a/b/c/d/e.

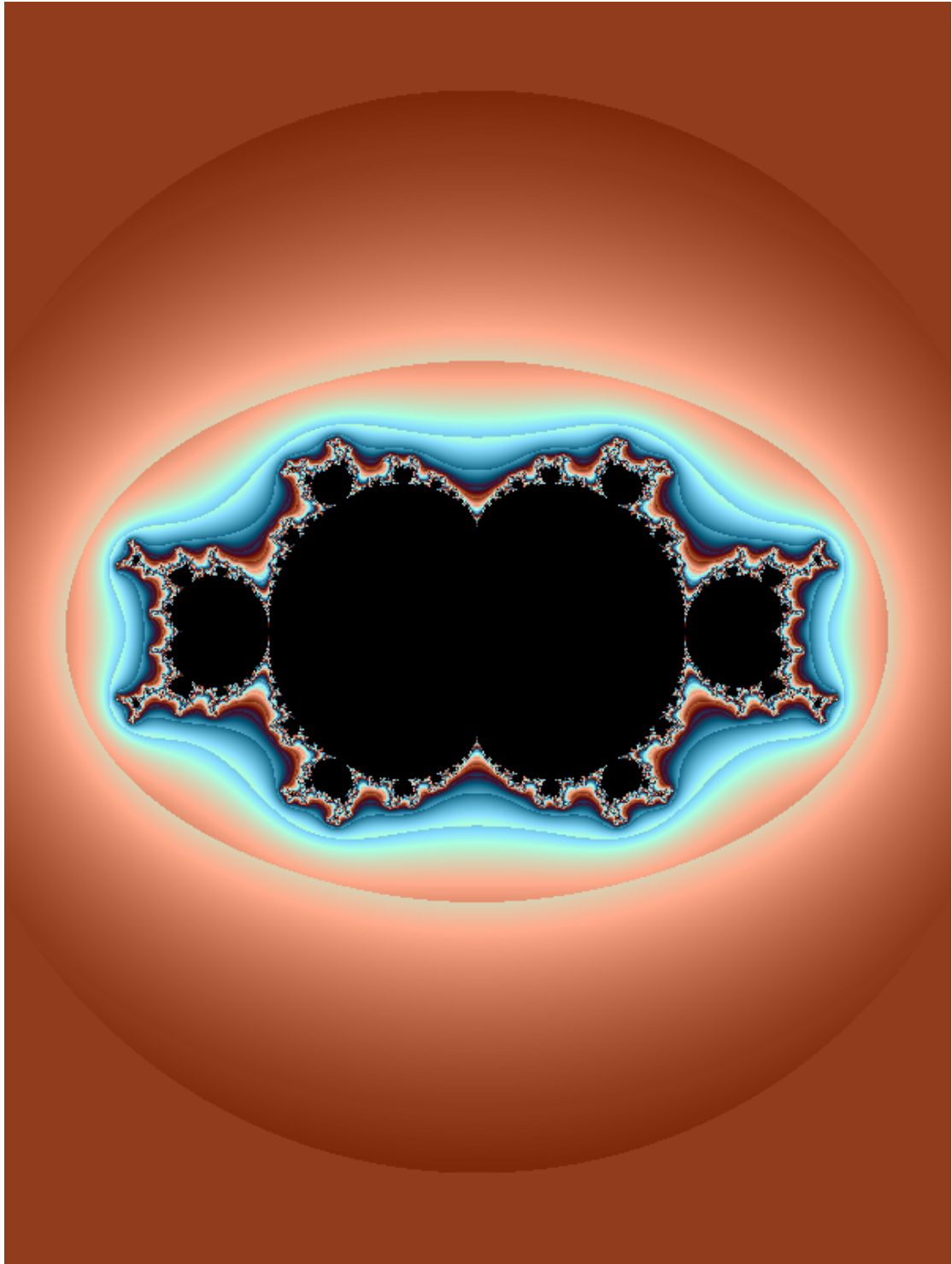


Fig 10a. Relatively simple fractal model of a density cavity with an elliptic shape.

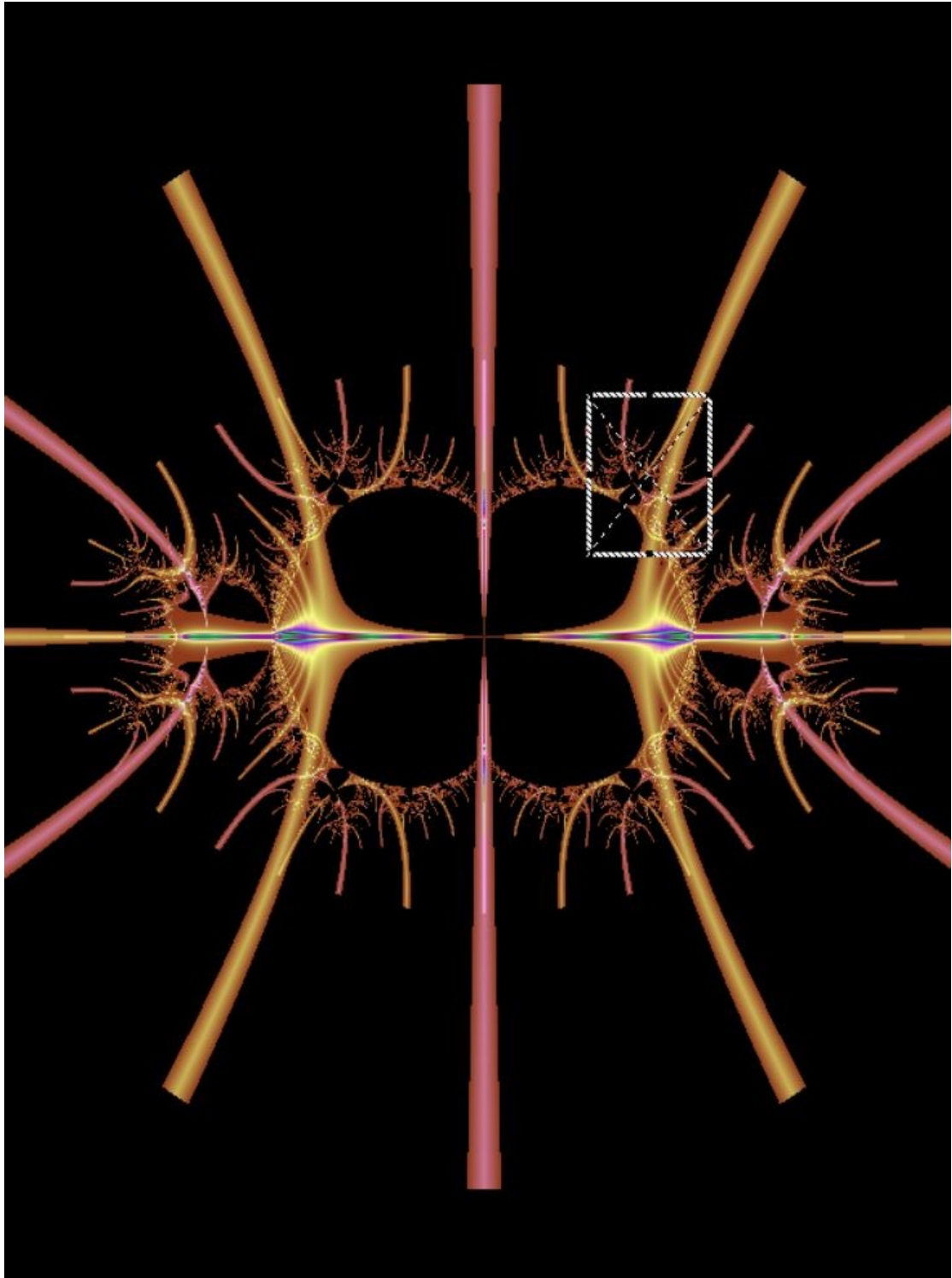


Fig 10b. This fractal model is presented to simplify the complexity of a density cavity. It show how electric and magnetic flux tubes cross each other in plasma form inside the main cavity. It also shows electric and magnetic loops using density cavities as a roundabout performing a U-turn. Electric and magnetic flux loops makes a U-turn while crossing each others inside the density cavity connecting this way cavities/celestial bodies between them. Between the

celestial bodies the flux tubes are aligned.
Note: There are no punch holes/sunspots in this model.

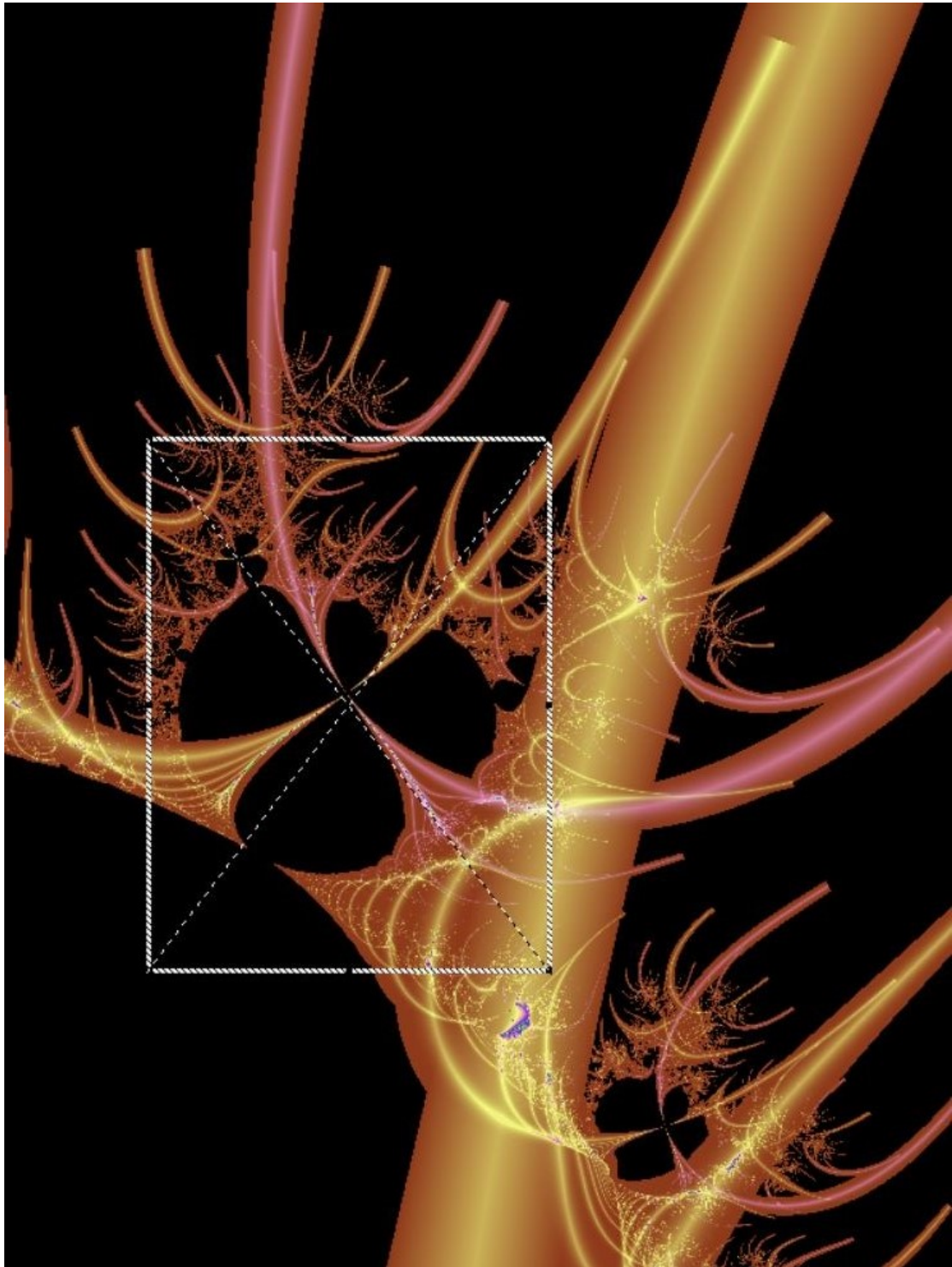


Fig 10c. A zoom into a density cavity shows electric and magnetic plasma crossing each other at right angle inside the density cavity.

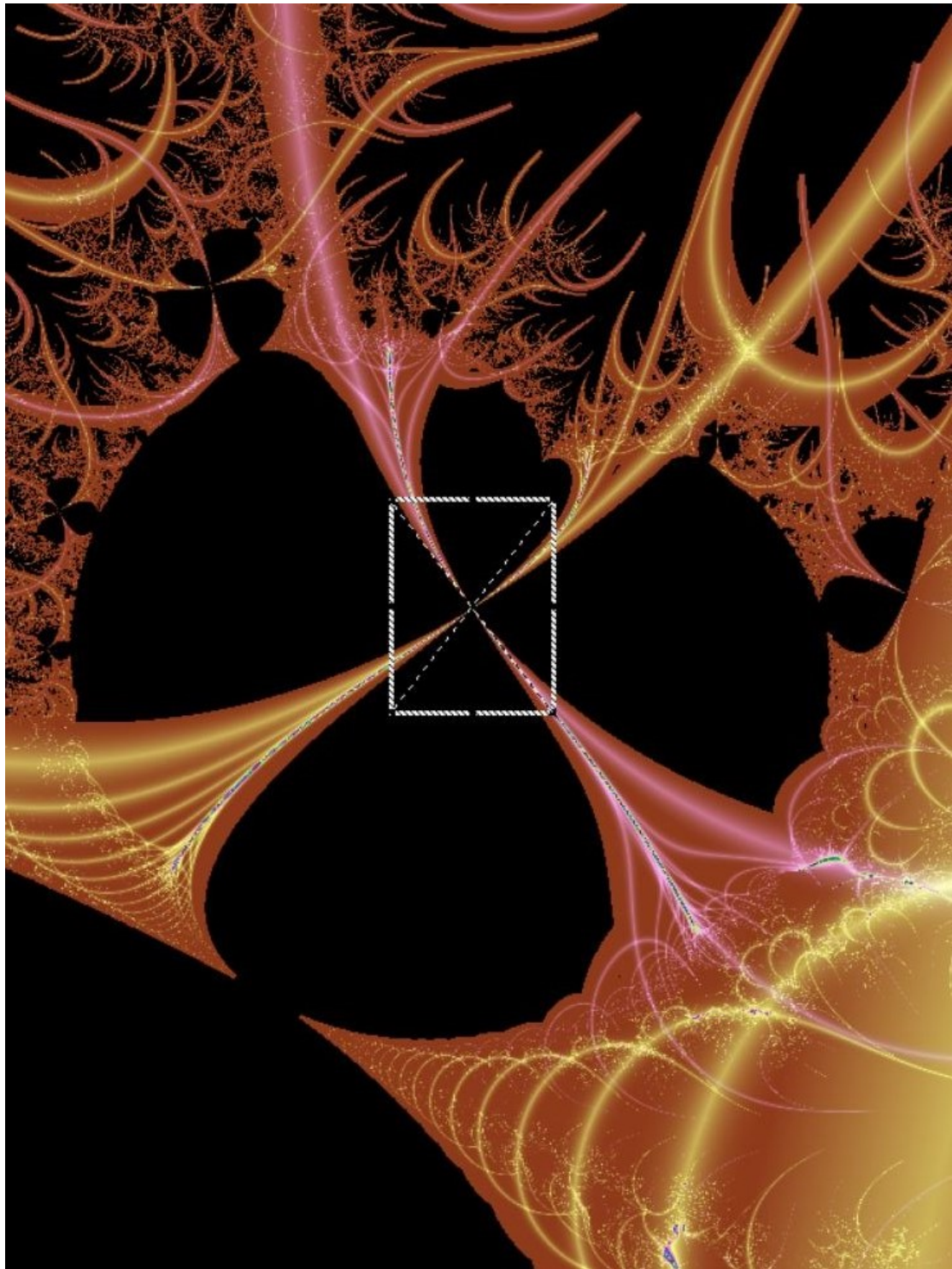


Fig 10d. A zoom into a density cavity shows electric and magnetic plasma crossing each other at right angle inside the density cavity.

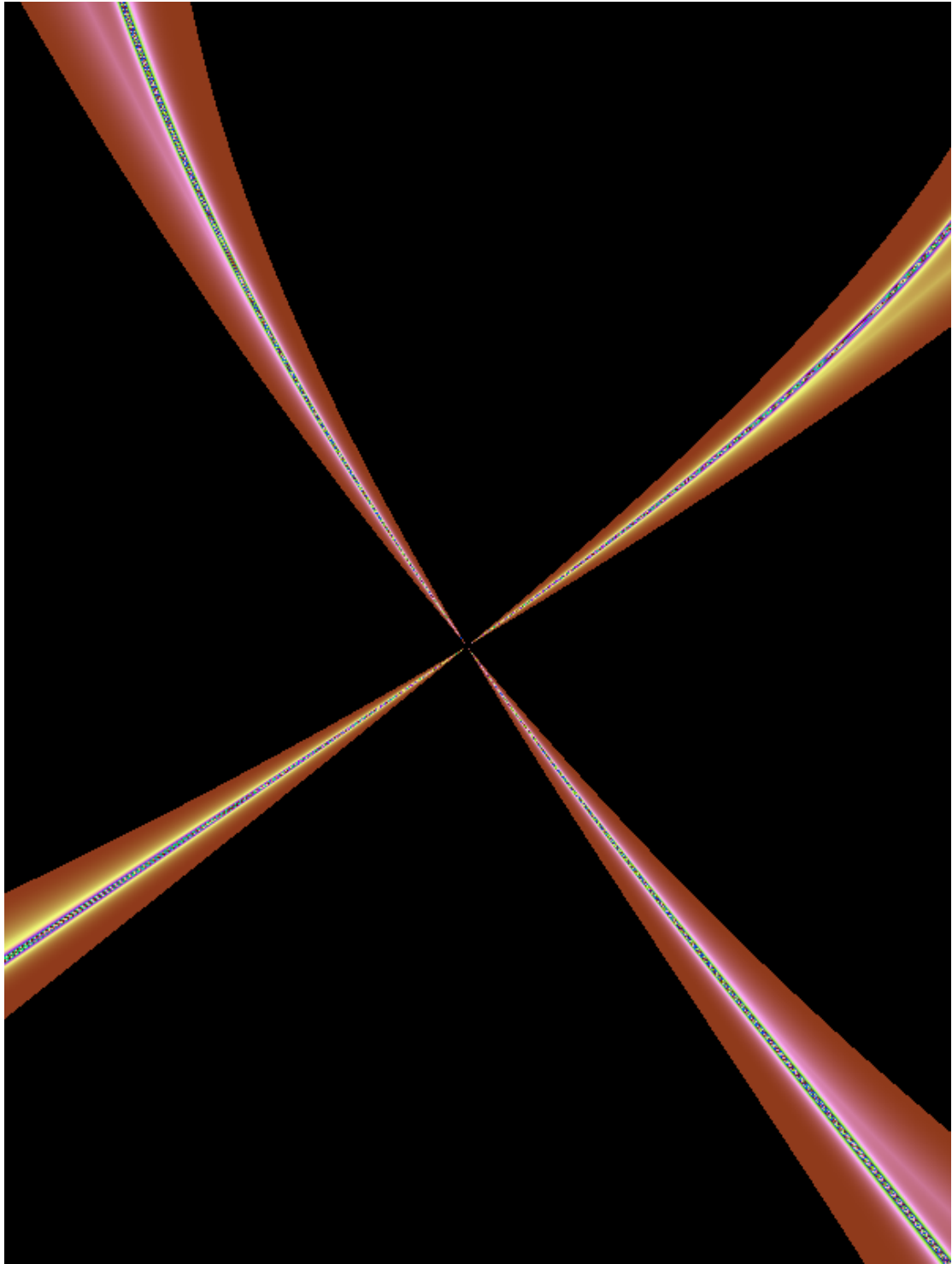


Fig 10e. Electric and magnetic plasma crossing each other at right angle inside the density cavity.

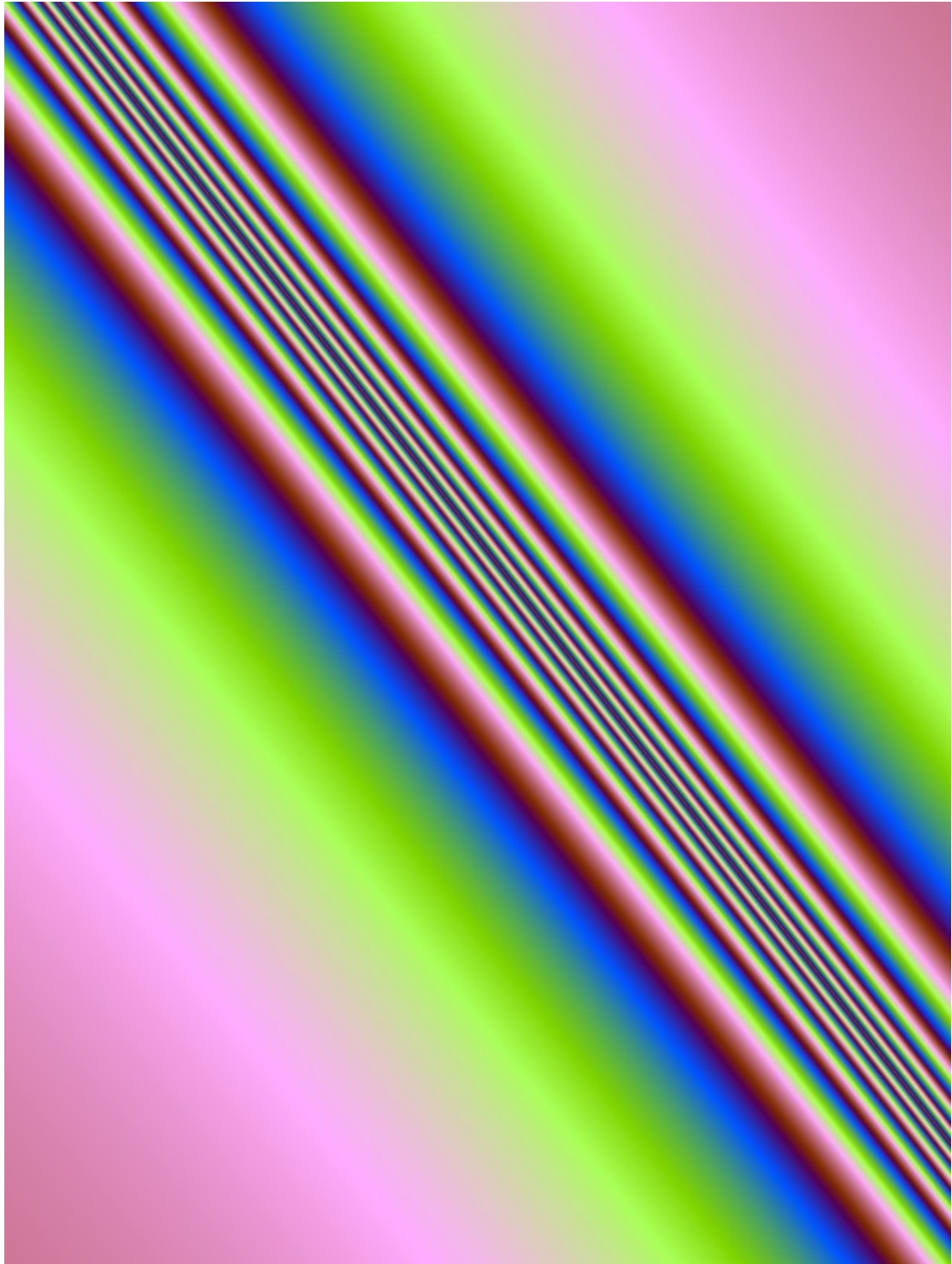


Fig 10f. A zoom into the electric plasma. Electric plasma, just like electric flux tubes, is a continuous medium.

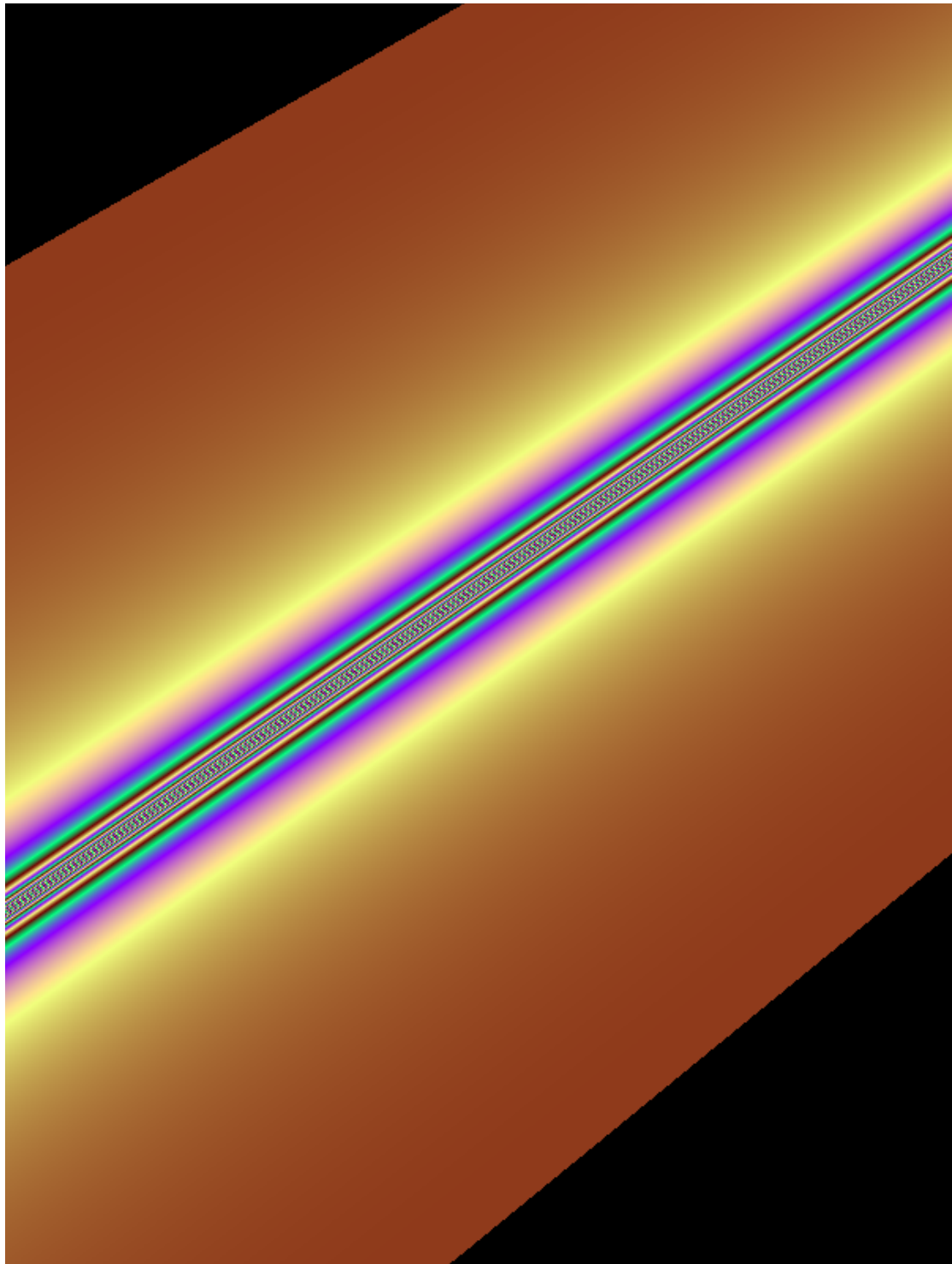


Fig 10g. A zoom in the magnetic plasma. Magnetic plasma is also a continuous medium.

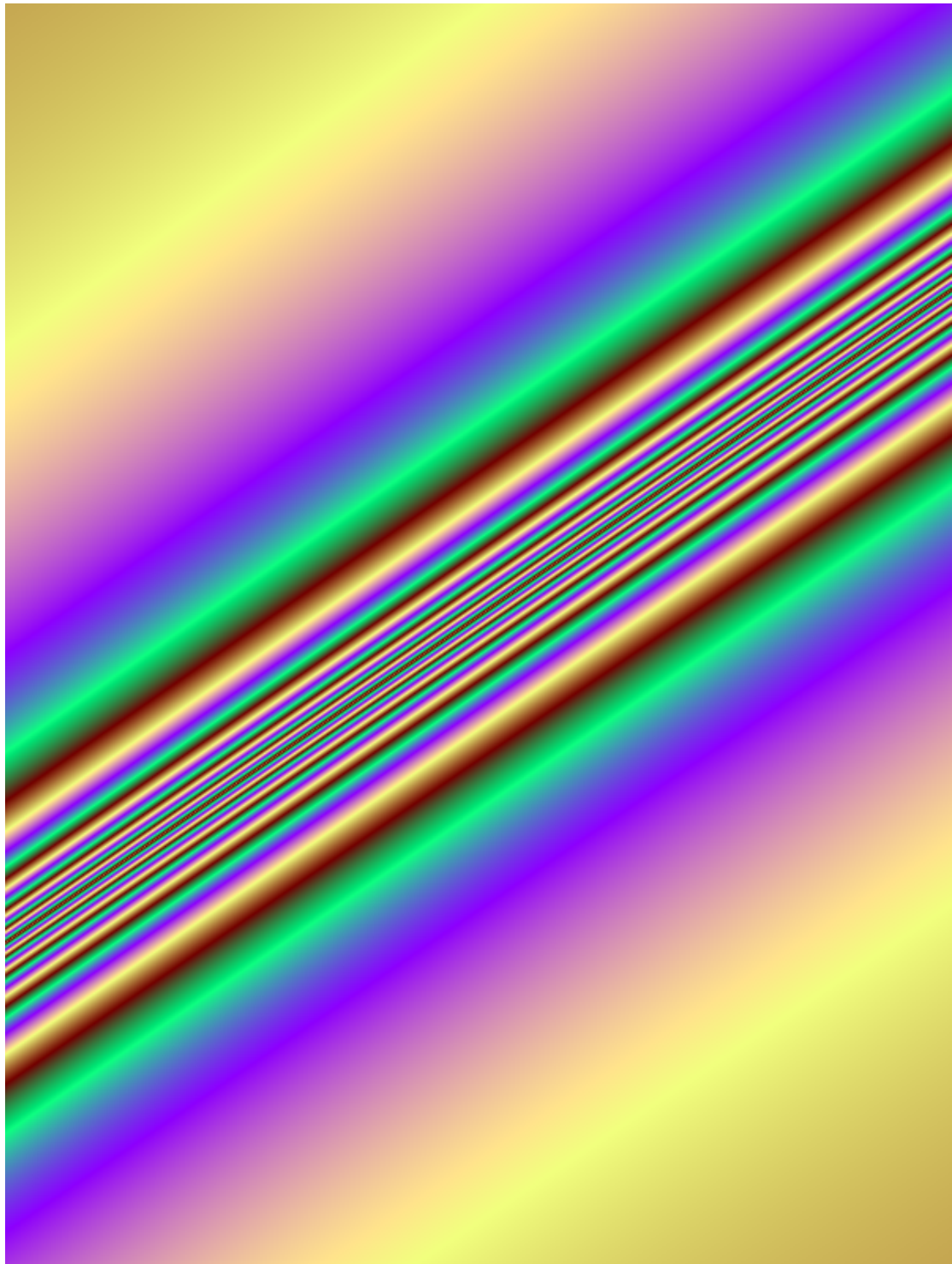


Fig 10h. A zoom into the magnetic plasma.

Dead zone cavities:

The second type of cavities are those that are open to the outside of the celestial body. These cavities extend to the atmosphere of a celestial body in what is called, in astrophysics, dead zones. So I will call them "dead zone cavities". They are also present in the north and south poles openings. Just like inside density cavities, electric and magnetic field lines cross each other in plasma form but not at a right angle. Dead zone cavities and density cavities can overlap. Density cavities are well shaped with clear boundaries. Whereas dead zone cavities have irregular shapes. Dead zones cavities are confined inside a boundary formed by a chain of connected density cavities. At the surface of a celestial body, dead zone cavities have a small opening to the outside. Blue holes are probably dead zone cavities. They have this bottle shape with side tunnels. A giant bottomless hole appeared in Northern Siberia in Yamal, called Yamal crater B-1 is probably a dead zone cavity. It reportedly sprung up overnight with burns at the edges of the hole. These burns are probably caused by electric plasma that flowed out of the cavity. This was a probably a sudden explosion. In the fractal model we see electric plasma crossing a dead zone cavity.

Electricity and magnetism:

Faraday's law's and James Clerk Maxwell equations allow us to understand electricity and magnetism, and gives us a mathematical insight into the close relation between them. But, we still don't know what is really happening. We are not able to explain what is really going on physically. These laws and equations are based on experiments. We can't see these fields, they are invisible. We know that a changing magnetic field generate an electric field, which is perpendicular to it, and vice versa. We also know that when both fields propagate together into space, they create radiation. But, what we lack is an image of these fields and their interaction. Fractal geometry will reveal not only the morphology of both fields, but also how they interact with each other. We are going to discover that these electric and magnetic field lines not only they are physical, but also together they shape the world. Faraday use to speculate that what he called lines of force are physical. James Clerk Maxwell proposed a theory of field forces inspired by gear systems.

According to him, Faraday tubes are comparable to vortices rotating in the same direction thanks to intermediate sprockets. This mechanical analogy transposing into electric and magnetic magnitude leads him to establish the unit of light and electromagnetic waves. Later he abandons the whirlpools that populated his aether, and retains only an energy disturbance in the form of waves propagated through electromagnetic field according to the electromagnetic laws. Our understanding of electricity and magnetism didn't change much since. The contemporary understanding of electric and magnetic field lines is as follows: We normally represent an electric field, created by a charge, by drawing lines connecting all the points, around the charge, that has the same vector field direction. We end up with lines that all converge towards the charge, that we call field lines. But we consider these lines as representation only. They help us visualize the vector field. They have no physical signification. These lines does not exist and we shouldn't take them too serious. Just like longitudes and latitudes, electric and magnetic field lines are not real. We may draw an arbitrary number of lines originating from a charge, and as long as we are consistent, we can deduce the magnitude of the electric field from the number of lines. In other words, the magnitude of the electric field is proportional to the density of the field lines. The same applies to magnetism. The magnetic field magnitude is proportional to the density of the magnetic lines. The closer the field lines, the stronger the magnetic field. The more spread out, the weaker the magnetic field. The magnetic flow is also not real. There is no flow, it's just a mathematical construct.

In this theory electric and magnetic field lines are real, and so is the flow in them. We see these lines almost every day in the form of Cirrus clouds. Coronal loops is another example.

We know that magnetic field lines are close loops, and that electric field lines are also close loops when induced by a changing magnetic field. In electrostatic, electric field lines start at a charge and end up at another charge, or extend to infinity in absence of charged particles. In this theory both electric and magnetic field lines are close loops and there are no charged particles. Moreover electricity nature, just like magnetism, is continuous not particulate.

Anthony Standen wrote in an article in July 1946 titled:

WHY DO WE BELIEVE IN ELECTRONS

"If J. J. Thomson had discovered phenomena which could be more easily explained on the assumption of the electron than without, this would amount to the usual scientific basis for adopting a hypothesis. If the phenomena could be explained easily by the assumption of the electron but not at all or only with fantastic difficulty without this assumption, this would amount to as near as science would ever get to a "proof" of its hypotheses; our belief in atoms is, of course, of this nature. But although this experiment is compatible with the hypothesis that electricity is particulate, it is just as easily compatible with the hypothesis that electricity is not particulate but continuous."

Electric and magnetic loops exist at all scales. These are actually tubes with different sizes. The thickness of a tubes may change in space and time. Energy flows through these tubes. Henceforth, I will call these "field lines" flux tubes. Flux tubes has been described by James Clerk Maxwell as a mathematical construct. But actually they are real. So we may no more draw an arbitrary number of these tubes, or the "field line" confined in them, as they are real.

James Clerk Maxwell describes flux tubes as follow:

"If upon any surface which cuts the lines of fluid motion we draw a closed curve, and if from every point of this curve we draw lines of motion, these lines of motion will generate a tubular surface which we may call a tube of fluid motion. Since this surface is generated by lines in the direction of fluid motion no part of the fluid can flow across it, so that this imaginary surface is as impermeable to the fluid as a real tube."

James Clerk Maxwell

Notice that James Clerk Maxwell consider the tubular surface, that wrap up the flux tube, as being imaginary(mathematical construct) and uses the analogy with real tube, to explain the fluid motion inside it. The term fluid motion is a purely imaginary substance and the "lines of fluid motion" are what we call field lines. Also, he is talking about field lines inside the tube. In the fractal models there are no field lines inside the tubes, and the tubular surface is real. The tube is not made of multiple field lines bundled together, but is

rather one single elementary entity. The tubular surface is part of the flux tube. The cross-section of the flux tube is not smooth, the flux inside the tube is more concentrated at the centre of the tube.

Electric and magnetic flux tubes loops are the building blocks of nature. These loops can intersect with each other forming complex structures. The simplest structure consist of a magnetic loop and an electric loop intersecting with each other at two points. At one intersection point they form a density cavity. At the second intersection point, a punch hole is formed. They form a crescent shape with the thinnest point residing at the centre of a punch hole where they converge/intersect. The density cavity reside somewhere along the thick part of both tubes. See fractal images Fig 11a/b, 12a. Inside the density cavity, the magnetic and electric flux tubes cross each other at a right angle.

Magnetic flux tubes has been observed on the sun and between Jupiter and it's moon Io. They differ from their surrounding by a larger magnetic field. Solar polar plumes are magnetic flux tubes. The polar rays are electric flux tubes. The Earth's pole magnetic alignment and the Birkeland current are also flux tubes.

We consider electricity and magnetism as a product of matter. It's actually the other way around. Matter is electric and magnetic flux tubes tangled together in a fractal fashion.

In a study of fractals, and by using the analogy with electricity, Adrien Douady, French mathematician, and John Hamal Hubbard, American mathematician, called these flux tubes "line of force" or "external rays". They also used the analogy between electric equipotentials and the Julia/Mandelbrot set lemniscates(equipotential curves). They supposed that the Mandelbrot set was an electrically charged metal object that created an electric field around itself. Little did they know that they were dealing with actual electromagnetic field lines. These equipotential curves seems to obey the Titius-Bode law of planetary orbits. This law suggest that, extending outward, each planet would be approximately twice as far from the sun as the one before. Notice that the fractal models I'm presenting in this manuscript are a 3rd order fractals.

Celestial bodies are made of electric and magnetic flux tubes. These tubes interact with each other. They both exist inside and outside of the celestial body. Together they structure the tissue of a celestial body. Flux tubes never occupy the same space. There exist no point in space that has more than one flow direction. In other words, there can be no point in space where two flux tubes exist simultaneously. We already know this, at least when it comes to magnetic "field lines", from Maxwell equations. But now, we are going to see it in the fractal models, not only valid for magnetic flux tubes, but also for electric flux tubes. The geometry of electric and magnetic flux tubes networks determine the structures we see in nature. They create a network that determine the shape of the celestial bodies. They also connect celestial bodies with each other exchanging energy. This is what is known as "interplanetary magnetic field"(IMF). However we talk only about the IMF, when the interplanetary electric field(IEF) is as important. We also study the structure of the magnetic field of celestial bodies, but we are unaware of the structure of their electric field. In astrophysics, celestial bodies magnetic fields play an important role, whereas electricity is considered as a by-product.

Celestial bodies have an electric and a magnetic field that are interlocked. Between the celestial bodies, these flux tubes collimate, whereas inside the celestial bodies they are tangled with each other forming their tissues. Celestial bodies electric and magnetic fields are dynamic. They cohabit and share space. Every flux tube occupy a fixed space at certain time. Not all space is filled with flux tubes, some spaces are flux tubes free(neutral). In other words, electric and magnetic fields are not smooth. So, these are different kind of fields than the mathematical force fields we know. A better description would be a "web".

Magnetic flux tubes with the same flux direction may connect with each other. Flux tubes loops can connect with other flux tubes creating new loops as long as the flow direction is the same. When the flux direction of both flux tubes is opposite they repulse each other. This is what we observe when two bar magnet interact with each other. The same applies to electric flux tubes. Electric flux tubes connect and reconnect just like magnetic flux tubes does. However they create a network that is slightly different than the magnetic flux tubes.

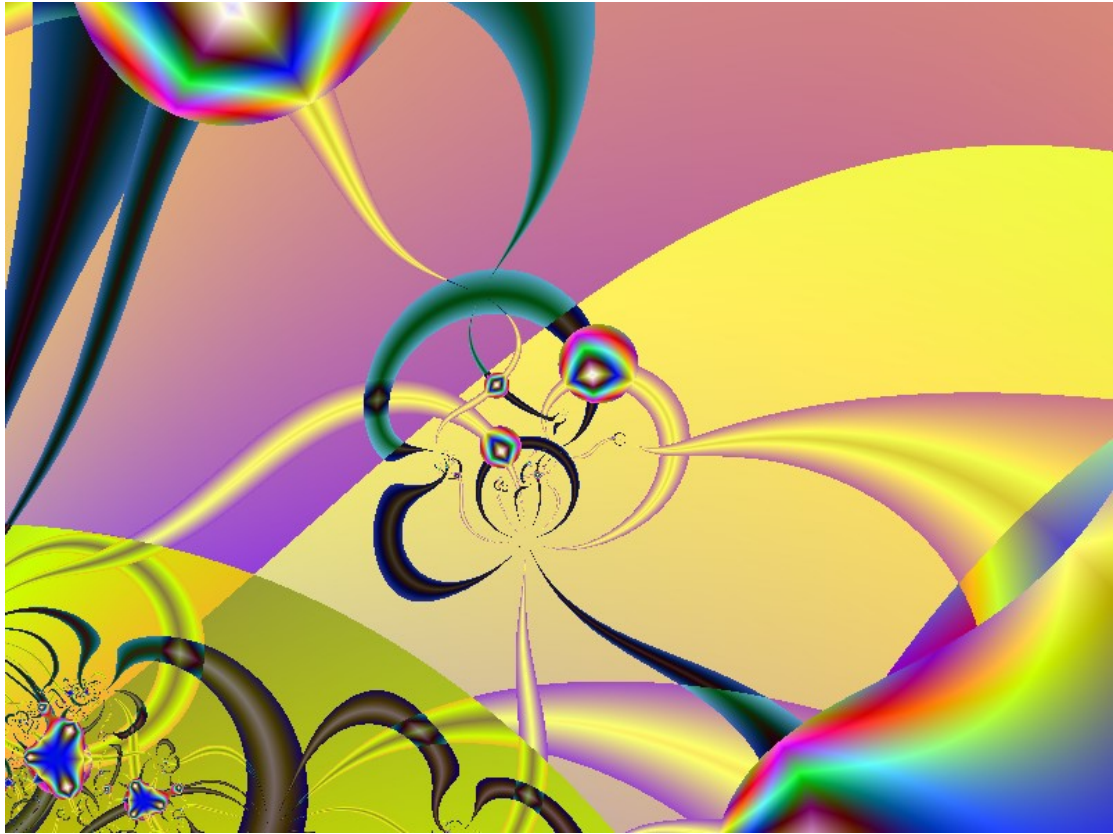


Fig 11a. Electric and magnetic flux tubes loops are the building blocks of nature. These loops can intersect with each other forming complex structures. The simplest structure consist of a magnetic loop and an electric loop intersecting with each other at two points. At one intersection point they form a density cavity. At the second intersection point, a punch hole is formed.



Fig 11b. Electric and magnetic flux tubes loops are the building blocks of nature. These loops can intersect with each other forming complex structures. The simplest structure consist of a magnetic loop and an electric loop intersecting with each other at two points. At one intersection point they form a density cavity. At the second intersection point, a punch hole is formed.

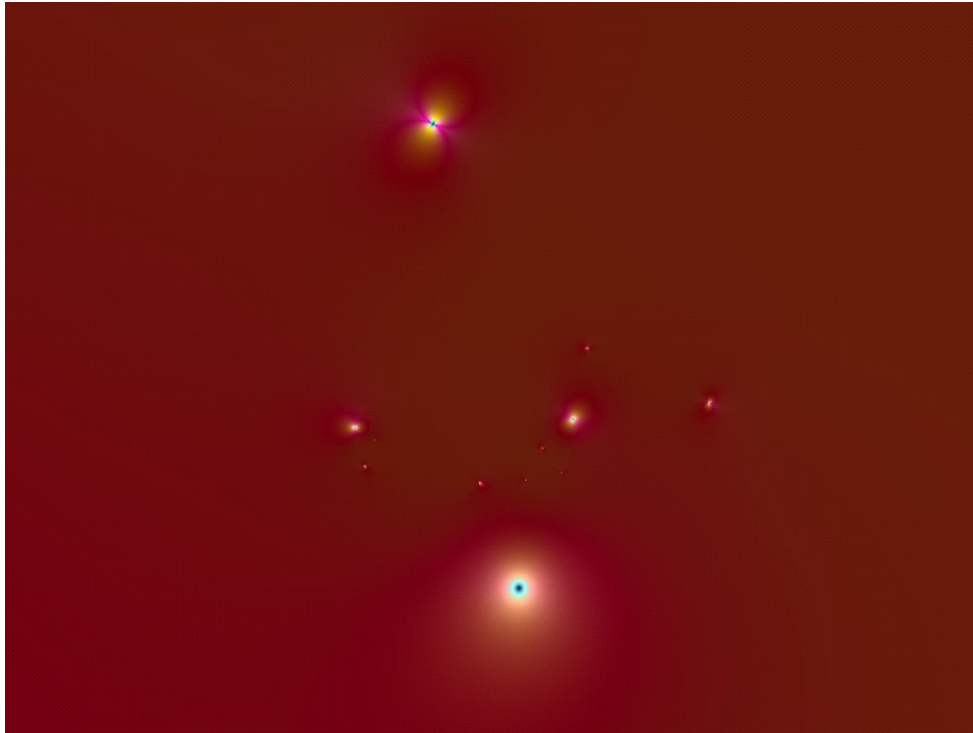


Fig 11c. These spots represent the punch holes of Fig 11b.

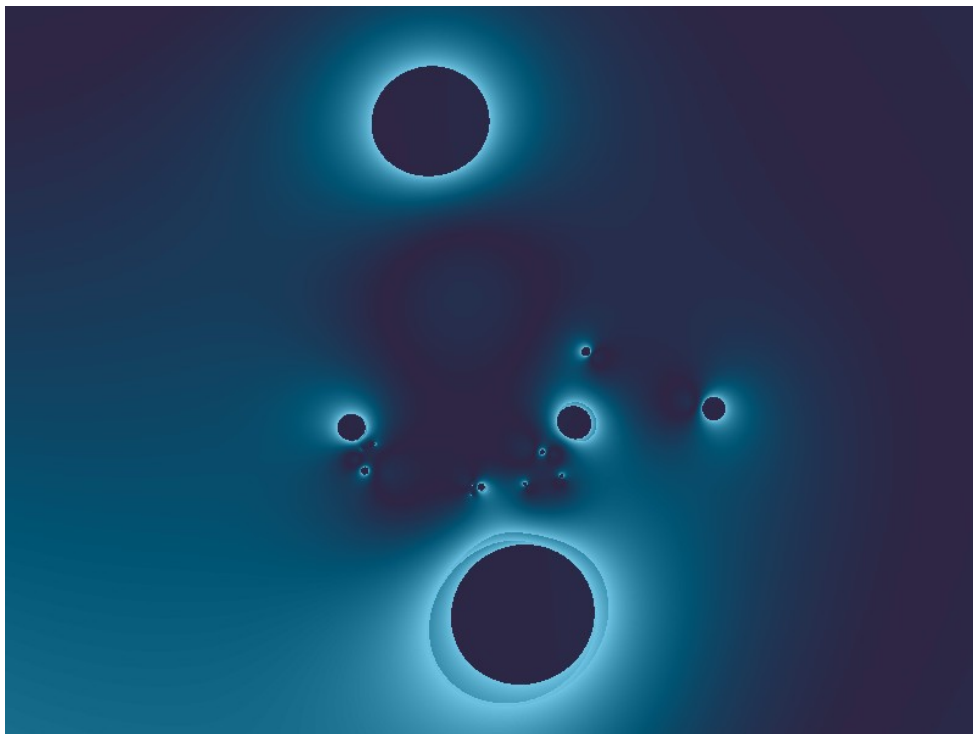


Fig 11d. These holes represent the punch holes of Fig 11b.

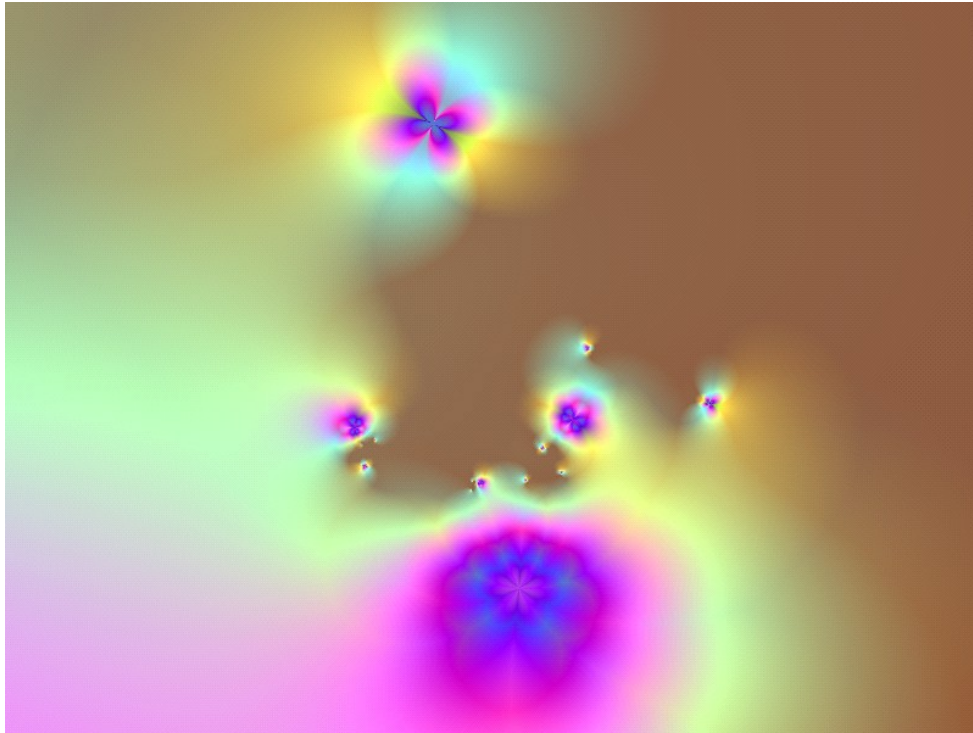


Fig 11e. These colourful flowers represent the punch holes of Fig 11b.

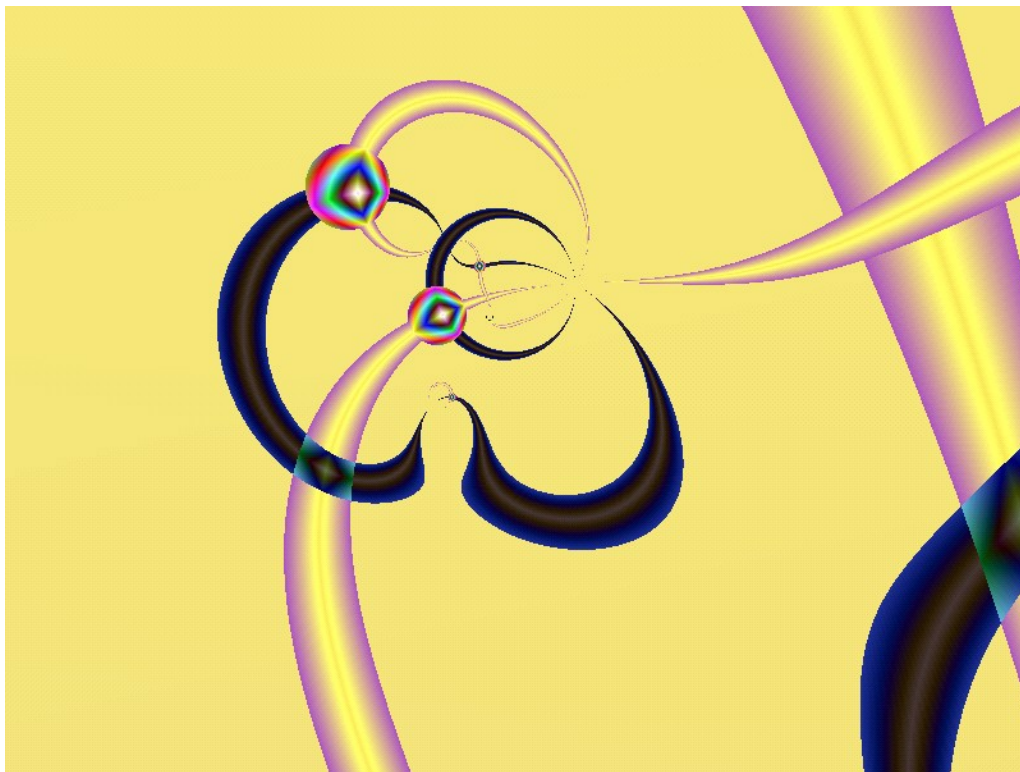


Fig 12a. A second example of a simple structure consist of a

magnetic loop and an electric loop intersecting with each other at two points. At one intersection point they form a density cavity. At the second intersection point, a punch hole is formed.



Fig

12b. These spots represent the punch holes of Fig 12a.

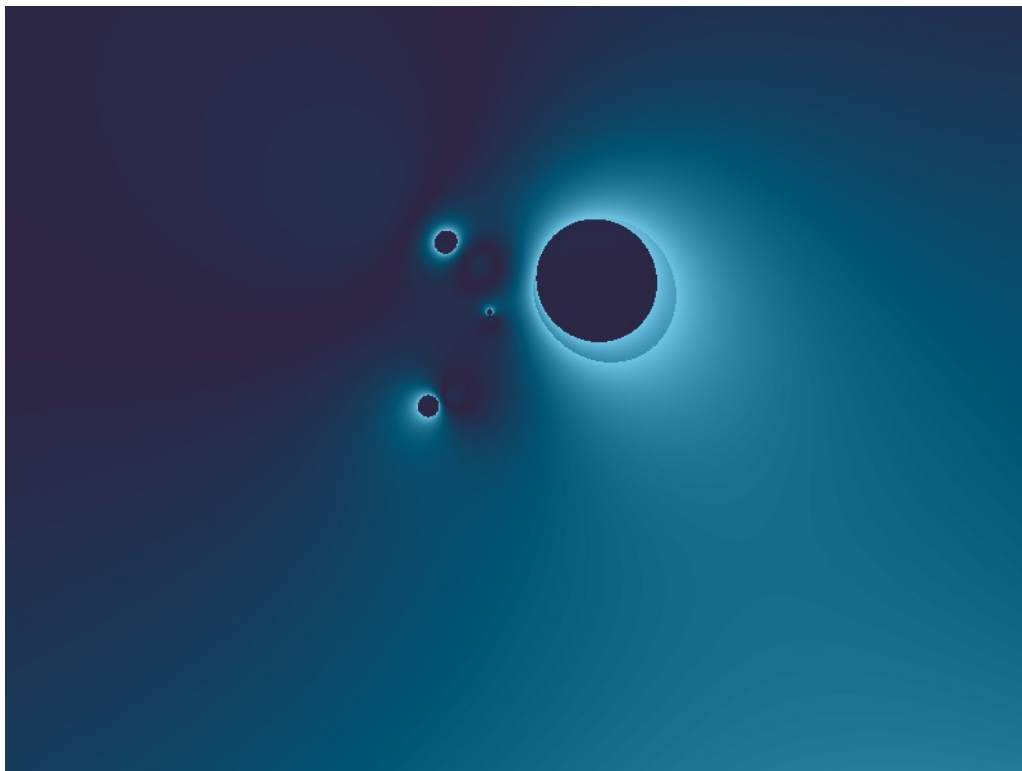


Fig 12c. These holes represent the punch holes of Fig 12a.

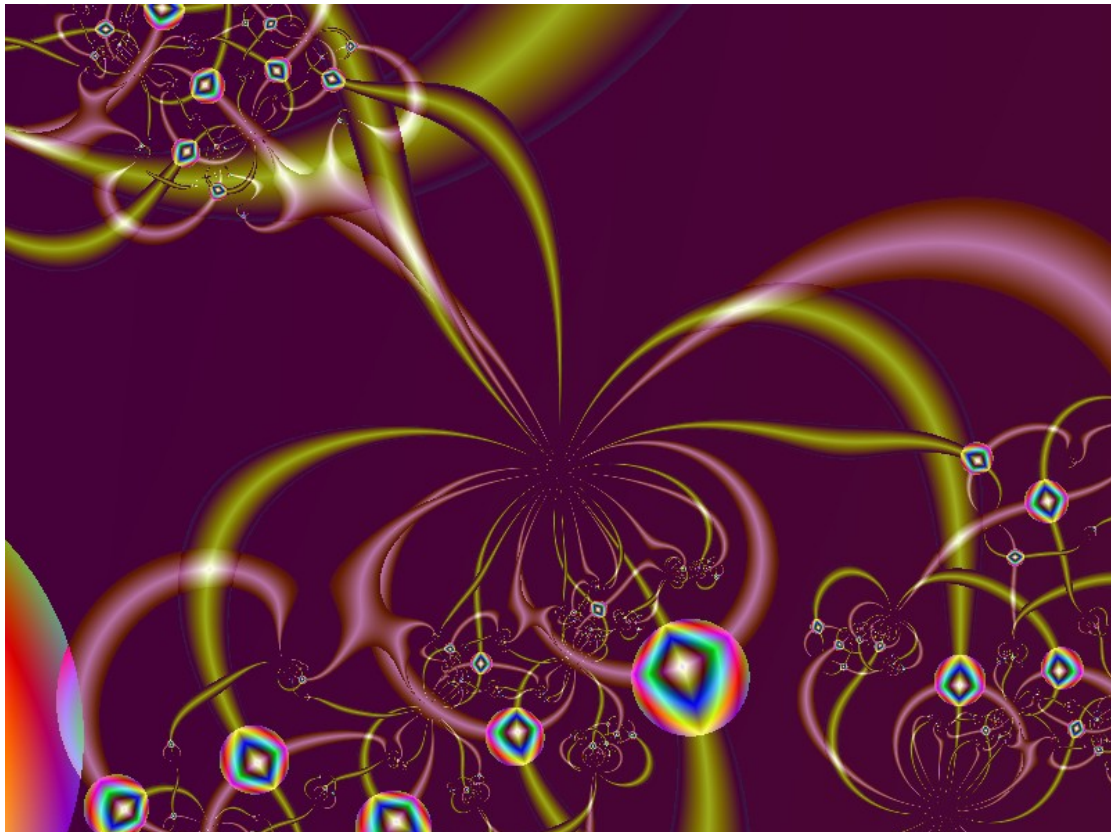


Fig 13. Electric and magnetic flux tubes loops can intersect with each other forming complex structures.

The Earth atmospheric dynamic is the result of exchange of energy between Earth and space. The atmosphere is transition region where Earth's electric and magnetic flux tubes connect and reconnect all the time with those coming from space, as Earth rotate and orbit around the sun. Hence the atmosphere is very dynamic. Actually, the interaction with space start already at the magnetosphere. We think of the atmosphere as gas that lies on the top of Earth surface. The atmosphere is connected to Earth's interior. The atmospheric tissue is an extension of Earth's interior structure. The morphology of the

electric and magnetic structure inside Earth is more or less stable compared to the atmosphere. Celestial bodies are populated by density cavities at all scales. These cavities are cross roads of the electric and magnetic flux tubes. The density cavities in the transition regions, like the atmosphere, are dynamic and can appear and vanish as the electric and magnetic flux tubes are connecting and reconnecting continuously. The cavities inside the solid part of the celestial body are more or less in the same place. Cavities that expand into the atmosphere are more loose but still all connected to each other and to the celestial body. They are part of the celestial body structure.

Just like celestial bodies, density cavities have a north-south orientation. Electric flux tubes enter the density cavities from the poles. Whereas magnetic flux tubes enter the density cavities from their mid-plane(equator). The flux direction determines the polarity of the cavity. We think that the magnetic "field lines" enter the Earth from the poles and travels through, and along, the north-south axis and come out at the opposite pole. In the fractal model the north-south axis of the density chamber is populated by an electric plasma column. The magnetic flux tubes come together to form a magnetic plasma along the equatorial plan, not the north-south pole axis as we have been assuming. Inside the density chamber, the magnetic flux tubes are squeezed against each other forming a magnetic plasma belt that dominates the southern hemisphere. The magnetic plasma and the electric plasma cross each other at the centre of the celestial body. Density cavities comes in two flavors. The direction of the electric and magnetic flow determine the polarity of the density cavity. Density cavities with opposite flows are positioned in alternate fashion next to each other. Density cavities have also different inclinations(This could explain planets Axial tilt). Cavities with opposite polarity, and different/consecutive size/scale, are positioned in an alternate fashion.

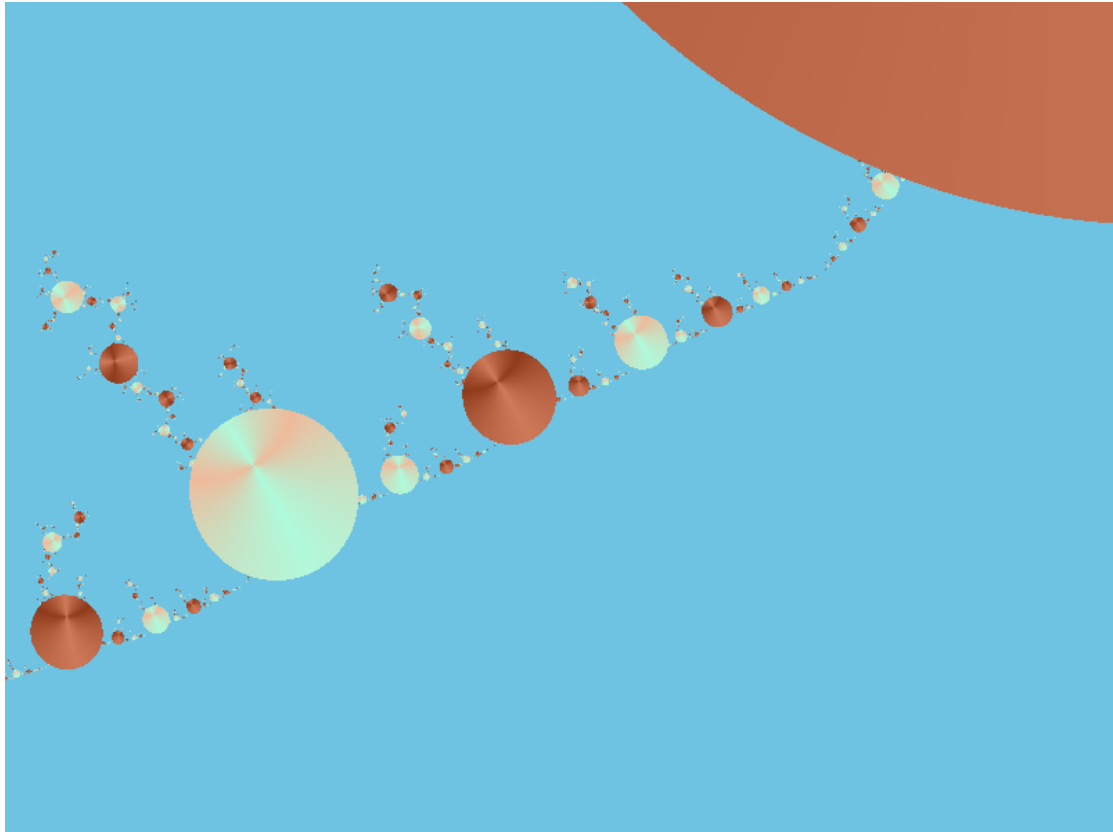


Fig 14. Density cavities with opposite flows are positioned in alternate fashion next to each other.

Dichotomy:

Celestial body are dichotomous. The northern hemisphere is mainly electric whereas the southern hemisphere is mainly magnetic. The magnetic field of the southern hemisphere of Mars is stronger than it's northern hemisphere. This phenomena is known as the Martian dichotomy. There is a magnetic plasma belt that dominate the southern hemisphere and split the celestial body into two hemispheres. The magnetic belt reside in the atmosphere of the density chamber of the celestial body. The electric flux tubes in the southern hemisphere get around the magnetic belt reaching this way the northern electric hemisphere. They do that while passing through a network of punch holes and density cavities. The axial electric plasma and the magnetic belt cross each other at the center of the main chamber. Along the electric plasma axis, we find several formations of magnetic loops nested inside each other. See image Fig 15a/b. To every magnetic loop correspond an electric loop that

intersect with it forming density cavities and punch holes. These loops formations, along the electric plasma axis, exist in both hemispheres. In the southern hemisphere the magnetic loops are much bigger and dominant than their corresponding electric loops. Whereas in the northern hemisphere the electric loops are bigger. The density cavities are not spread uniformly regarding to the equatorial plan. In the fractal model the biggest prominence's are located in the northern hemisphere about between 20 and 30 degrees latitude. Further north, there are polar prominence's between 50 and 60 degrees. This can cause a difference in the activities between the northern and southern hemisphere. In solar physics, this phenomenon is known as DSAF(difference in solar activity features). The northern hemisphere is populated by density cavities that are so huge, that on one side they are directly connected to the density chamber, and on the other side they extend to above the surface of the celestial body.

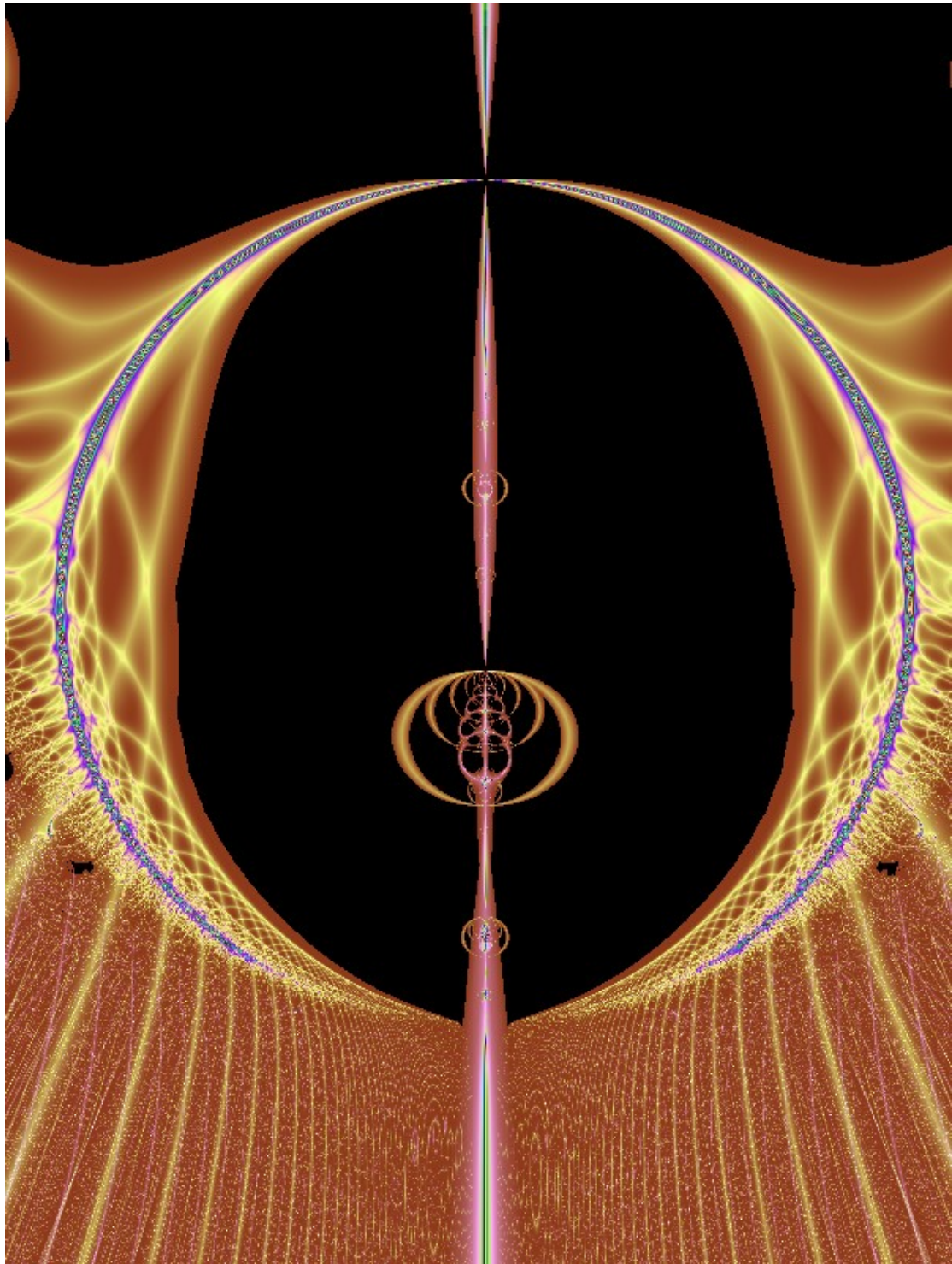


Fig 15a. Southern hemisphere of the celestial body fractal model. Confined inside the magnetic belt, several small magnetic loops can form along the electric plasma axis.

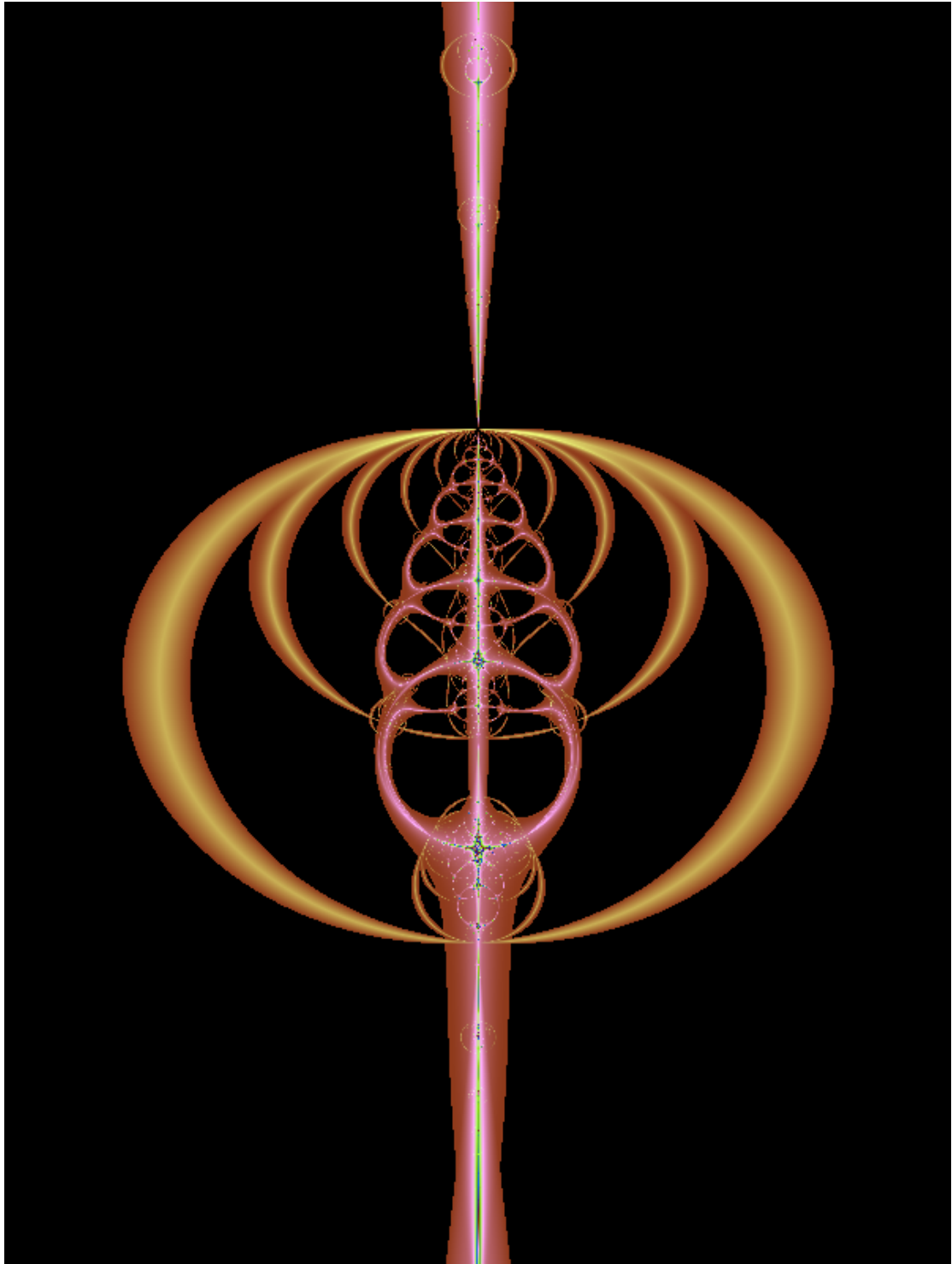


Fig 15b. Confined inside the main magnetic belt, several smaller magnetic belts can form along the electric plasma axis. To every magnetic loop correspond an electric loop that interlock with it forming density cavities and punch holes.

Radiation:

Radiation, in particular light, has been a mystery until now. Is light a wave or particle? what is the nature of light? What is a ray light made of? We know more or less what light is. We know that it's made of electromagnetic fields. When these two fields, combined, propagate into space they create radiation. However we have no image of these two fields and their interaction. We now, and finally, have this image. The answer to the nature of light came from an unexpected place, or should I say spot: sunspots. These are dark spots on the sun surface. In reality these dark spots are light fabrics. We will see later how they produce radiation. Let us first describe radiation.

Radiation is made of electric and magnetic flux tubes that propagate parallel to each other in an alternate manner into space. The distance separating every electric flux tube from its adjacent magnetic flux tube correspond to what we have been considering as the "wave length". This distance determines the nature of radiation. The smaller the distance, the higher the energy of the radiation. I will call this length the "EM alternance length". When combined, electromagnetic flux tubes are energetic. When electric and magnetic flux tubes alternate and come closer to each other, the colour shift from red to blue in the case of visible spectrum. See Fig 16(punch hole cloud with rainbow colours). So light is not a wave nor a particle. Light is electric and magnetic flux tubes that propagate into space parallel and alternate to each other.

Above the punch hole the electric and magnetic flux tubes are separated and that makes them less visible. By assembling electric and magnetic flux tubes in alternate fashion, punch holes create radiation/light, making clouds visible. This is how Cirrus clouds become visible once they plunge into the punch holes. This is also what happens at all scales in punch holes around density cavities making clouds visible. This alternance, is apparently the most natural way for electric and magnetic flux tubes to plunge into a punch holes.



Fig 16. Most radiation that is created by punch holes is not in the visible spectrum. These punch hole create radiation that happens to be in and around the visible spectrum. Red is the top colour. The clouds below are cumulus clouds.



Fig 17. Electric and magnetic flux tubes changing direction after plunging into the punch hole.

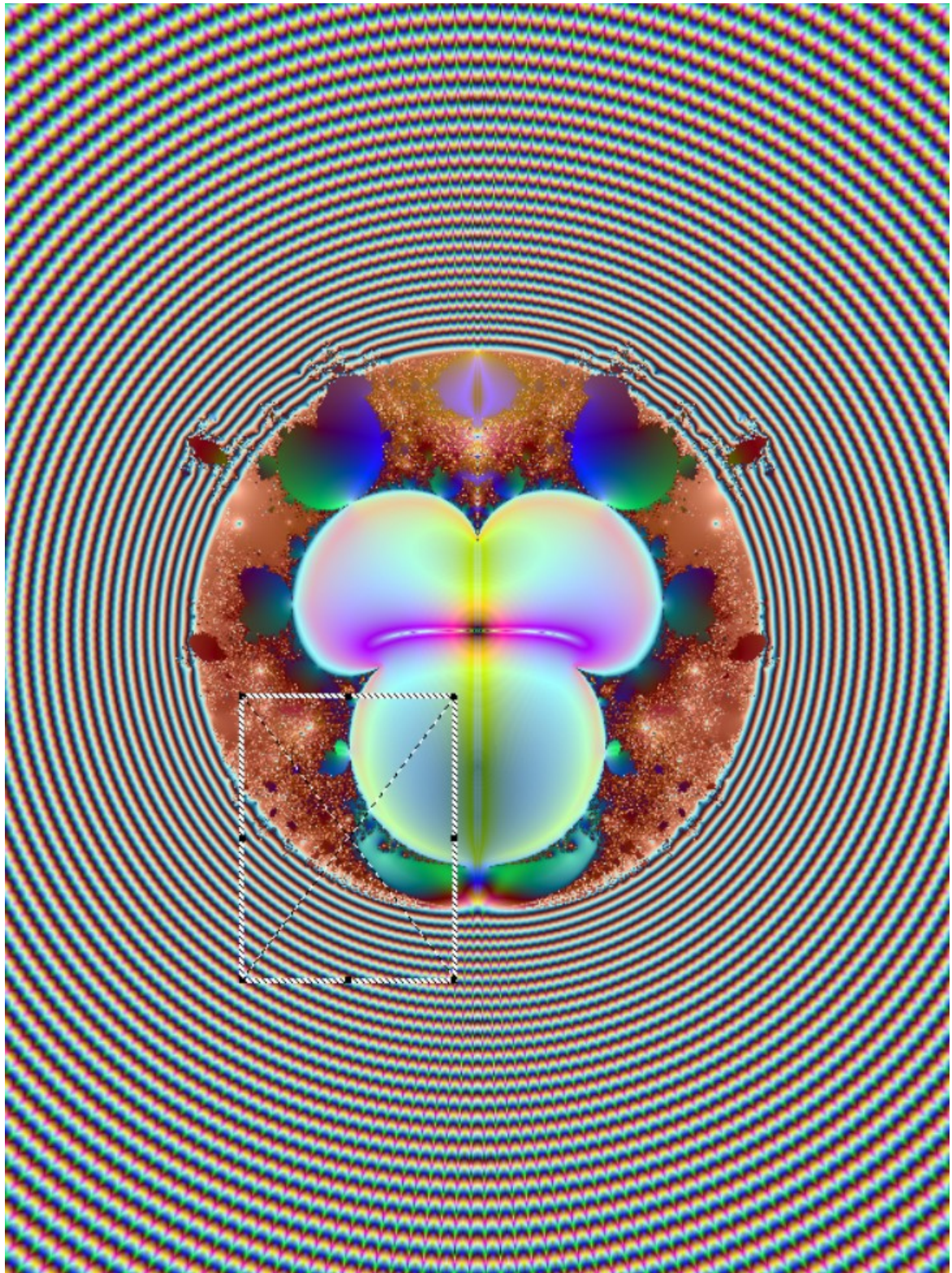


Fig 18a. This is the same fractal model as Fig 2a/b/c/d with a different filter. We see the punch holes/sunspots as small dots surrounding the celestial body. We also see, at 45 degrees latitude and on both sides of the image, two cavities pulling the atmospheric layers up and away from the surface. On the sun this are called

prominence density cavities. On planets they are called Hot flow anomalies(HFA). Another phenomenon are the synclines in the atmosphere. Synclines exist as ground layers but also as atmospheric layers.

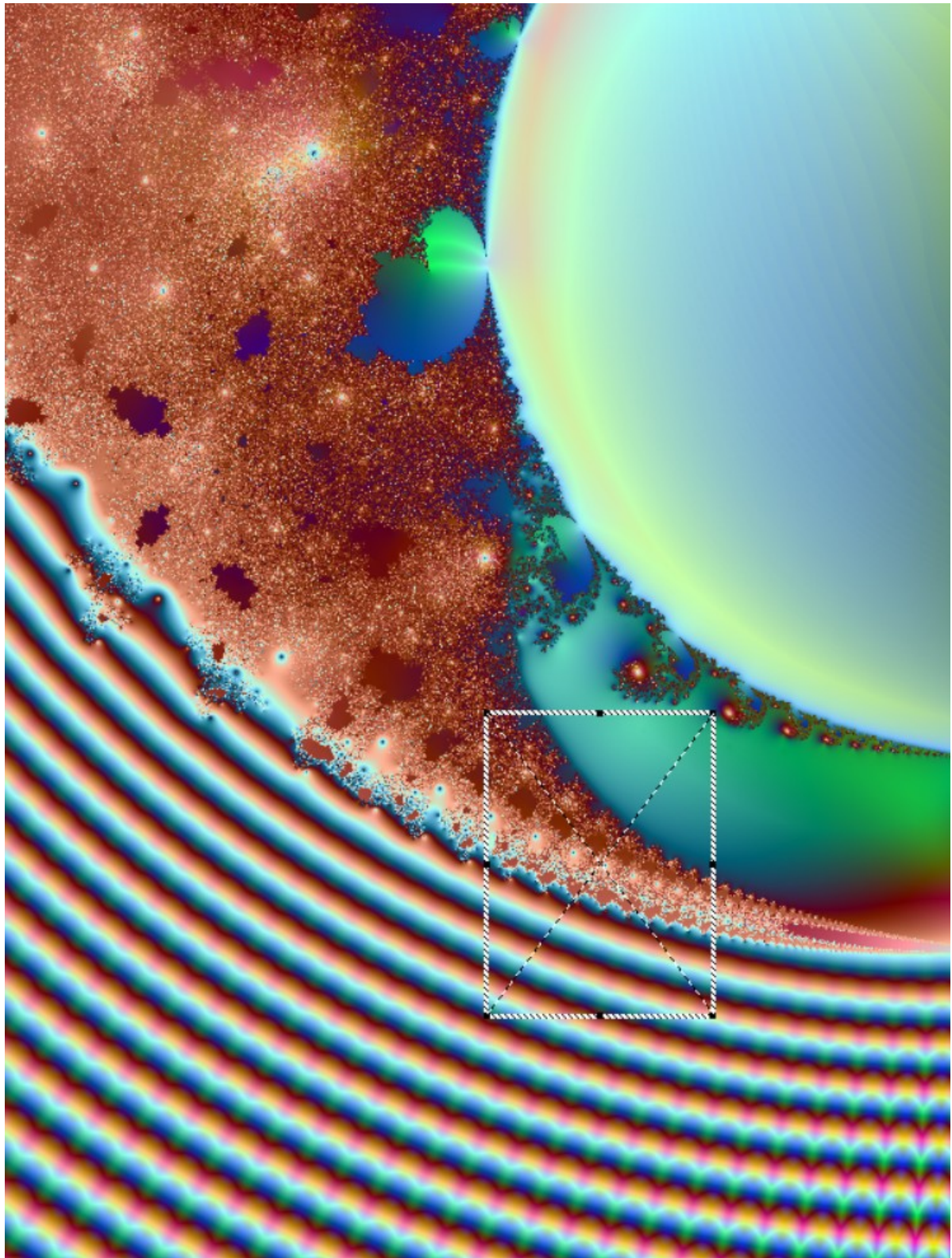


Fig 18b. Left side of the southern hemisphere of a celestial body.
Left mid: punch hole clouds distorting the atmospheric layers.
punch holes exist also inside the celestial body. Inside the celestial
body they don't create radiation but serve as a cross road for electric
and magnetic flux tubes.

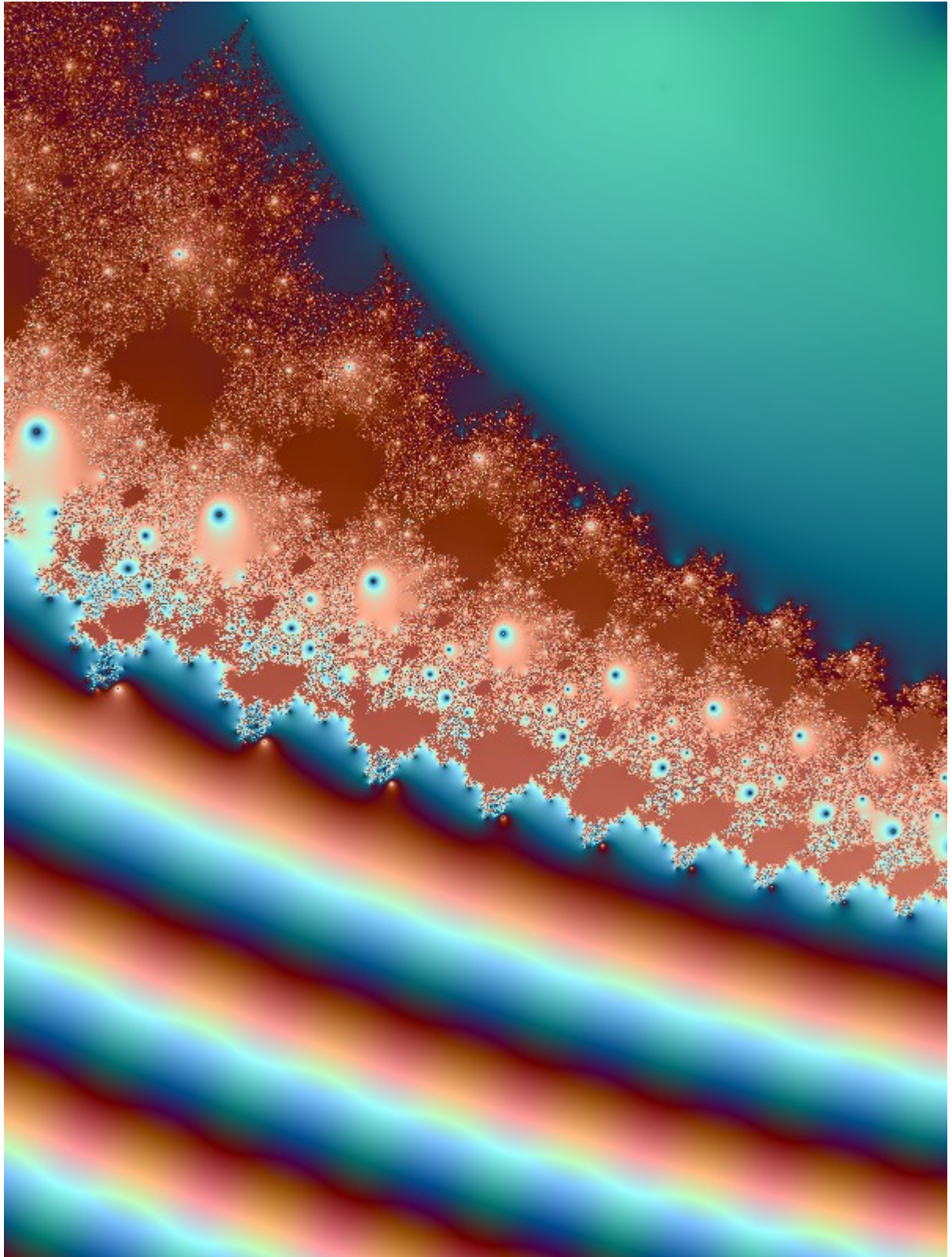


Fig 18c. Left side of the southern hemisphere of a celestial body. Punch holes exist in the atmosphere and inside the celestial body. The distance between punch hole clouds increases equator-ward. The size of punch holes also increases equator-ward.

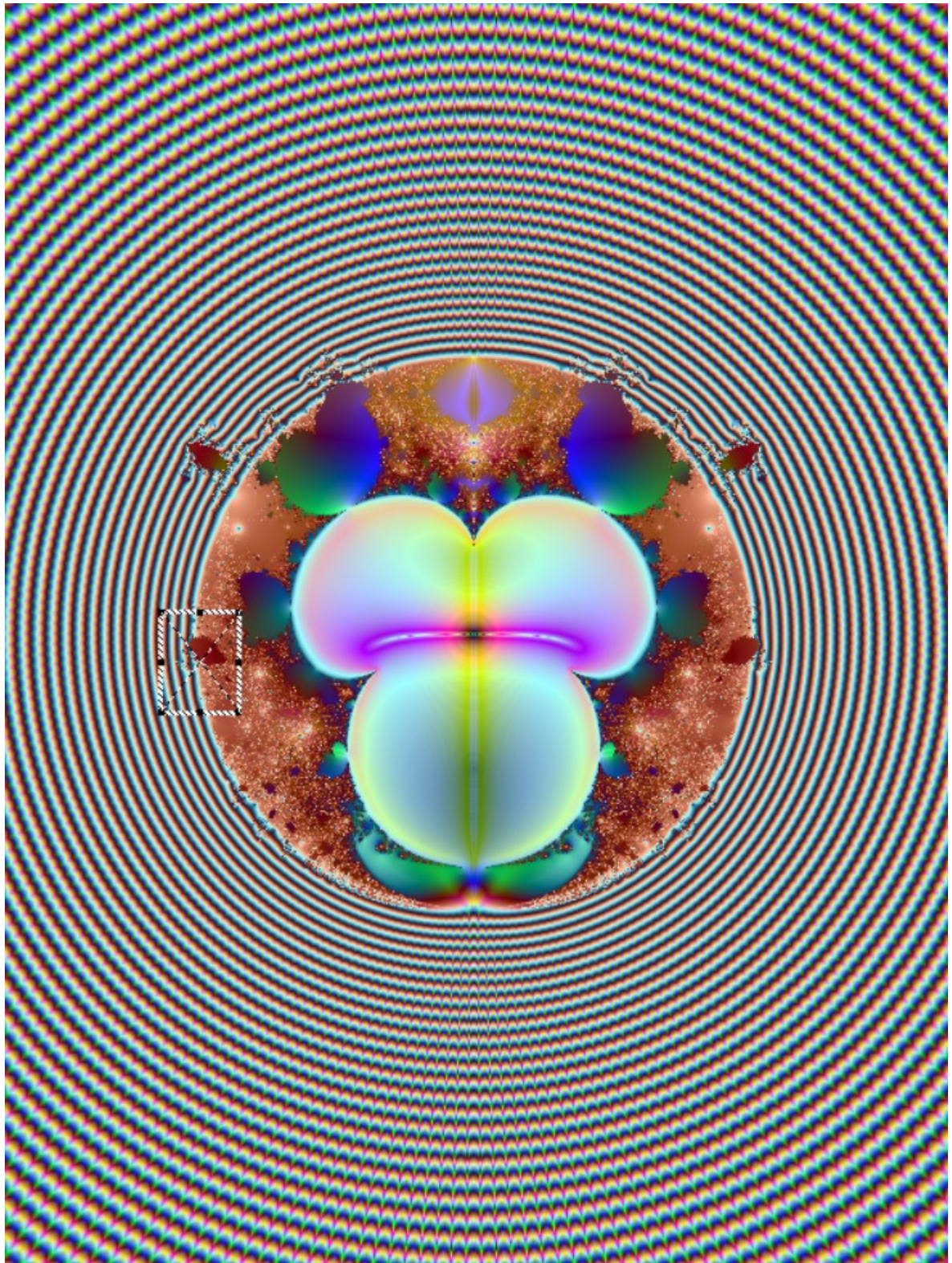


Fig 19a. Fractal model of a celestial body. We will zoom into this region looking for density cavities and punch holes.

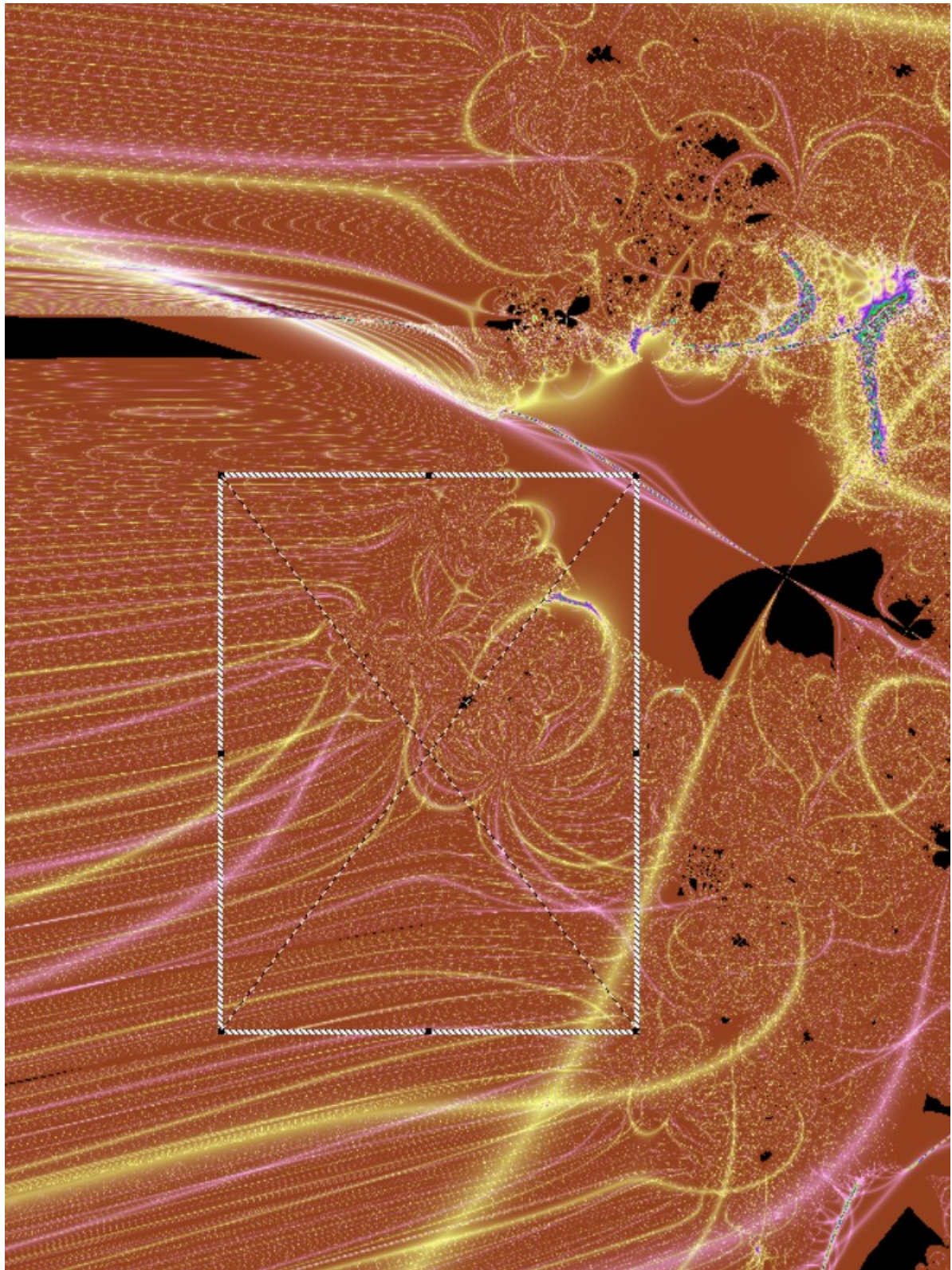


Fig 19b. A zoom into Fig 19a. We will zoom into this region looking for density cavities and punch holes.

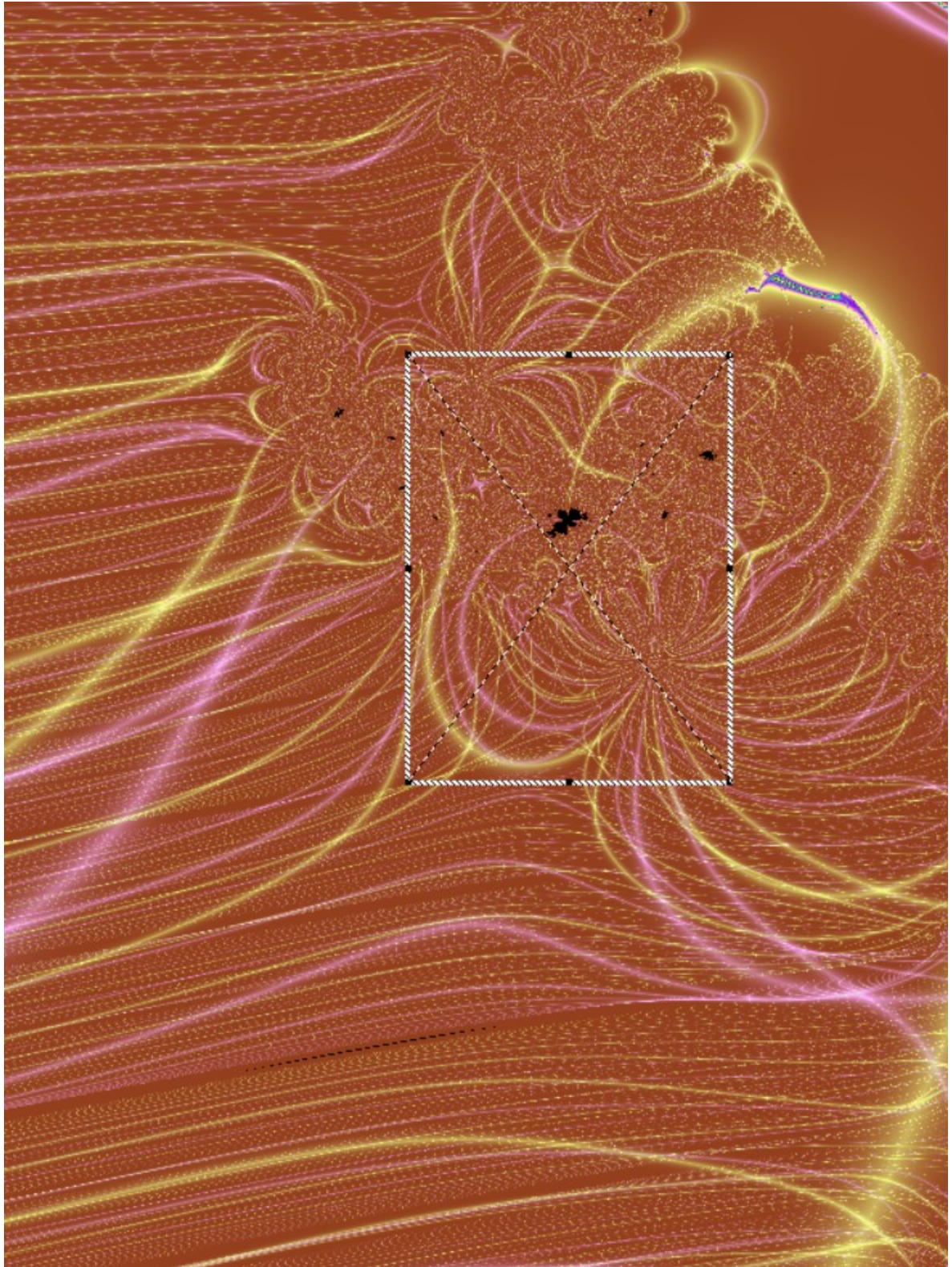


Fig 19c. A zoom into Fig 19b. We will zoom into this region looking for density cavities and punch holes.

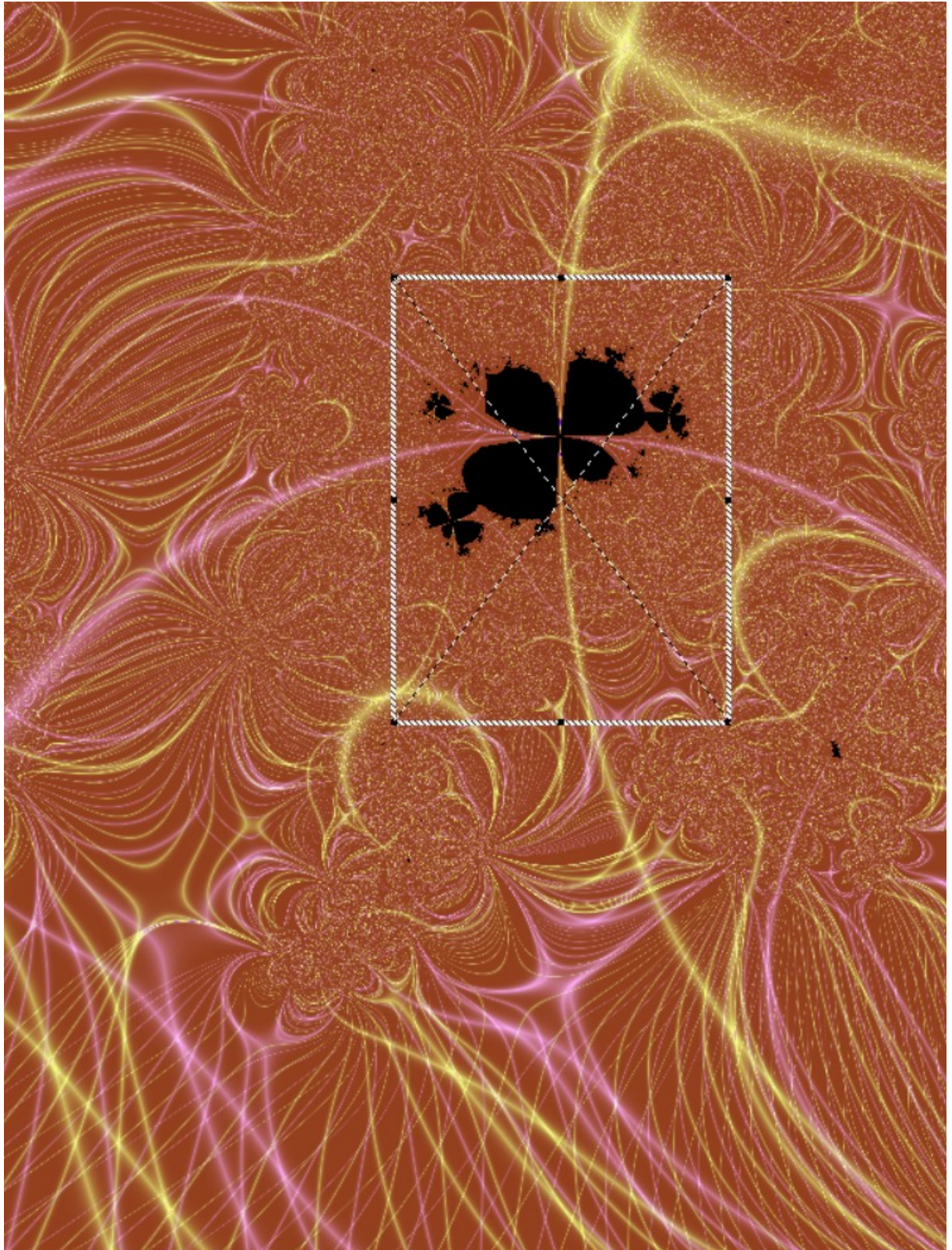


Fig 19d. A zoom into Fig 19c. We will zoom into this region looking for density cavities and punch holes.



Fig 19e. A zoom into Fig 19d. A density cavity(black).

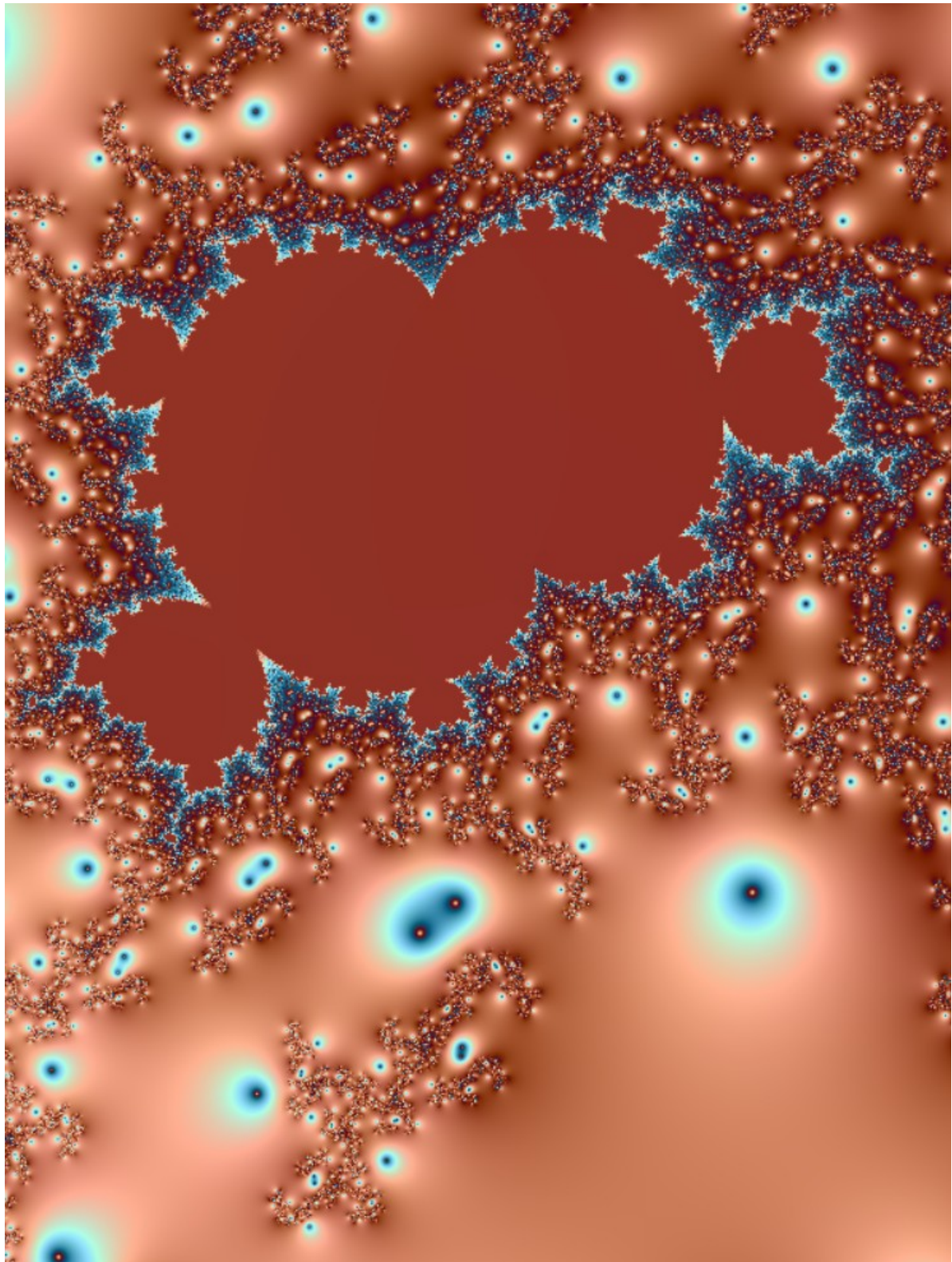


Fig 19f. The same as Fig 19e. In this fractal we see the sunspots/punch holes as dots. They can be single or double. They are arranged in spirals around density cavities.

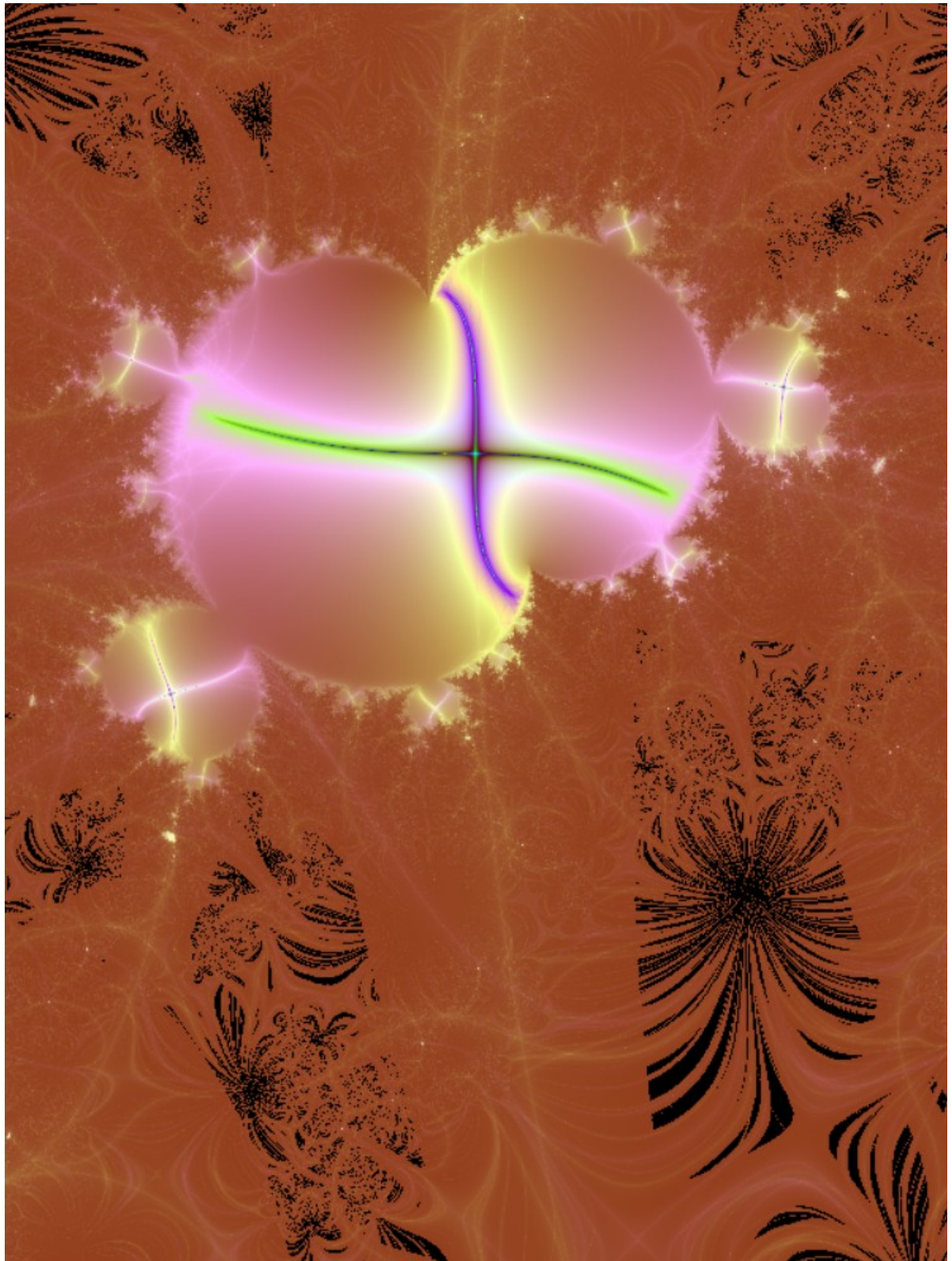


Fig 19g. In this fractal we see the sunspots/punch holes in dark colour.

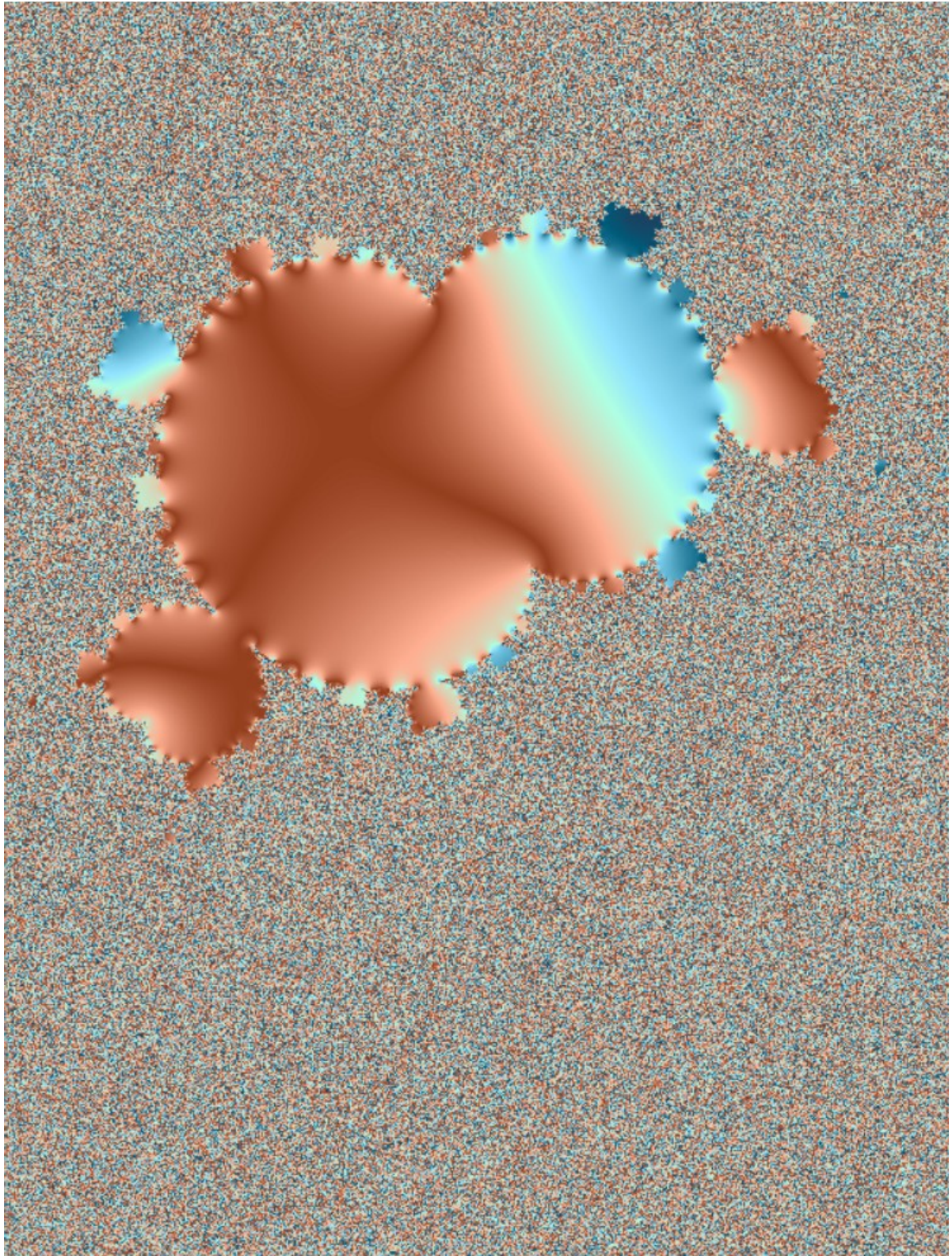


Fig 19h. This fractal image shows the density inside and outside of a density cavity. The density inside the density cavity is much lower than the surrounding.

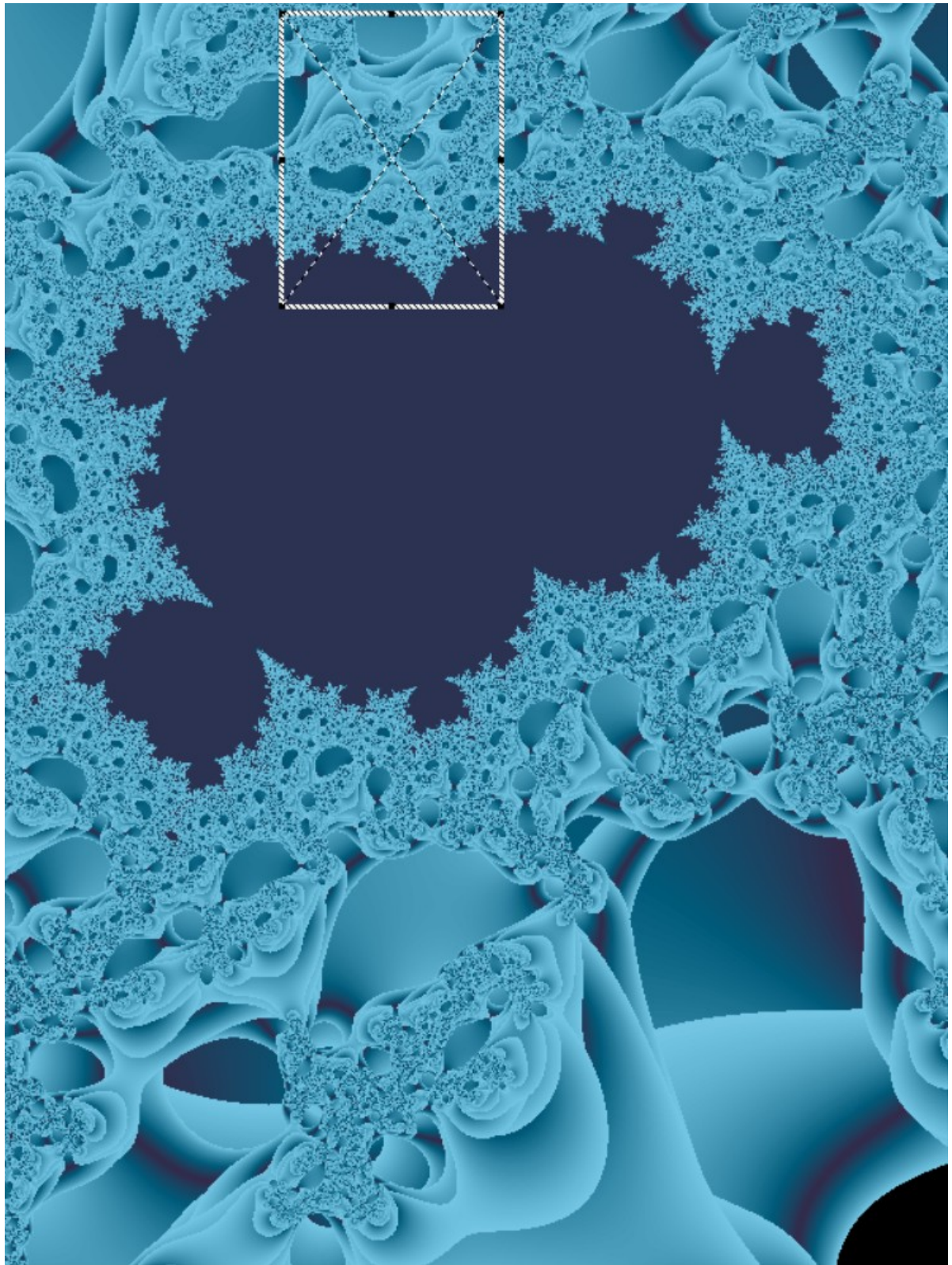


Fig 19i. The same as Fig 19h. We will zoom into this region looking for density cavities and punch holes. This is a double punch hole.

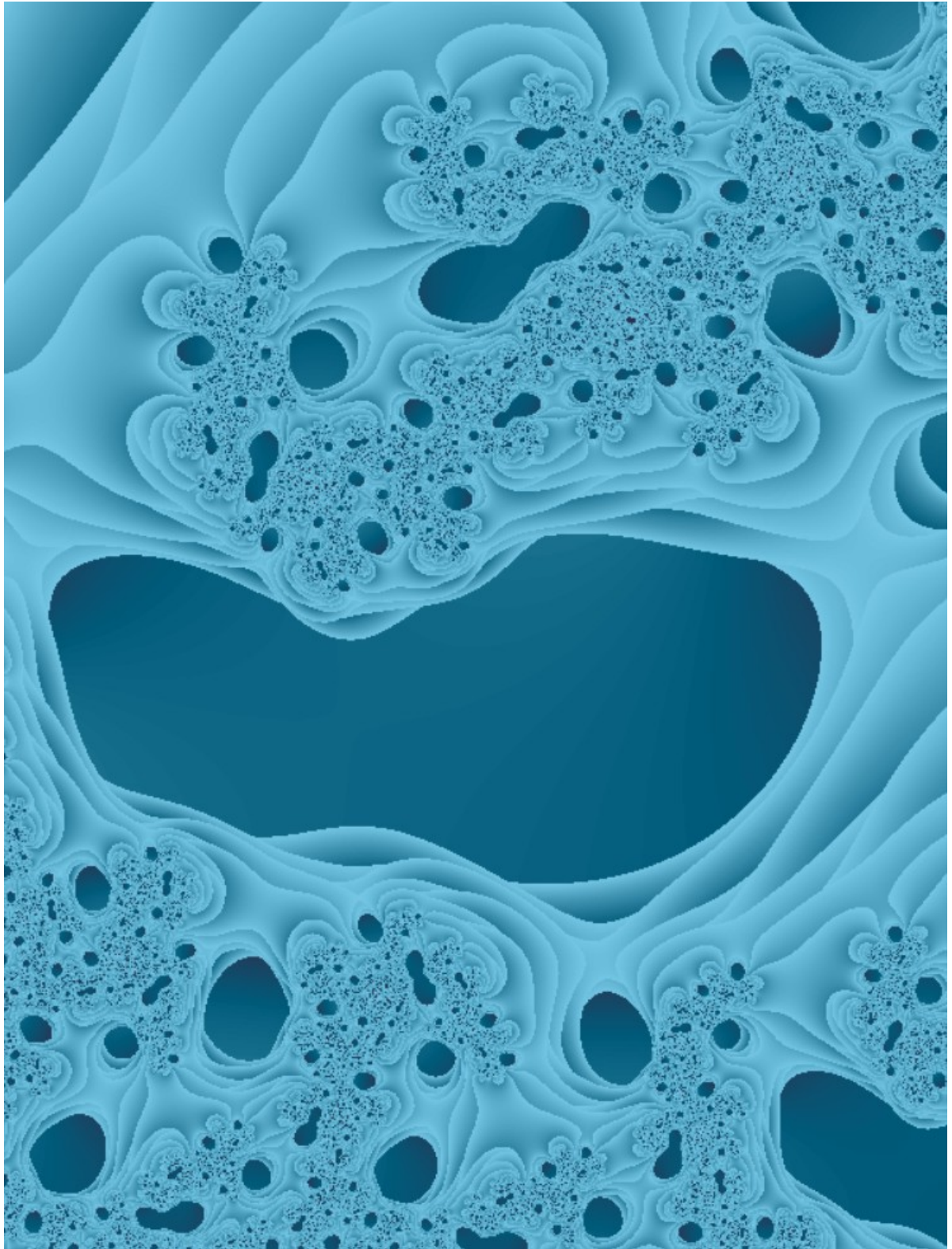


Fig 19j. Sunspots can be single but can also be arranged in a double formation. In this model we can see the depth of the punch holes.

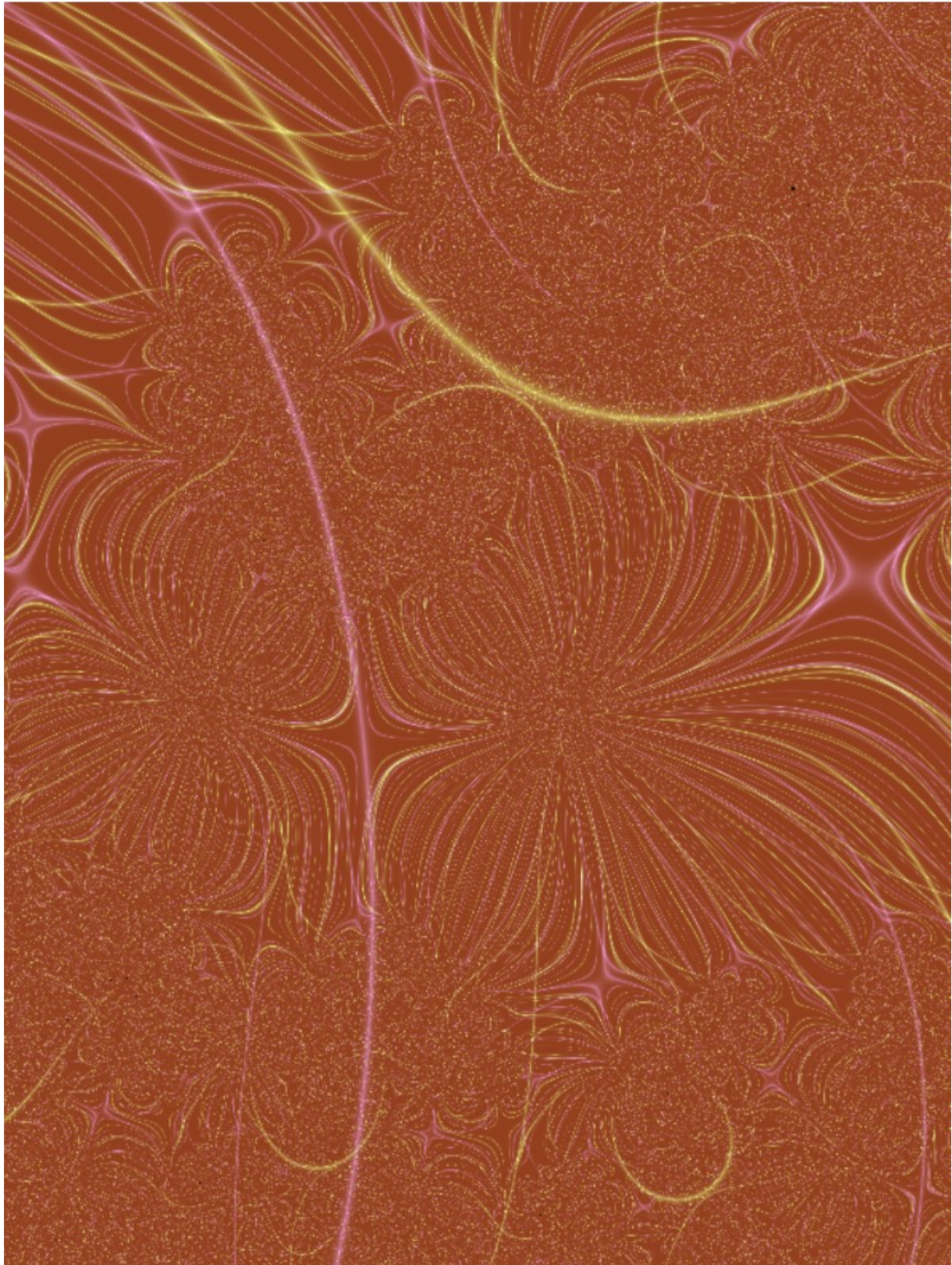


Fig 19k. The same as Fig 19j. An electric field line passing between a double sunspots. This is what is known as sunspot light bridge. In case of a single sunspot, they cross it at the centre. This because at the centre and in-between sunspots the bridges are in an equilibrium.

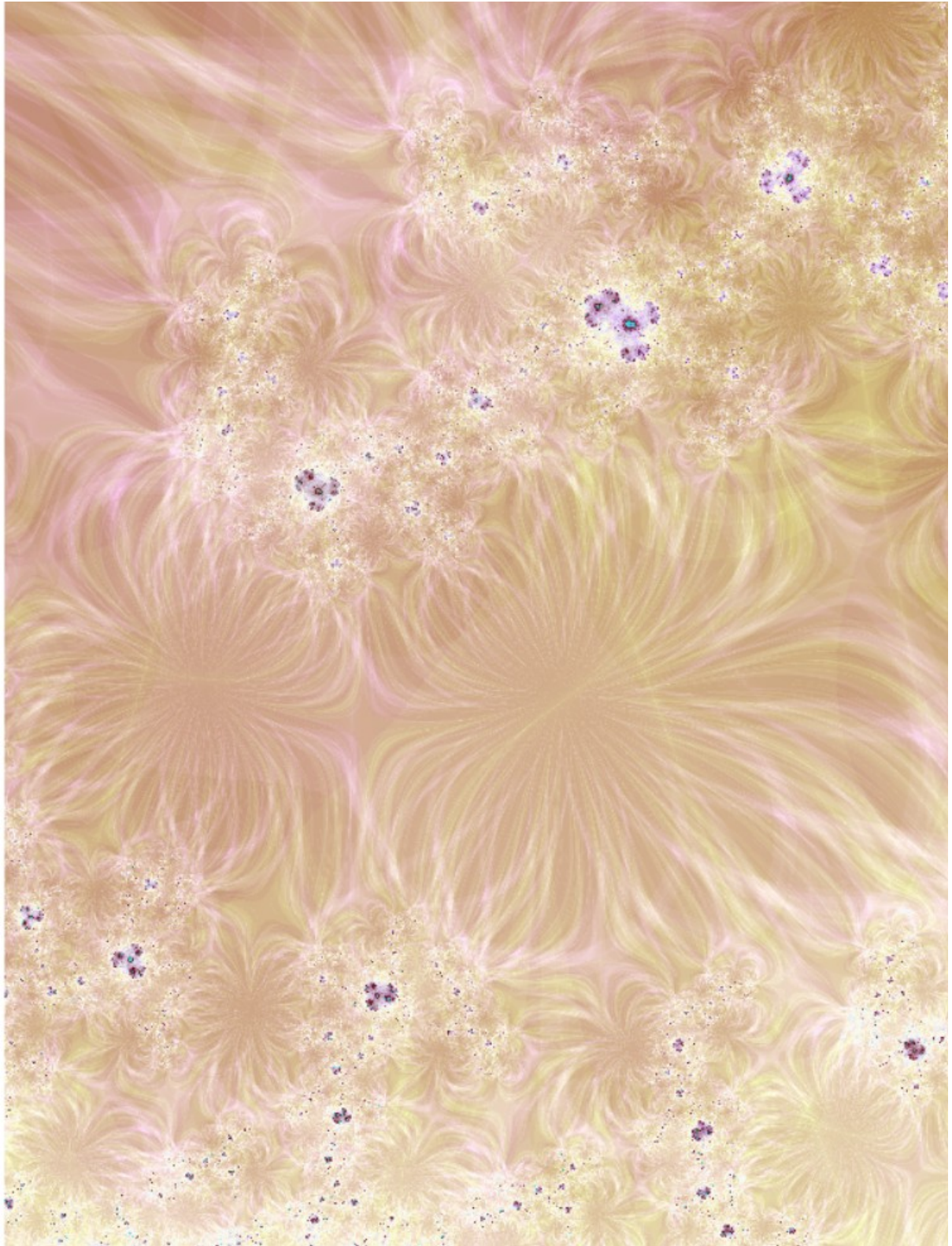


Fig 19l. The same as Fig 19k. The bright spots are called plages. Plages are density cavities.

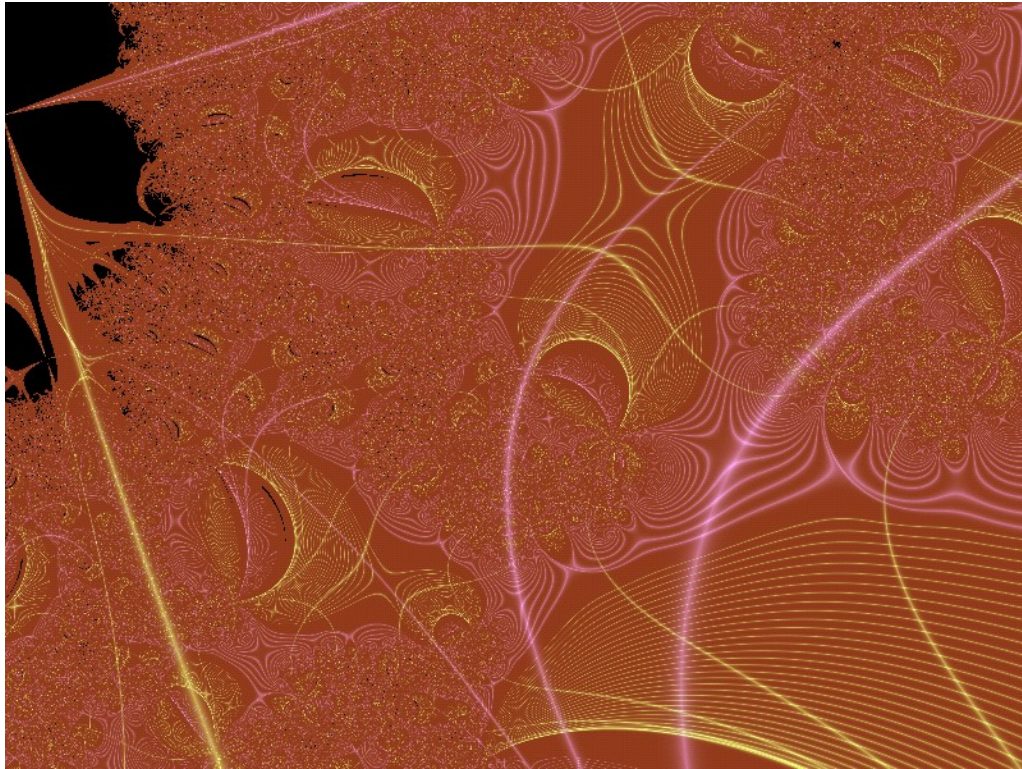


Fig 20a. Electric and magnetic flux tubes converging and plunging into the punch holes.

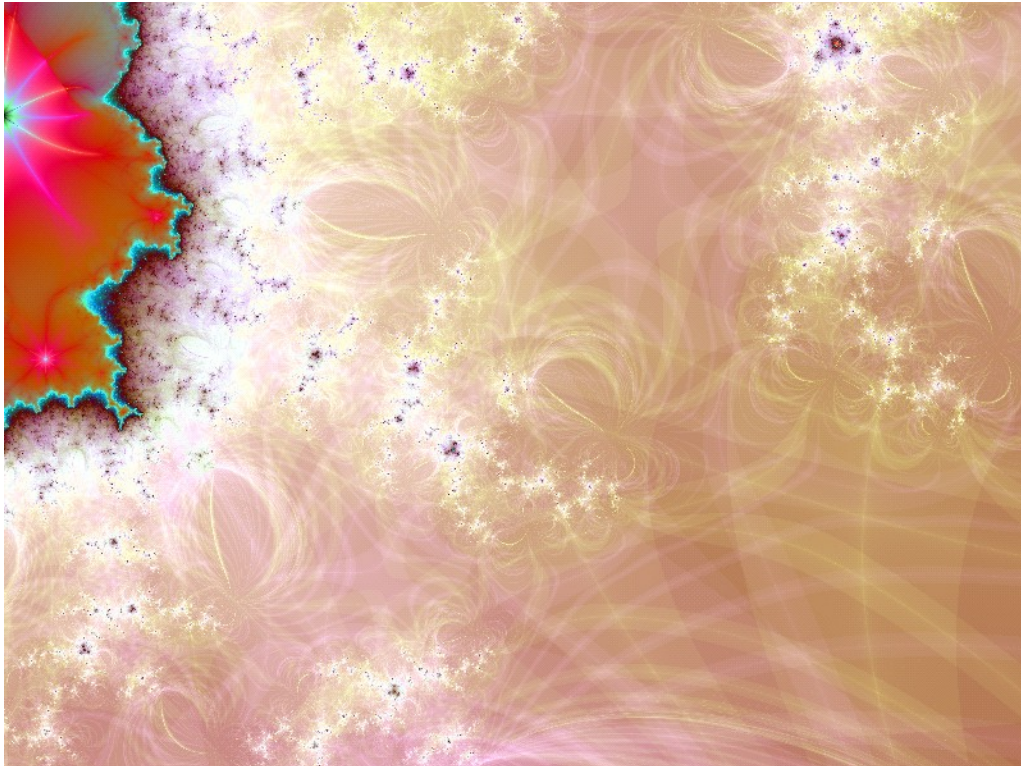


Fig 20b. Plagues are density cavities that are connected to each other in a branches form.

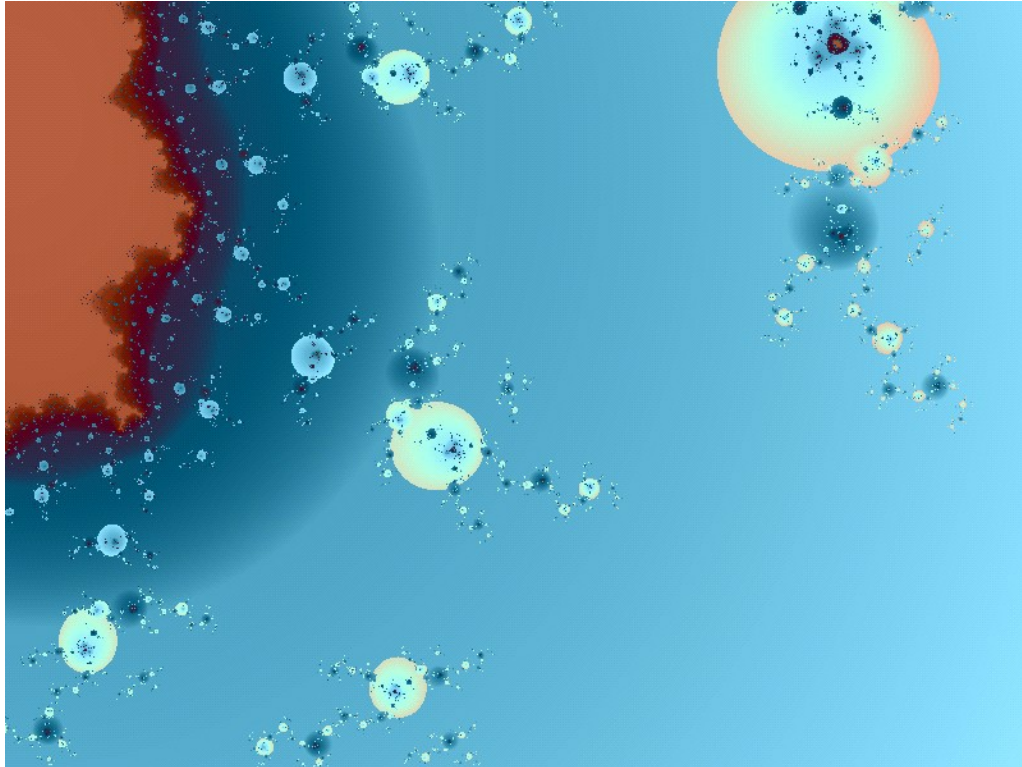


Fig 20c. Plages are density cavities that are connected to each other in a branches form.

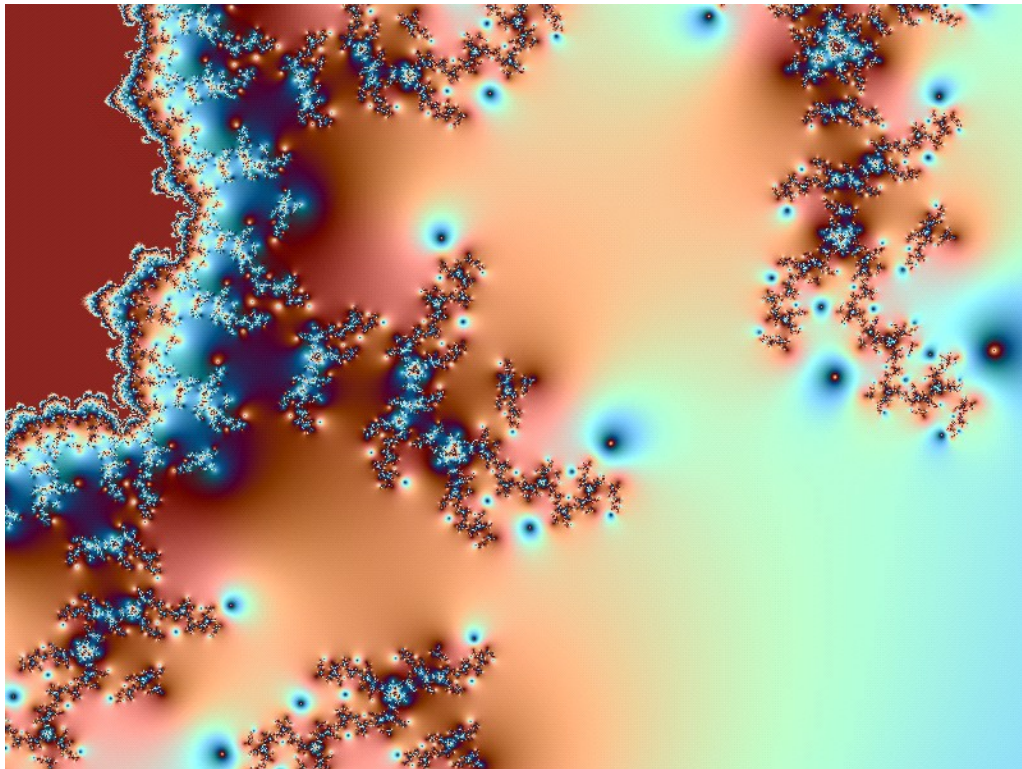


Fig 20d. The spots are the punch hole clouds/sunspots.

Punch hole clouds and sunspots:

Punch hole clouds are these round/circular or elongated holes that appear in cirrocumulus or altocumulus clouds. They are thought to be caused by passing aircraft. Ice crystals form, causing water droplets around the crystals to evaporate resulting in a hole in the cloud.

But actually, punch hole clouds are the same phenomenon as sunspots on the sun. Punch holes play an important role in the electromagnetic field traffic. Punch holes are nature ingenious solution to regulate electric and magnetic flux tubes traffic in and out of a celestial body at all scales. Inside the celestial body, punch holes do not create light nor they split it. They rather serve as cross road for the flux tubes. Punch holes punch the atmospheric layers down creating a hole. That's why they are called punch holes. Punch holes are arranged in layers around density cavities. These layers are not necessary planar. The density cavities can push the atmospheric layers (electric equipotentials) up. The punch holes become then inclined towards the cavities and with respect to the horizontal. Sunspots are known to have their axis of symmetry angle inclined to the solar surface. On Earth the flux tubes penetrating them are inclined towards the thunderstorm.

The punch holes upper layers are the first gate for incoming radiation/wind and the last gate for outgoing radiation/wind. The altocumulus and cirrocumulus clouds are known to have punch hole clouds. But actually the cirrostratus clouds have also punch holes, they are just not that obvious. Punch hole clouds takes many forms. We have different names for them, like Cirrus uncinus, Cirrus fibratus, circumhorizontal arc, fire rainbow clouds, Cirrus floccus, Cirrus spissatus and jellyfish clouds.

Both punch holes and density cavities exist inside the celestial body and in it's atmosphere. Punch holes layers follows the contours of the celestial body. I prefer to call them punch holes in general and sometimes sunspots in case of the sun. They have been observed on other stars than our sun and are called starspots. Punch holes are a convergence zone of flux tubes. Sunspots at the surface of the sun

are well visible because of the contrast with the surrounding. But actually they exist at different altitudes. They also populate, at all scales, the interior of the sun.

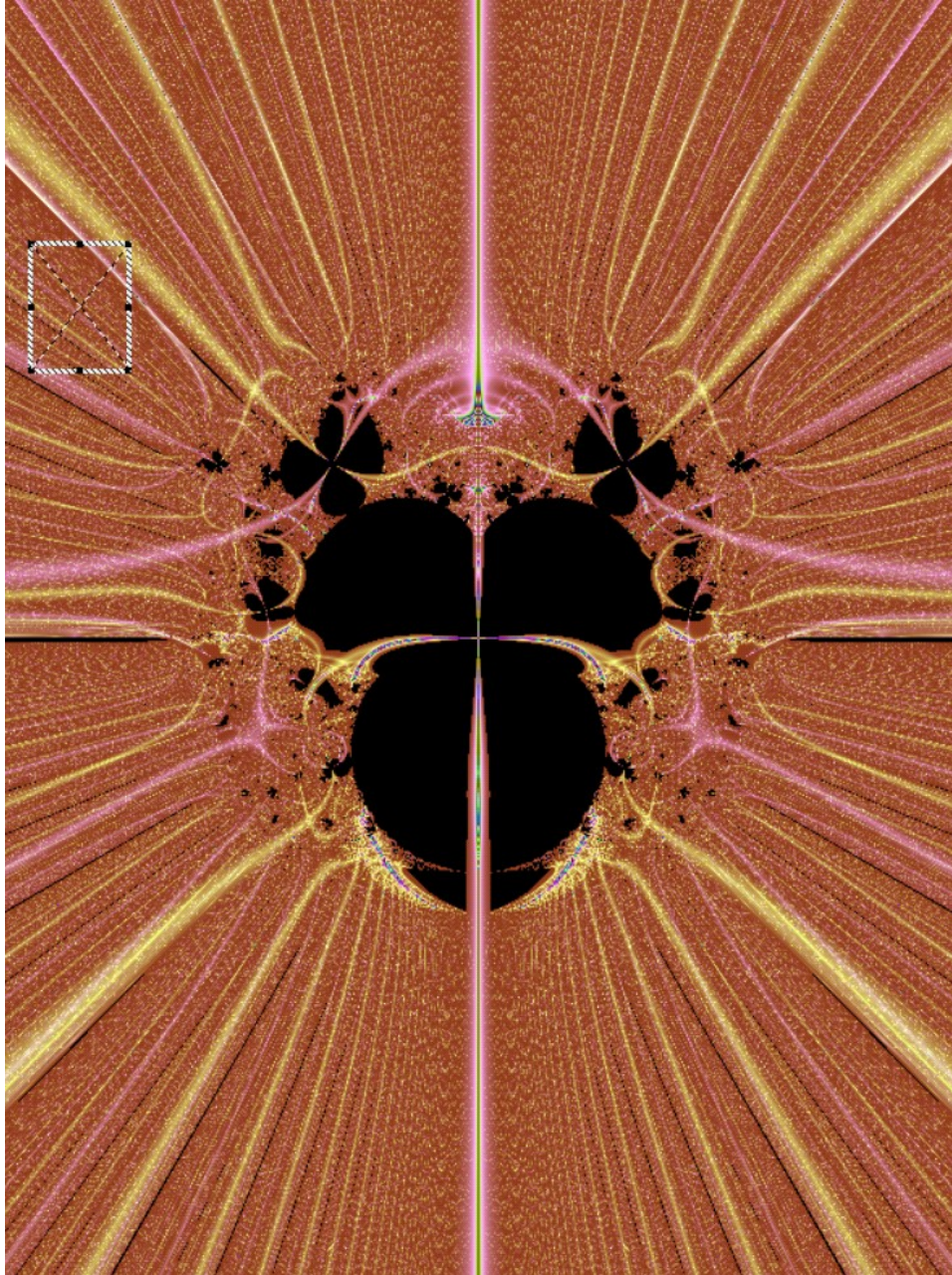


Fig 21a. We will zoom into the corona of this celestial body fractal model.

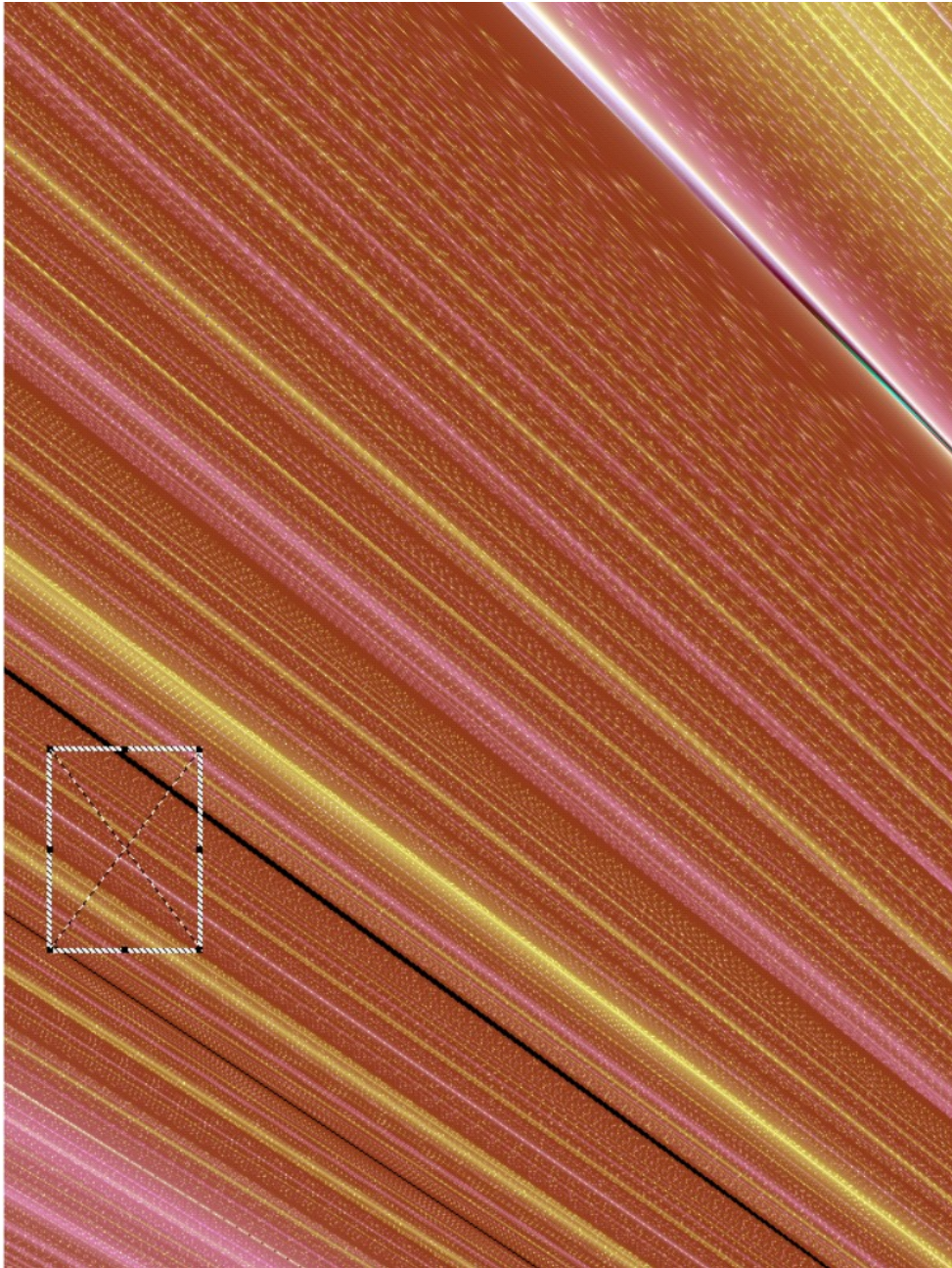


Fig 21b. Top right: electric flux tubes crossing a dead zone beam creating electric plasma(white colour).

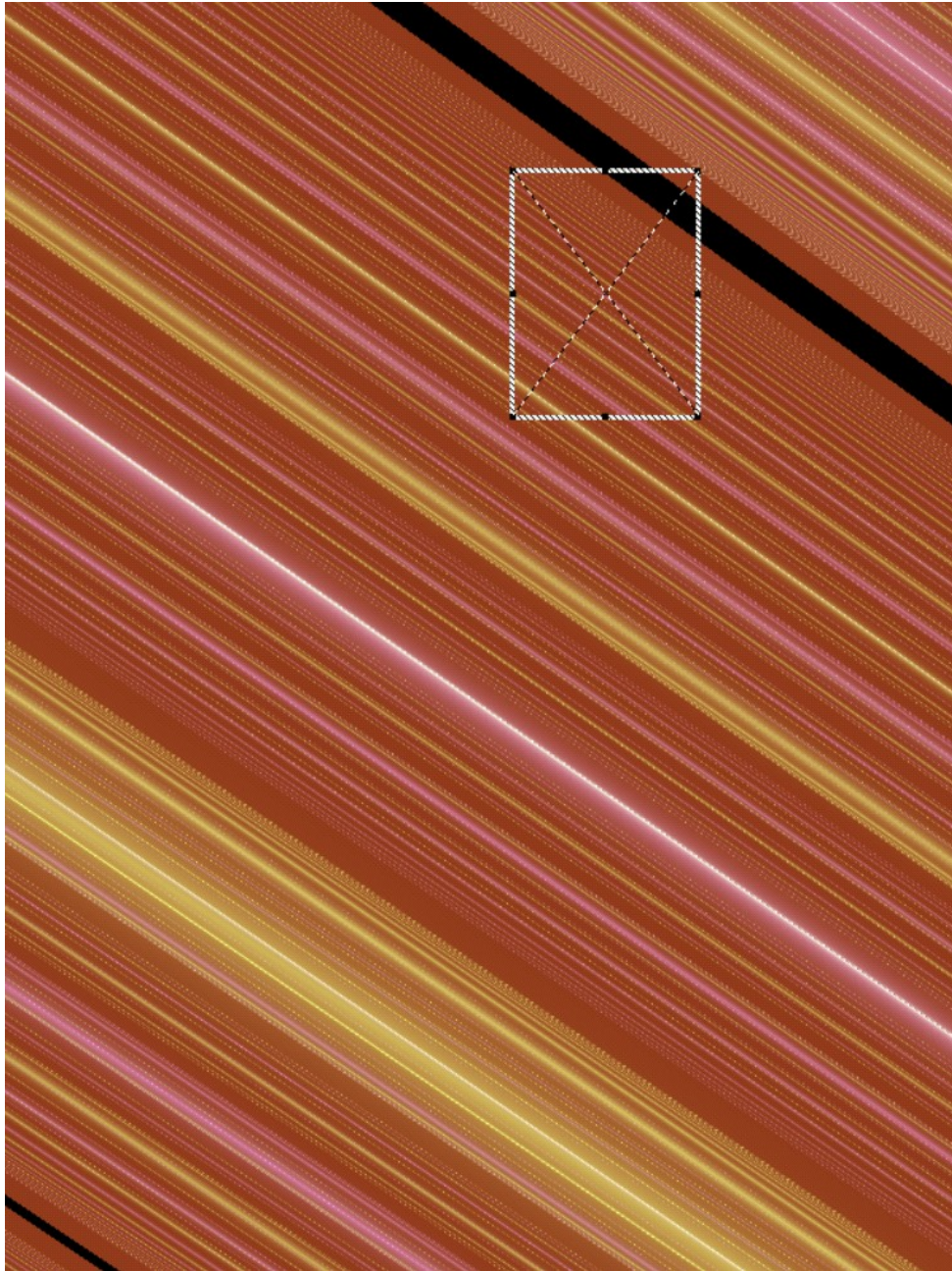


Fig 21c. Lets zoom into Fig 21b.

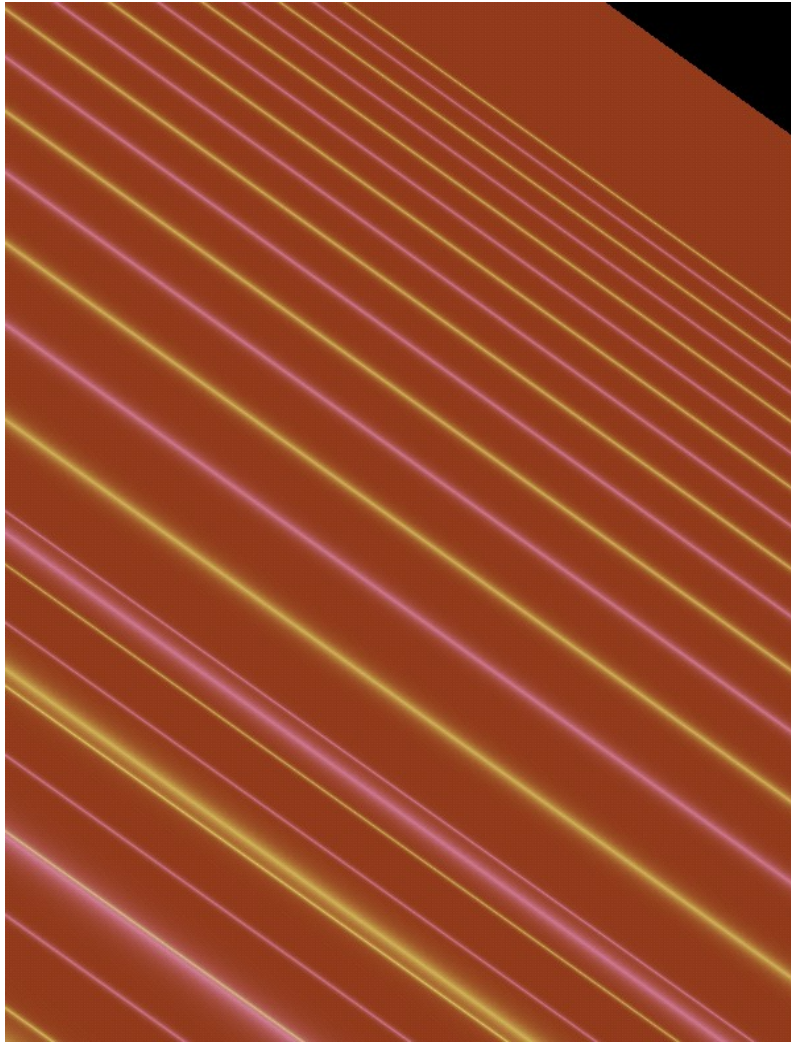


Fig 21d. In this fractal image we see alternate EM flux tubes at the top right(radiation), Just before the dead zone beam(top right), electric and magnetic flux tubes cease to exist living only the background neutral sheet. EM alternance length becomes increasingly smaller the closer we get to the dead zone beam producing colours. Bottom left we see wind(solar wind)

When propagated into space E/M flux tubes are aligned. In case they are parallel and alternate they form radiation. When they do not alternate they are just wind, like the solar wind. The radiation is produced and split by punch holes. We will describe the geometry of these traffics.

Incoming radiation:

Let's describe what happens when a celestial body split radiation/wind. Celestial bodies are made of, and covered by, layers of punch holes and density cavities. They form the tissue of the celestial body and form carpets covering it. These carpets are those cloud layers that we see everyday.

When entering the celestial body, electric and magnetic flux tubes have to split off. They do that while avoiding flux tubes that are plunging into the punch holes. The downward flow interact with the upward and converging flow of punch holes. The converging flow/loops that enter punch holes comes from the density cavities. This upward and converging flow, into the punch hole, have an opposite flow direction to the downward flow coming from space. So the downward flow avoid it by splitting into separate flows of tubes. The punch holes are acting as umbrellas shielding a celestial body from the incoming radiation. Flux tubes downward flow find their way to the cavities bypassing more and more punch holes. The first punch hole the flux tubes encounter, will split them in separate streams. The next punch hole will split them again in separate streams. This will go on and on, in a fractal way, until the flux tubes are separate from each other's and can enter the density cavities. These umbrellas becomes smaller and smaller the closer they are to the density cavities. The density cavity boundaries is a cost line populated by small cavities. The number of flux tubes to be split is also getting less and less the closer they are to the density cavities boundaries. They finally reach and cross the cavities. They can do that as individual flux tubes or join other flux tubes and cross the cavities in plasma form. Every time radiation is split, at certain layer, the temperature will drop. So every layer that split radiation will create a temperature differential. Between the layers the temperature remains almost the same. This phenomenon is what is known as thermocline. Thermocline exist in the atmosphere, sea and lakes. Once separated the flux tubes will enter the density cavities. They join other flux tubes. Inside the cavity, the magnetic flux tubes will converge towards the centre of the cavity with other magnetic flux tubes. The electric flux tubes converge with other electric flux tubes. They are then squeezed against each other forming electric and magnetic plasma. They cross at the centre with an angle of 90 degrees. Inside the density cavities the magnetic field and the electric field influence each other. The electric field is accelerated by the magnetic field and the magnetic field is amplified by the electric

field. The flux tubes can travel from cavities to punch holes to cavities again. Some of them will pass by the density chamber. Others will make a U-turn and travels back into space.



Fig 22a. Electric and magnetic flux tubes bunches plunging in the punch hole. They will superimpose, in alternate fashion, creating this way radiation. Notice the number of the flux tubes is the same in adjacent bunches.

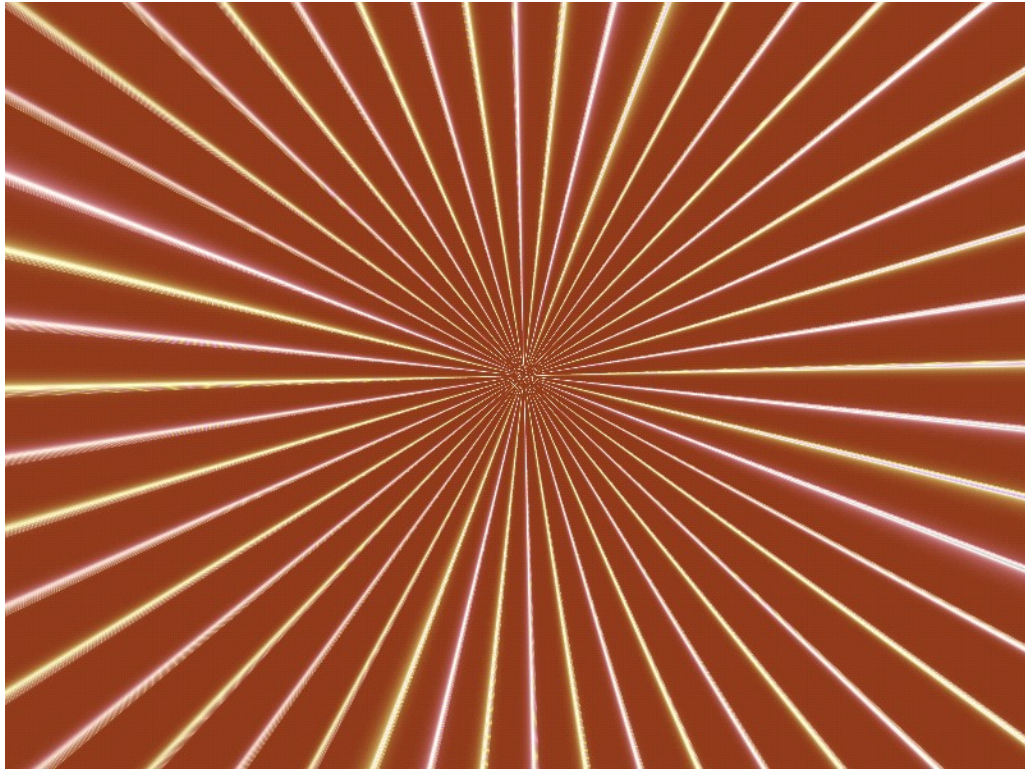


Fig 22b. A zoom inside Fig 20b. The above punch hole fractal image shows electric and magnetic flux tubes alternate with each other creating this way radiation.



Fig 23a. Dead zone beams crossing a punch hole. The flux tubes cross these dead zone beams creating electromagnetic plasma. Normally, dead zone beams shows as black beams. In this case they are too narrow for that. Bottom right, the beam is large enough so we can see a black spot.

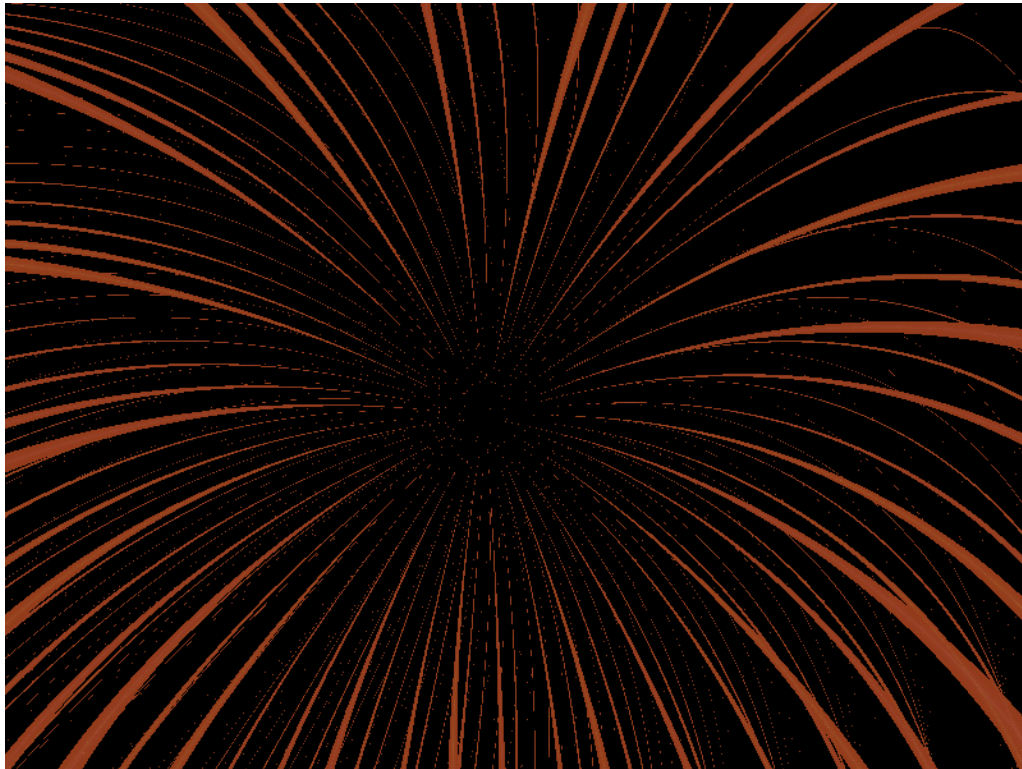


Fig 23b. At the centre of the punch hole an empty tunnel with zero density. See also Fig 23d.

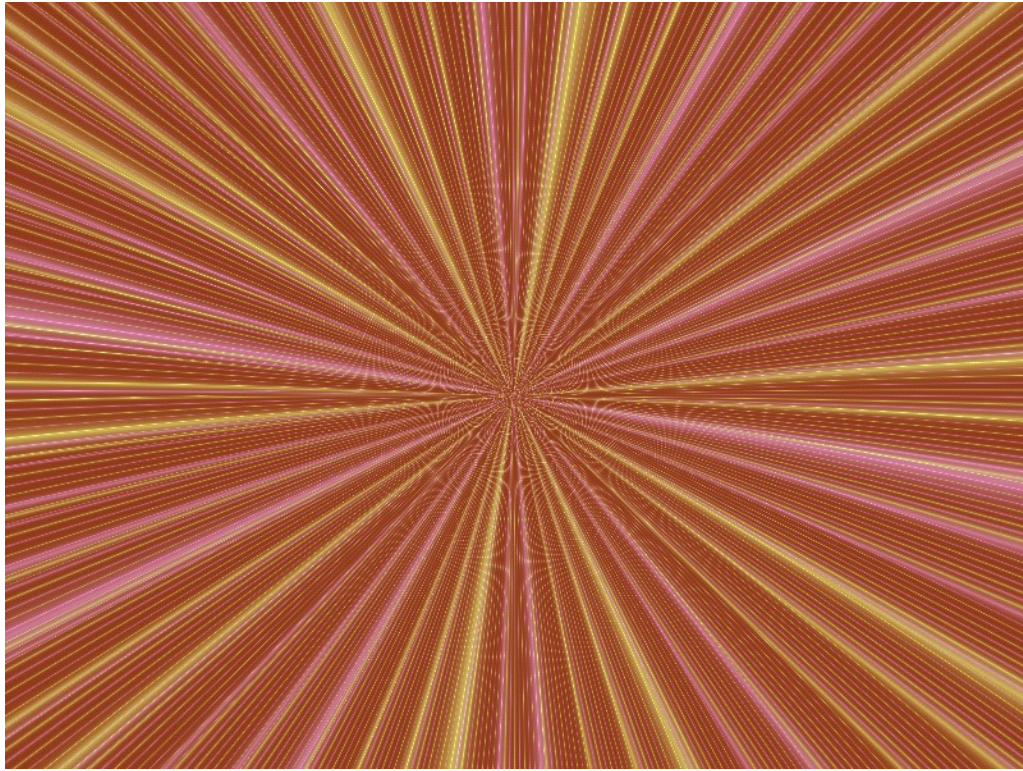


Fig 23c. Electric and magnetic flux tubes end up alternate with each other inside the punch hole.

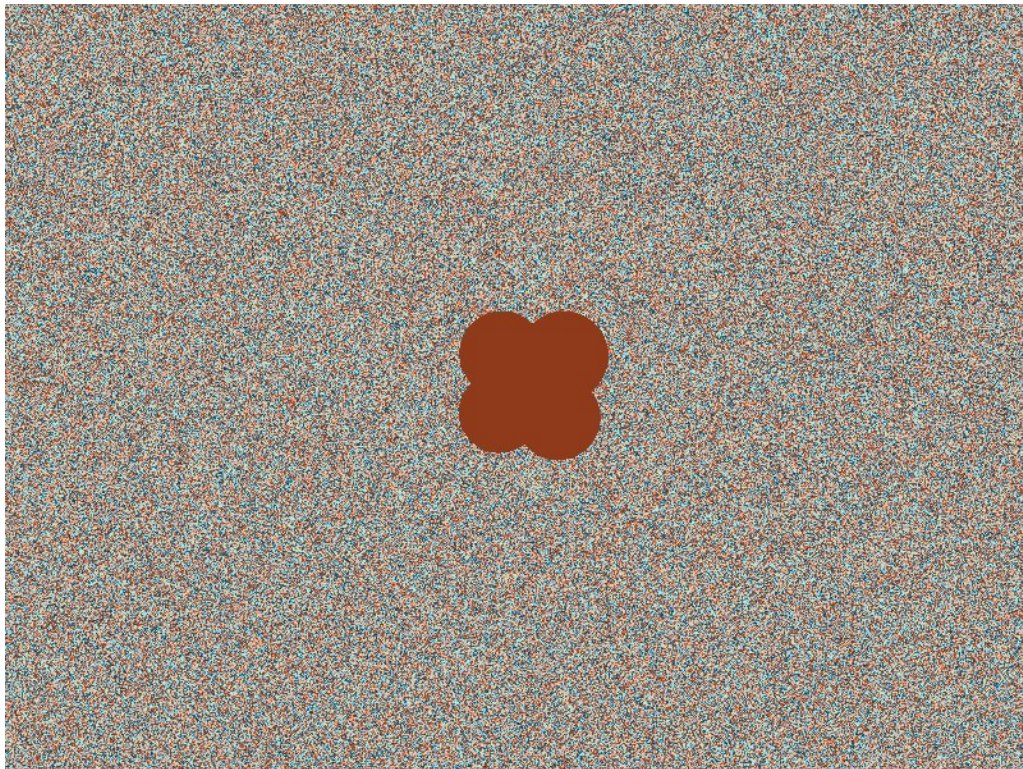


Fig 23d. The same as Fig 23b/c. The punch hole has a zero density at

the centre.

Outgoing radiation:

Let's describe now what happens when celestial bodies radiate. We have seen how punch holes split radiation in separate electric and magnetic streams by serving as umbrellas. We now will see how they assemble/produce radiation from separate electric and magnetic flux tubes.

When electric and magnetic flux tubes, coming from different directions, plunge into the punch holes they alternate with each other creating radiation/light. Apparently, this alternate distribution is the most natural way for electric and magnetic flux tubes to share space while going through a punch hole. Flux tubes plunge into punch holes and join underlying bigger flux tubes using them as highway and propagate into space. The flux tubes then swirl and spirals up into space. Flux tubes coming out of different punch holes join and follow the spiralling stream. These spiralling streams reside between the arms of a cyclone. See Fig 30. This is the way a celestial body radiate. It is thought that because planets do not have a nuclear fusion at their core, they do not produce their own light. There is no nuclear fusion at the core of stars or planets. Stars, planets and moons are all hollow bodies. Just like stars, planets do radiate. All celestial bodies radiate the same way. On Earth, punch holes are called a.i. Cirrus and rainbow clouds. Flux tubes descend from punch holes converging towards a certain direction. In case the radiation they create is in the visible spectrum, they are known as rainbow clouds and sometime called fire clouds. Rainbow colours are splashed across it. From up to down, the colour change from red to green to orange to yellow to blue. After that we are not able to see it with naked eye. We still see Cirrus cloud visible with water dump. The changing colours are due to the electric and magnetic flux tubes that are converging towards each other. The general explanation of rainbow clouds is that ice crystals act as little prisms like in a rainbow circular arc.

Punch holes are for flux tubes the gates to the celestial body. Punch holes are radiation fabrics. They split light entering a celestial body in separate electric and magnetic flux tubes. They also create

radiation from separate electric and magnetic flux tubes that leaves the celestial body.

Punch holes and density cavities exist everywhere at all scales. They are around us but also in us. They exist in every living body. They both play their role in the electric and magnetic fields. They form layers covering a celestial body.

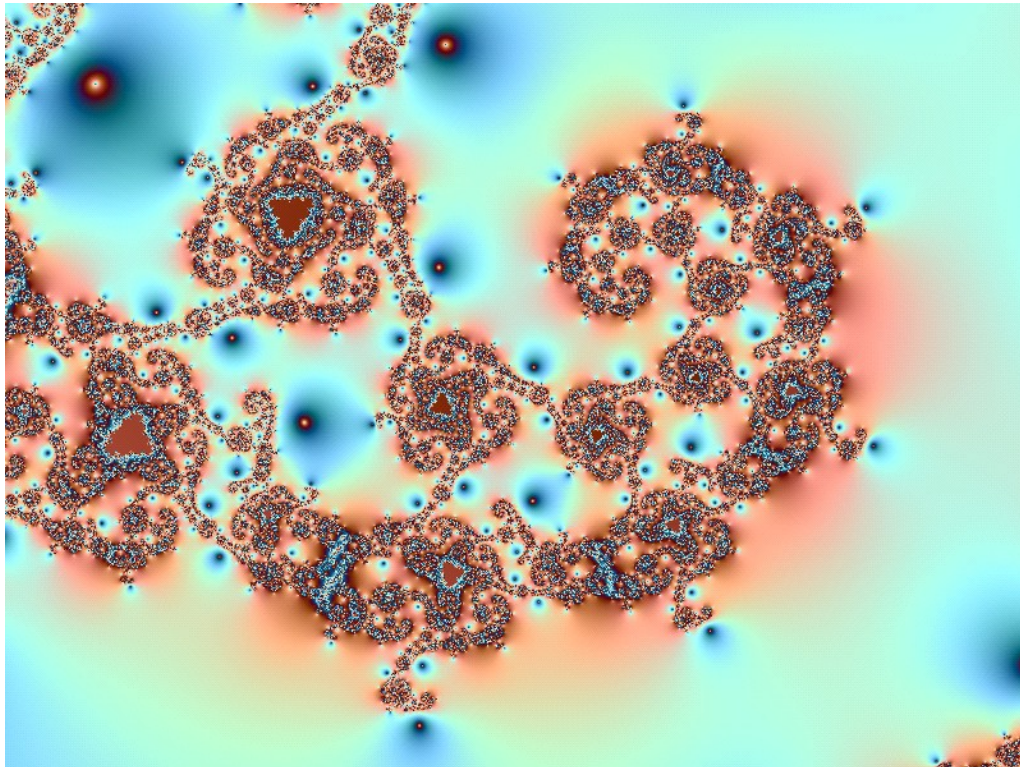


Fig 24a. Cyclones are density cavities, surrounded by punch holes, in spiral form.

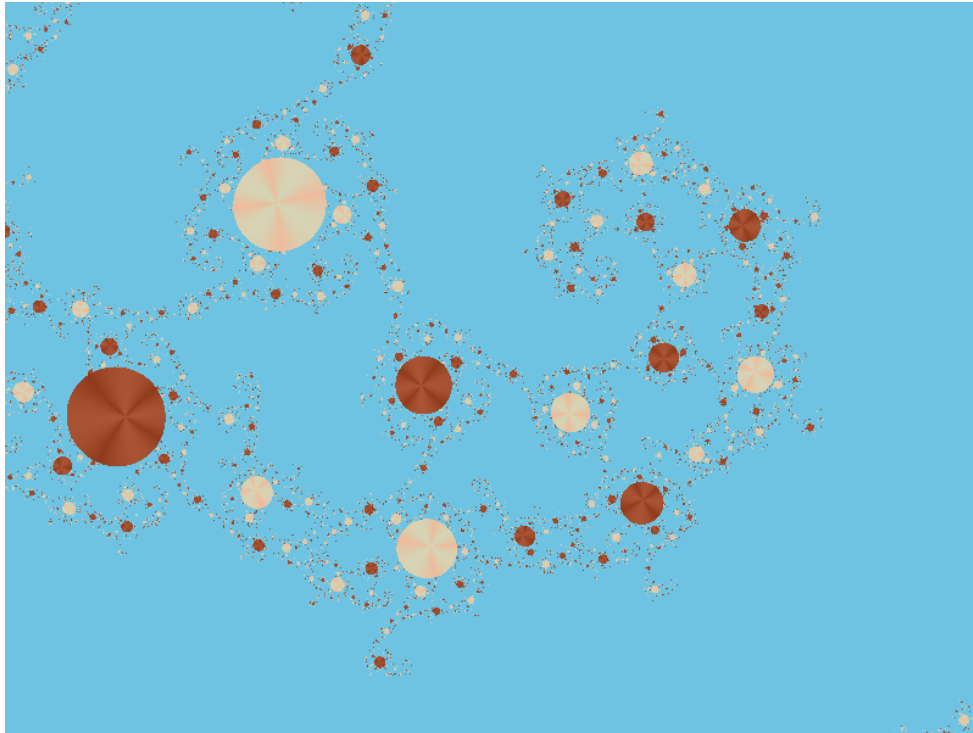


Fig 24b. Cyclones are density cavities, surrounded by punch holes, in spiral form.

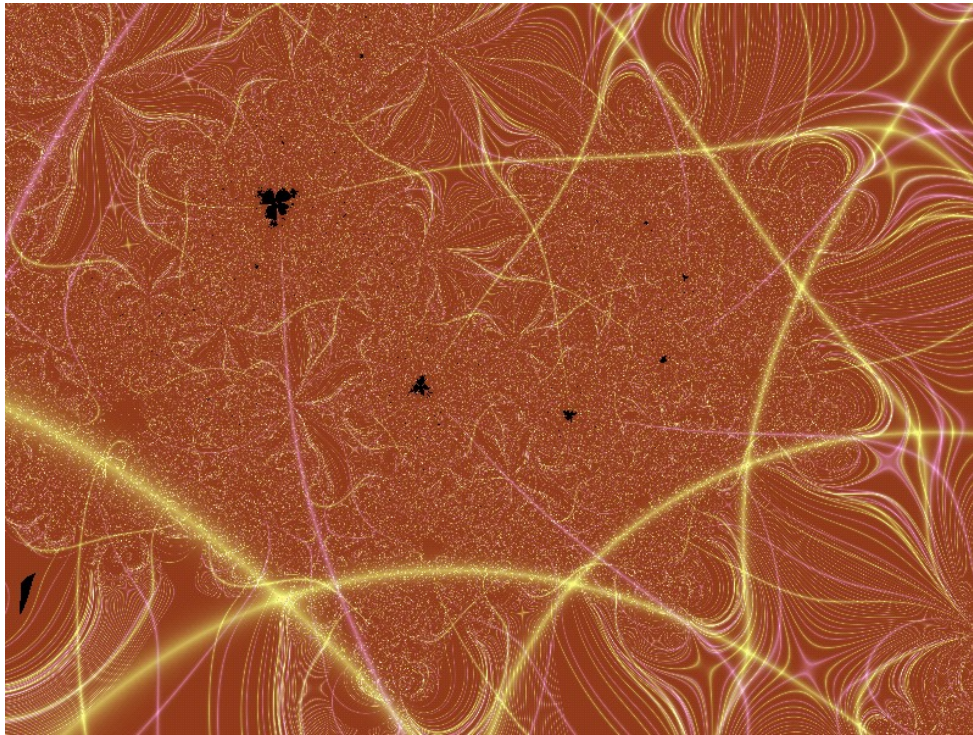


Fig 24c. Cyclones are density cavities, surrounded by punch holes, in spiral form.

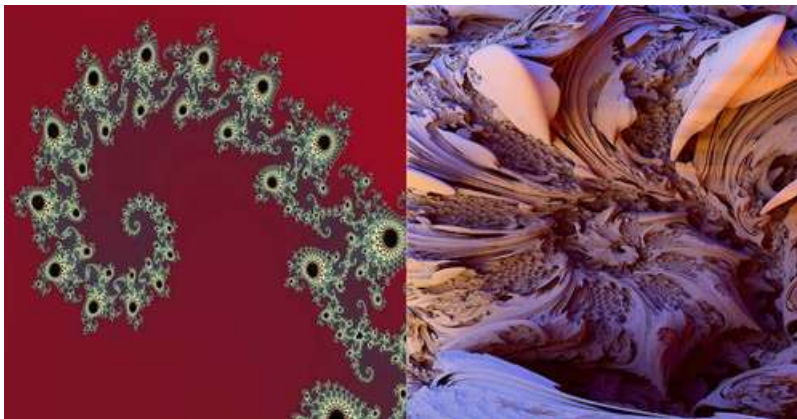


Fig 25. This could be a model for clouds. Density cavities and punch holes form cloud structures.



Fig 26. This could be a model for clouds. Density cavities and punch holes form cloud structures.



Fig 27. This could be a model for clouds. Density cavities and punch holes form cloud structures.



Fig 28. Density cavities in a cloud fractal model.

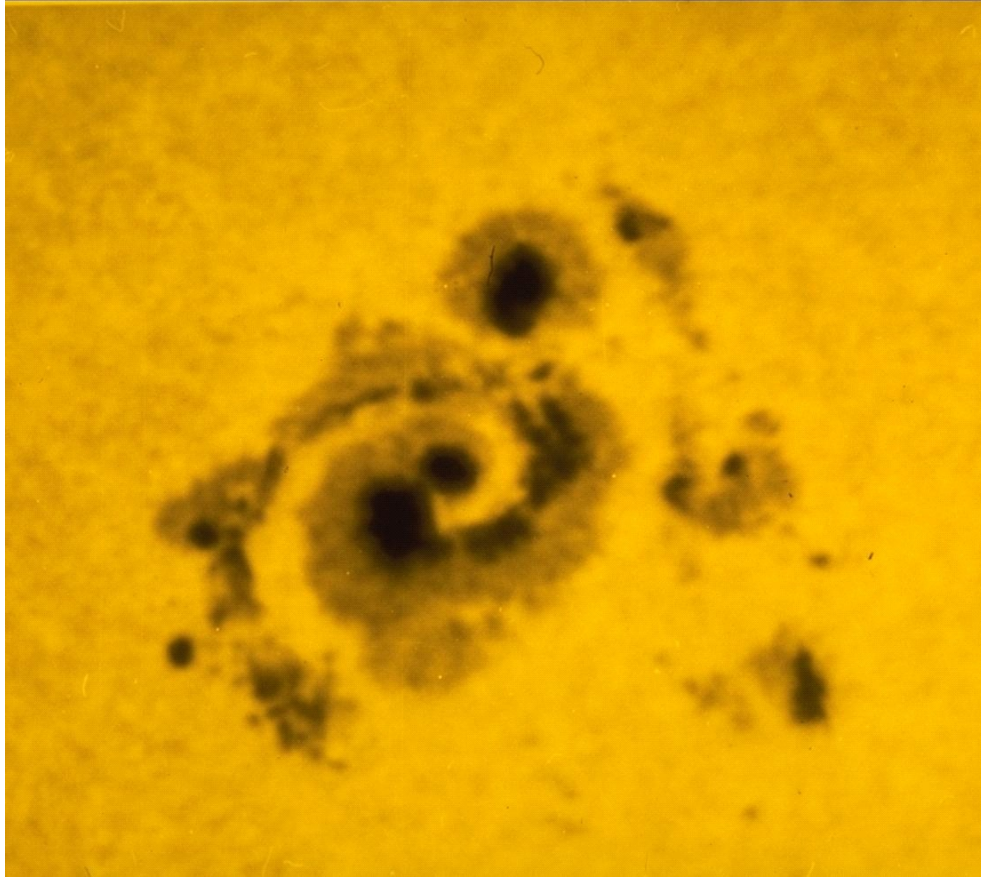


Fig 29. Celestial body contours are fractal and spiralling. The incoming and outgoing radiation passes by punch holes and cavities while spiralling. On Earth these spirals are the anticyclones. Seeing from above they are counter clockwise at the northern hemisphere and clockwise at the southern hemisphere. Cyclones are density cavities, surrounded by punch holes, in spiral form.

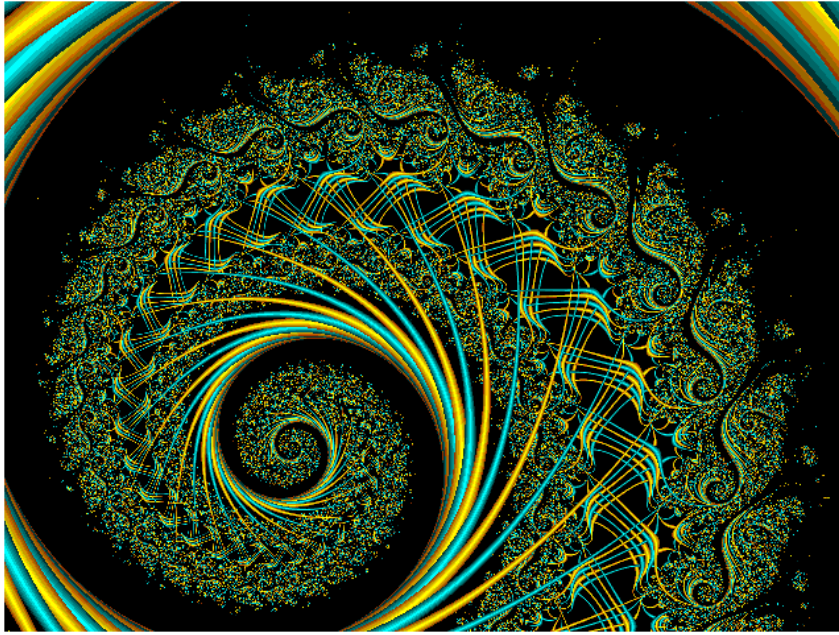


Fig 30. Electric(blue) and magnetic(yellow) flux tubes alternate and spiral between the cyclone arms to propagate into space.

Clouds and celestial body layers:

To understand the complexity of cloud and celestial body layers we should examine them at the poles where they, so to speak, start to form. It is at the poles that these complex structures are relatively simple to understand. These layers are better visible and easier to understand at the south pole opening of the celestial body fractal model. The pole opening is circular with the electric plasma jet outflow coming out the centre of the main chamber. The electric plasma flows in and out the density chamber, through both poles. It's at the edge of this pole circle that electric and magnetic flux tubes start getting tangled forming cavities and punch holes. Electric and magnetic flux tubes, coming from space and expanding into space, criss-cross each other creating punch holes and density cavities. Close to the electric plasma axis, we encounter first magnetic flux tubes only. At certain distance from the axis electric flux tubes start to appear. A double layer of cavities and punch holes start to form. One at the outside surface and a second one at the inner surface of the celestial body. They start very thin and get thicker and complexer equator-ward. This is the reason why thermoclines are shallow to nonexistent in the polar regions and permanent in the tropics. The

inner layer start first to form prior to the surface layer. In each layer density cavities are sandwiched by punch holes layers. The layers are symmetrical to each in regard to an imaginary line separating them. The inner layer at the opening of the south pole start first with one cavity followed by two punch holes. The punch holes are positioned slightly in phase shift on both sides of the cavities. The surface layer density cavities inclination is orthogonal to those of the inner layer. Let's describe the inner layer. Magnetic flux tubes, coming from space, penetrates the celestial body and make a U-turn and intersect with electric flux tubes that are coming from up. These magnetic sheets makes a U-turn crossing with other magnetic sheets and creating a magnetic grid and a magnetic plasma belt. After the U-turn, and after intersecting with the electric flux tubes, they change direction and travel along the horizontal, between the punch holes layers, crossing more and more electric flux tubes. Each time, a new magnetic and electric flux tube is joining the formation. Both flux tube change direction towards the equator. By doing so, they have to cross more flux tubes, create so an increasing number of density cavities and punch holes. So, The number of cavities and punch holes gets higher equator-ward. The flux tubes, with their corresponding cavities and punch holes, are also getting bigger and bigger. This means that the produced radiation rate becomes higher. This is one of the reasons why it is cold at the poles. Magnetic flux loops nested in each other lock density cavities with corresponding/shared, punch holes. They start first with two perfect nested magnetic flux loops. The following formation has also two perfect nested magnetic flux loops with new nested loops that are much longer, and in addition to that The number of nested magnetic loops increases equator-ward. The distance between the cavities increase too. The resulting space in between is filled by new layers of smaller scale cavities and punch holes. The distance separating the layers also increases equator-ward. The resulting space in-between get filled with new layers of cavities and punch holes. These layers form the celestial body layers like the ones in Earth interior. At both poles of the fractal model we see clearly these first two layers of density cavities and punch holes. At certain distance from the pole, the area between the layers become populated by a dead zone cavities. The distribution of the cavities and punch holes in these layers is not uniform. Cavities and their surrounding punch holes are arranged in distinct heaps. This is why clouds form these

structures we call cumulus clouds. Equator-ward, new series of density cavities and punch holes are added to the formation. The result are heaps of density cavities of different scales in each heap. The heaps size increase equator-ward. In Denmark the cumulus clouds are much smaller than in Spain. The distance between the heaps increases to. At the poles cumulus clouds are close to the surface than at low latitudes. All these features of the fractal model match with cloud observations.

Cavities and the surrounding punch holes are arranged in spiral forms. For every cavity there is a corresponding punch hole.

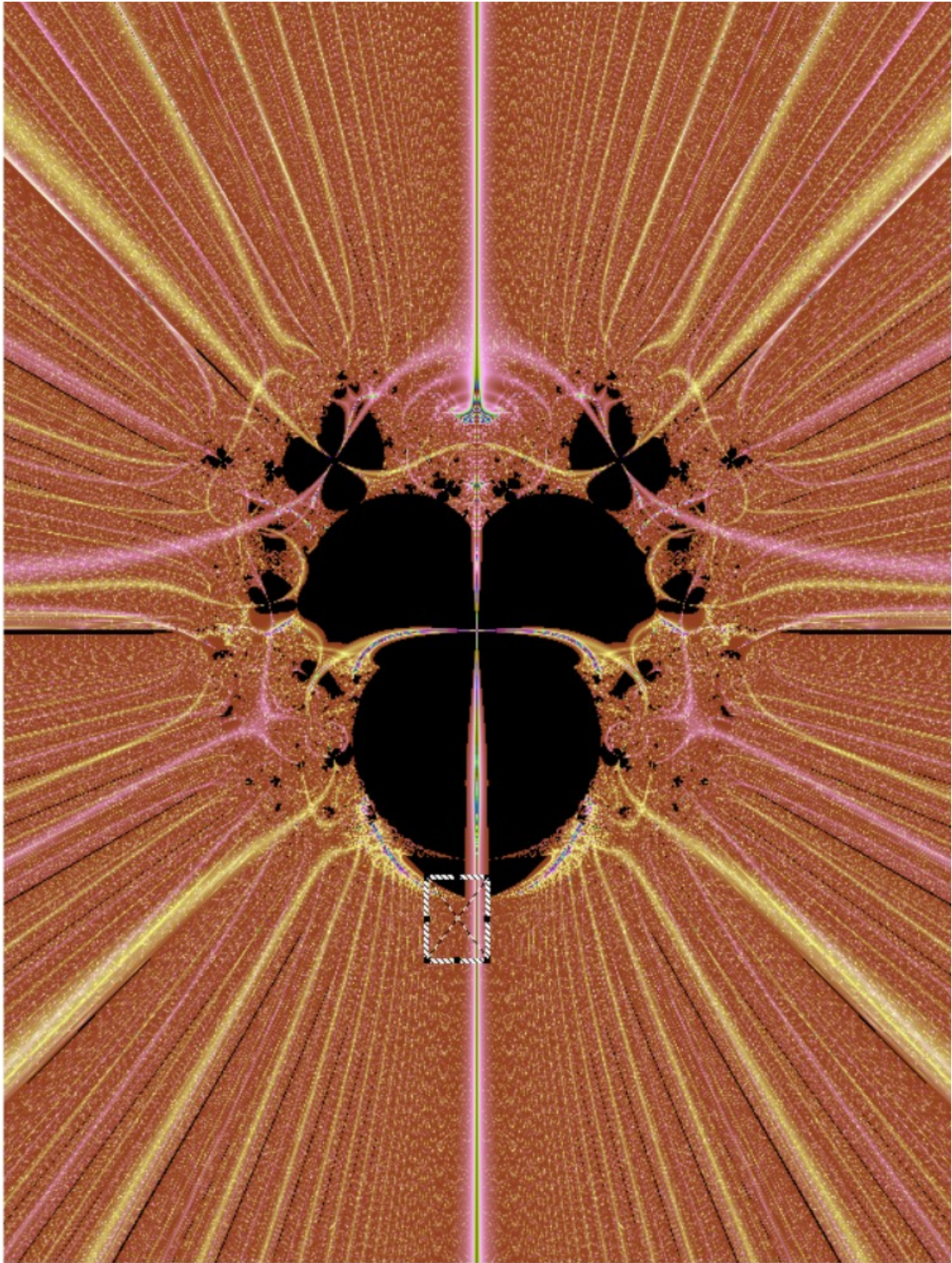


Fig 31a. We will zoom into the south pole opening to understand clouds formation. It's at the poles that these structures are relatively simple to understand.

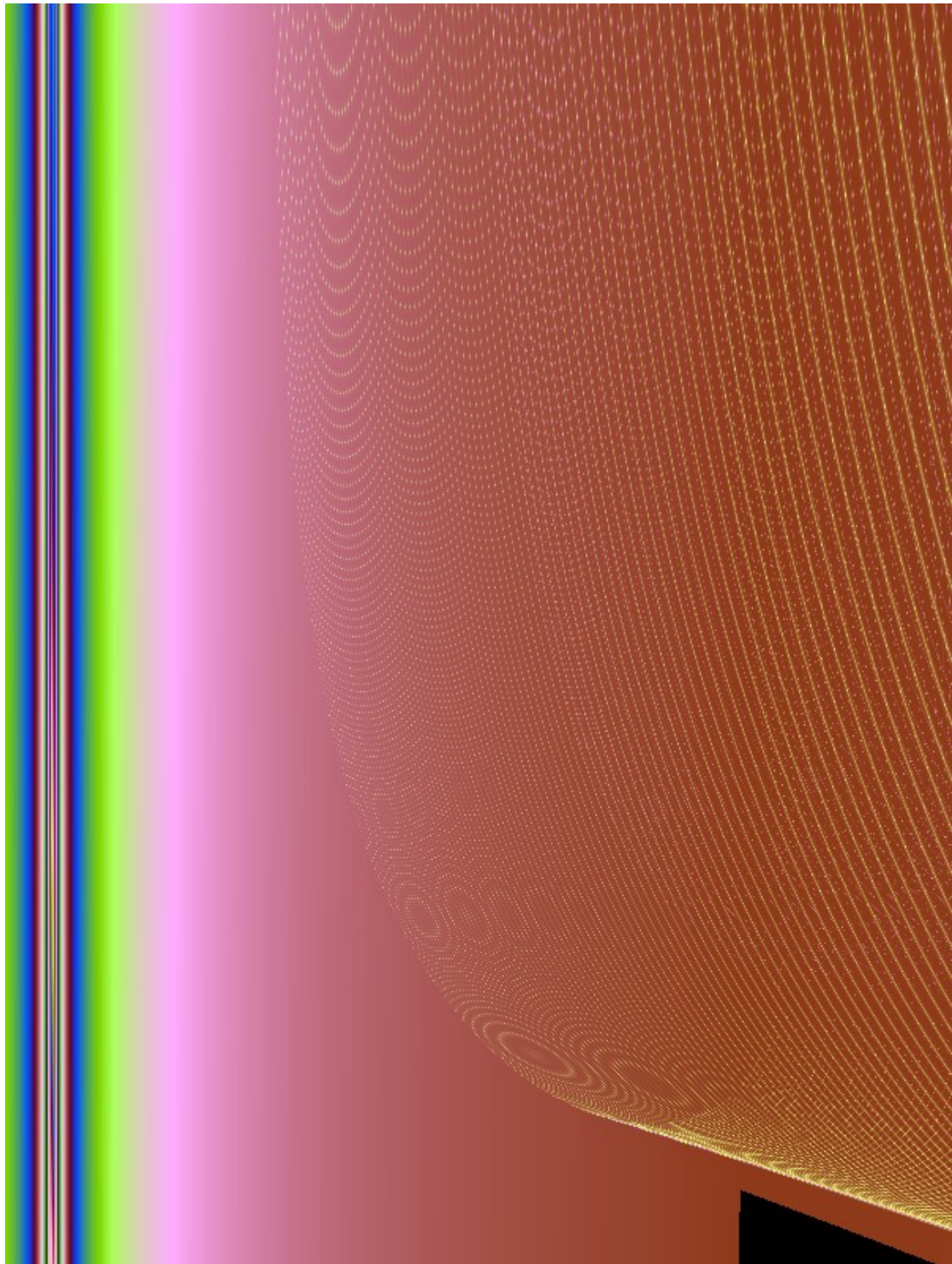


Fig 31b. The pole opening is circular with the electric plasma jet outflow coming out the centre of the main chamber. The electric plasma flows in and out the density chamber, through both poles.

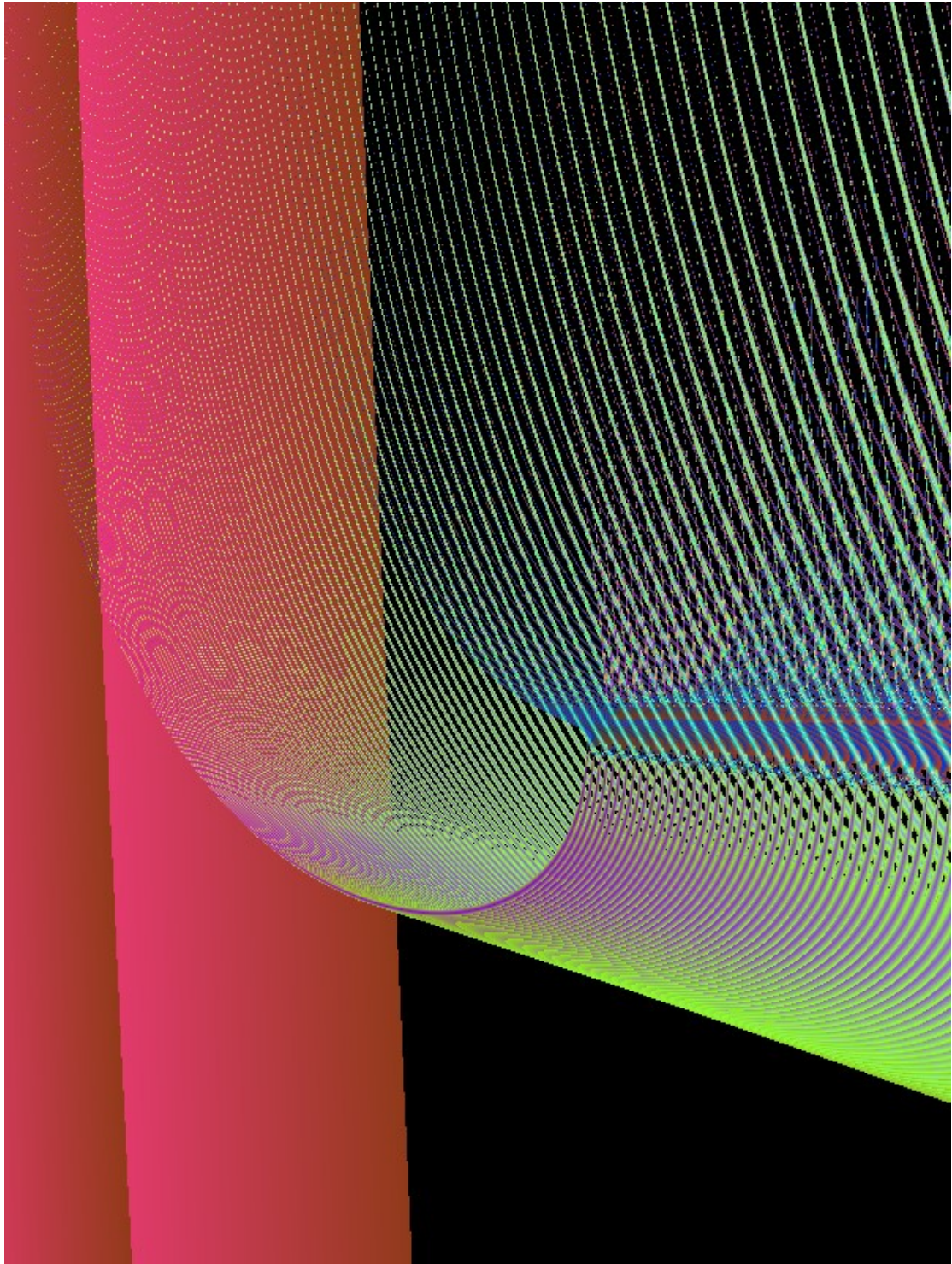


Fig 31c. Electric and magnetic flux tubes making a U-turn. This is what we call the current sheet. It is actually electromagnetic.

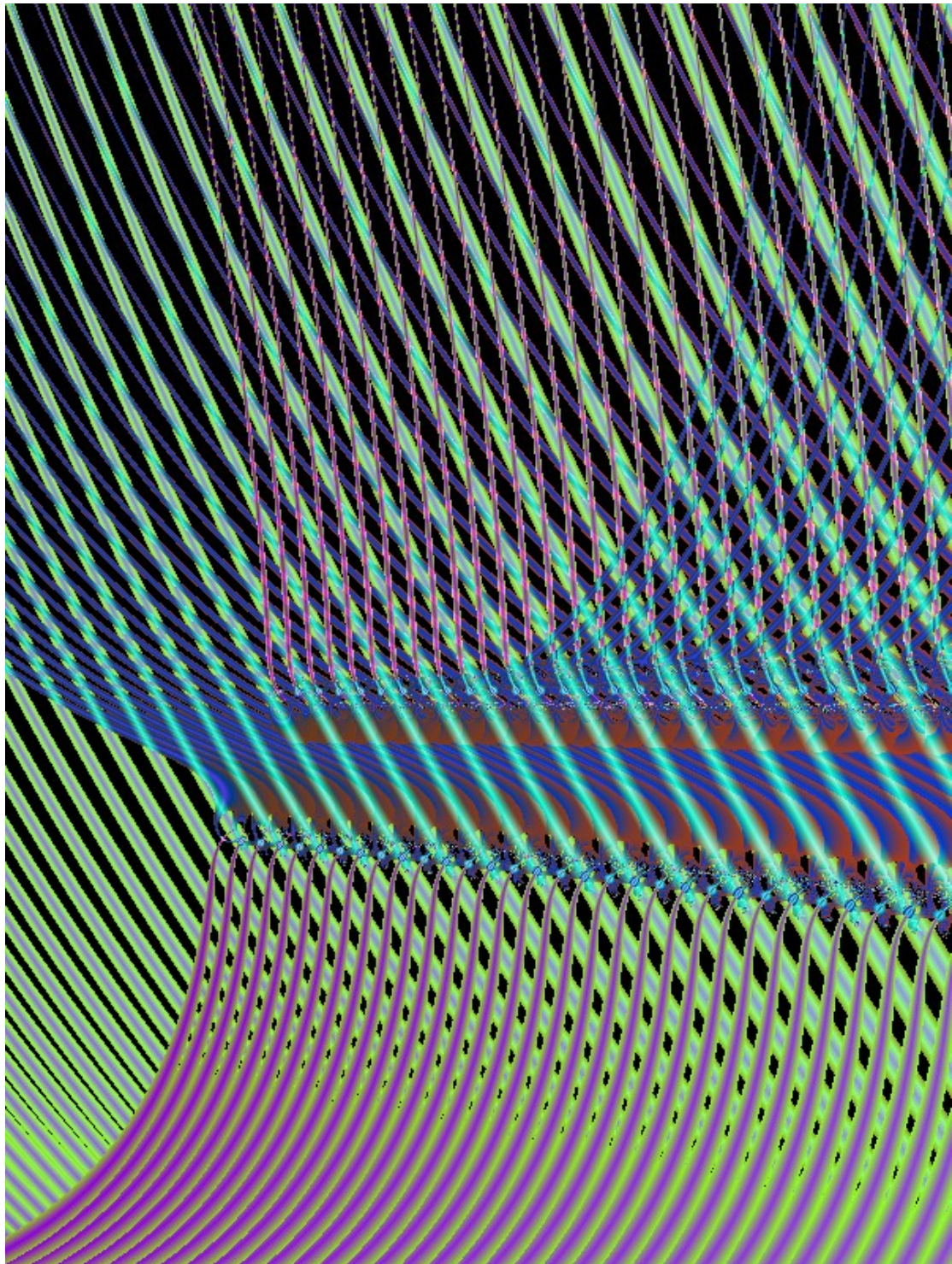


Fig 31d. Electric flux tubes(blue). Magnetic flux tubes(green and purple). It's at the edge of this pole circle that electric and magnetic flux tubes start getting tangled forming cavities and punch holes.

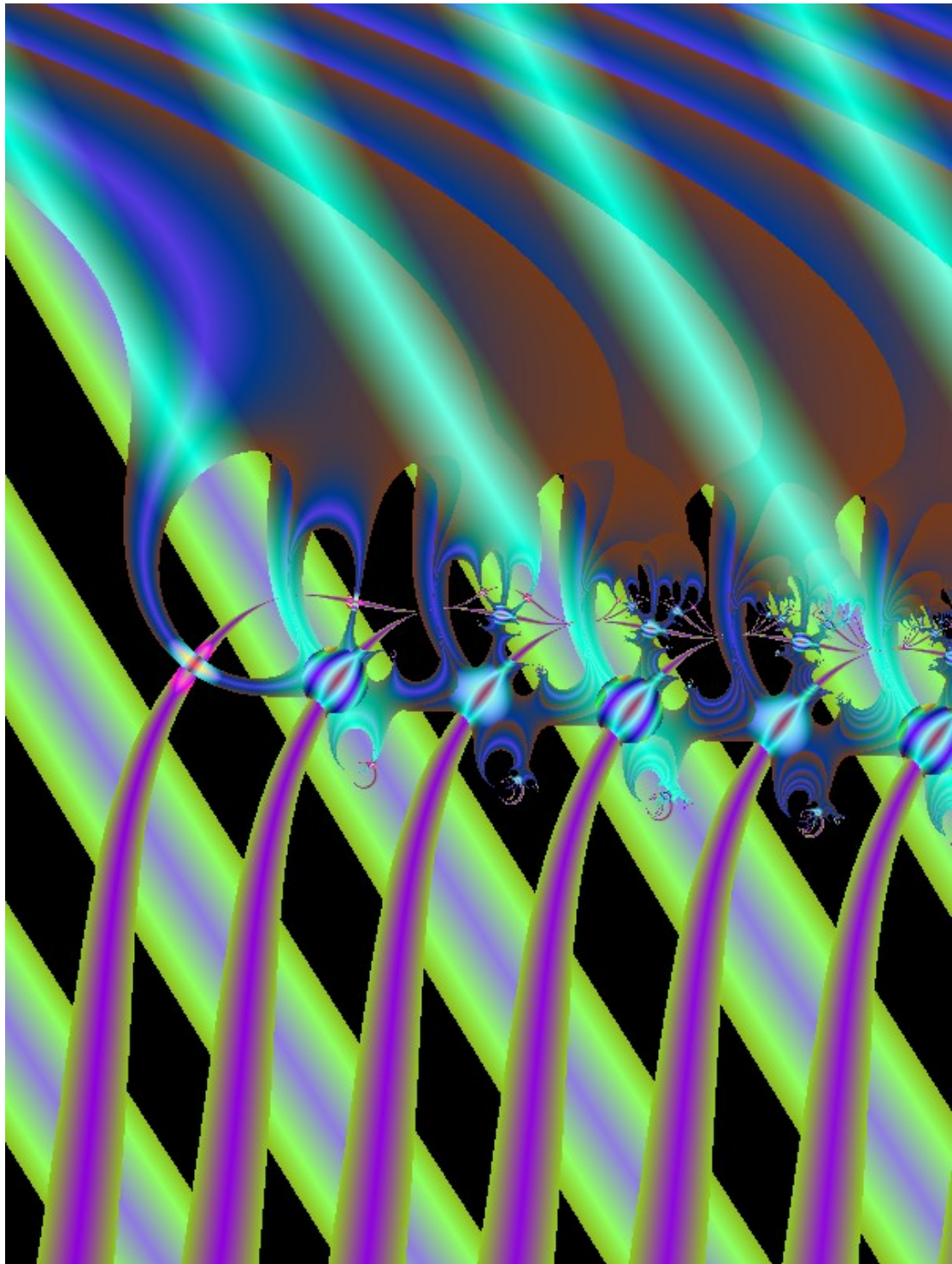


Fig 31e. Electric flux tubes(blue). Magnetic flux tubes(green and purple).

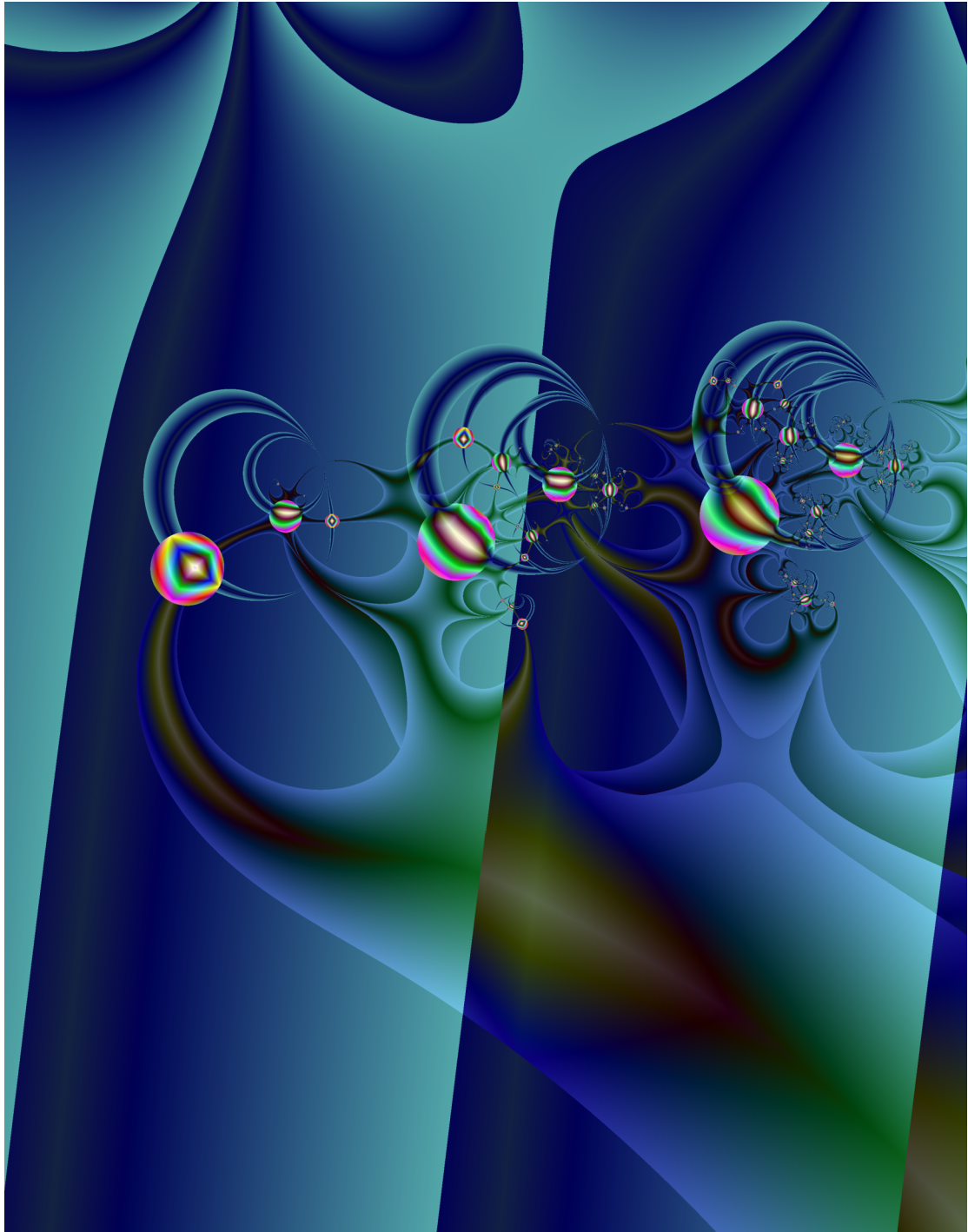


Fig 31f. This image shows the south pole opening inner/down layer. The opening is on the left side. Electric and magnetic flux tubes start to get tangled with each other creating density cavities and punch holes. Equator-ward, the number of plumes and rays increase and so does the number of density cavities and their corresponding punch holes. The density cavities are these coloured spheres. The punch holes reside at the thin part of the loops.

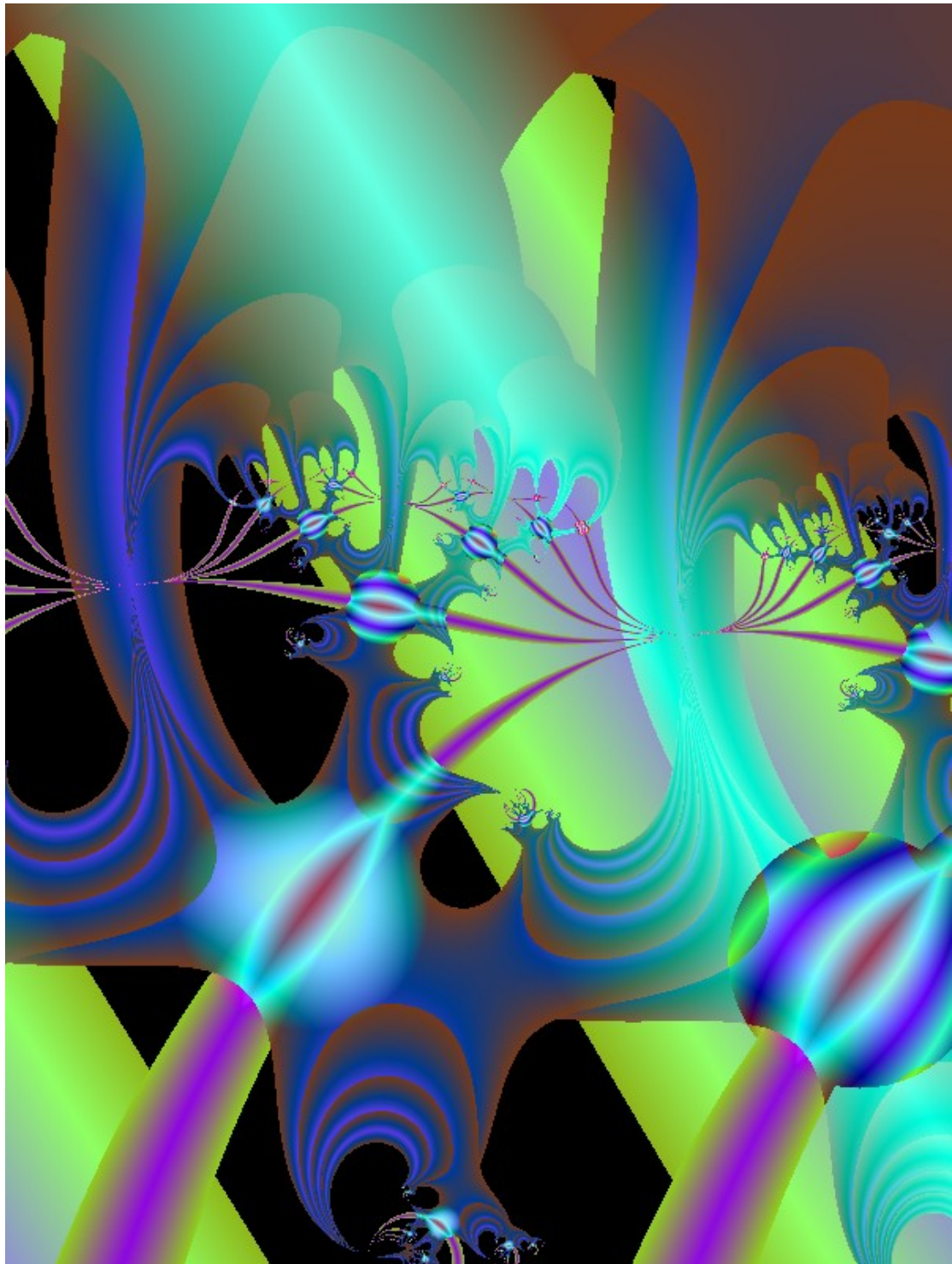


Fig 31g. Electric flux tubes(blue) cross magnetic flux tubes(purple/magenta) forming an increasing number of density cavities and punch holes equator-ward.



Fig 32. Flux tubes ascending towards the density cavities(the top clouds).

The sun magnetic field:

We consider the sun as a giant fluid ball with material moving inside it creating an electric current. The electric current in turn generate a magnetic field that produce the activities we see at it's surface. The magnetic field lines become then visible as they guide the so called plasma. A variety of plasma structure delineate the magnetic field lines of the sun. We also think that the solar wind, composed of charged particles, carries the sun magnetic field through the solar system. We consider the sun magnetic field or the interplanetary magnetic field(IMF) as a separate phenomenon to the sun wind, prominences, polar plumes, helmet streamers, spicules etc. But, all these phenomena are actually features of the same structure. We see only the exterior of the sun. But if we could travel inside the sun we would see that the sun is made of empty cavities with a density chamber at it's centre. The interior of the sun is made of electric and magnetic flux tubes. These loops are the building blocks of the sun. They also connect the sun to stars and planets. The sun, like planets and moons, is hollow. The sun is not a dipolar magnet as we think. Flux tubes propagate into space asymptotic to the mid-

plane. Also prominence's and coronal loops do not cross the mid-plane as you would expect from a dipolar magnet. Early in my research I was thinking that cyclones of both hemispheres are connected. But when I was studying the sun I found out that few magnetic field lines cross the mid-plane. Also prominence's and coronal loops do not cross the mid-plane as you would expect from a dipolar magnet. It's only when I found these fractal models that things became clear.

Sun magnetic flip:

Every eleven years the sun magnetic field is reversed. But actually the electric field should also reverse. During the electric and magnetic flip the flow direction in the flux tubes is reversed. The flow direction of a prominences also reverse. This means that the sunspots magnetic field, at the feet of the prominence, reverse polarity from cycle to cycle. During electromagnetic flip, the sun activity slows down to a minimum before the flux of every tube start to flow in the opposite direction.

Plasma:

The contemporary understanding of plasma is that it's some kind of soup of negative charged particles like electrons and ions(atoms which have lost electrons). It is sometimes referred to as the fourth state of matter. It is even thought that 99% of the universe is made of plasma. With the arrival of fractals, plasma has finally revealed its true nature. Plasma is not a soup of charged particles and ions but rather flux tubes that cross each other, or are squeezed against each other. See Fig 10d/e. Inside the cavities and in the dead zones, electric flux tubes and magnetic flux tubes are squeezed against each other creating plasma. Plasma can have different shapes. There are three types of plasma: electric, magnetic and electromagnetic plasma. Electric plasma also exist in cellular form like on the top of clouds(pixies). Magnetic plasma can have spiral shapes.

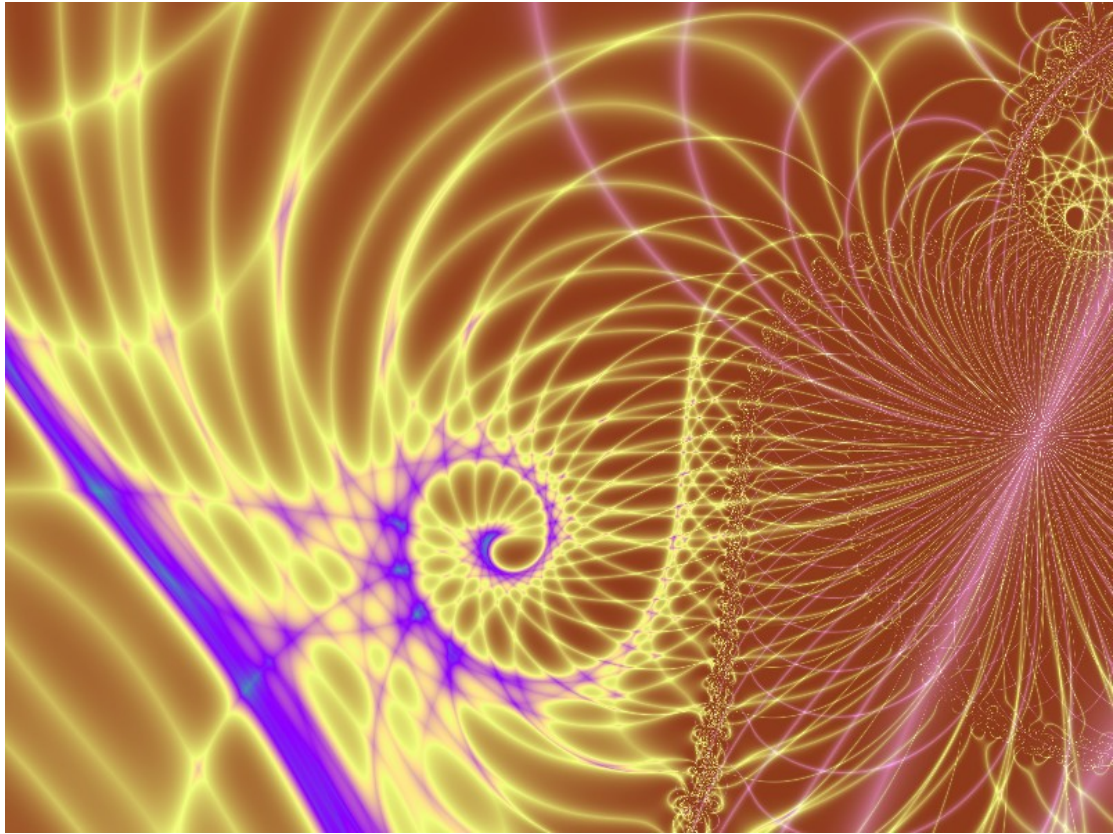


Fig 33. A deep zoom inside the celestial body model show magnetic plasma in spiral form.

Polar plumes and polar rays:

Polar plumes are huge magnetic flux tubes that extend radially from the sun surface into space. They have different sizes. They start big and thick, at a certain distance from the pole, and are gradually thinner poleward. The structure and origin of the southern and northern polar plumes differ from each other. Let's describe the southern polar plumes. The big magnetic polar plumes are known as "beam plumes". In-between, electric and magnetic flux tubes, at smaller scale, are propelled from the cloud layers. These regions in-between is known, in solar physics, as the inter-plume regions. These smaller magnetic inter-plumes are called "network plumes". The electric flux tubes are called the "polar rays". These polar rays are more curved than the beam plumes. This difference in curvature/inclination cause polar plumes and polar rays to cross each other, with a slight angle, creating electromagnetic plasma. Polar plumes are magnetic flux tubes whereas polar rays are electric flux tubes. Polar rays are hotter than polar plumes as they are

electric. Polar plumes and polar rays alternate while propagating into space. Polar plumes are much bigger than polar rays. South pole polar plumes have their origin, so to speak, in the magnetic belt of the southern hemisphere. Whereas polar rays originate from the cloud layers. Both polar plumes and polar rays cross each other creating plasma.

Despite the numerous observations techniques, the structures and nature of the inter-plume regions is not well understood. Using these models, we can understand these inter regions.

The magnetic flux tubes, originating from the atmospheric clouds, curvature is less than the one of the polar rays. They too cross the polar plumes creating magnetic plasma. Tangled together, at the base in a grid form, polar plumes form the southern magnetic belt. This belt can be considered as the magnetic back-bone of the southern hemisphere of a celestial body. The magnetic belt reside in the inner atmosphere of the celestial body. Magnetic flux tubes coming from space, in a sheet formation, penetrate the celestial body, makes a U-turn, while crossing each other, creating a magnetic grid and the magnetic plasma belt. After making a U-turn, they then intersect with electric flux tubes and form the celestial body layers. Polar plumes cross the dead zone cavities, at the surface of the sun, creating this bright magnetic plasma. Plumes cross also density cavities giving them brightness. Observations of polar plumes shows indeed bright areas at the foot point of polar plumes. See fractal images Fig 34b and Fig 35.

Polar plumes having a slight opposite inclination to the radial cross each other creating magnetic plasma. The inter-plumes, as much electric as magnetic, originate from the cloud layers. See fractal image Fig 34c.

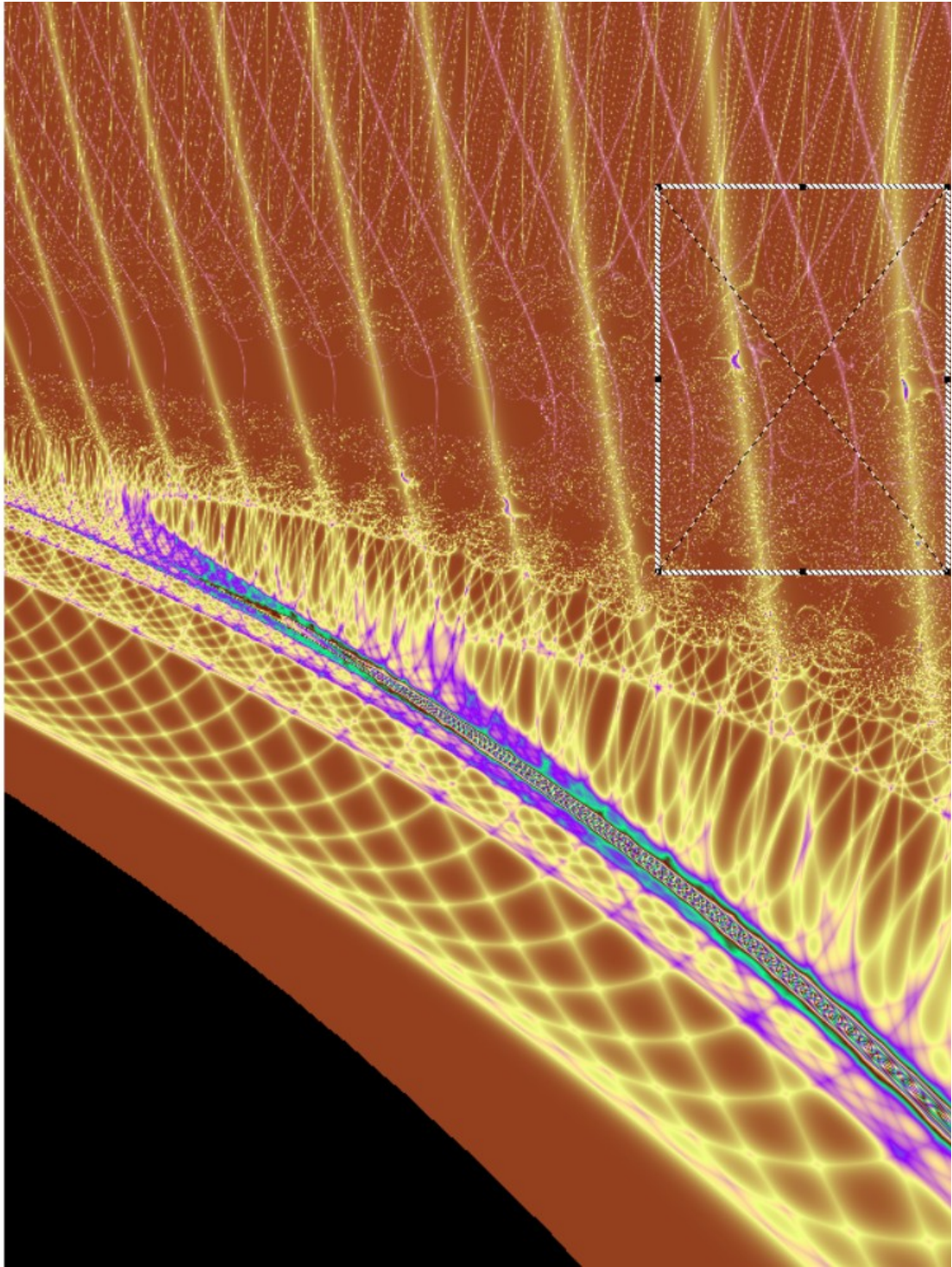


Fig 34a. Polar plumes shooting out from the magnetic belt. The polar rays shoot out from the clouds upper layers. The magnetic flux tubes makes a U-turn inside the celestial body creating a grid. They then cross with electric flux tubes and change direction towards the equator creating so the celestial body layers.

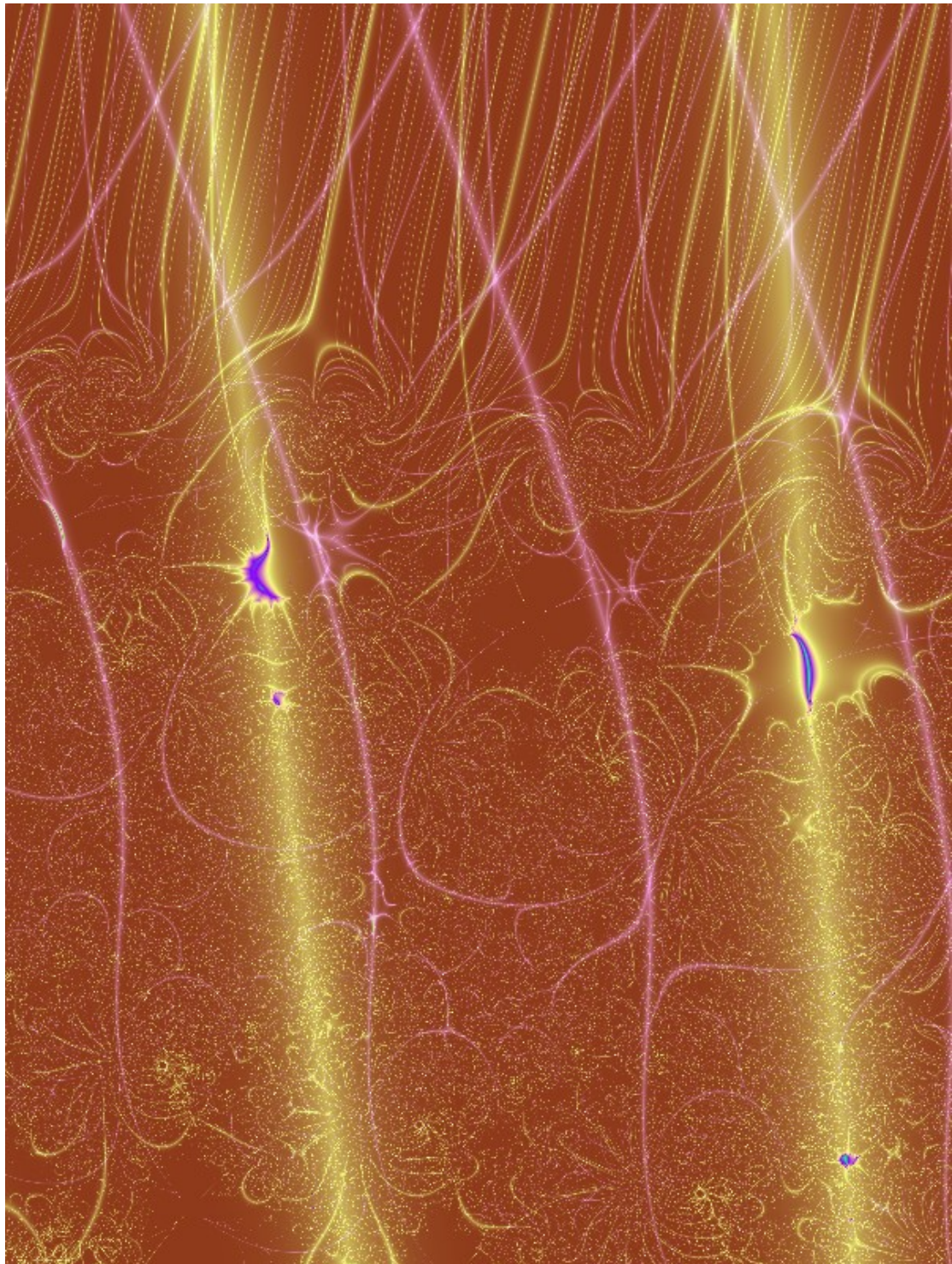


Fig 34b. South pole polar plume crossing density cavities, in plasma form, giving them brightness. These bright spots has been observed at the foot point of polar plumes. The polar rays makes an angle with the polar plumes while propagating into space.

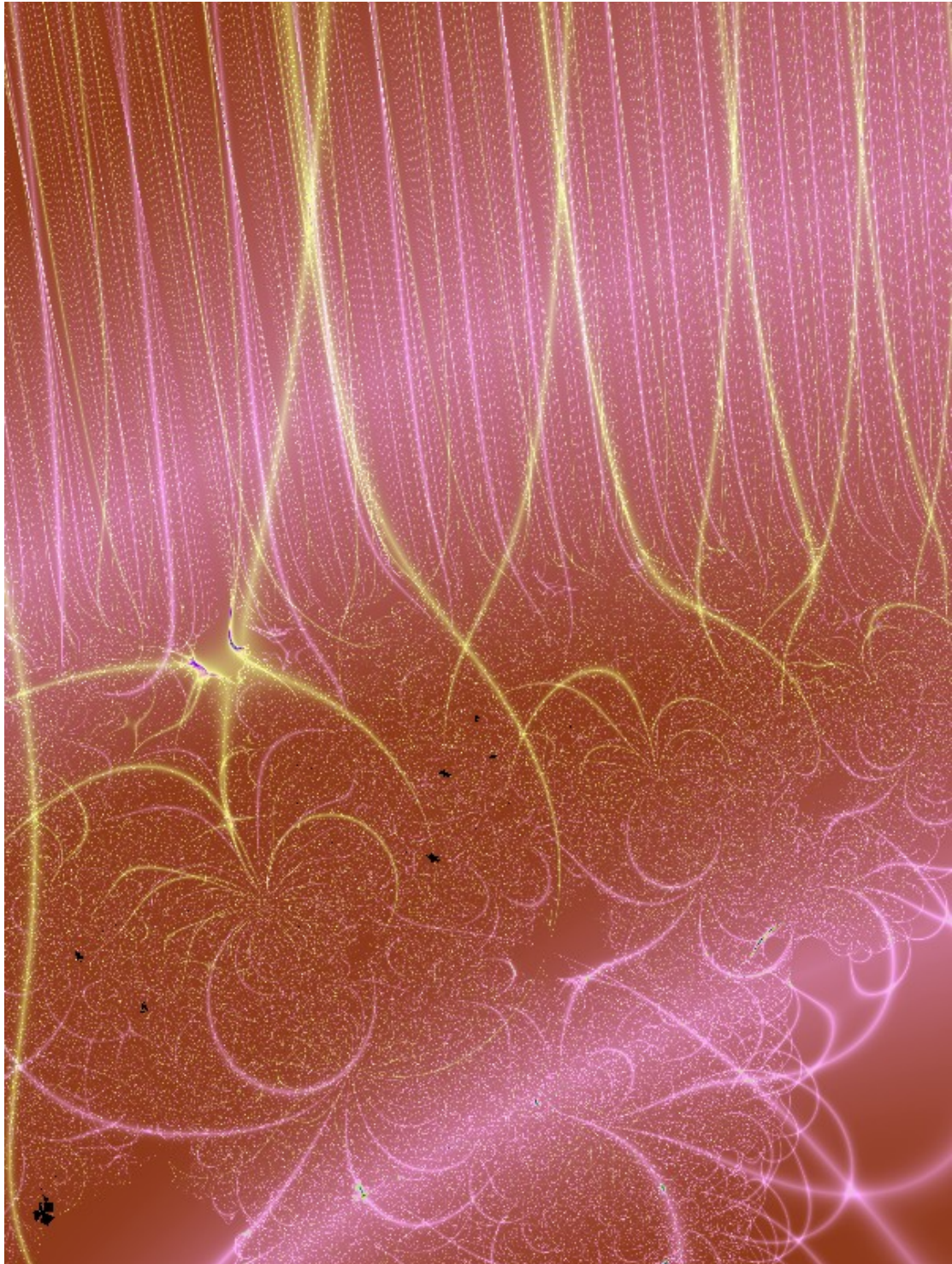


Fig 34c. North pole polar plumes and polar rays. Magnetic plasma at the foot point of the polar plumes(left middle). magnetic flux tubes crossing dead zone cavity producing magnetic plasma. Polar plumes cross each other, in the upper atmosphere, creating magnetic plasma. Polar rays cross each other, in the upper atmosphere, creating electric plasma.

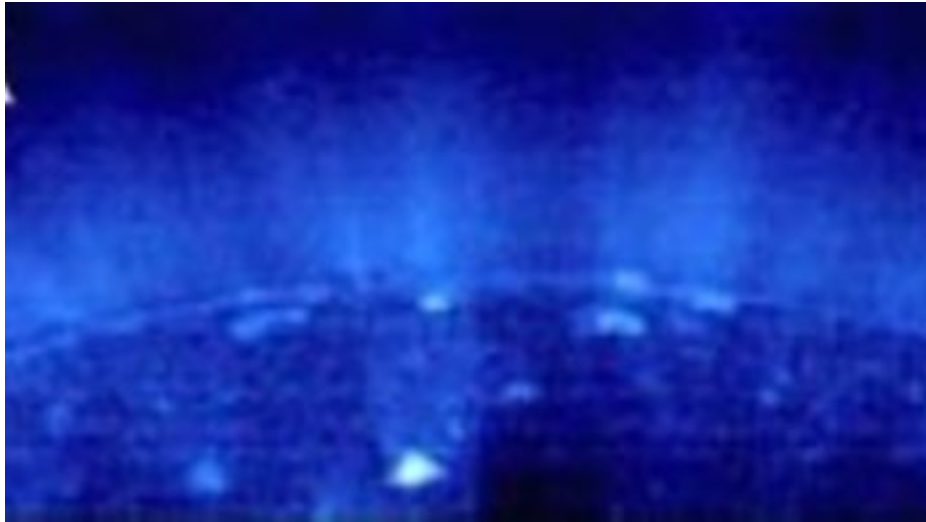


Fig 35. Bright areas at the foot point of solar polar plumes are magnetic plasma

Solar wind and coronal holes:

Coronal holes are these dark regions on the sun surface. These regions produce the most high speed solar wind. The solar wind speed is twice as high as elsewhere. Solar wind are electric and magnetic flux tubes that are not alternate. When electric and magnetic flux tubes propagate collimated but not alternate into space they produce the solar wind. Their speed can vary depending of their scale and the interaction between them. These flux tubes does not produce radiation. That's why coronal holes are dark. Coronal holes produce the most solar wind and are cooler and darker than other regions. Coronal holes are populated by open magnetic flux tubes because these lines do not plunge into punch holes to create radiation. So there are no arcs to be seen that comes out of the cavities plunging into the punch holes. Coronal holes exist permanently at the poles of the sun. But, they also exist at lower latitudes. Coronal holes are these areas with few density cavities and sunspots. In the fractal model both poles have few punch holes and cavities. Hence they produce less radiation than the mid latitudes.

Dead zones, neutral sheet and current sheet:

Dead zones exist at different latitudes. They are extended beams that alternate with flux tubes beams. Dead zones are an extension of the dead zone cavities inside the celestial body. See Fig 37c. Dead zone beams are geostationary spreading out radially from the celestial body. They have different sizes. The closer you get to the poles the thinner they are, with the equatorial dead zone as the thickest one. The flux tubes coming out of the sun are not spread out uniform. Dead zones alternate with flux tubes beams forming these dark beams in-between. See Fig 36, Fig 37a and Fig 38a/b/c.

The current sheet is a huge electric flux tube that cross the north-south axis of the sun. The current sheets and the magnetic sheets are propagated into space asymptotic to the equatorial dead zones. Inside the dead zone the electric and magnetic flux tubes form plasma.

Dead zone is not created by a dust shield as generally thought. Dead zones are probably connections between celestial bodies.

In the case of binary stars, dead zone split both stars at the equatorial plan.



Fig 36. Dead zone beams spread radial out of the celestial body. They have different sizes. The closer you get to the poles the thinner they get, with the equatorial dead zone as the thickest one.

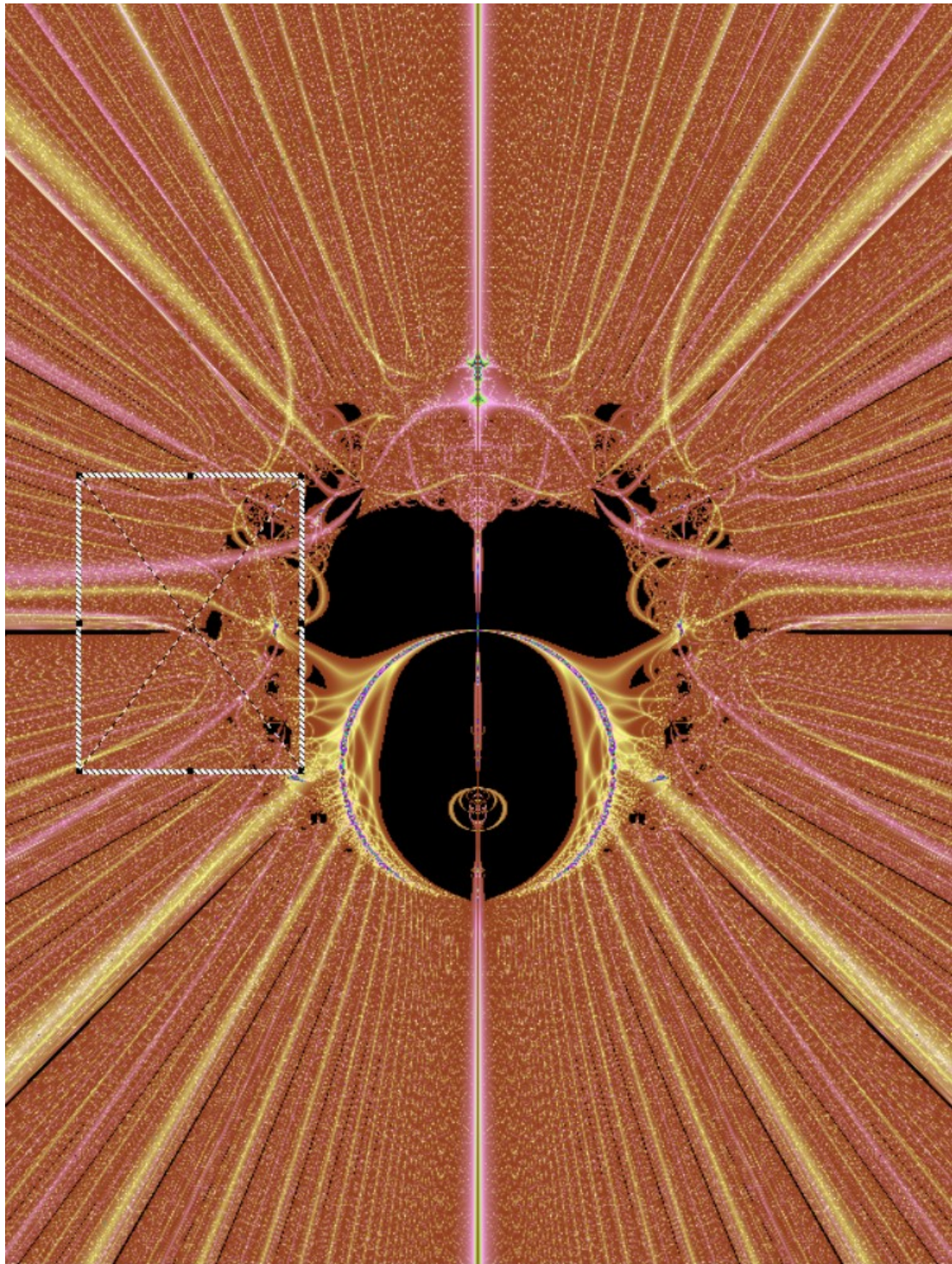


Fig 37a. Dead zones are an extension of the dead zone cavities inside the celestial body

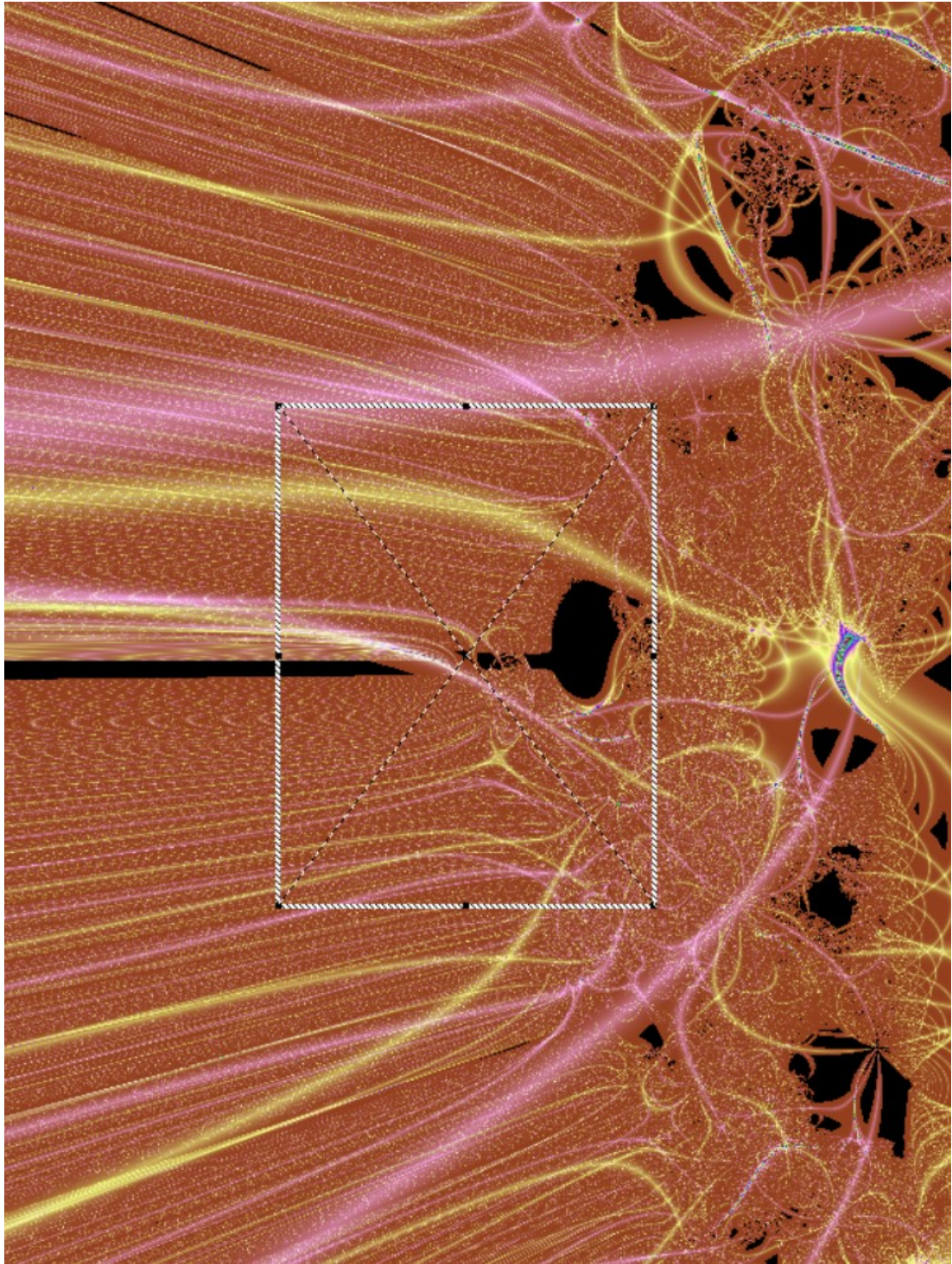


Fig 37b. Electric and magnetic fields tubes cross the dead zone in plasma form.

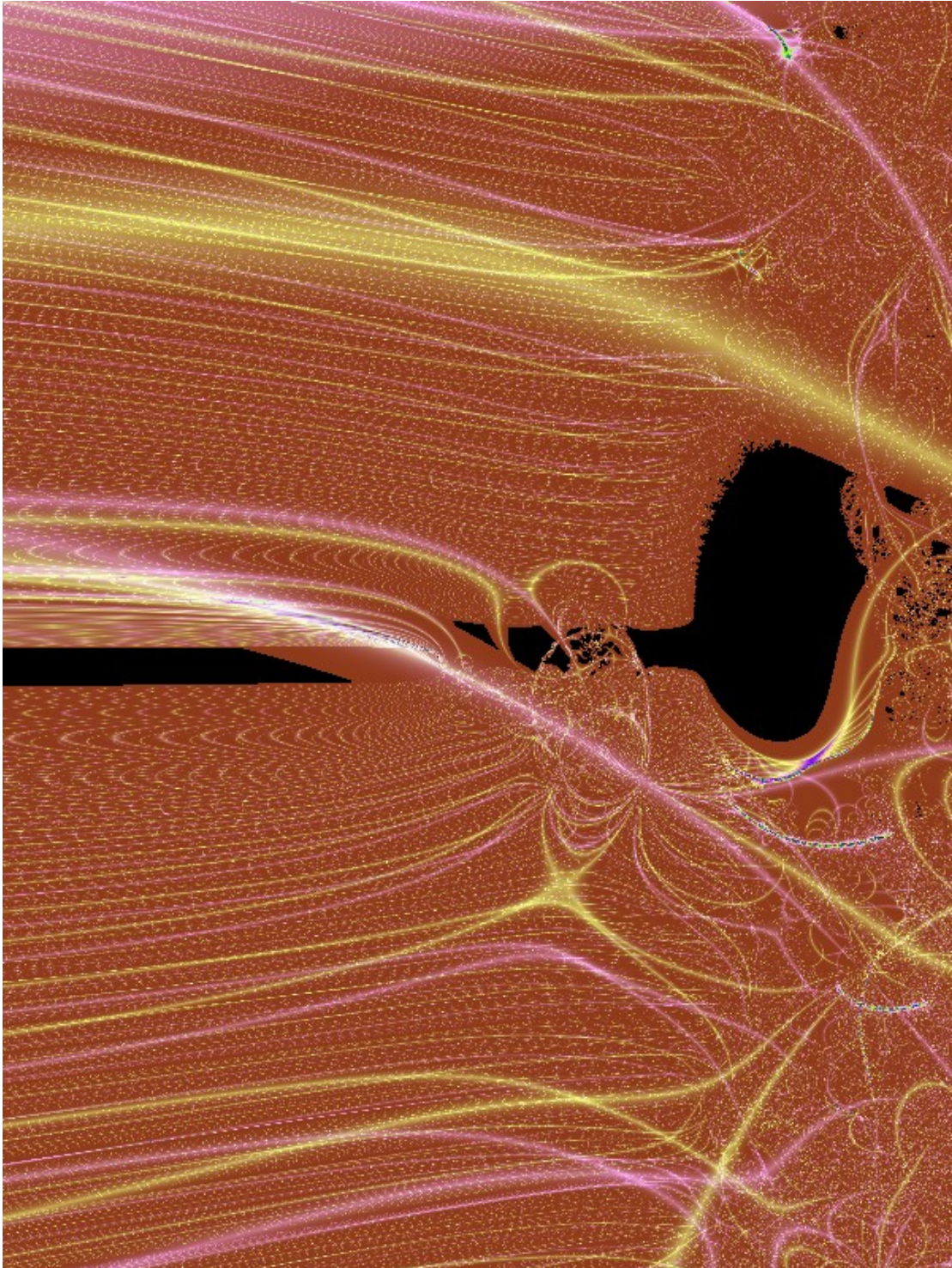


Fig 37c. Dead zones are an extension of the dead zone cavities inside the celestial body

Dead zone does not start at certain distance from the celestial body

and is not due to a plasma that prevent it from being energized as generally thought. Dead zone is a continuous medium. The electric and magnetic flux tubes can cross the dead zone in plasma form only.

Neutral sheet is the medium where flux tubes can exist. flux tubes are wrapped inside the neutral sheet. In the dead zone there are no flux tubes. Dead zone is a field free zone. When a flux tube has to cross a dead zone, they do that as a plasma wrapped inside the neutral sheet. Inside a cavity flux tubes are wrapped in the neutral sheet. The neutral sheet can be considered as the aether. Aether is the medium that transport flux tubes. Aether varies and adapt itself to the dead zones.

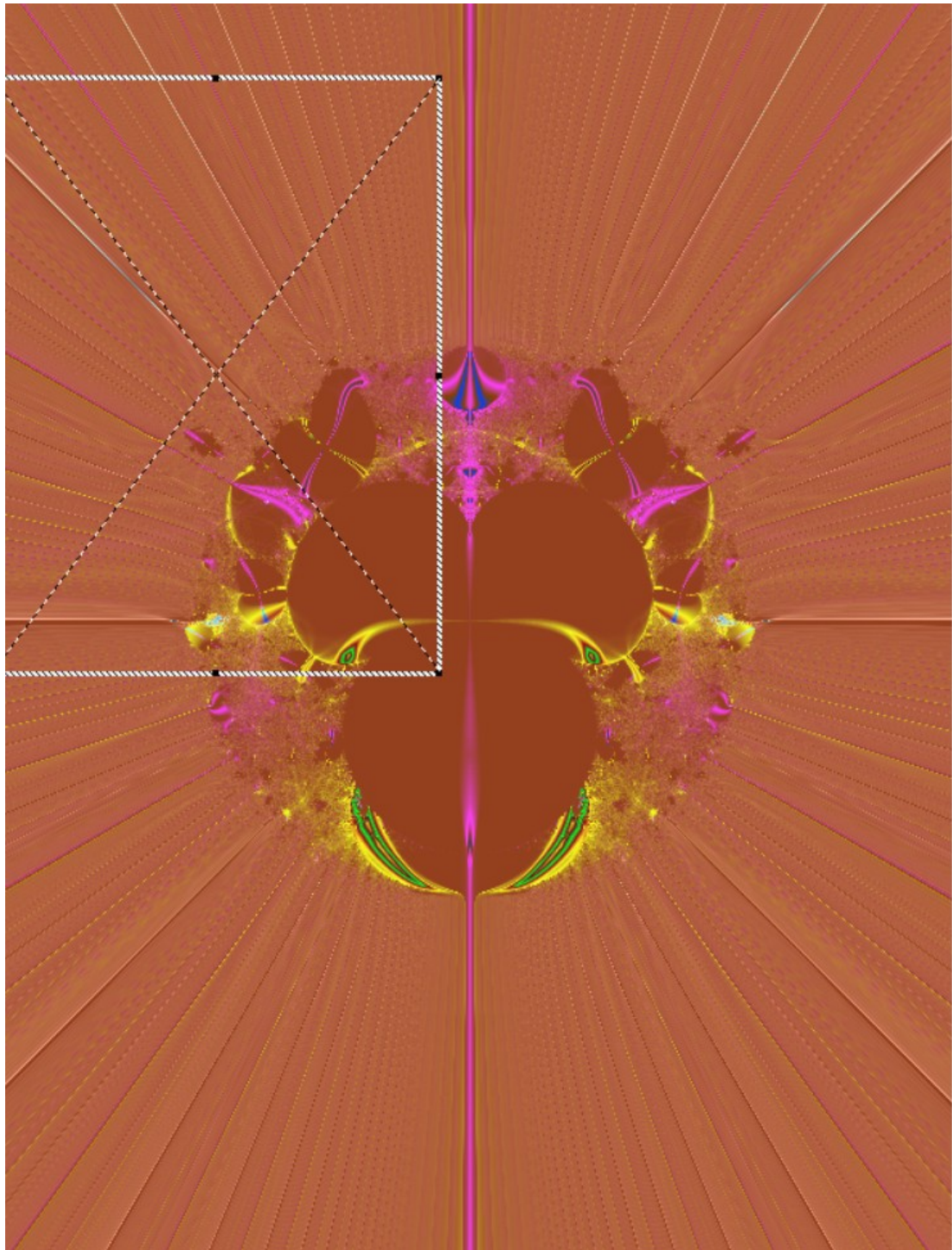


Fig 38a. Dead zones alternate with flux tubes beams forming these dark beams in-between.

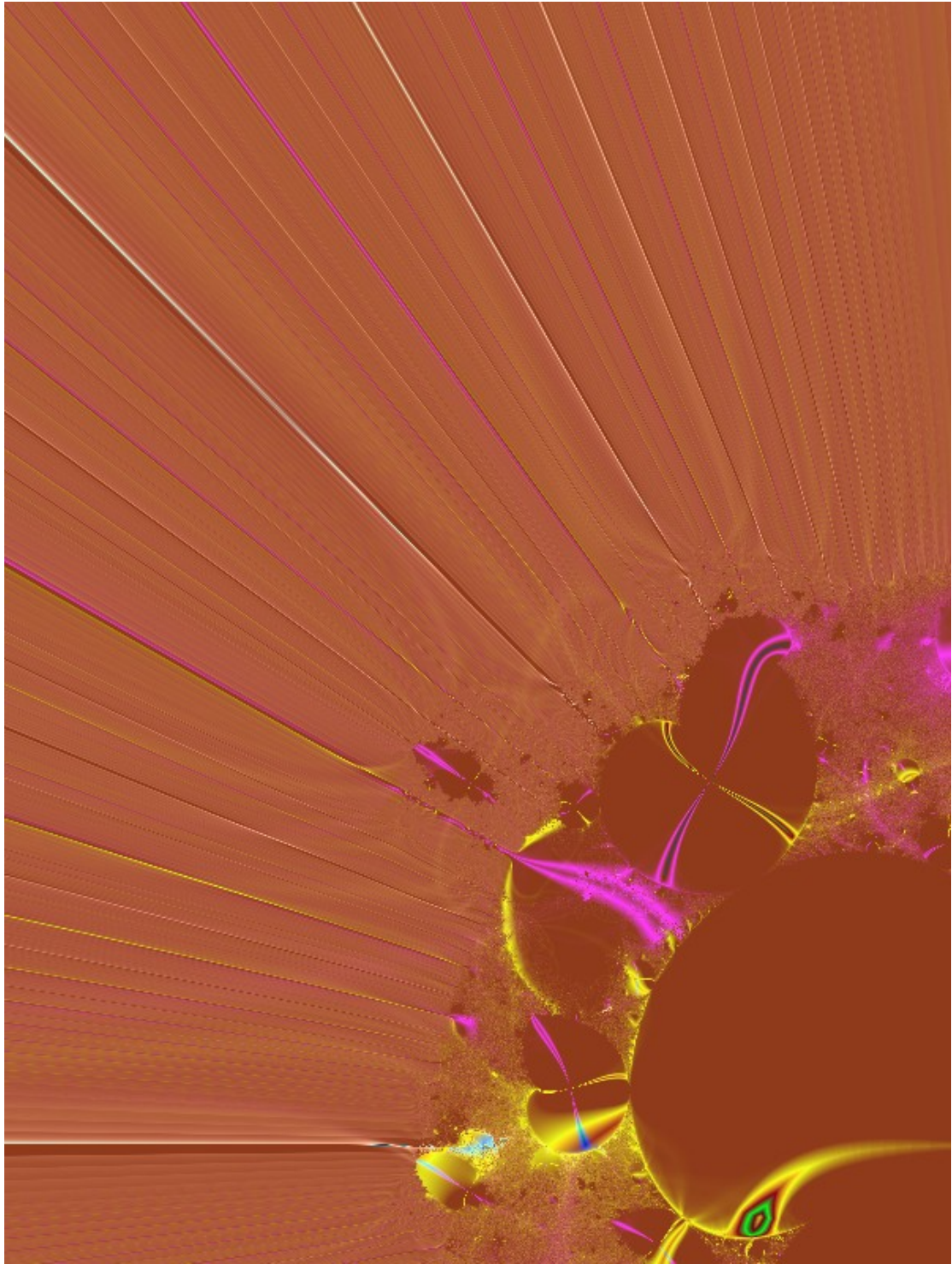


Fig 38b. Dead zones alternate with flux tubes beams forming these dark beams in-between.

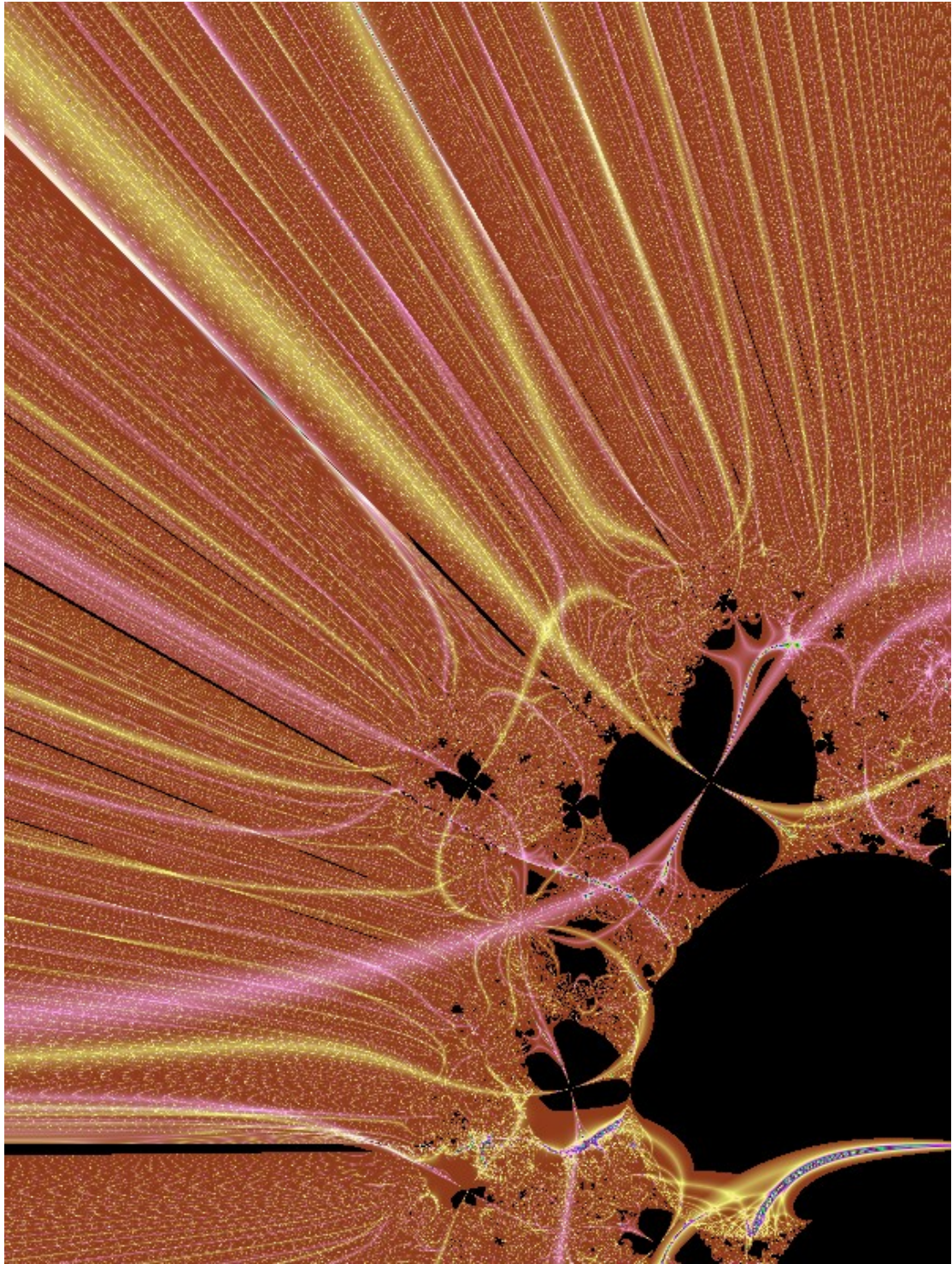


Fig 38c. Electric and magnetic flux tubes align with dead zone beams. When the flux tubes cross the dead zone beams they create plasma.

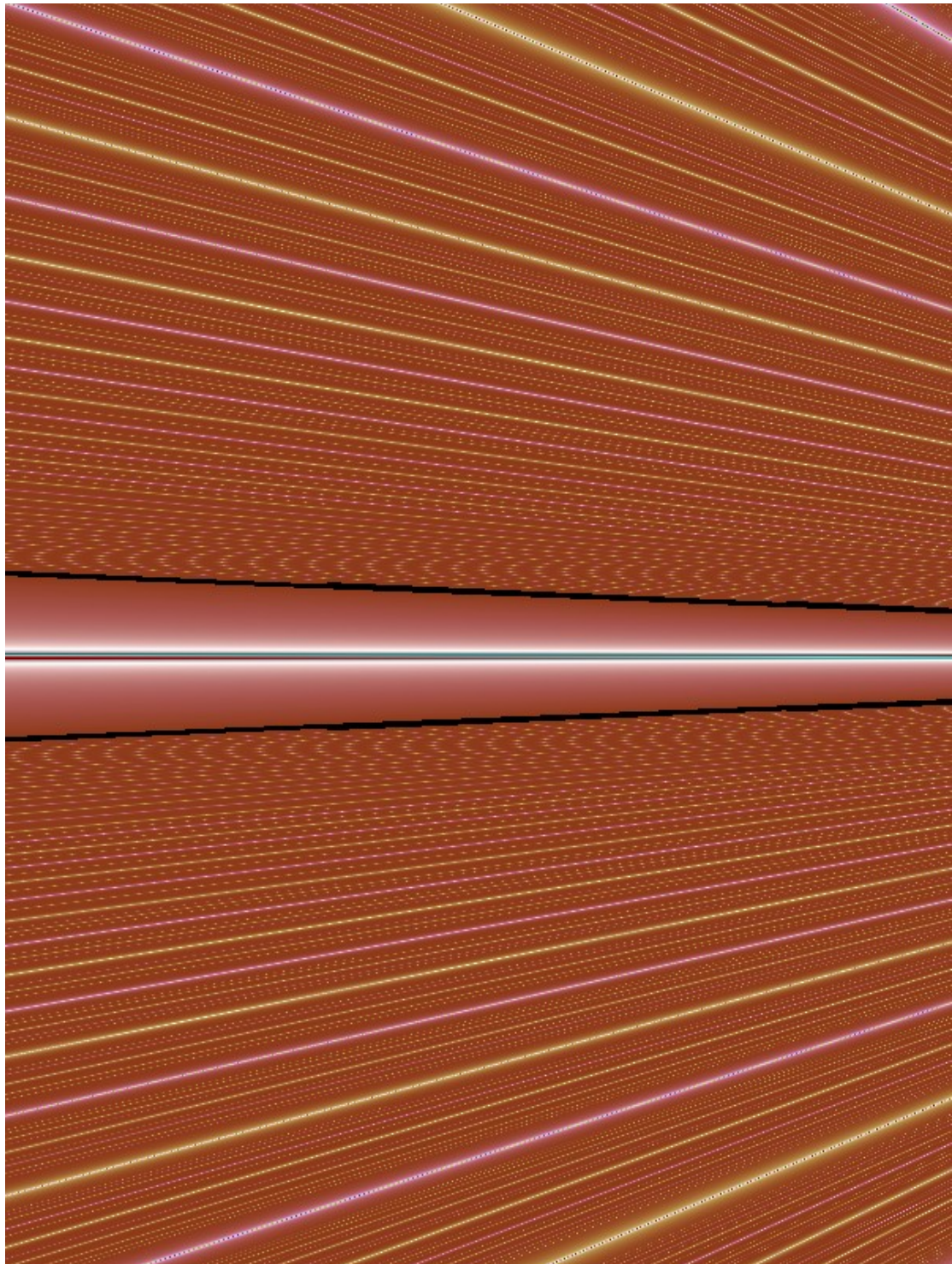


Fig 38d. Electric plasma sheet end up encased inside a neutral sheet which, at his turn, is encased inside the dead zone.

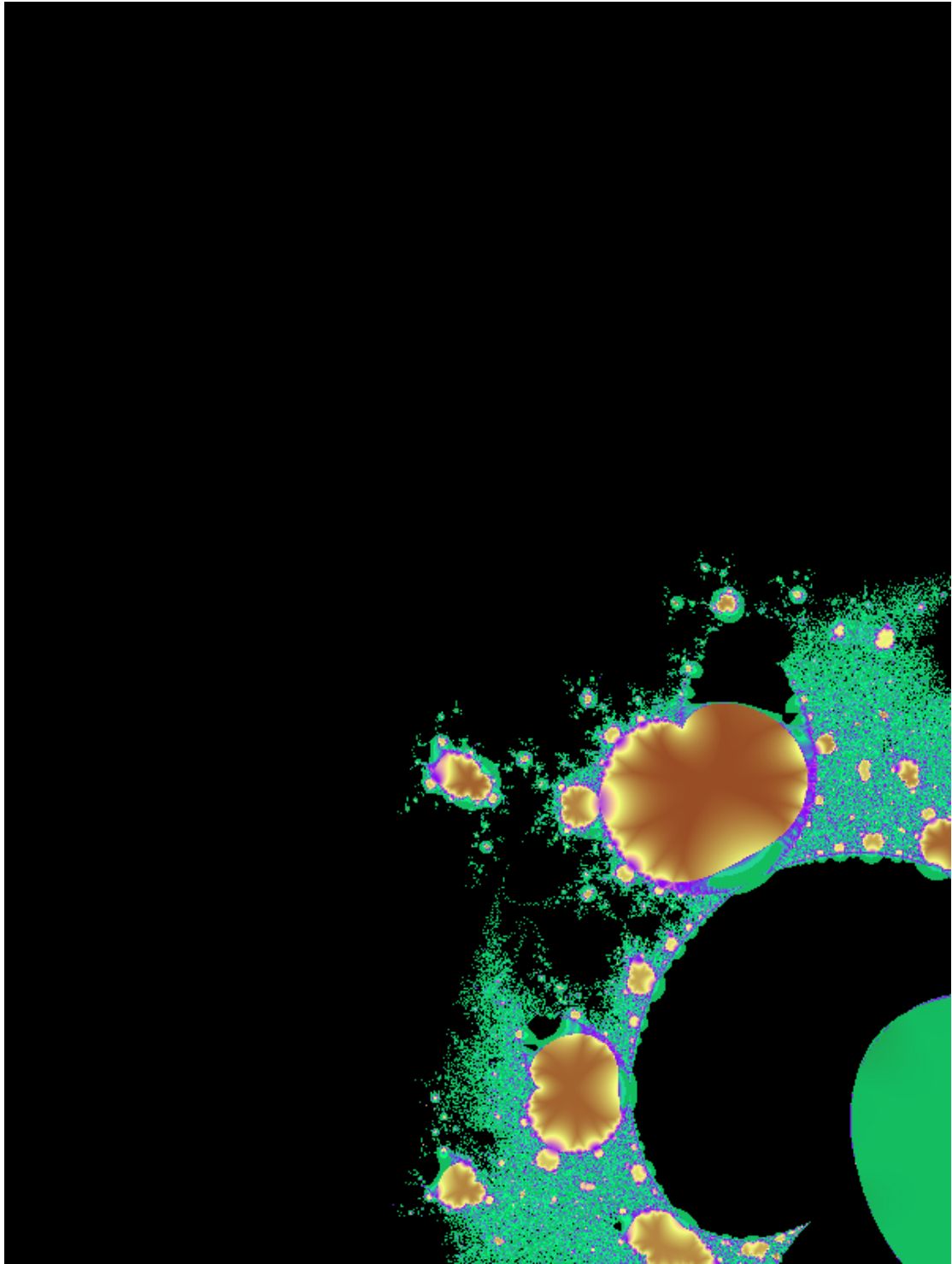


Fig 38e. Density cavities(with yellow brown colours) are open inward whereas the dead zone cavities (black area) are open outward. Both cavities can overlap with each other.

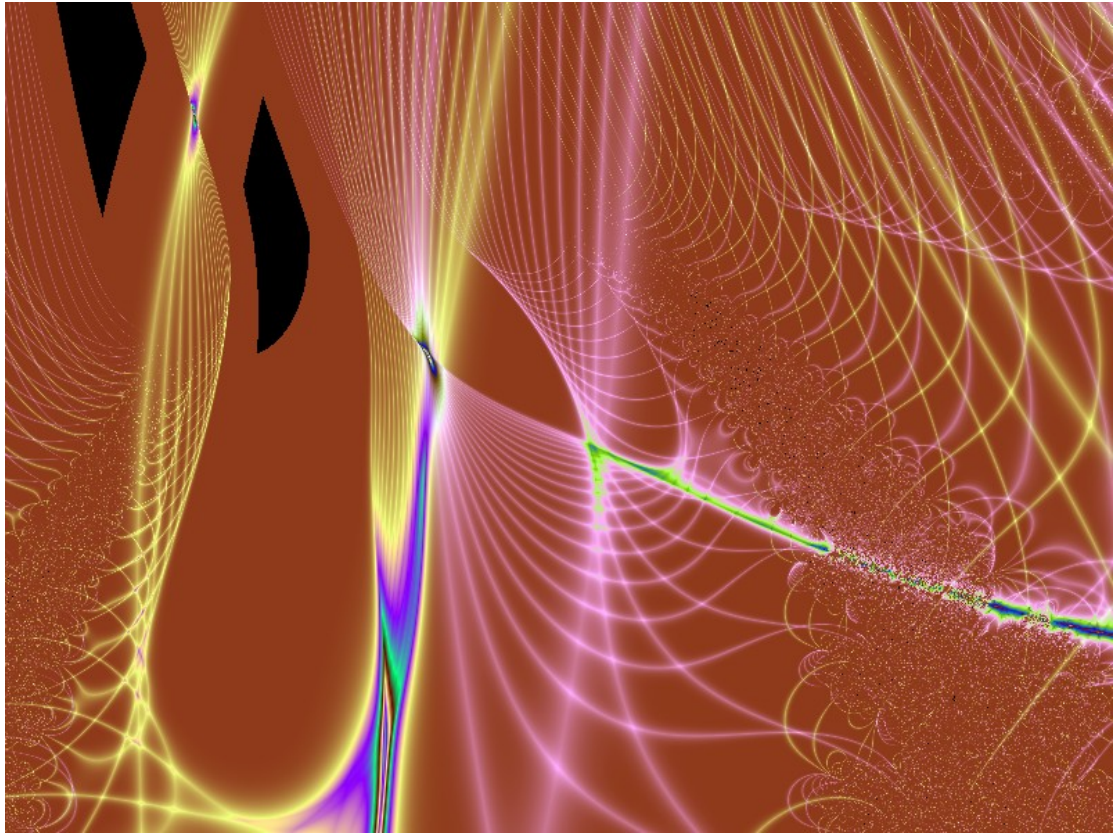


Fig 39. Electric and magnetic flux tubes create plasma when crossing a dead zone. From left to right: magnetic plasma, electromagnetic plasma and electric plasma.

Light bridges:

Not to confuse with rainbow clouds. Light bridges has been observed in sunspots. See Fig 42. These are electric or magnetic flux tubes loops that attach a sunspot to a density cavity interlocking them together. See Fig 55c. A punch hole and a density cavity can be interlocked by an electric or a magnetic flux loop or both in the same time. The flux loop cross the punch hole at it's centre. In the case of a double punch hole, the flux tube loop cross in-between. See Fig 19k. In the case of punch holes clouds they produce rainbow colours. See Fig 40. Not to confuse with rainbow clouds, where punch holes themself produce colours by assembling electric and magnetic flux tubes. See Fig 16. Not all punch holes and density cavities are interlocked by light bridges. Light bridges can have a perfect ring shape.



Fig 40. Light bridge crossing a punch hole cloud at it's centre. This light bridge connect this punch hole to a density cavity interlocking them together. The density cavity is somewhere near.



Fig 41. Light bridge crossing a punch hole cloud in an arc form. These electric/magnetic(not sure if it is an electric or a magnetic flux tube loop) flux tube is a loop that interlock a density cavity with this punch hole.

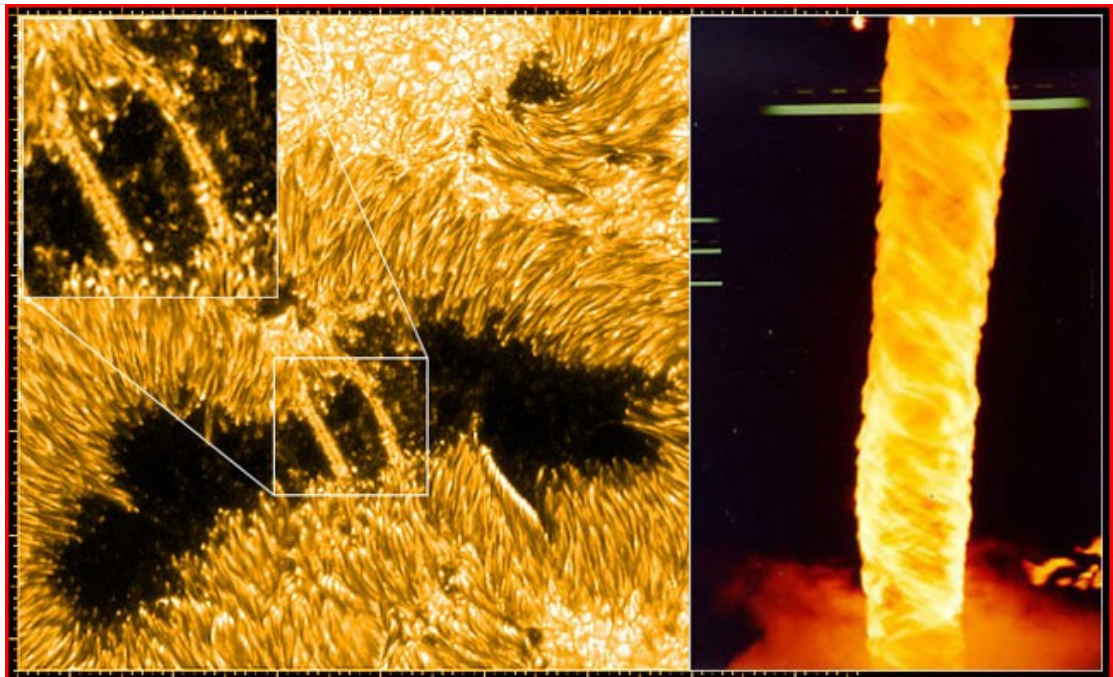


Fig 42. Sunspot light bridge.

Pixies and ball lightning:

Pixies are brief dots of light above thunderstorms. A pixie is an electric plasma cell. Electric flux tubes cross each other forming a plasma cell. In the fractal model we find plasma cells at the top of prominences density cavity. Each plasma cell is confined inside a chain of density cavities that are surrounded by punch holes. Pixies are probably the same phenomenon as ball lightning. Ball lightning is bright white blob floating in the air. They appear during thunder storms and can burn objects and injure people. They have different sizes. They are continuously connecting and reconnecting with their surrounding. Pixies has also been observed at the top of sun prominences and are thought to be free electrons.



Fig 43a. We will zoom in this region looking for electromagnetic plasma.

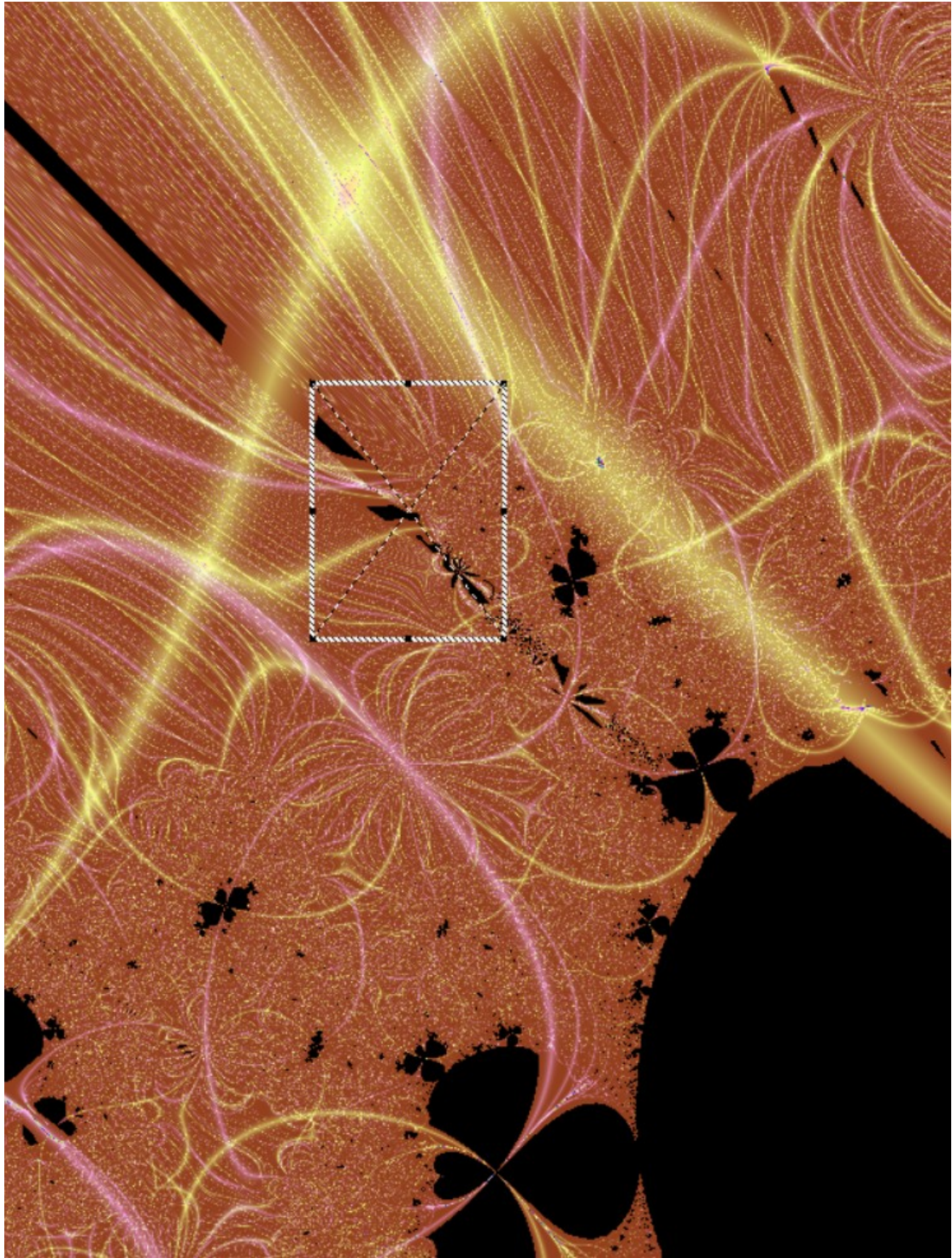


Fig 43b. We will zoom in this region looking for electromagnetic plasma.

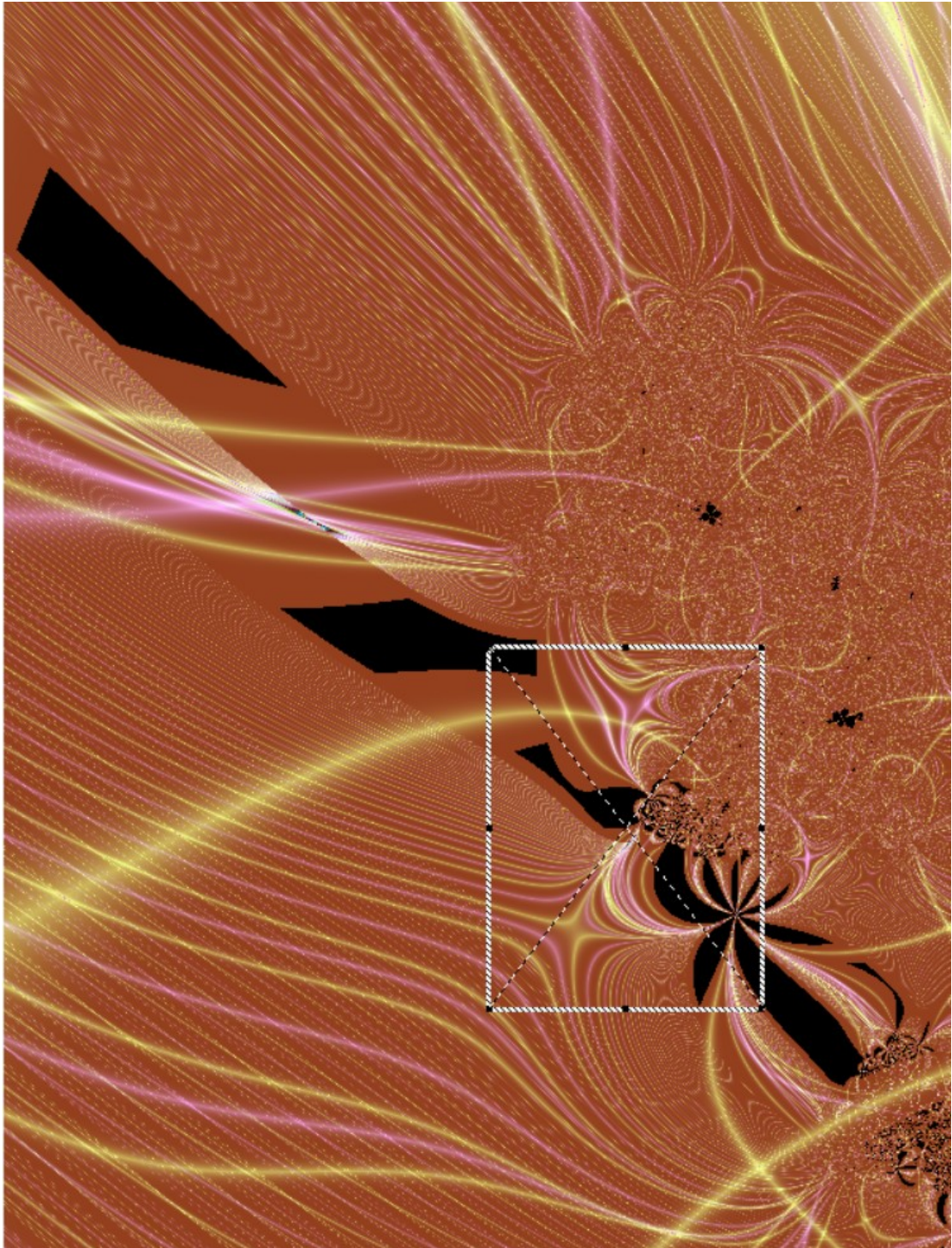


Fig 43c. We will zoom in this region looking for electromagnetic plasma.

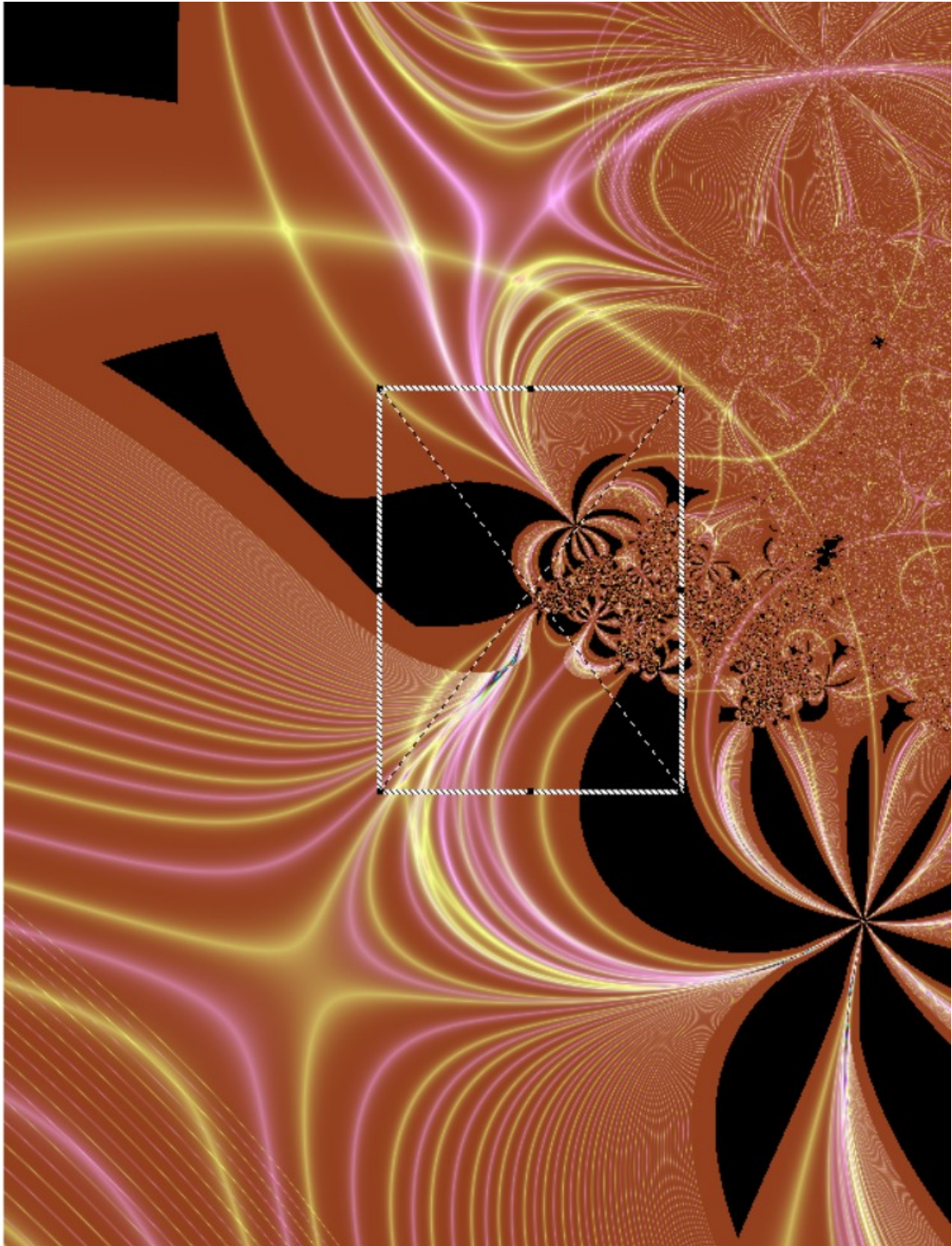


Fig 43d. We will zoom in this region looking for electromagnetic plasma.

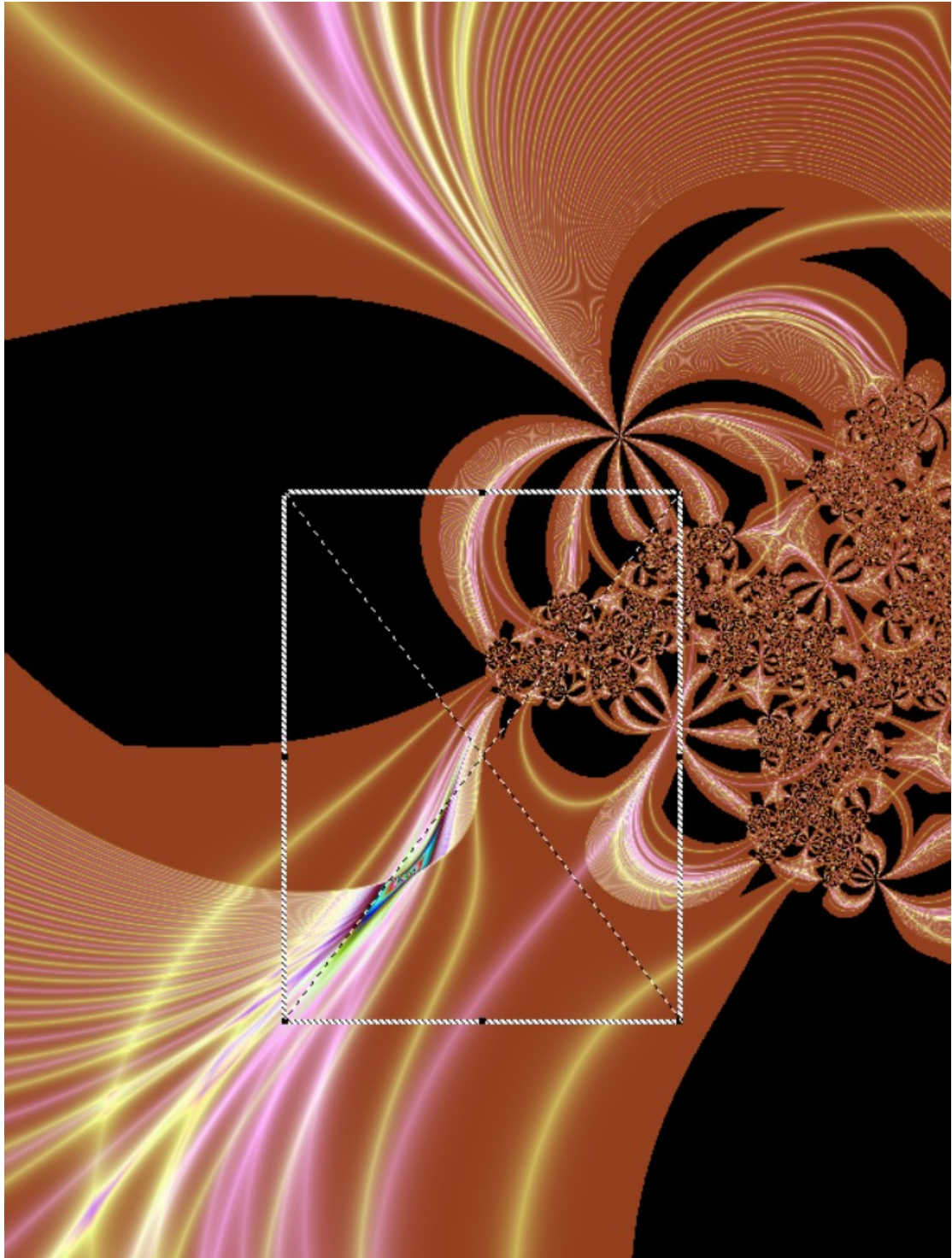


Fig 43e. We will zoom in this region looking for electromagnetic plasma.

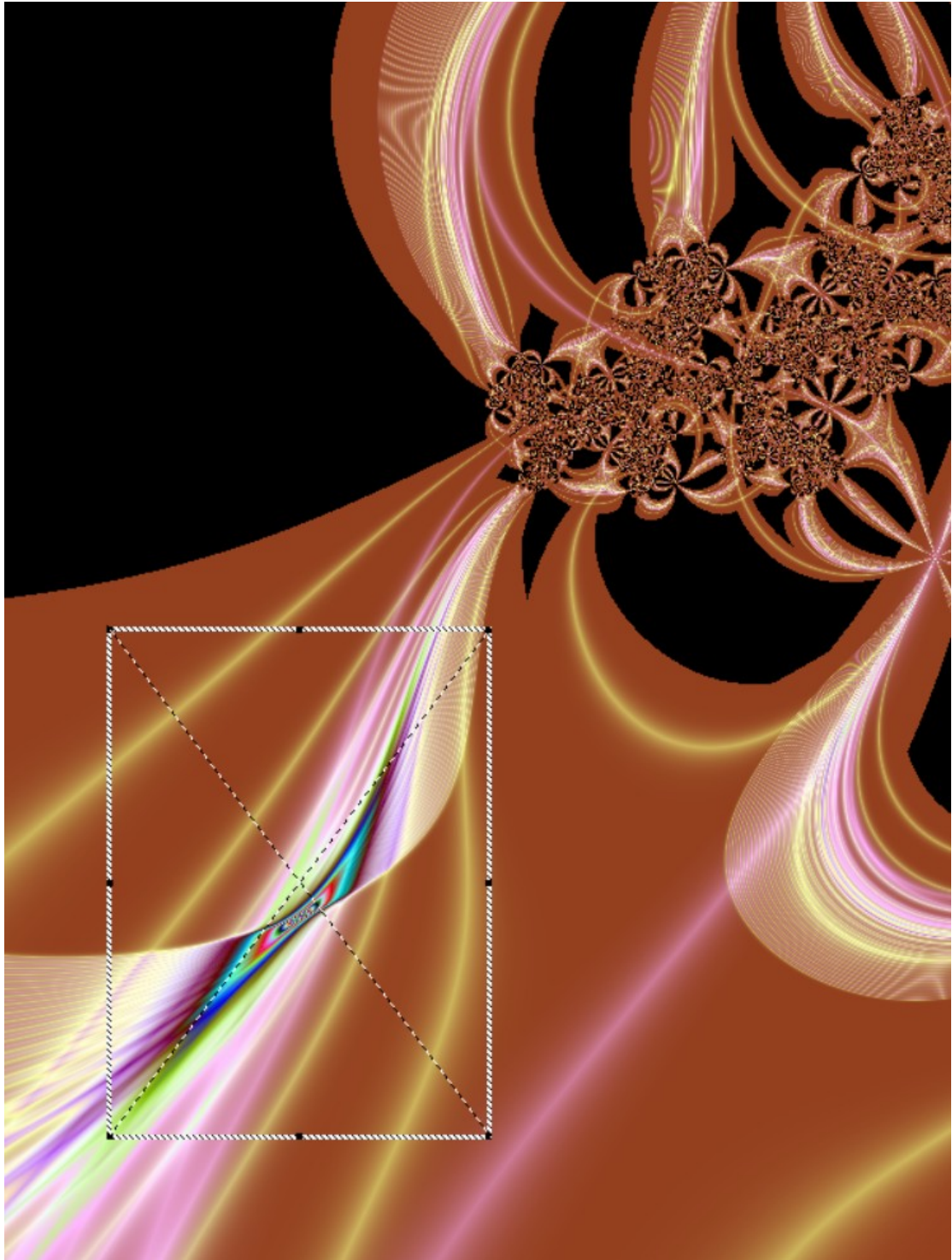


Fig 43f. We will zoom in this region looking for electromagnetic plasma.

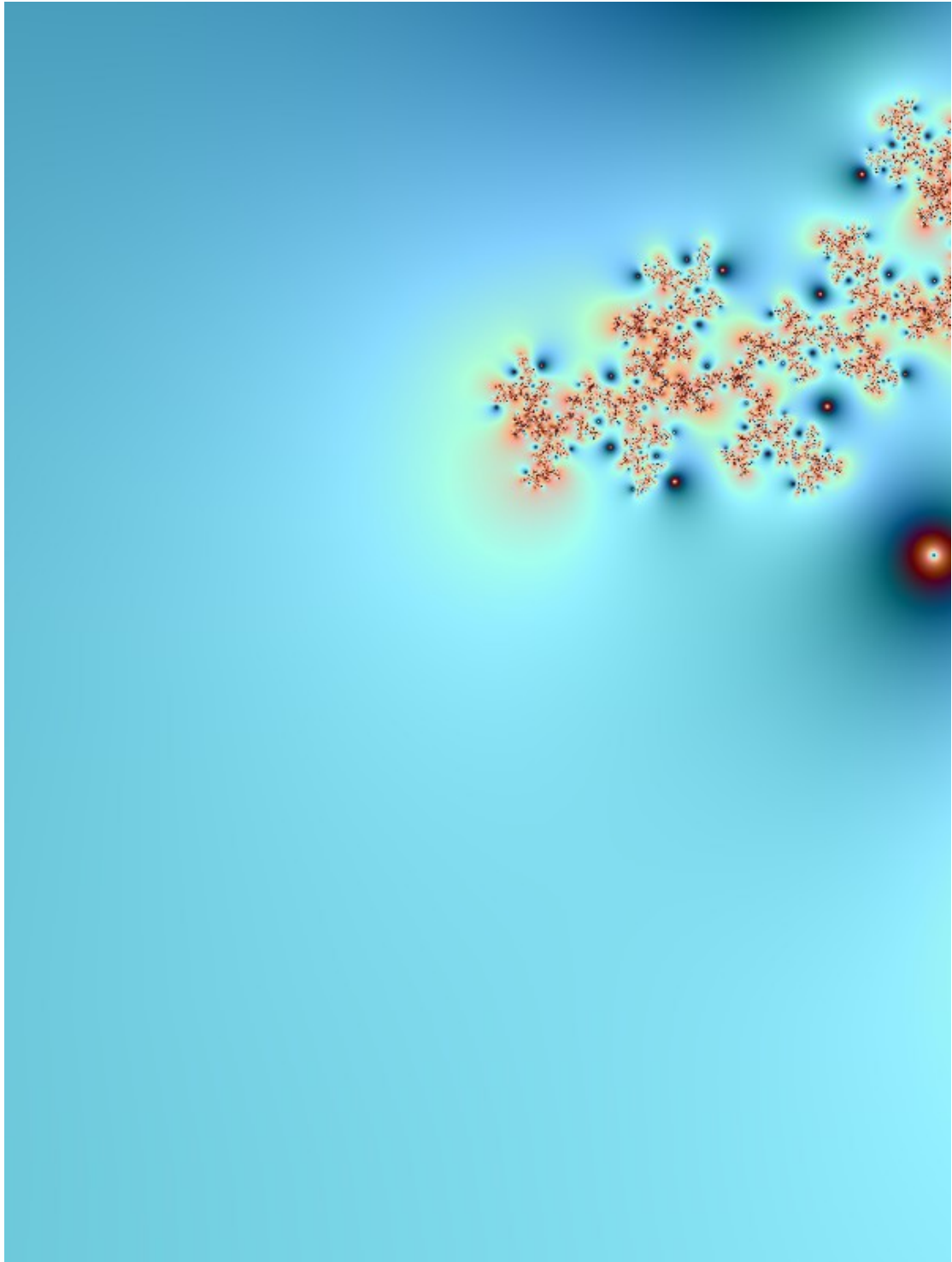


Fig 43g. These are all punch holes/sunspots that acts as bridges. This means that they do not produce radiation.

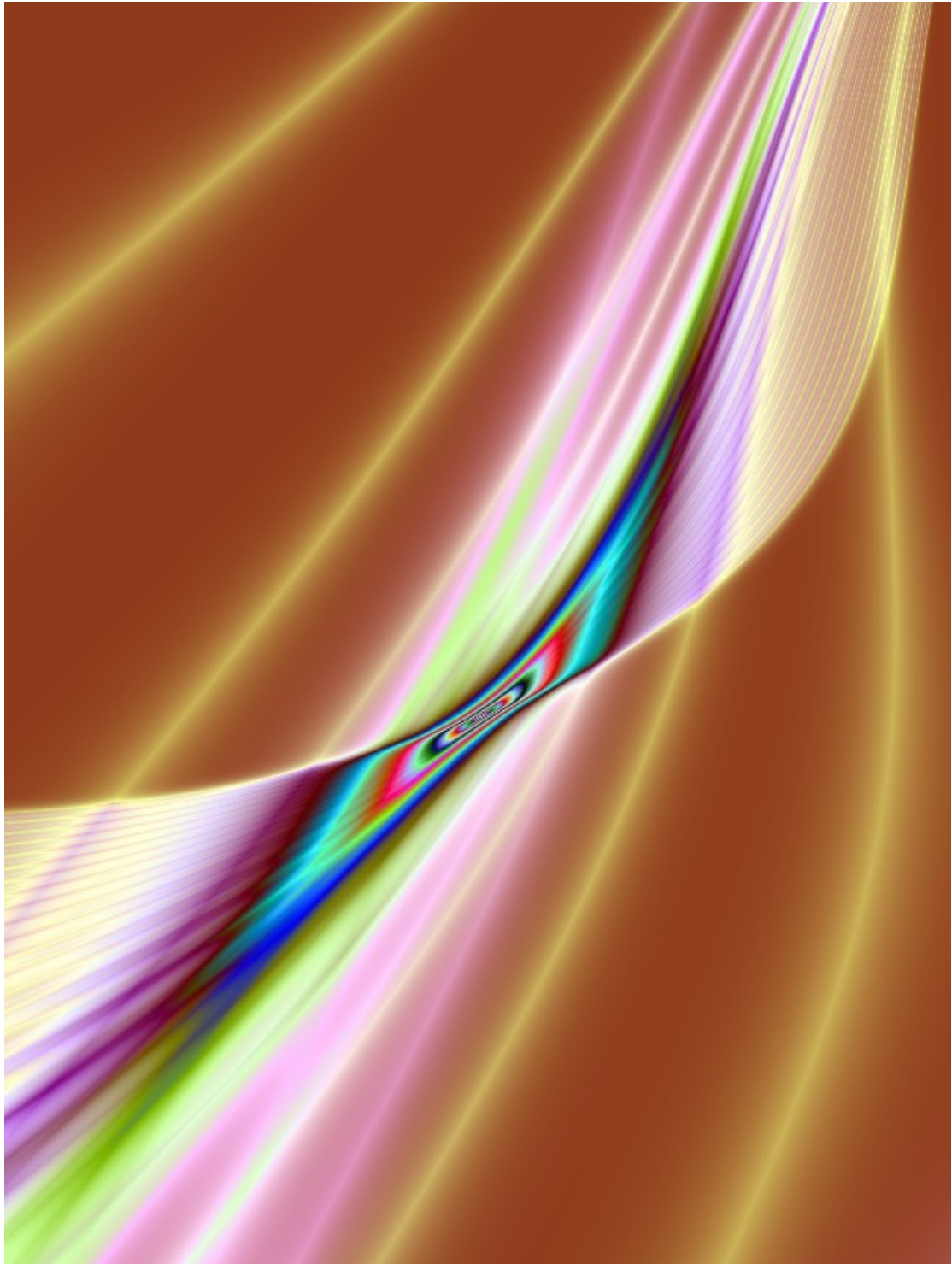


Fig 43h. Electromagnetic plasma. Electric and magnetic flux tubes crossing each other and form electromagnetic plasma.

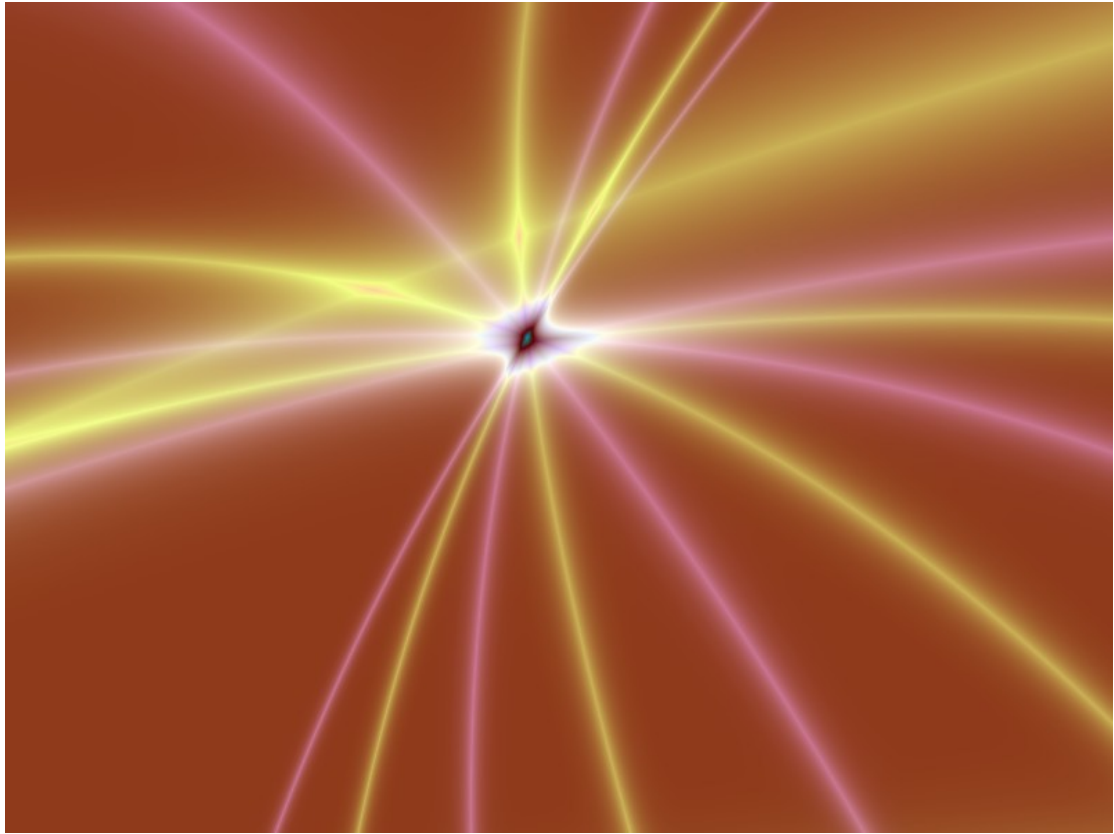


Fig 44a. Electric and magnetic flux tubes crossing each other creating electromagnetic plasma cell.

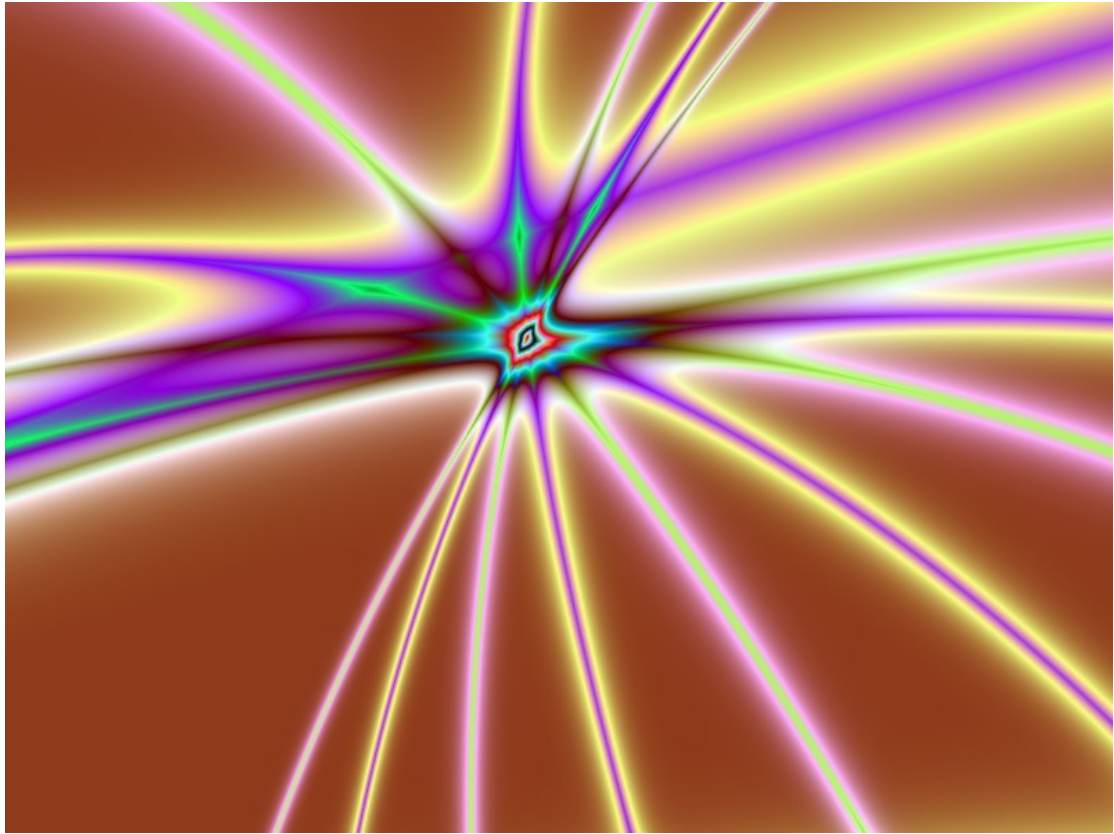


Fig 44b. Electromagnetic plasma cell.

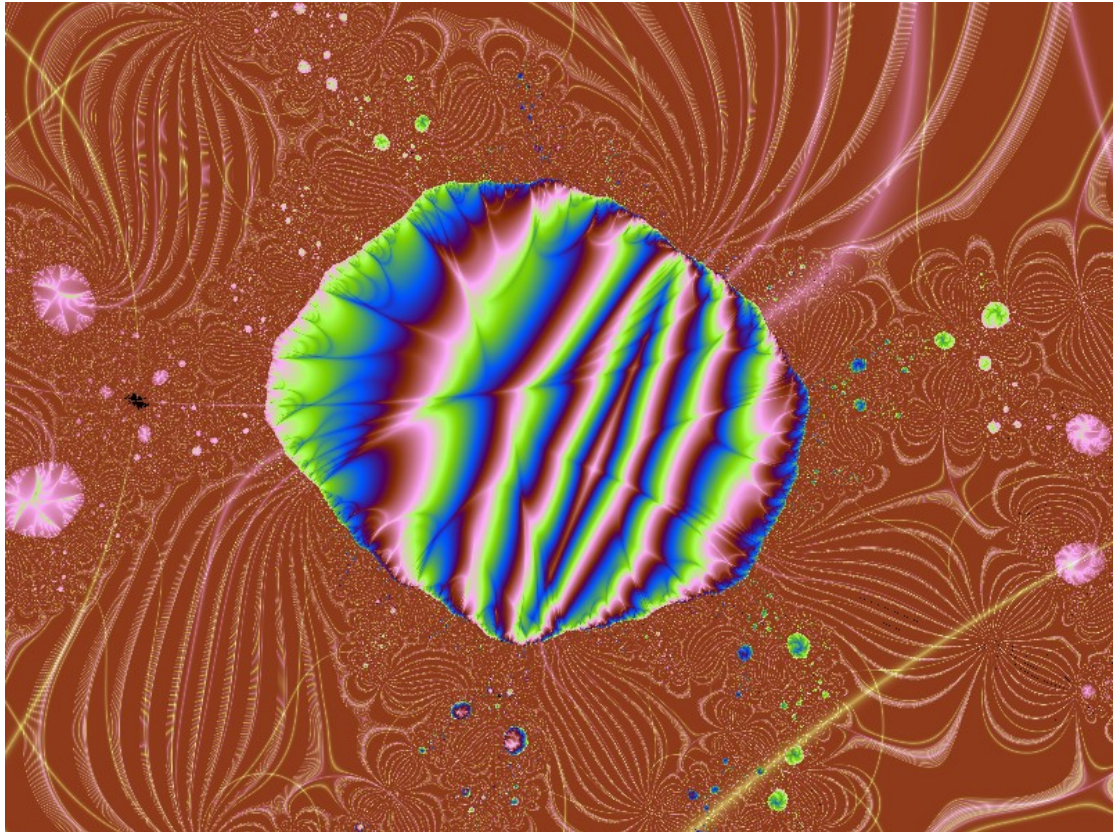


Fig 45a. Electric plasma(pixies). Pixies are bright spots that form at the top of clouds. Pixies are electric plasma cells. Electric flux tubes cross each other forming a plasma cells. Notice the electric flux tube(white colour) crossing a cavity(black colour) at left-centre of the image. It then cross the plasma cell. Coming out of the other side of the cell, the electric flux tube change direction towards the top. The plasma cell is confined inside a chain of density cavities that are surrounded by punch holes.

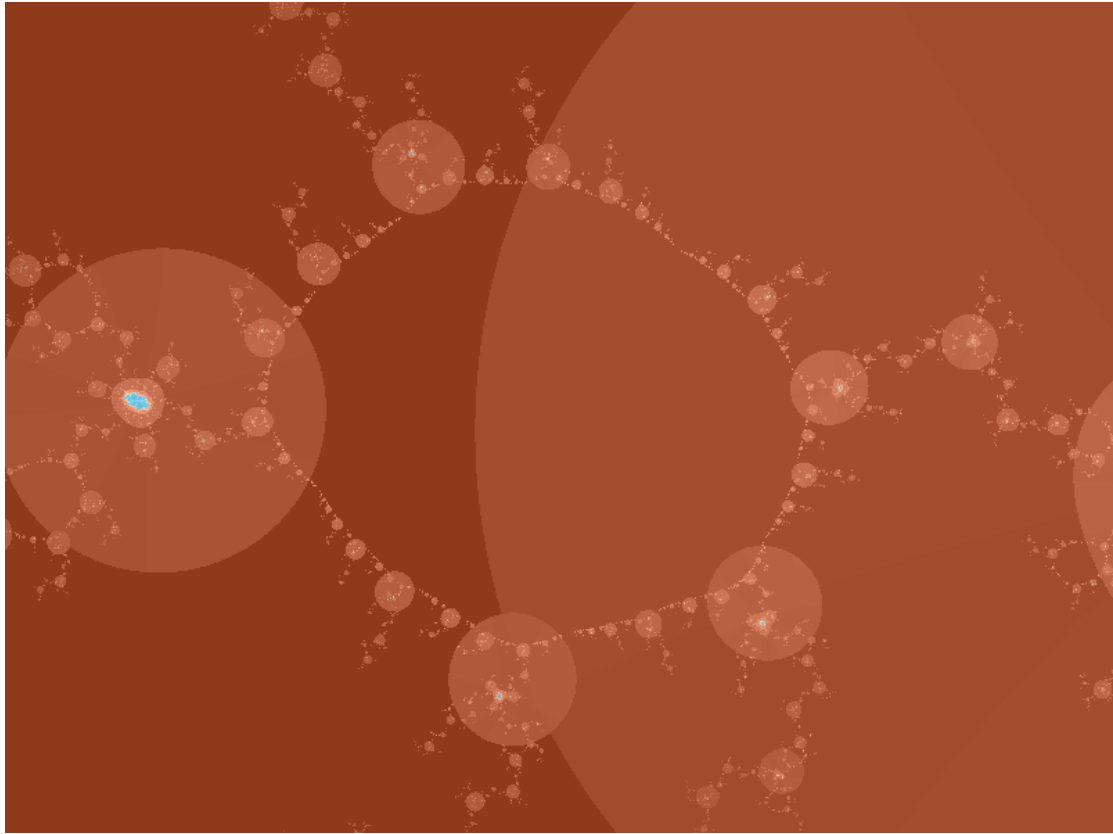


Fig 45b. Pixies on the top of clouds. The plasma cell is surrounded by a ring of density cavities. These plasma cells are confined by density cavities and punch holes.

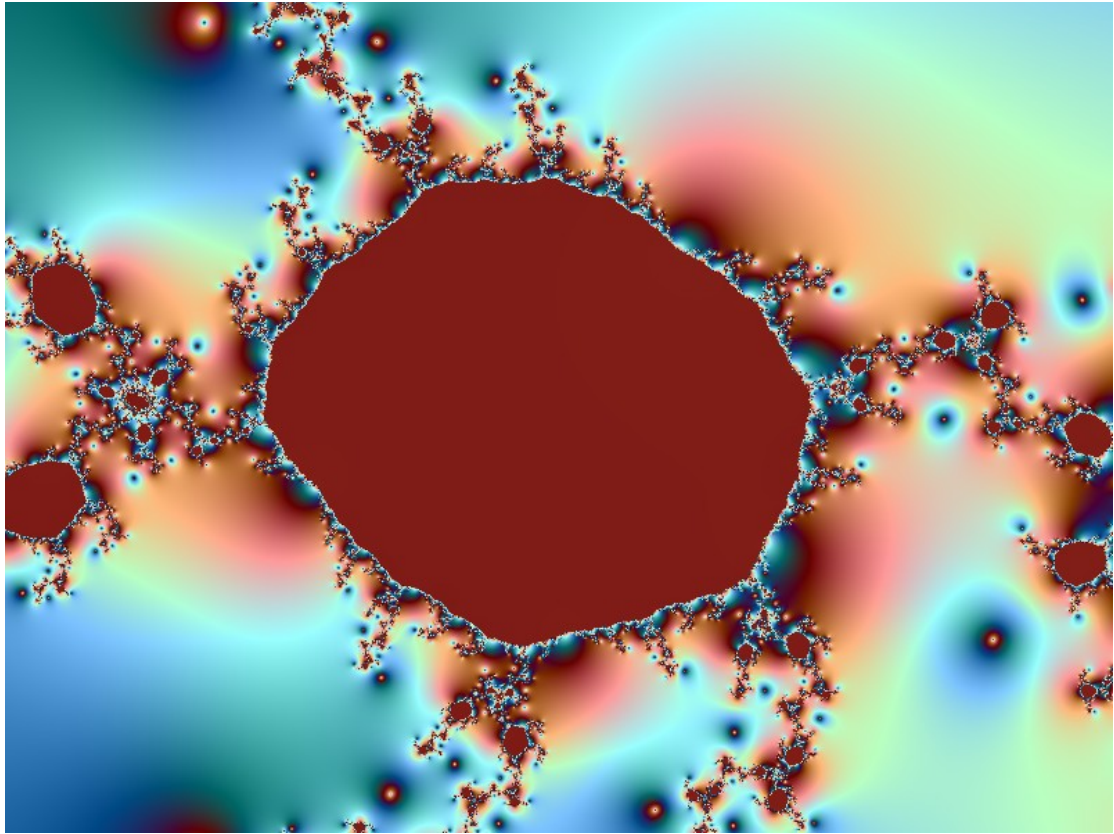


Fig 45c. Pixies on the top of a cloud(density cavity). Pixies are The same phenomenon as ball lightning. Pixies are all connected.

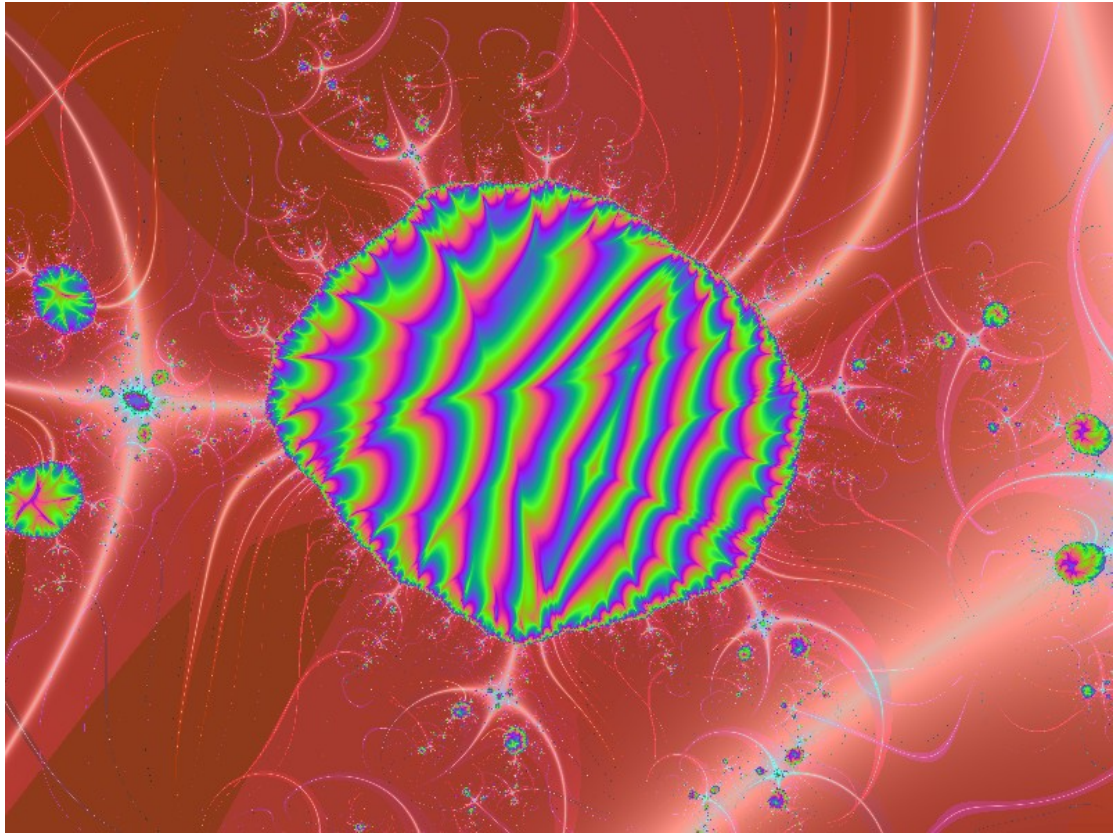


Fig 45d. Pixies on the top of clouds. Plasma cell surrounded by density cavities. The electric flux tubes coming out of the cavities cross the each other creating this electric plasma cell.

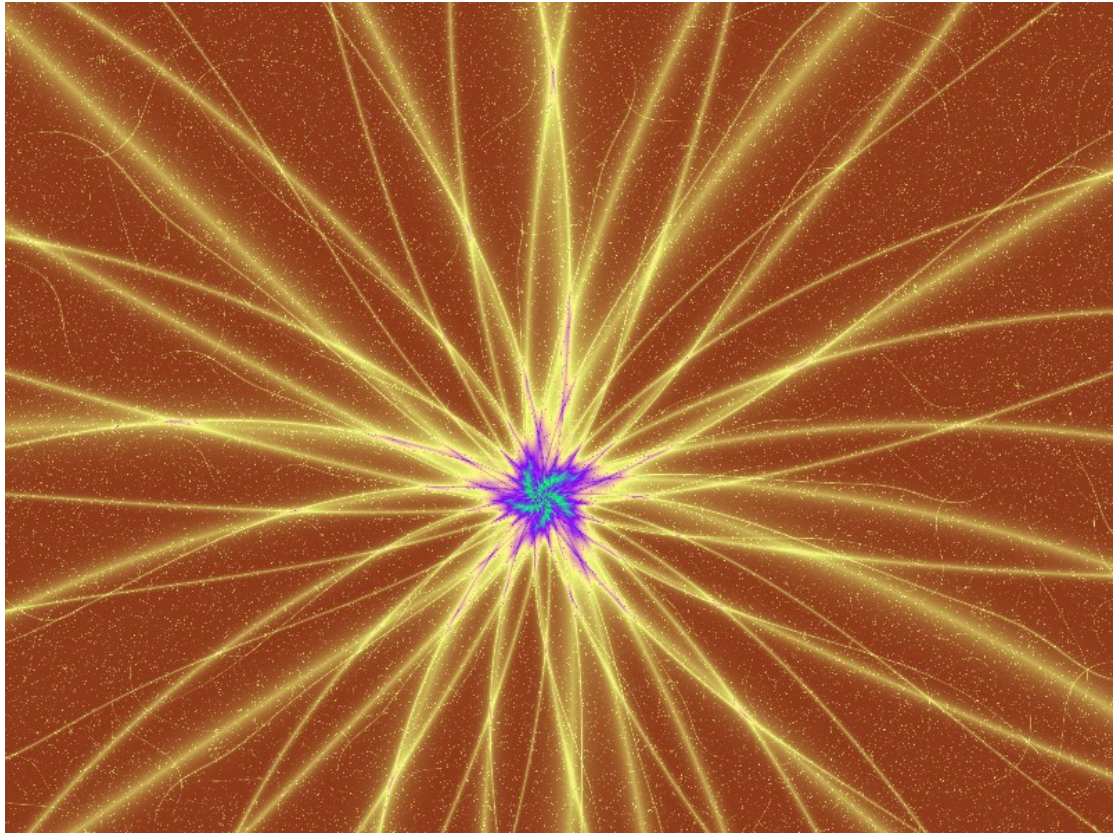


Fig 46. Magnetic plasma in spiral form. Electric plasma do not form spirals.

Sunspot bridges/punch hole bridges:

Not to confuse with sunspot light bridges that we will describe later. Sunspots located in dead zone play a different role, they serve as a bridge for flux tubes to cross the dead zone. Electric and magnetic flux tubes do not plunge into the sunspot but rather cross it at the centre like they do in density cavities. Two bundles of electric and magnetic flux tubes (not always alternate) cross at the centre of the punch hole. It looks similar to what bundles does inside a density cavity except that in this case both bundles are mixture of electric and magnetic flux tubes in a random distribution. The punch holes has still the shape of a hole. But, it's used by the flux tubes as a bridge to cross the dead zone. These punch holes do not produce radiation nor they split it. When crossing the dead zone via a sunspot bridge, flux tubes are squeezed against each other creating plasma. At the centre of the sunspot the crossing angle is 90 degrees.

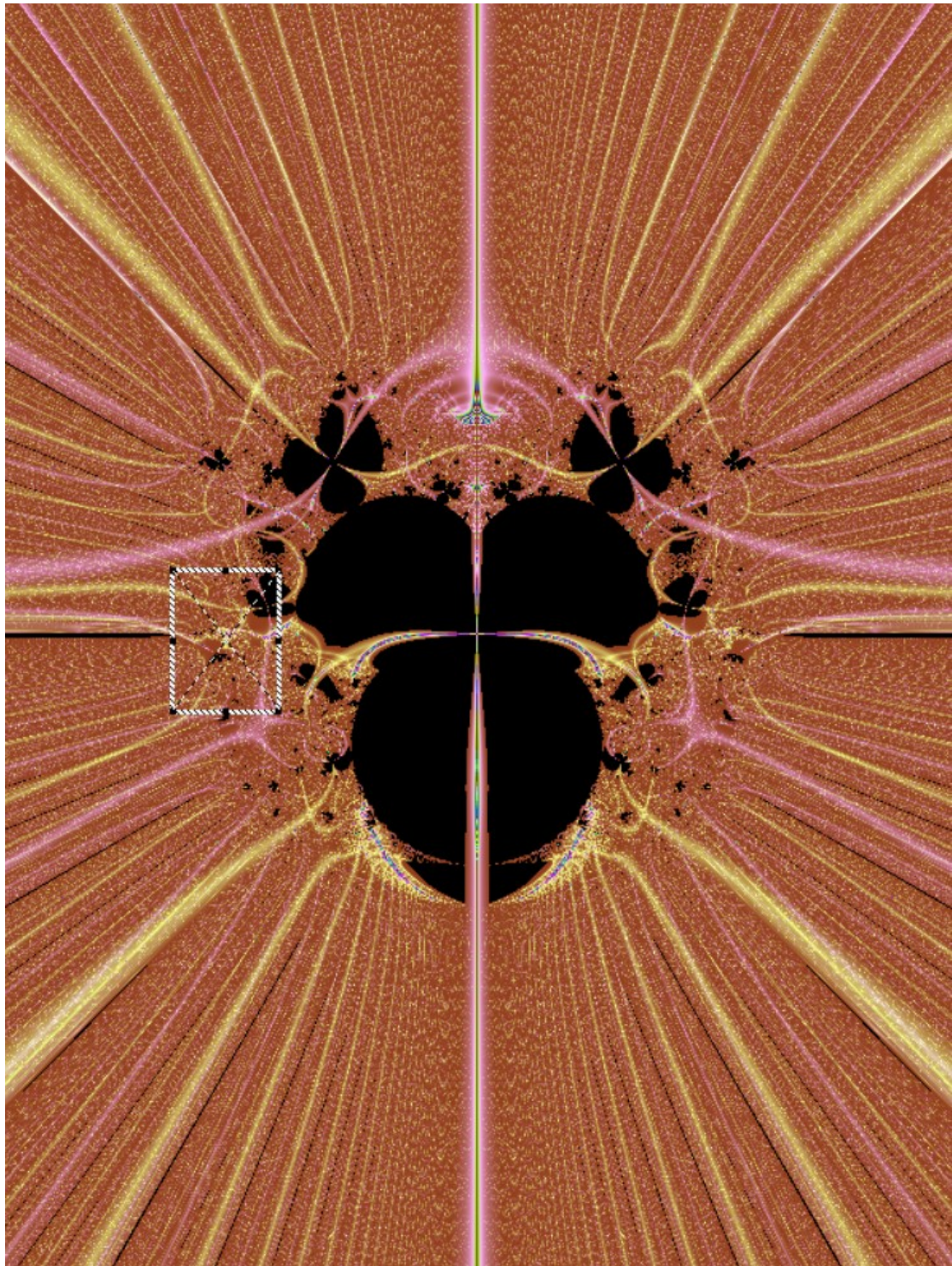


Fig 47a. We will zoom in this region looking for Sunspot bridges/punch hole bridges.

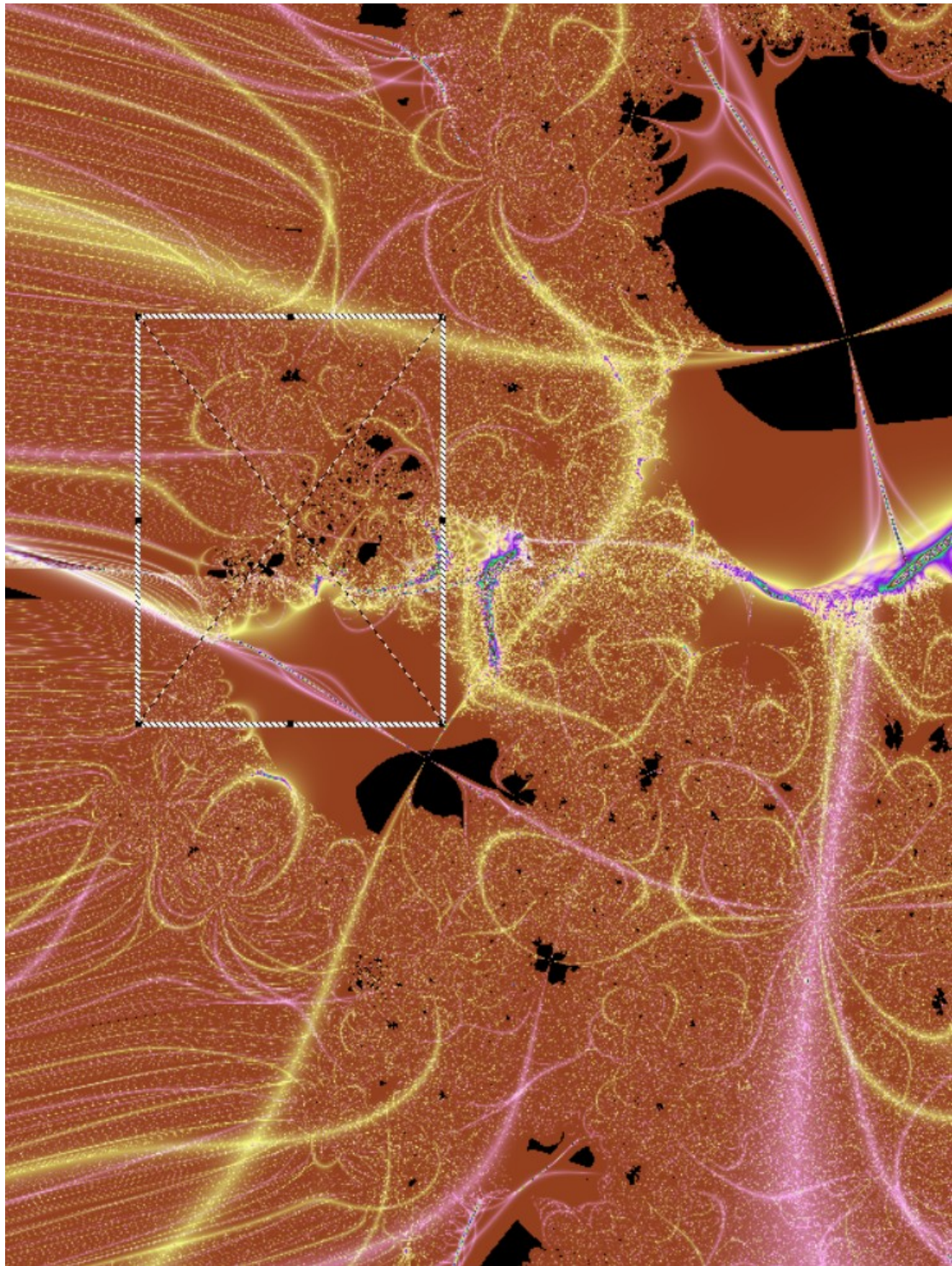


Fig 47b. We will zoom in this region looking for Sunspot bridges/punch hole bridges.

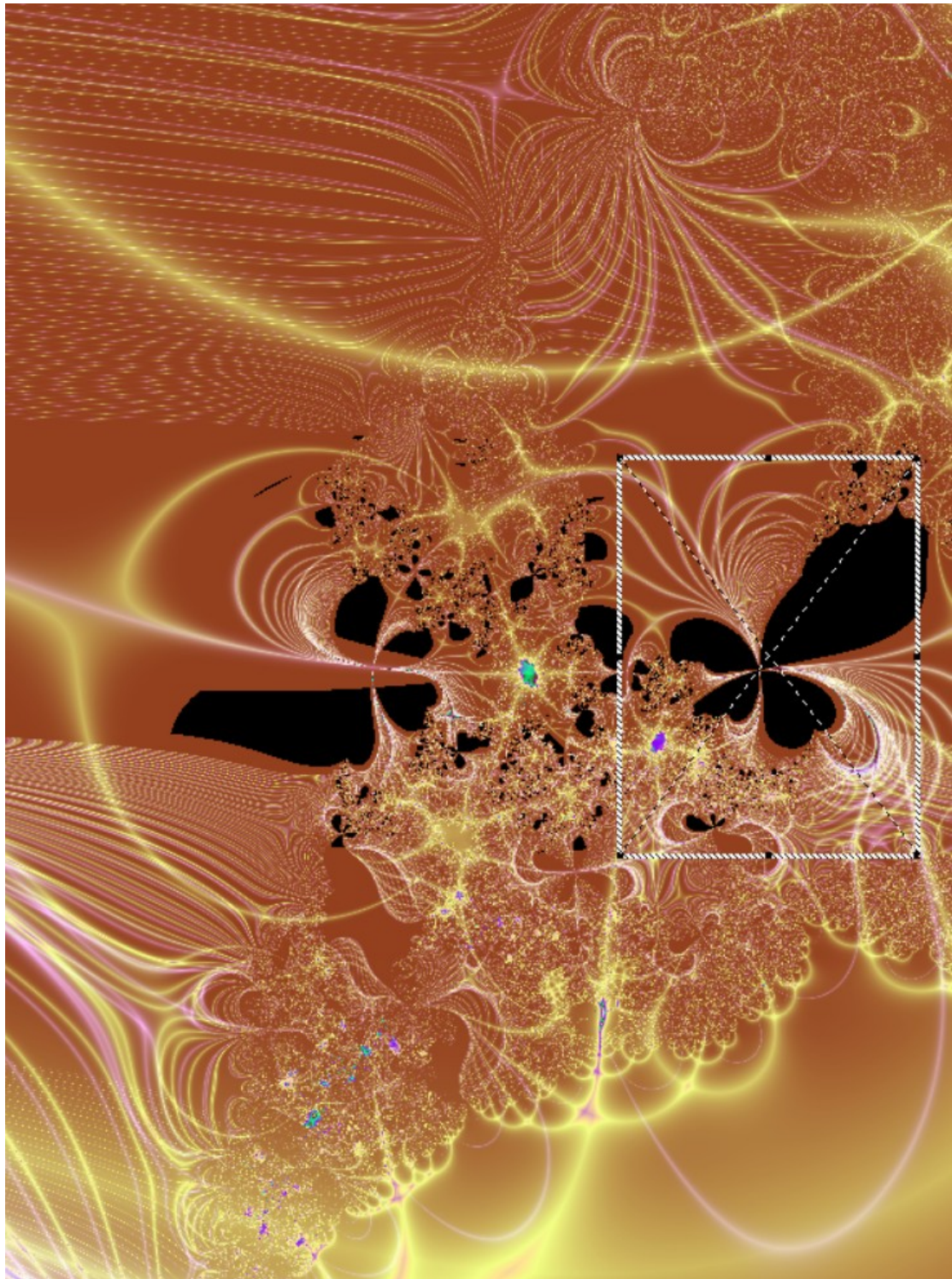


Fig 47c. We will zoom in this region looking for Sunspot bridges/punch hole bridges.

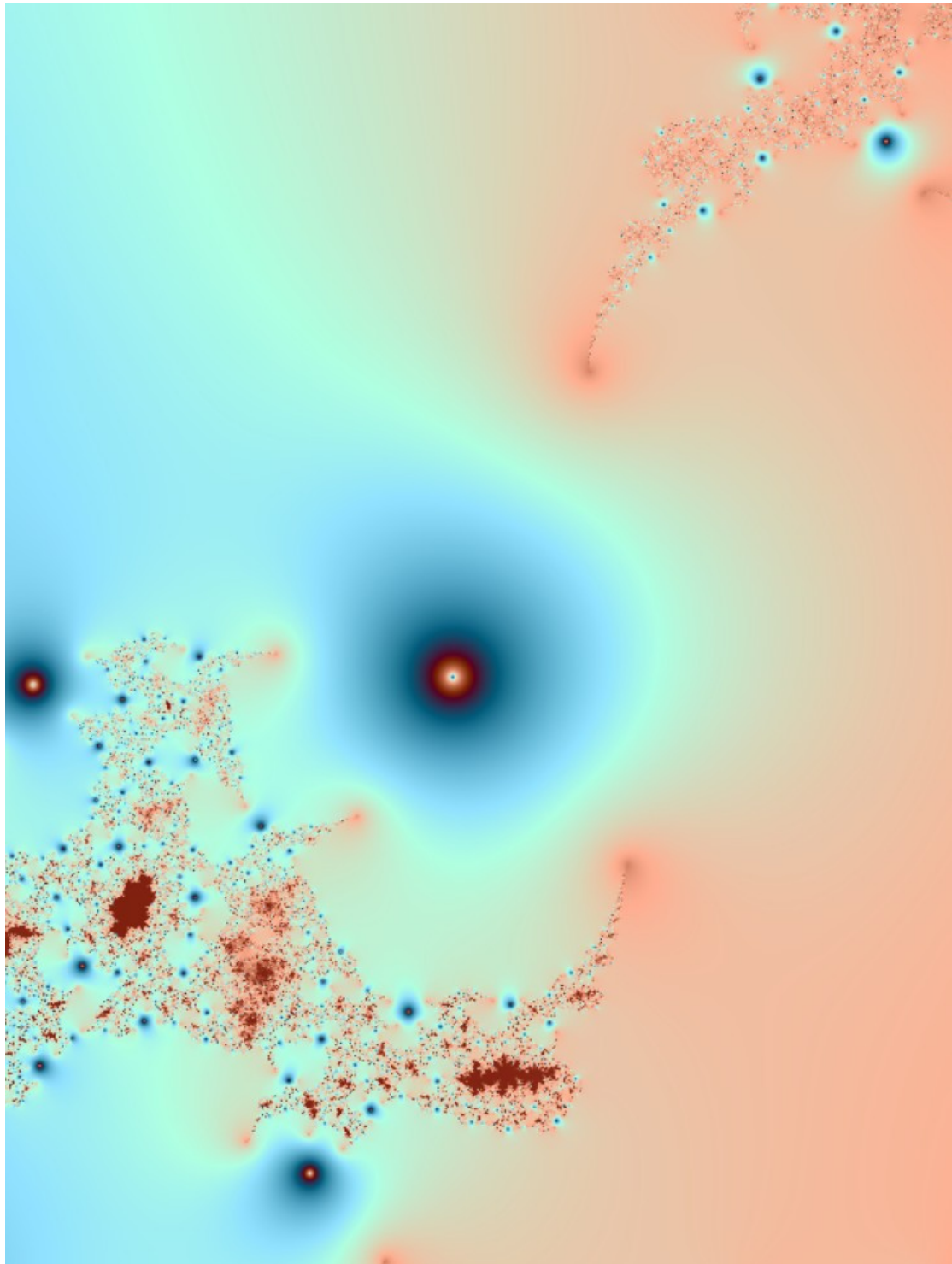


Fig 47d. Sunspot bridges/punch hole bridges(at the centre of the image). The punch holes has still the shape of a hole.

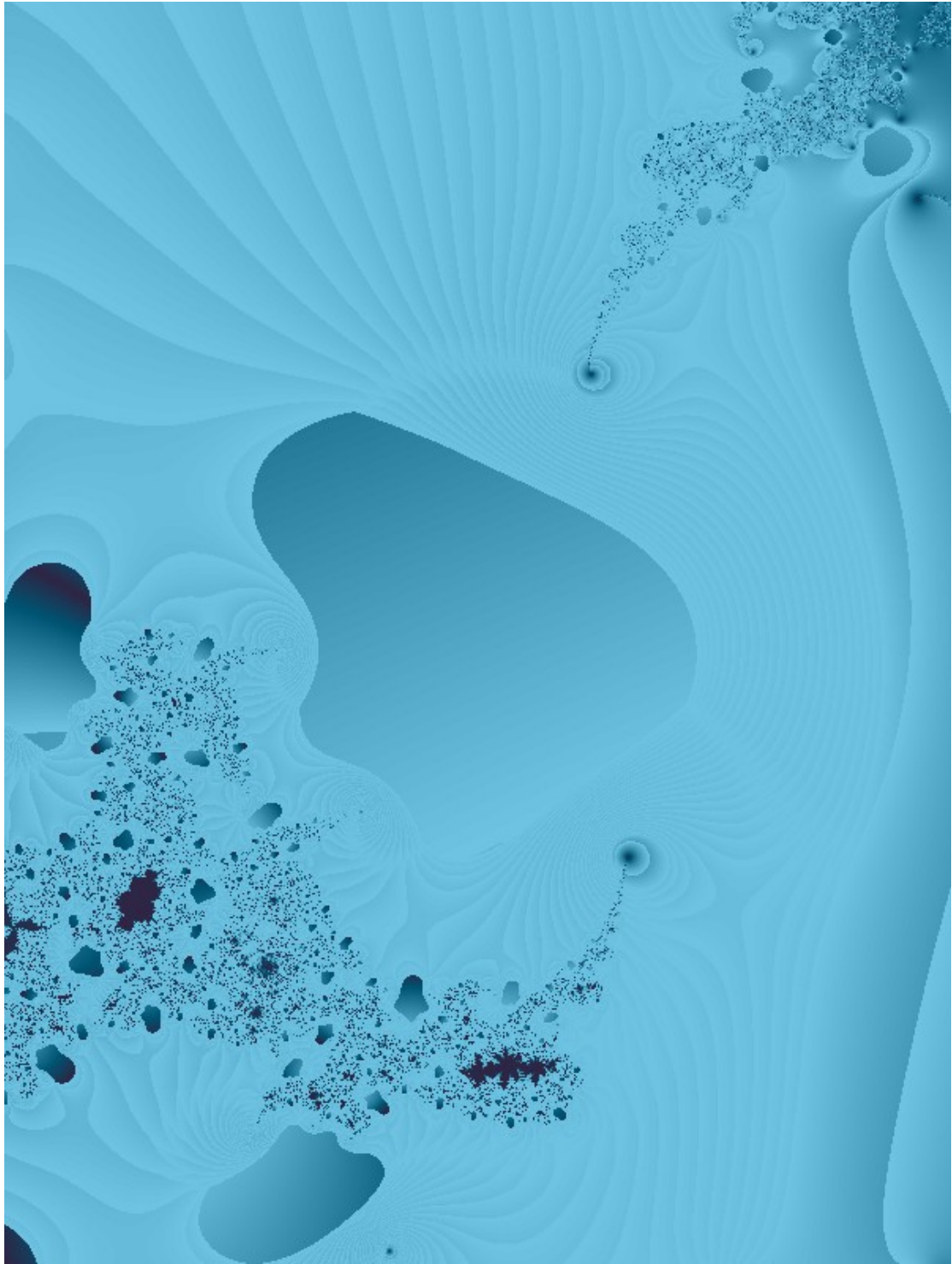


Fig 47e. Sunspot bridges/punch hole bridges(at the centre of the image). The punch holes has still the shape of a hole.

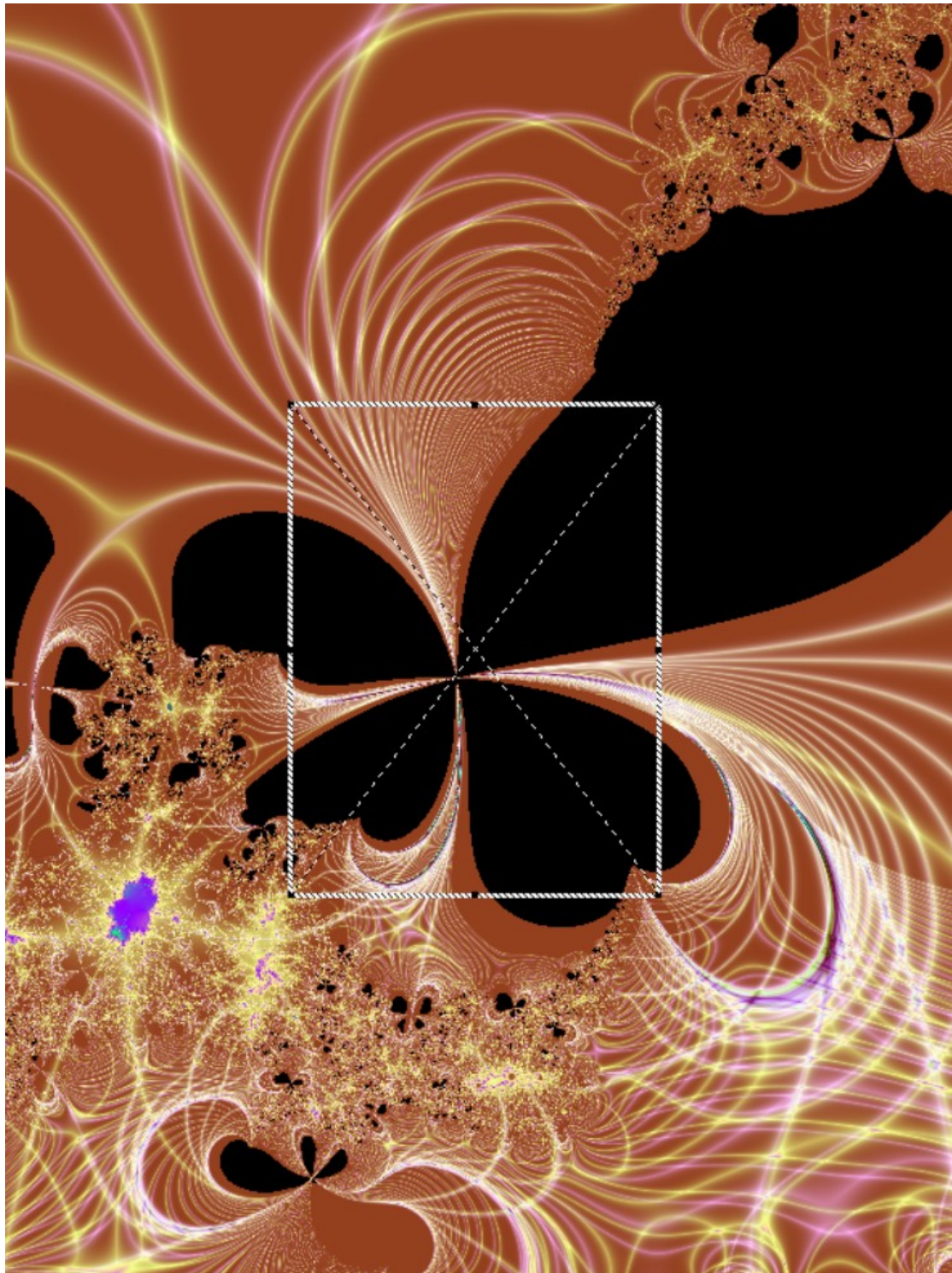


Fig 47f. Sunspot bridges/punch hole bridges(at the centre of the image). These punch holes do not produce radiation nor they split it.

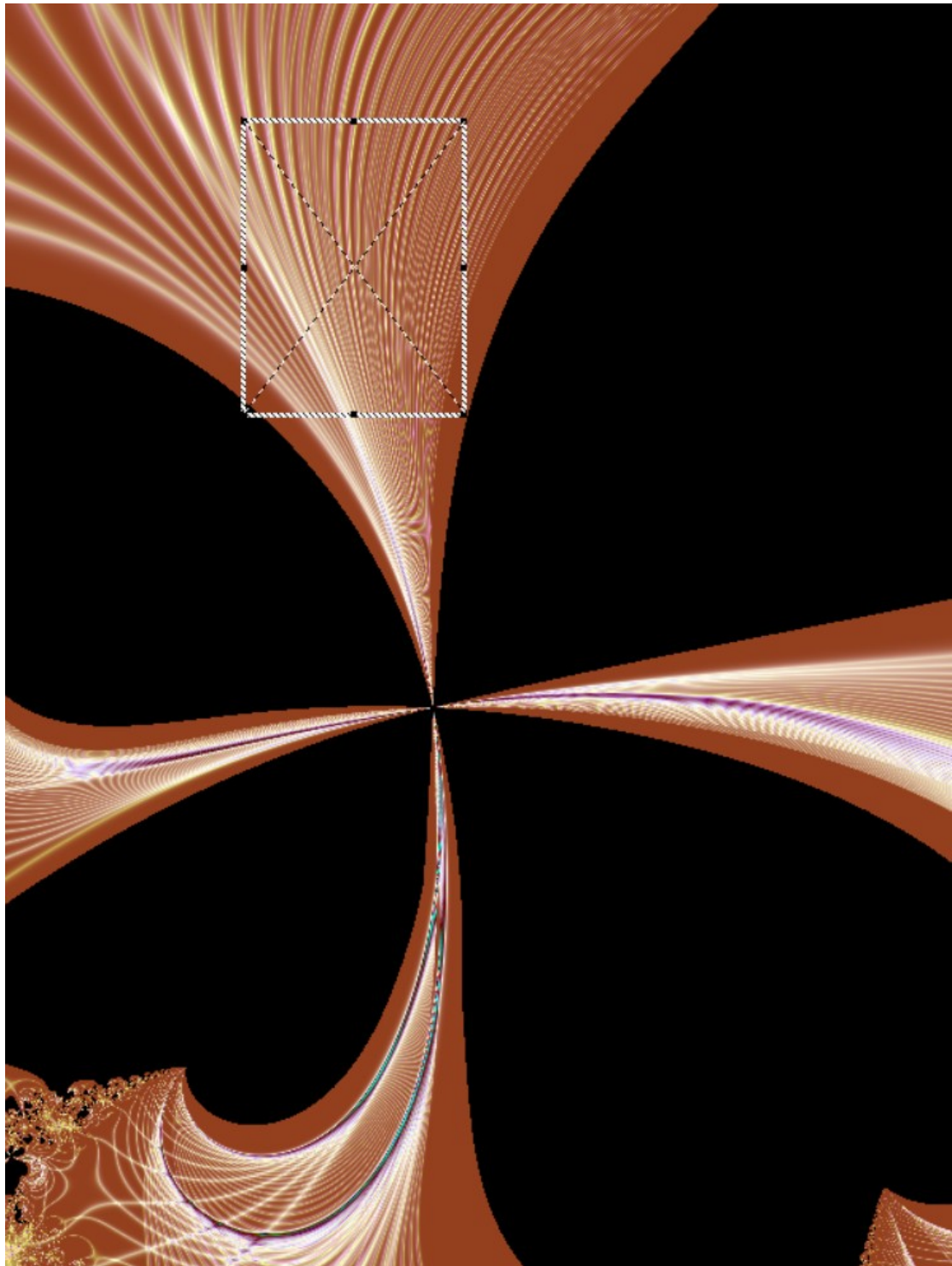


Fig 47g. Two bundles of electric and magnetic flux tubes (not always alternate) cross at the centre of the punch hole. It looks similar to what bundles does inside a density cavity except that in this case both bundles are mixture of electric and magnetic flux tubes in a random distribution

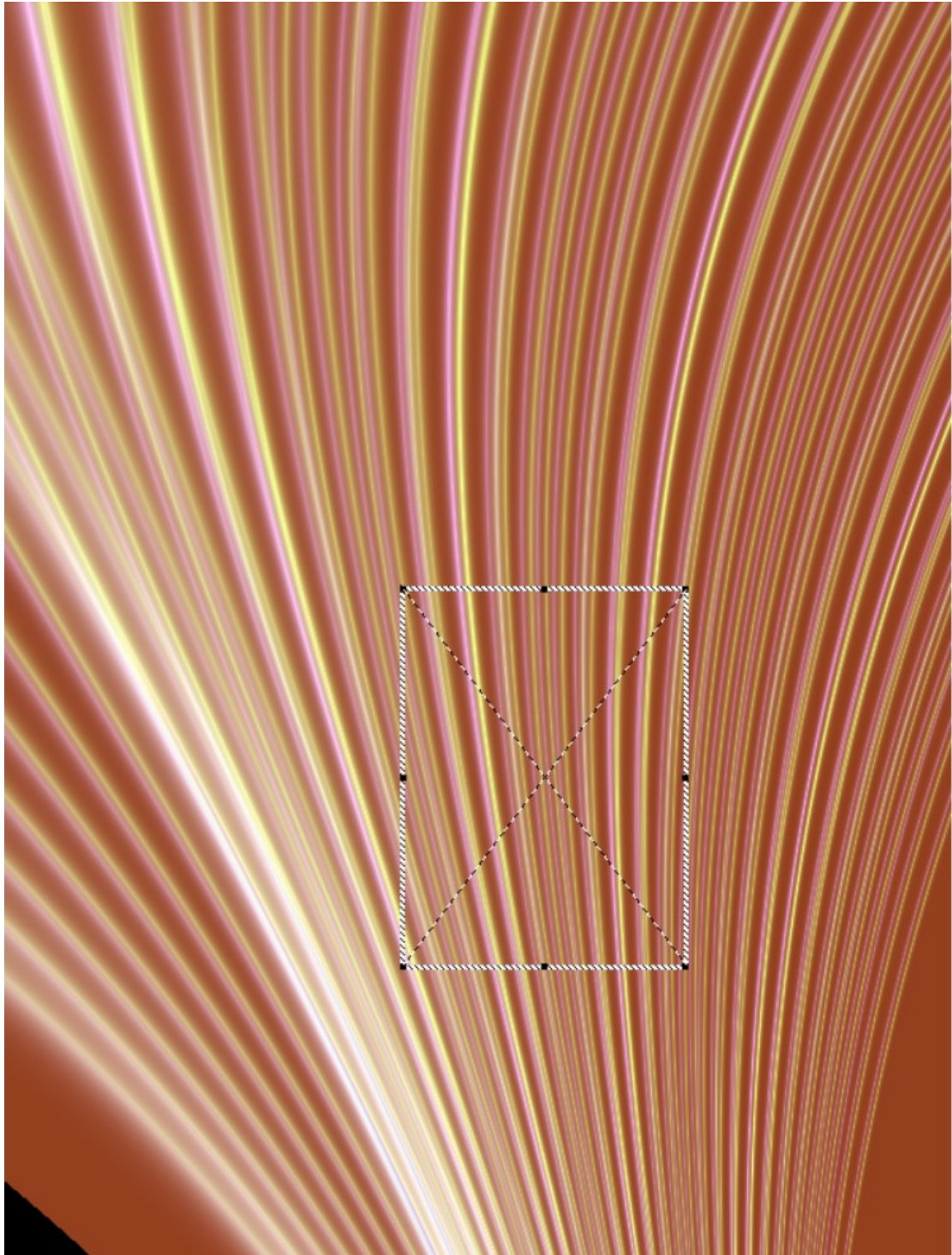


Fig 47h. Both bundles are mixture of electric and magnetic flux tubes in a random distribution

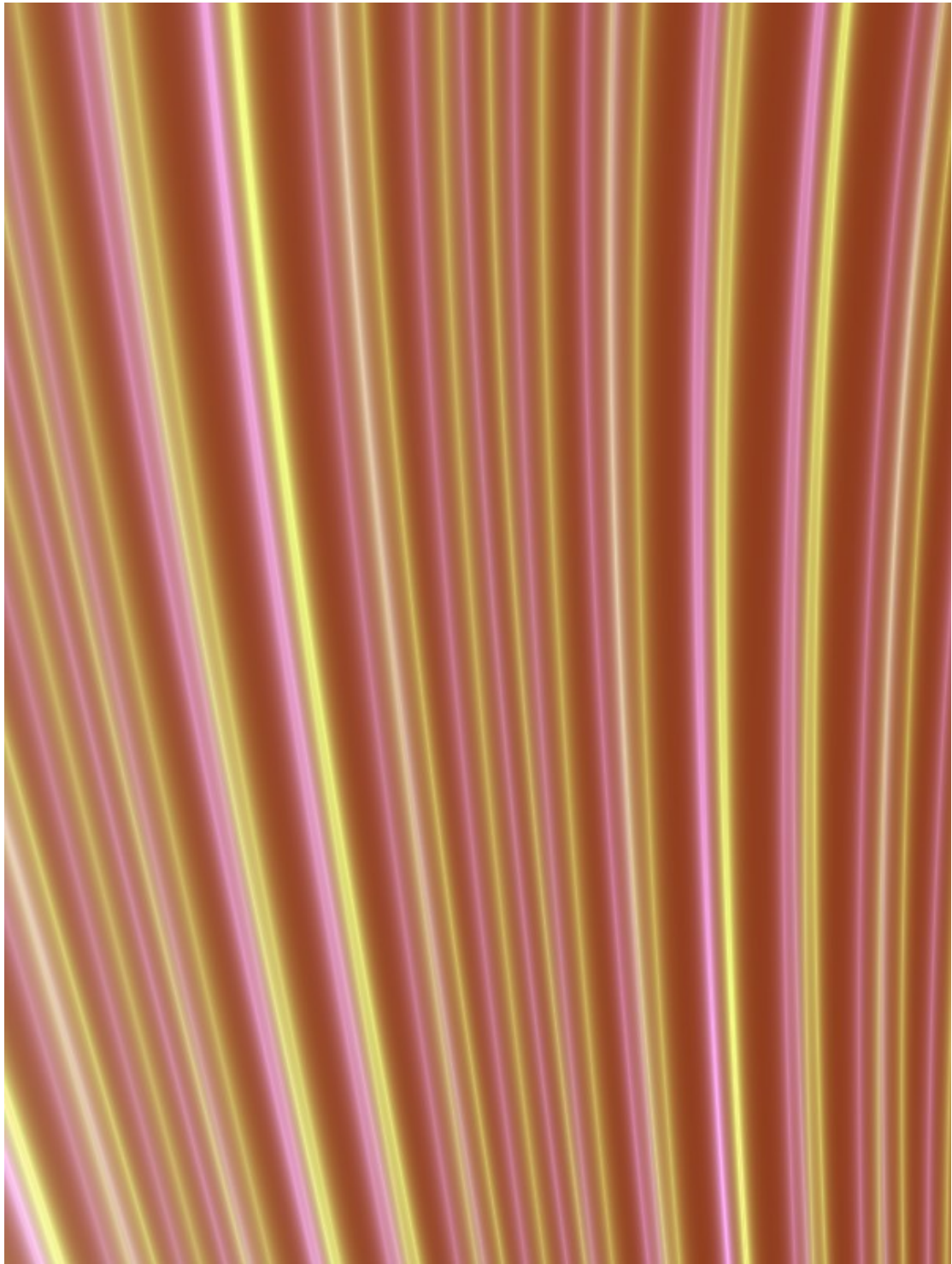


Fig 47i. Both bundles are mixture of electric and magnetic flux tubes in a random distribution

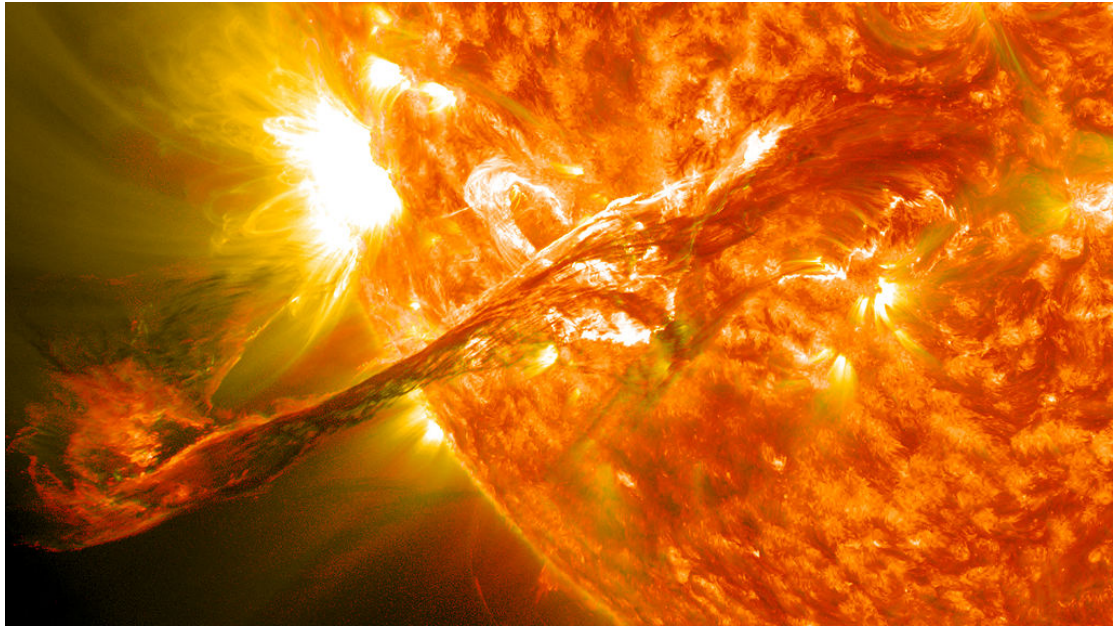


Fig 48. A prominence is a large arc extending outwards from the sun's surface.

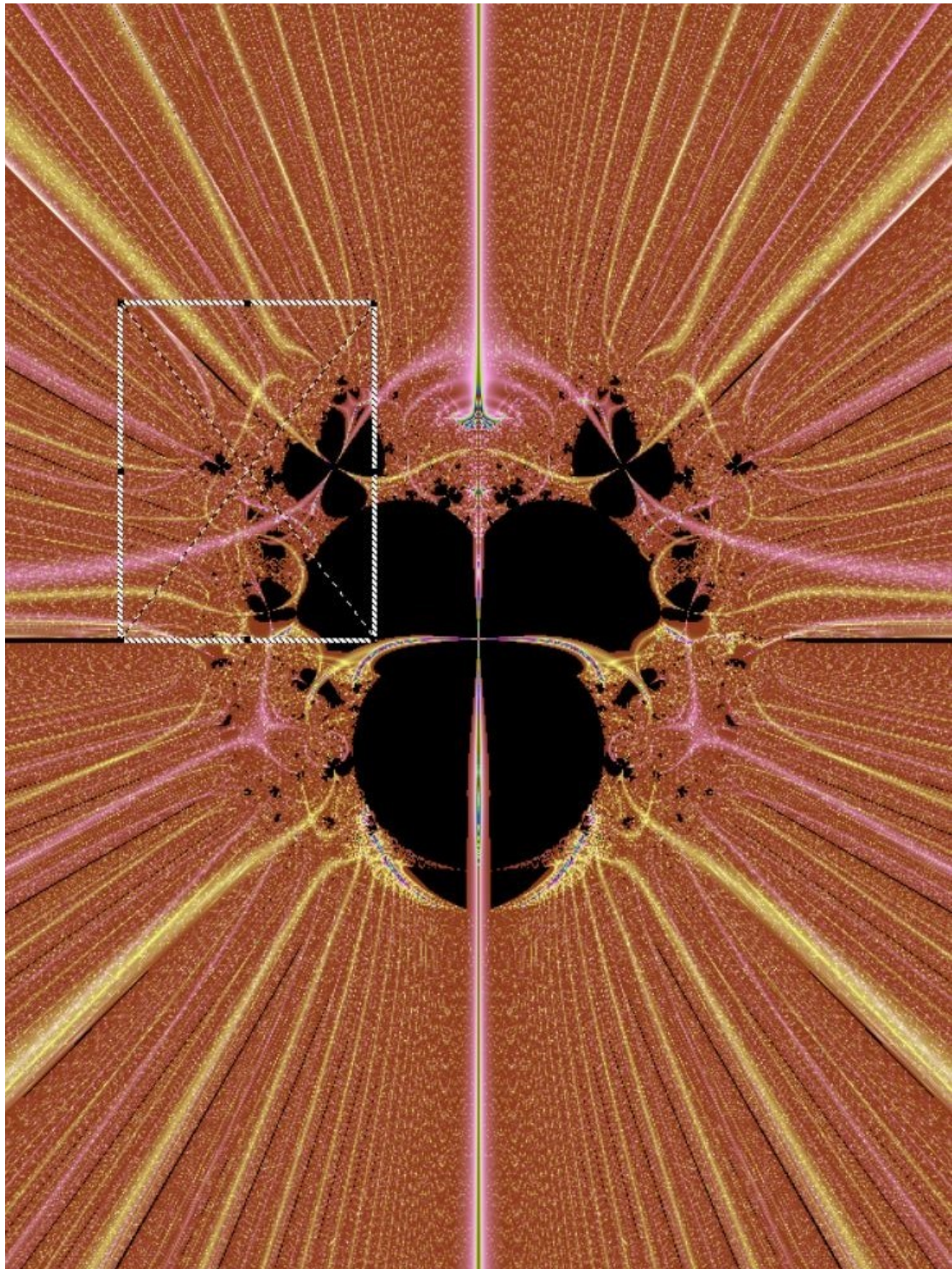


Fig 49a. We will zoom in this region looking for a prominence.

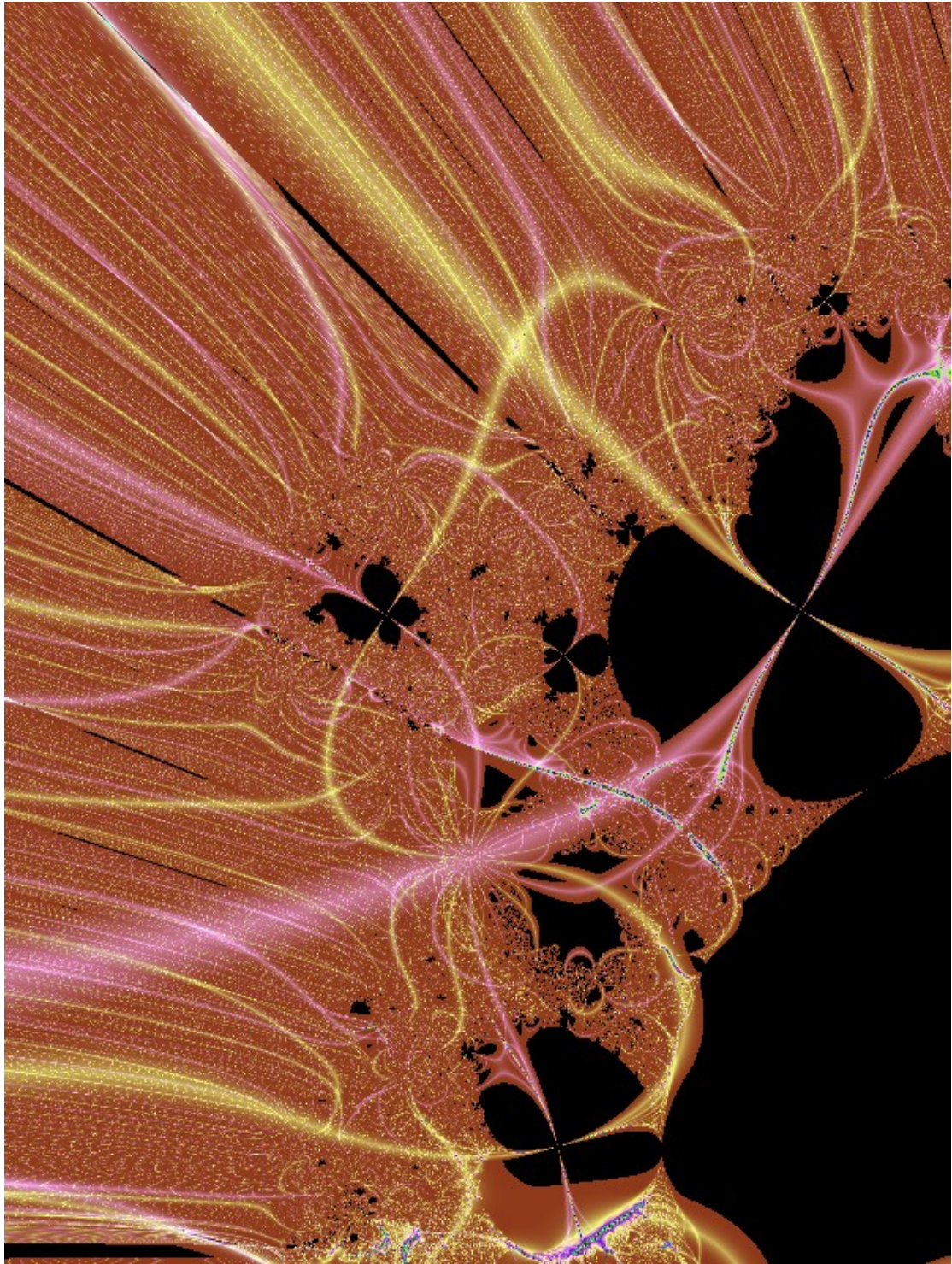


Fig 49b. The prominence is anchored/attached to the sun with a pair of sunspots and three density cavities.

Prominences, CME's and flares:

A prominence is a large arc extending outwards from the sun's surface. They are much cooler than their surrounding. They are also called solar filaments. When viewed against the sun's surface they appear as dark filaments. When viewed at the edge of the sun they appear brighter. Prominences are anchored to the sun's surface in or near sunspots. Their lifetime varies from hours to months. They can erupt in what is known as coronal mass ejection. At the top of the prominences is a structure called prominence density cavity. Until now prominences remained a mystery. Based on the fractal model we are going to describe prominences.

A prominence is a huge magnetic flux tube. In this model we see two prominences on both sides of the north-south axis. See Fig 49a. Let's suppose this is a model of our sun. The prominence is anchored/attached to the sun with a pair of sunspots and three density cavities. The mid cavity is hanging in the sun's atmosphere. The other two cavities are inside the sun. The two sunspots in this model are at different sun's layers, one in the sun's atmosphere and the second one is buried deep into the sun. The prominence magnetic flow direction determines the polarity of both sunspots. The first sunspot a prominence flux tube cross is a north pole sunspot. The second is a south pole sunspots. When the flow change direction, as it does during sun magnetic flip, the polarity of these two sunspots is reversed. Starting from high latitude, the prominence enter the sun's cavities first and then pass through the sunspot to emerge to the surface of the sun. It then loops back in an arc form to the surface and enter the second cavity which is suspended in the atmosphere. Before it enters the cavity, it is joined by other magnetic tubes coming from under(lower altitude). On the sun this cavity is called the coronal cavity or prominence density cavity. Electric and magnetic plasma inside this cavity is suspended in the atmosphere. Coming out of the other side of the cavity, the prominence magnetic flux tube plunge again into the sun to cross the second sunspot. The visible arc in the sun's atmosphere is what we call a prominence. But, the magnetic flux tube loop is more than that. Under the surface it will again form an arc and loop back passing a third cavity buried inside the sun. After that, it propagate into space above and asymptotic to the equatorial dead zone. The magnetic flux tubes will then merge with what is known as the heliospheric current sheet. See

Fig 50. Sometimes we are able to see this propagation as matter flows in and out of the sun on both sides of the prominence arc. It looks like that the sun is pulling the matter back from the corona. At the other end the matter seems bursting out of the sun surface. They both form an angle with the sun surface. This matter movement, on both sides of the prominence, has never been associated with prominences as far as I know. When a prominence flux tube cross the sunspot, it twist creating a crossing point at the centre of the sunspot.

A prominence can release the middle segment of the magnetic arc together with the electric flux tube and the density cavity into space. See Fig 51a/b. This is what is known as the coronal mass ejection(CME). The electric flux tubes crossing the magnetic prominence flux tubes inside the cavity also detach from the sun. When released the electric and magnetic flux tubes forms two loops that cross each other at the centre of the released density cavity. The total three-part structure propagate into space in a crescent shape. The bigger the electric and magnetic flux tubes the bigger the cavity. When the prominence density cavity snatch loose a new cavity is formed. This is what we call a flare. A flare is a new born prominence density cavity. This density cavity replace the one that just brook lose and propagated into space(CME). When generated, this new cavity is so energized it shows a double satire. These satires are actually small density cavities that are all connected. The double satires consist of a series of bright blue lights. See Fig 52 and. Fig 53e fractal model image shows these satires. A deep zoom into these satires shows that they consist of a double line populated by density cavities. Flux tubes, coming from space, cross these density cavities. The flux tubes are all parallel to each other and perpendicular to the satire lines. These flux tubes makes a U-turn while crossing the density cavities. These satires produce radiation across the entire electromagnetic spectrum.

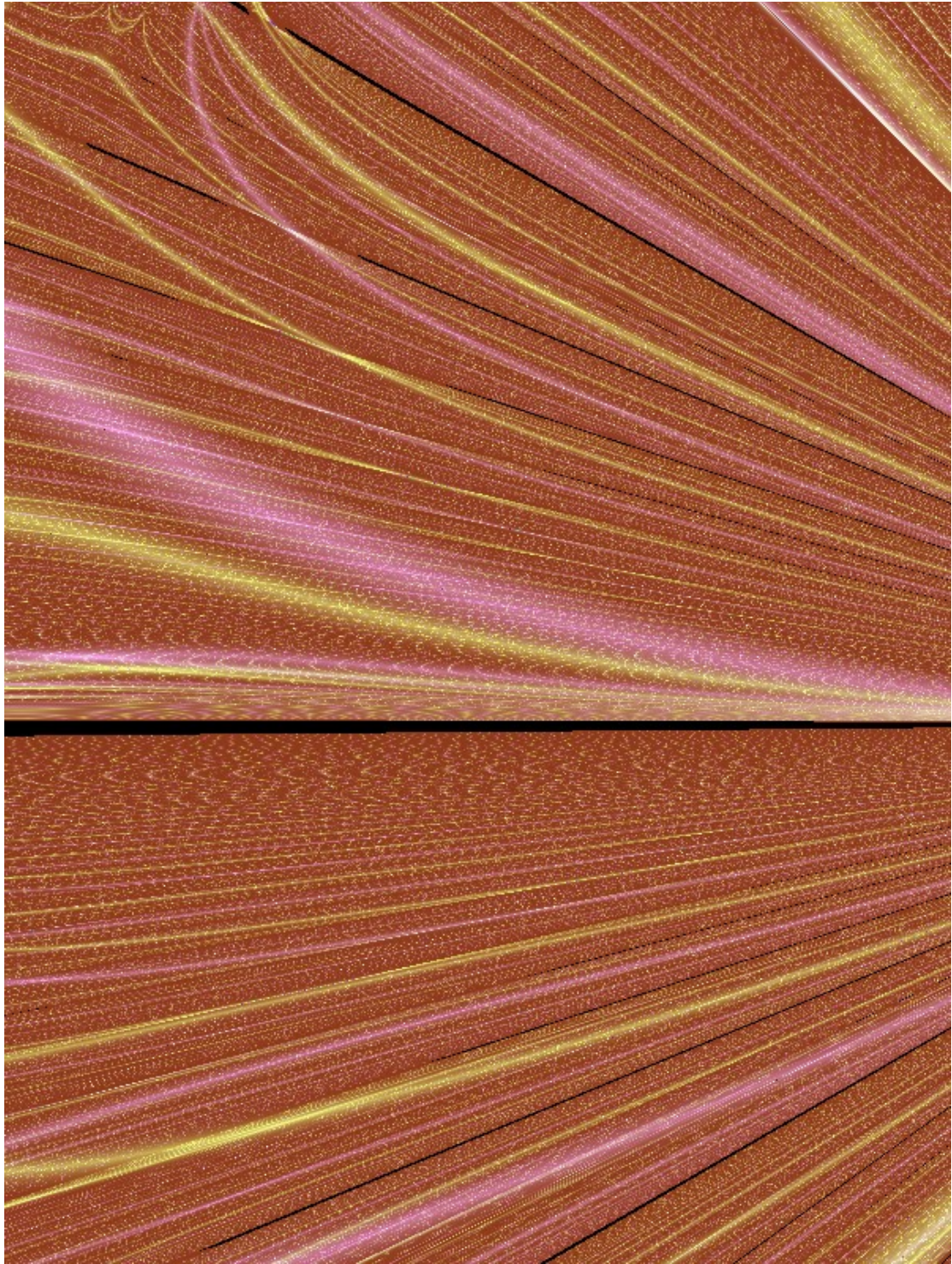


Fig 50. Inside-out image of the fractal model shows a prominences flux tube merging with heliospheric current sheet. They propagate into space asymptotic to the dead zone.

Prominences are cooler than their surroundings because they are magnetic flux tubes only. Prominences have different sizes. The biggest prominences ever observed had the size of the sun radius. Prominences has been observed between 25-50 degrees and 60-70 degrees. The latest are called polar crown prominences. In the celestial body fractal model, we find prominences at these latitudes.

HFA(hot flow anomaly):

Hot flow anomaly is a phenomenon that has been observed on planets. The TEMIS spacecraft encountered a hot flow anomaly on the dusk flank of Earth's bow shock on 4 of July 2007, observing it on both sides of the shock. HFA is a density cavity that expand into the atmosphere of the planet pulling it up. HFA correspond to prominences density cavities on the sun. A HFA surge can cause the solar wind to reverse its flow and flood backward. This is the same phenomenon as a coronal mass ejection(CME) on the sun. Inside the HFA density cavity, hot plasma has been observed. The fractal model shows two cavities in the northern hemisphere. Their shape and position is symmetrical in regard to the E/M axis. They stretch the layers of the atmosphere of the celestial body towards the sky. These giant cavities are connected to the density chamber through other cavities.

Jet stream clouds:

Jet stream clouds are the best candidate to be mapped to solar prominences as they have a lot in common. They can rich speeds of 400 km/h. They are used by aircraft, saving them time and fuel. They are very high in the atmosphere and can last for days. They are mostly located at near altitudes of the tropopause. Their size are big and they produce no rain. The subtropical jets are located around 30 degrees latitude. The polar jets are located around 60 degrees latitude. The subtropical jets streams are higher(altitude) than the polar jet streams which is similar to the celestial body fractal model. The lower latitude prominences are indeed higher than the ones near the poles. Also the latitude locations of the prominences are similar to jet streams clouds locations.

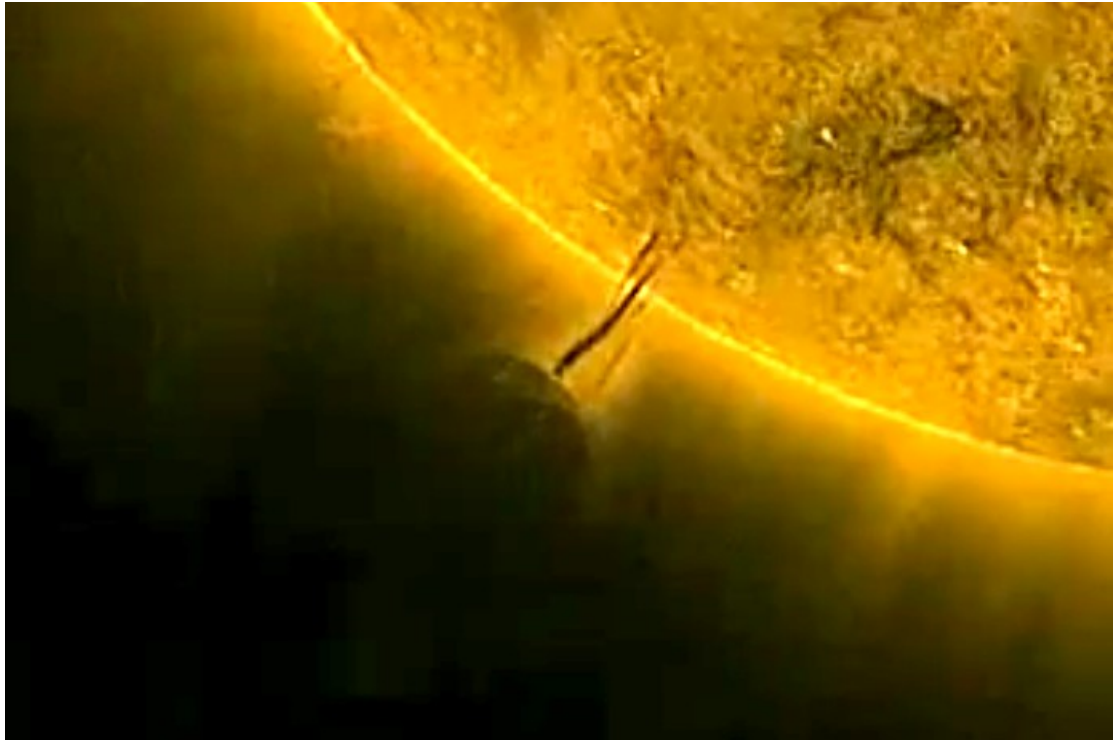


Fig 51a. A prominence density cavity attached to the sun.

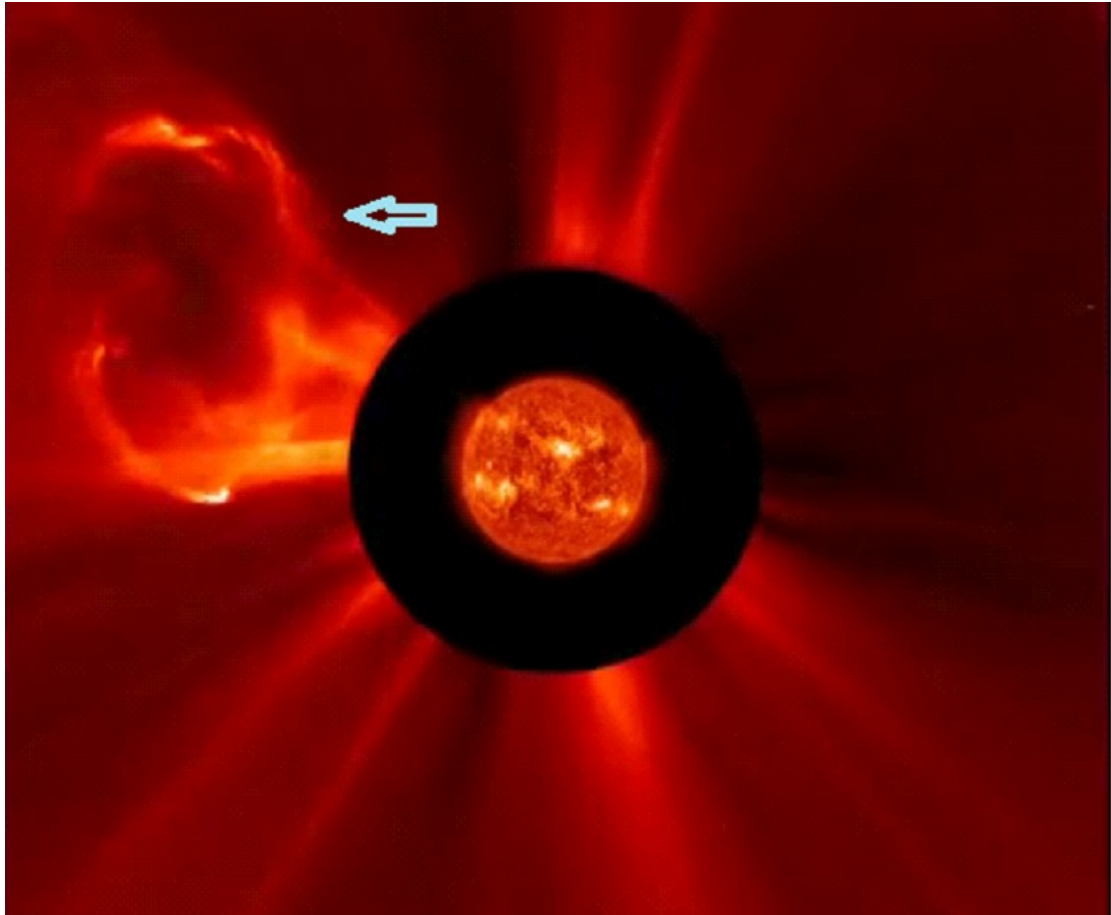


Fig 51b. A prominence can release the middle segment of the magnetic arc together with the electric flux tube and the density cavity into space. This is what is known as the coronal mass ejection(CME).

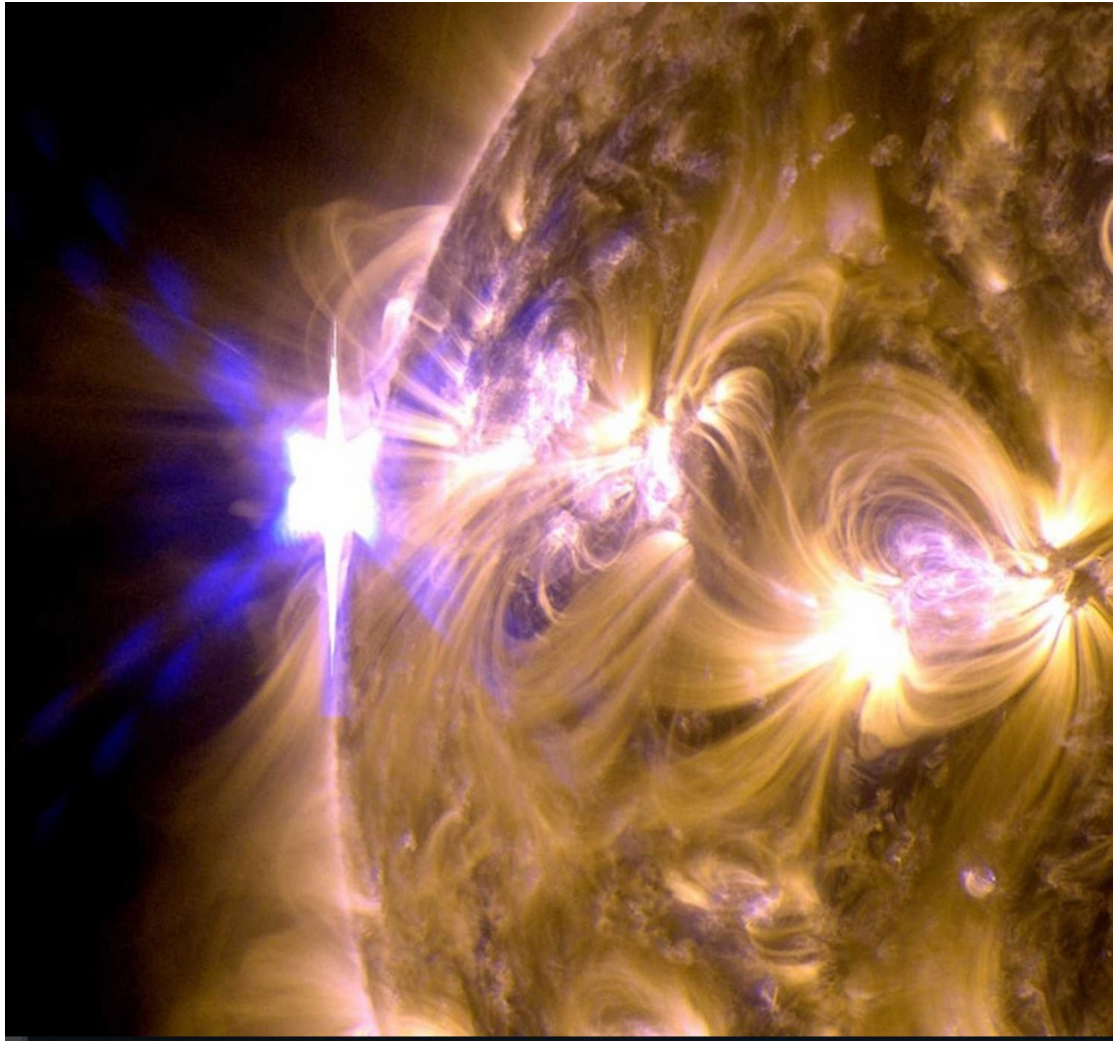


Fig 52. A solar flare. When the prominence density cavity snatch loose a new cavity is formed. This is what we call a flare. A flare is a new born prominence density cavity. This density cavity replace the one that just brook lose and propagated into space(CME).



Fig 53a. A fractal model of a solar flare.

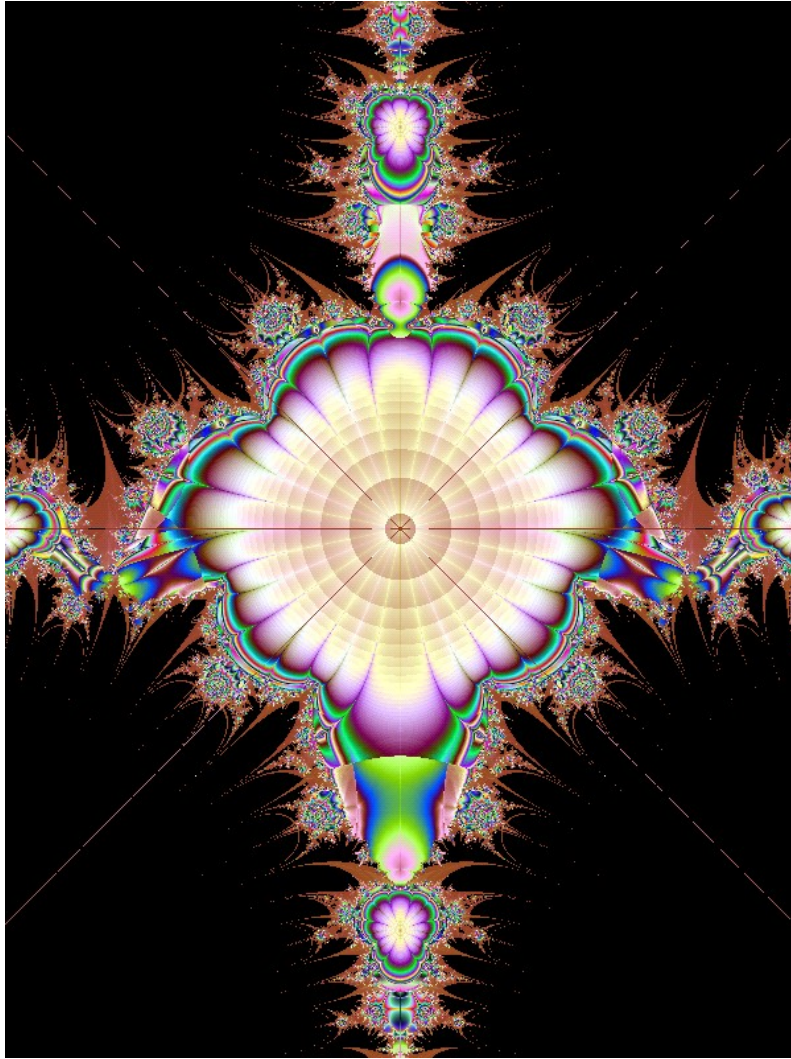


Fig 53b. A fractal model of a solar flare and it's chakras. We will zoom in one of the satires.

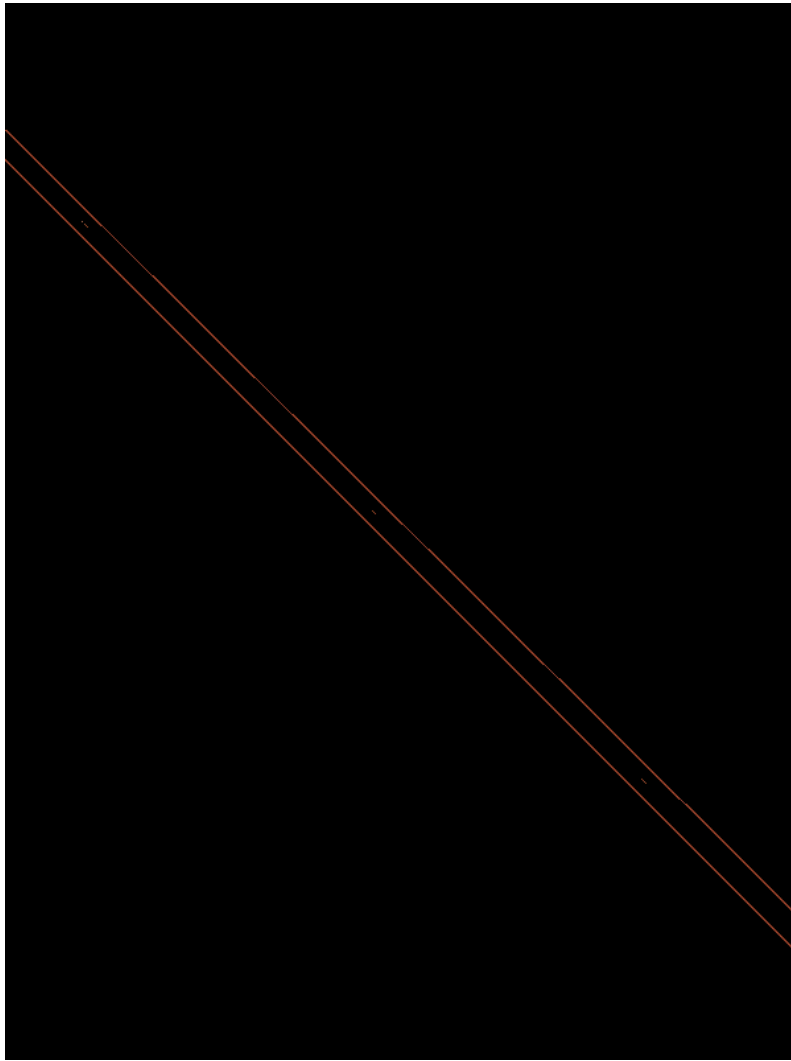


Fig 53c. A zoom in one of the satires of the flare.

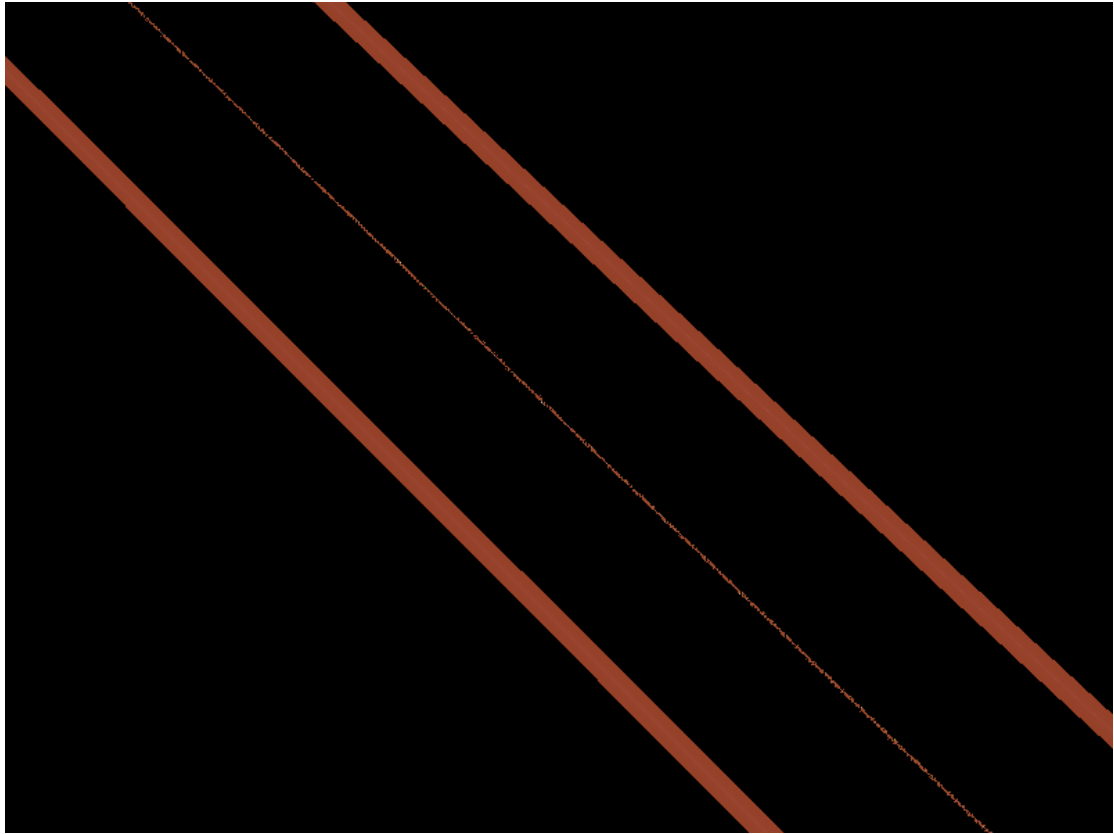


Fig 53d. A zoom in one of the satires of the flare.



Fig 53e. A zoom in one of the satires of the flare.

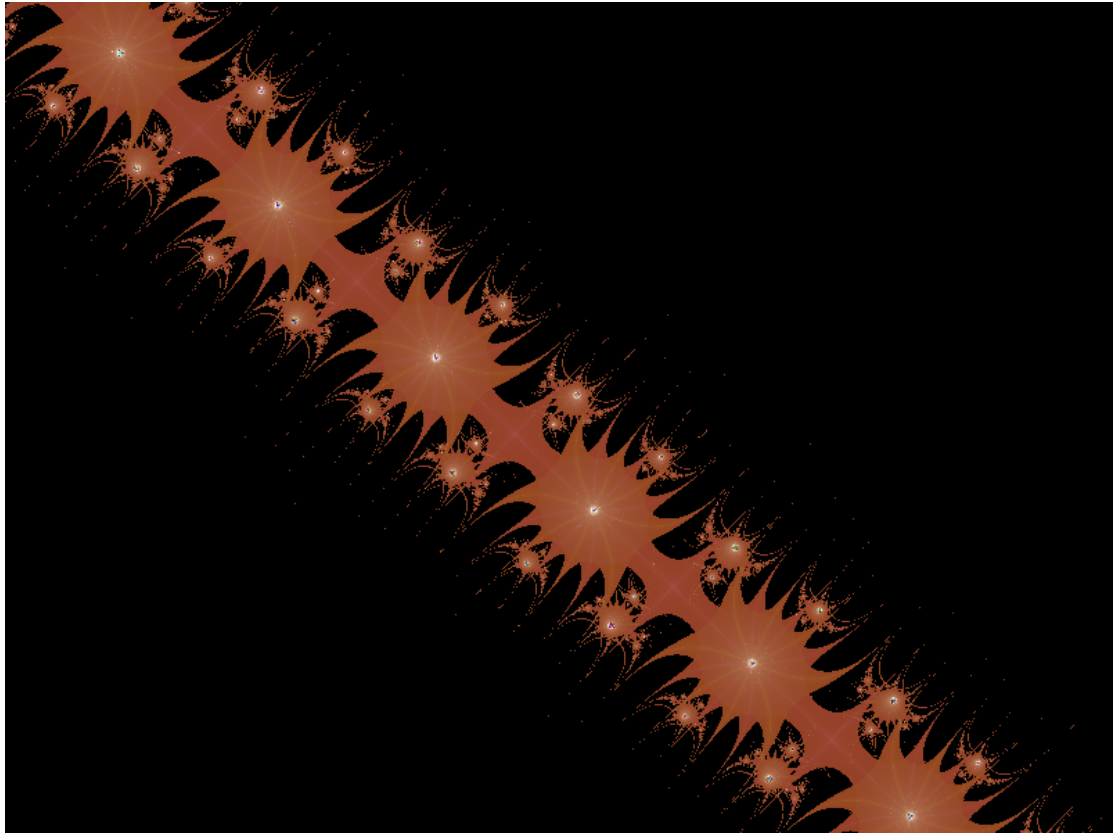


Fig 53f. The cavities are positioned slightly in phase shift. Just like the observations shows.

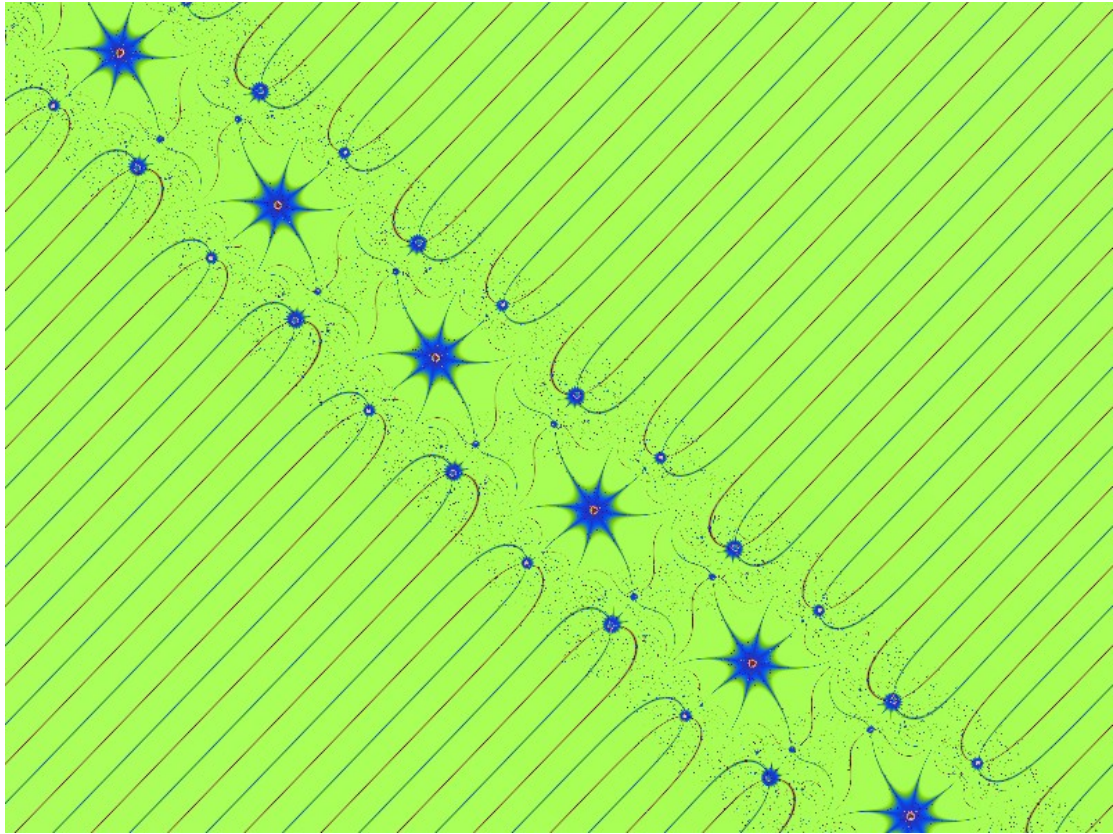


Fig 53g. These satires are actually small density cavities that are all connected. Flux tubes, coming from space, cross these density cavities. The flux tubes are all parallel to each other and perpendicular to the satire lines. These flux tubes makes a U-turn while crossing the density cavities. These satires produce radiation across the entire electromagnetic spectrum. Notice that the electric and magnetic flux tubes are alternate.

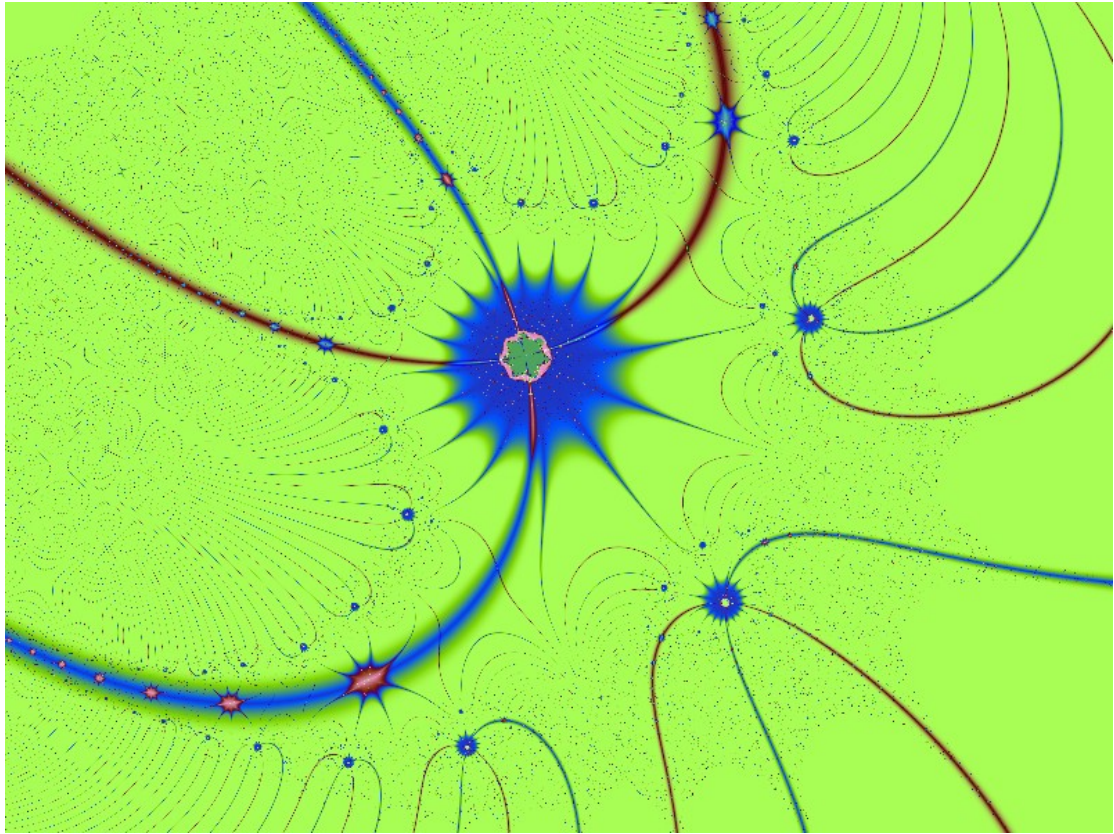


Fig 53h. These satires are actually small density cavities that are all connected. Flux tubes, coming from space, cross this density cavities. These flux tubes makes a U-turn while crossing the density cavities.

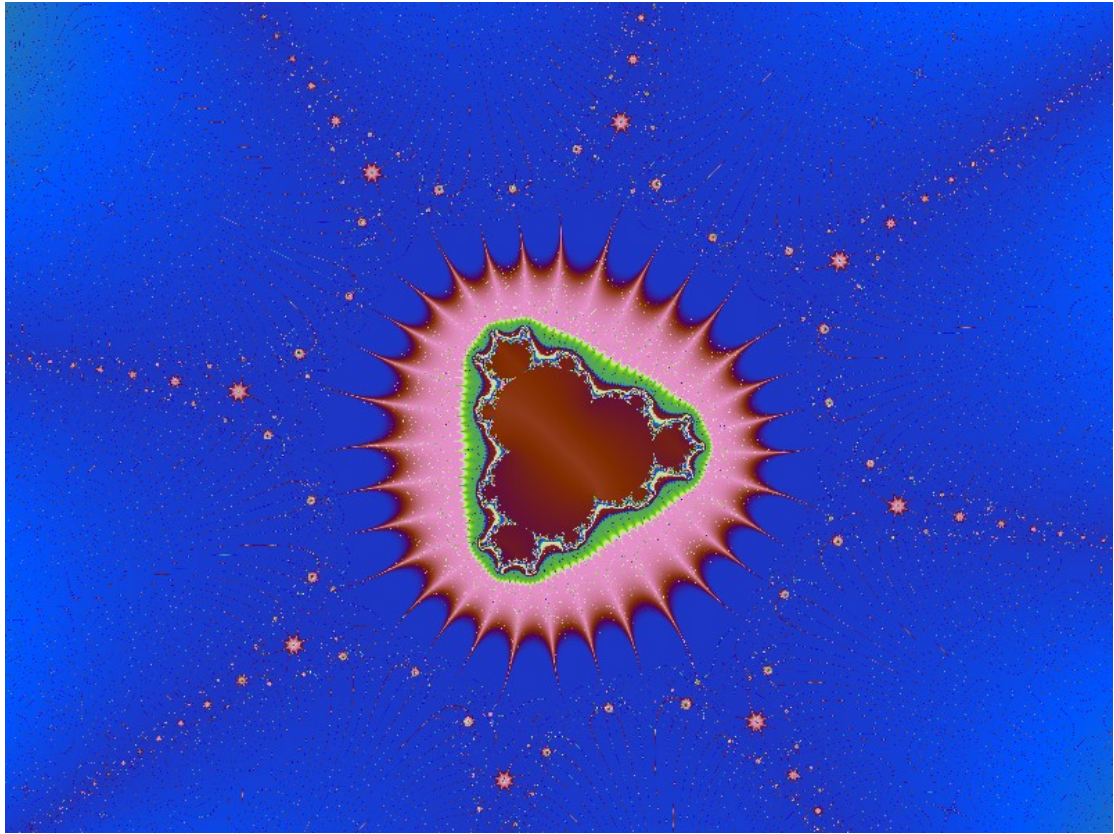


Fig 53i. These satires are actually small density cavities that are all connected.

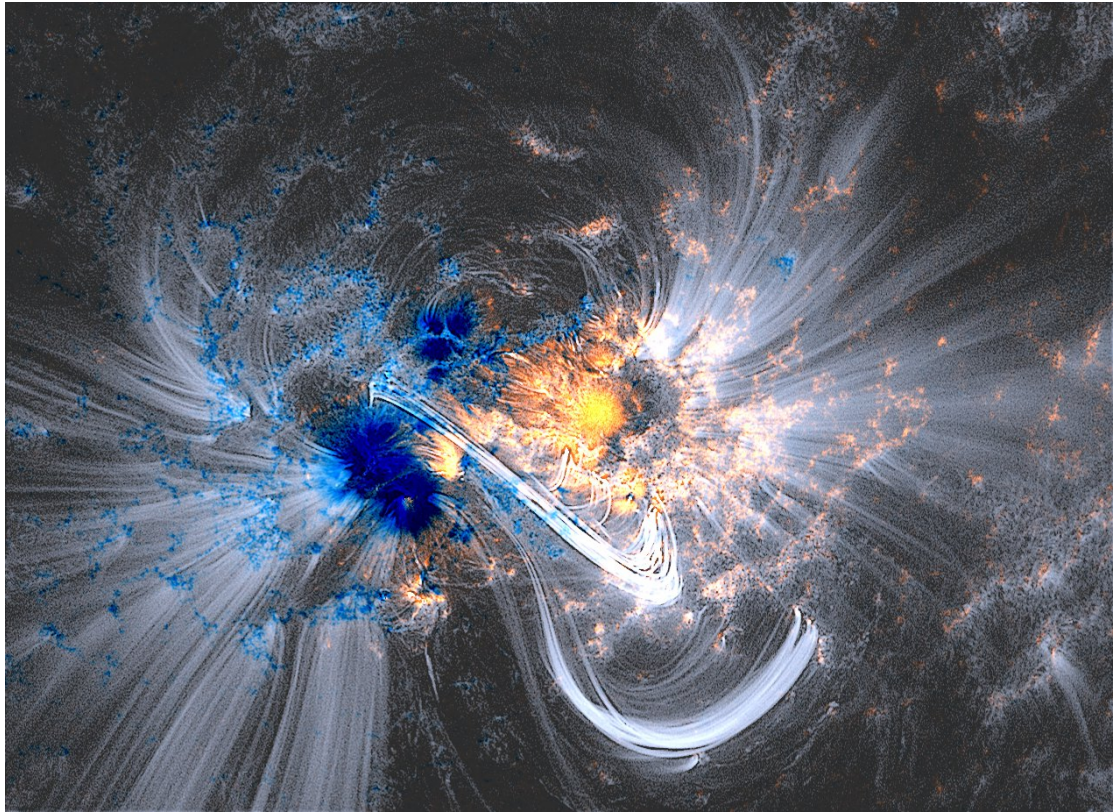


Fig 54. Coronal loops coming out of density cavities(yellow) and plunging into sunspots(blue). They are racing from hotter end(density cavities) to a cooler one(sunspots).

Coronal loops and cirrus clouds:

In early years of this research I knew that cirrus clouds were magnetic flux tubes. The power behind the atmospheric dynamic are magnetic and electric flux tubes flows.

Coronal loops are these fine flux tubes that seem to emerge from the sun surface just to loop back and plunge into the sunspots.

Coronal loops exist at all scales. They can last for days or weeks but most change quite rapidly. They are anchored to the plasma in the photosphere. They originate from bright areas called plages. Plages are density cavities connected forming a tree chain in a zigzag form. Plages are found near sunspots. Density cavities when energized are bright. The brightness of the density cavities and the visible shape of the sunspots are both known to be associated. When the electric and magnetic flux tubes flux energize the cavities and the sunspots, they become visible. The same flux tubes that pass by the density cavities will plunge after into the sunspots to produce radiation. The trajectory taken by the flux tubes from the density cavities to the

sunspots form what we call the coronal loops. The flux tubes coming out of the density cavities are two separate flows of electric and magnetic flux tubes. In order to plunge combined into the sunspots they have first to be distributed in space. They position themselves through some kind of spaghetti area. It is like making a cloth, you need first to combine different colours. Once the flux tubes plunge into the punch holes they alternate producing radiation. High altitude cirrus clouds are the same phenomenon as coronal loops. Just like coronal loops, cirrus clouds exist at all scales. Large coronal loops correspond to high altitude cirrus clouds. On the sun, we are not able to see the clouds under the sunspots. Whereas on Earth, we can see cirrus clouds under the punch holes. They are the ones that make the punch holes visible. They become better visible after plunging into the punch holes. What we call punch holes are these well shaped forms. But actually punch holes are everywhere. They are just not that obvious. When ever you see cirrus clouds descending, coming together and converging and stretching in the same direction, then they must be punch hole clouds. They are called i.a. cirrus uncinus. They appear as filaments shaped like a comma with a top like a tuft. The tuft shape correspond to the top of the punch hole. Others are called cirrus spissatus. I like to watch them, they converge in spectacular way towards the same direction. It looks like someone swept the sky with a besom. When punch hole clouds produce light in the visible spectrum they are called circumhorizontal arc, also known as fire rainbow clouds. See Fig 16. Other type of punch hole clouds are cirrus floccus, cirrus fibratus and jellyfish clouds. It took me a while to realize that this variety of clouds are all punch hole clouds.

Cirrus clouds indicate the arrival of precipitation. They appear in the sky before the arrival of bad weather. This is how people use to predict bad weather in the past. This is because Cirrus clouds surround density cavities. Density cavities and punch hole clouds(Cirrus clouds) are arranged in spiral forms. The density cavities populate the inner part of the arm of a cyclone. The punch holes surround them on both sides of the arm. So when the arm of a cyclone approach the first thing we will see are the punch holes(Cirrus clouds). See 24a/b/c. They are the last gate for outgoing flux. The flux coming out of the density cavities flows through the

punch holes(Cirrus clouds) to propagate into space. This flow is the driving force behind cloud formation and dust precipitation.

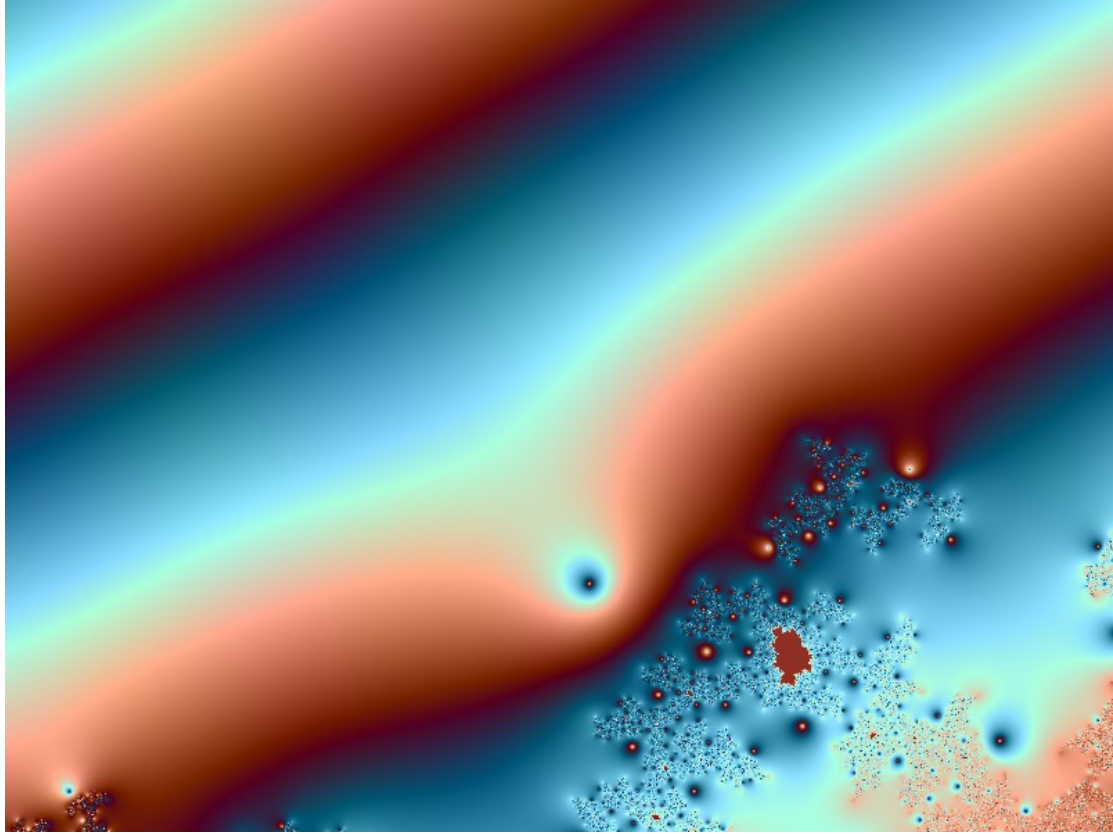


Fig 55a. This punch hole(at the lower centre) and the density cavity(brawn), both in the lower atmyosphere of the celestial body, are interlocked with a double light bridge. See Fig 55b/c.

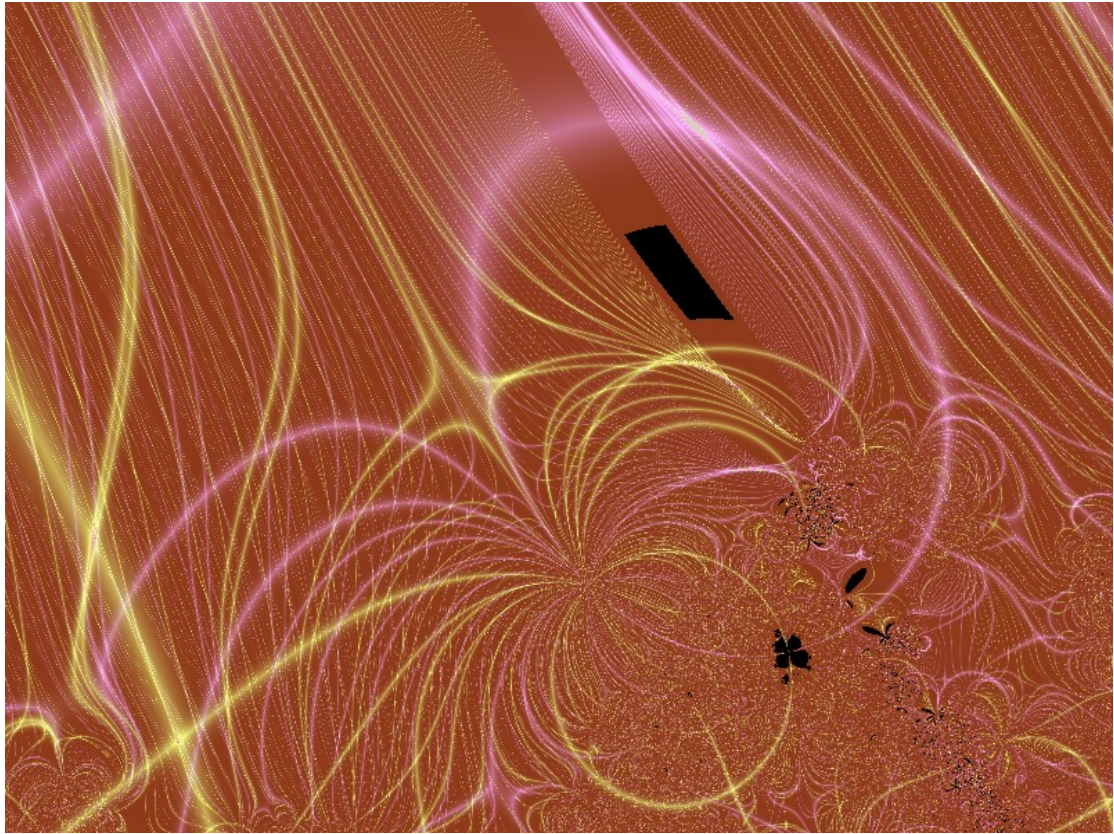


Fig 55b. Same as Fig 55a. A punch hole and a density cavity double interlocked together with an electric (small yellow loop) and a magnetic (big white loop) light bridge.

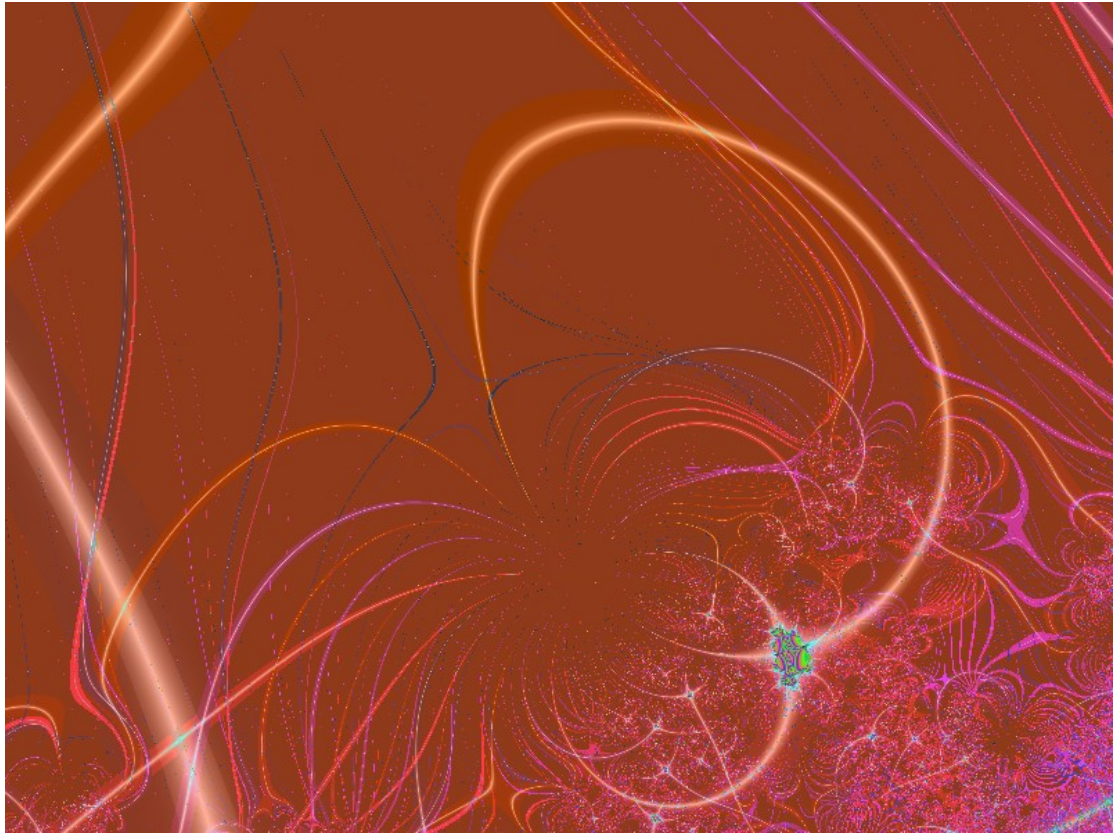


Fig 55c. Same as Fig 55b. A punch hole and a density cavity double interlocked together with an electric(small loop) and a magnetic(big loop) light bridge. Both loops intersect at the centre of the punch hole and the density cavity.

Astrophysical jets:

Astrophysical jets are highly collimated supersonic jets emerging from both poles of a some astrophysical objects. They are seen in young stellar objects. An astrophysical jet is an electric outflow along the axis of rotation of stars and galaxies. The north-south axis of every celestial body is populated by electric plasma. Electricity flows/pulsate in both directions along the axis. Inside the northern hemisphere of the celestial body fractal model, electric plasma blobs populate the north-south plasma axis. The electric flux tubes cross several dead zone cavities at the axis forming these electric plasma blobs. Around the blobs, electric flux tubes form spiralling arcs along the plasma axis. These blobs has been observed in the astrophysical jets. A huge magnetic tube cross the electric plasma axis. Just under this magnetic tube we find a magnetic ring. Just above the biggest dead zone cavity, a huge electric flux tube cross the axis an extend to the equator joining other electric flux tubes to form the current sheet.

The nowadays accepted theory is that there is a black hole at the center of every galaxy. My guess is that galaxies, just like stars, have a density chamber at their center and that the bulge that we see is not an agglomeration of stars but rather a celestial body globe.

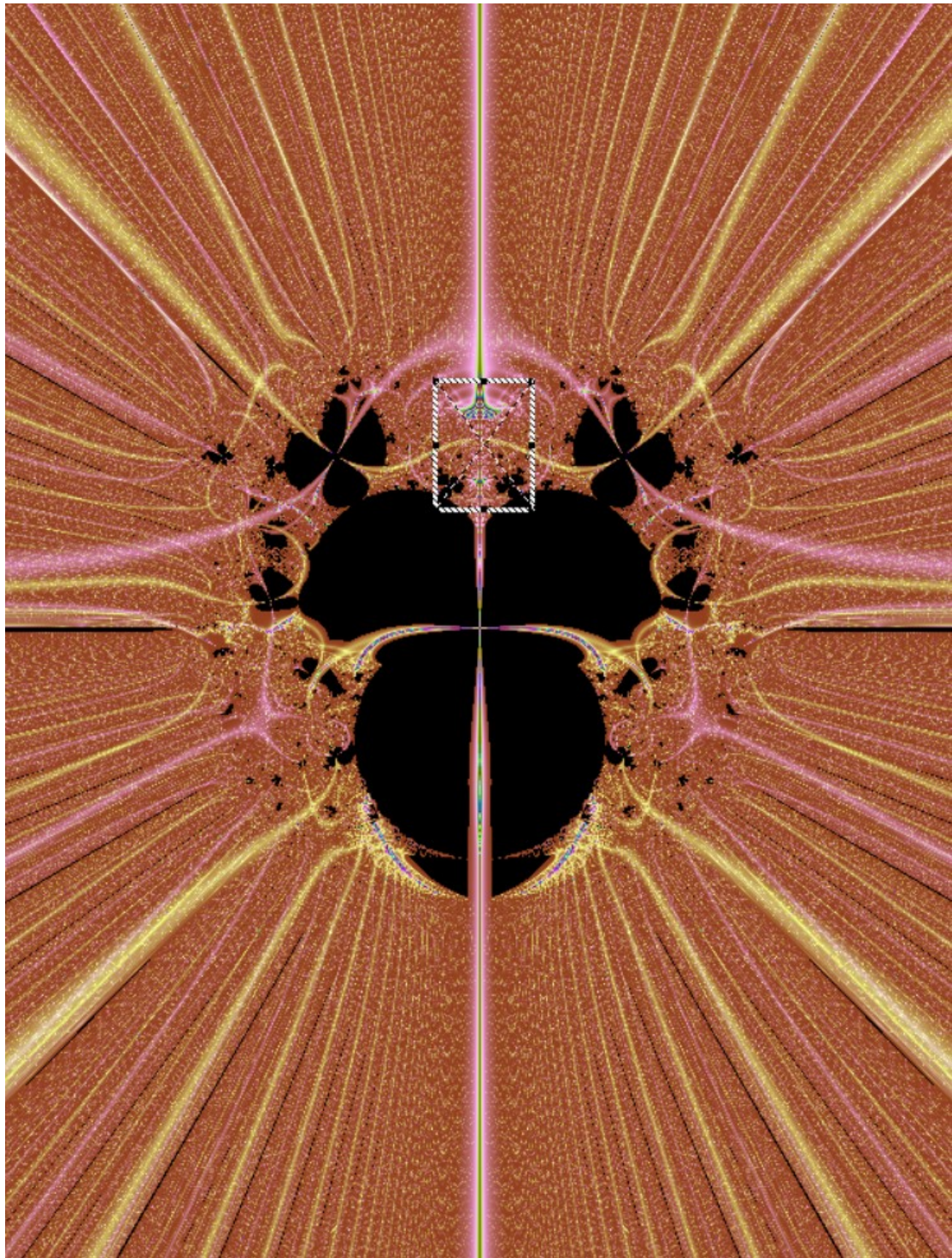


Fig 56a. We will zoom in this region looking for plasma blobs.

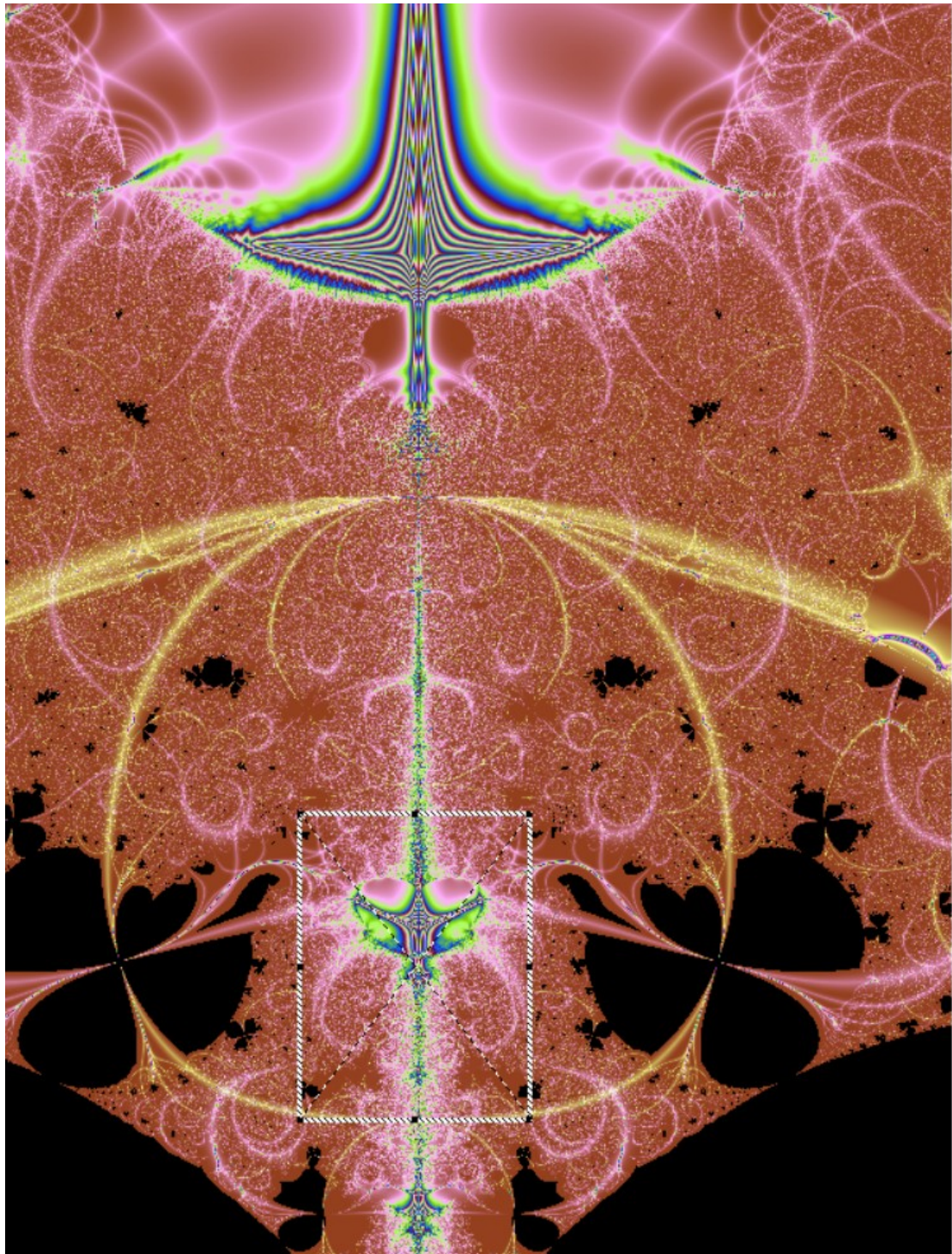


Fig 56b. We will zoom in this region looking for electric plasma blobs.

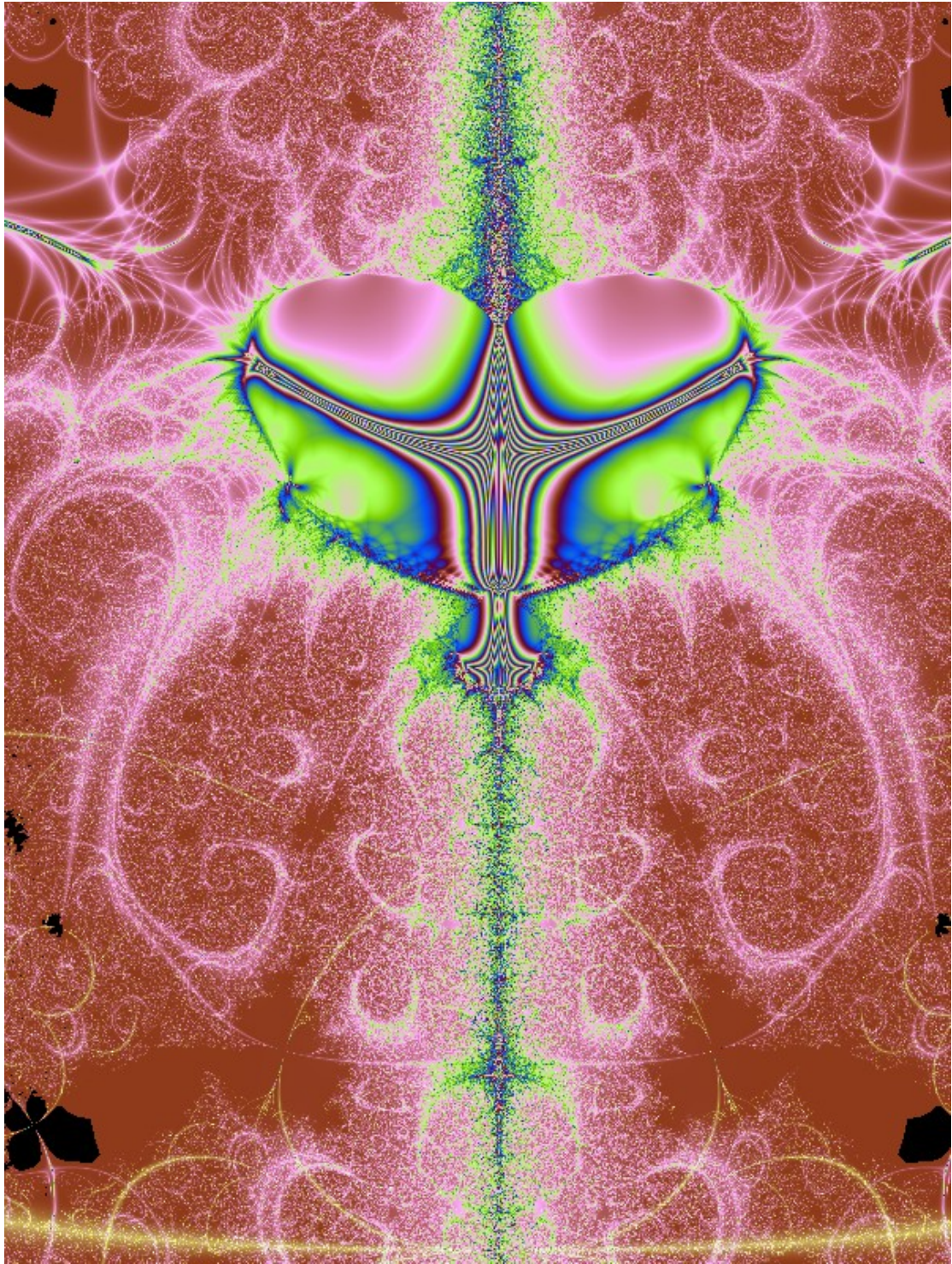


Fig 56c. Electric plasma blob.

Helmet streamers:

Helmet streamers form a dome with a prominence density cavity at the base of it. Flux tubes on both sides of prominence density cavity form a shape like a candle flame or helmet called "Helmet streamers". Helmet streamers are flux tubes that work their way around the prominence density cavity to propagate into space. Once the flux tubes are above the density cavity the free space created above the density cavity is filled up by helmet streamers creating this helmet shape. In the fractal model we see a dead zone cavity on the top of the density cavity. The dead zone cavity is confined inside small connected density cavities. On both sides of the cavity, plasma forms at the intersections between the prominence flux tube and the flux tubes emerging from the sun surface.

At the top of the dead zone cavity, flux tubes, attached to the top of the density cavity, have enough space to spread out, in a parabola shape, to propagate into space. Further in space, they are gently squeezed against each other by those flux tubes coming from the sides of the prominence density cavity. Some flux tubes spread out far enough to cross dead zone beams, in plasma form, and end up aligned with them.

During a coronal mass ejection (CME), the helmet streamers will be pushed aside by the prominence density cavity that propagates into space. When the CME is finally ejected a new prominence density cavity will replace it and the helmet streamers will again get back to their helmet shape.

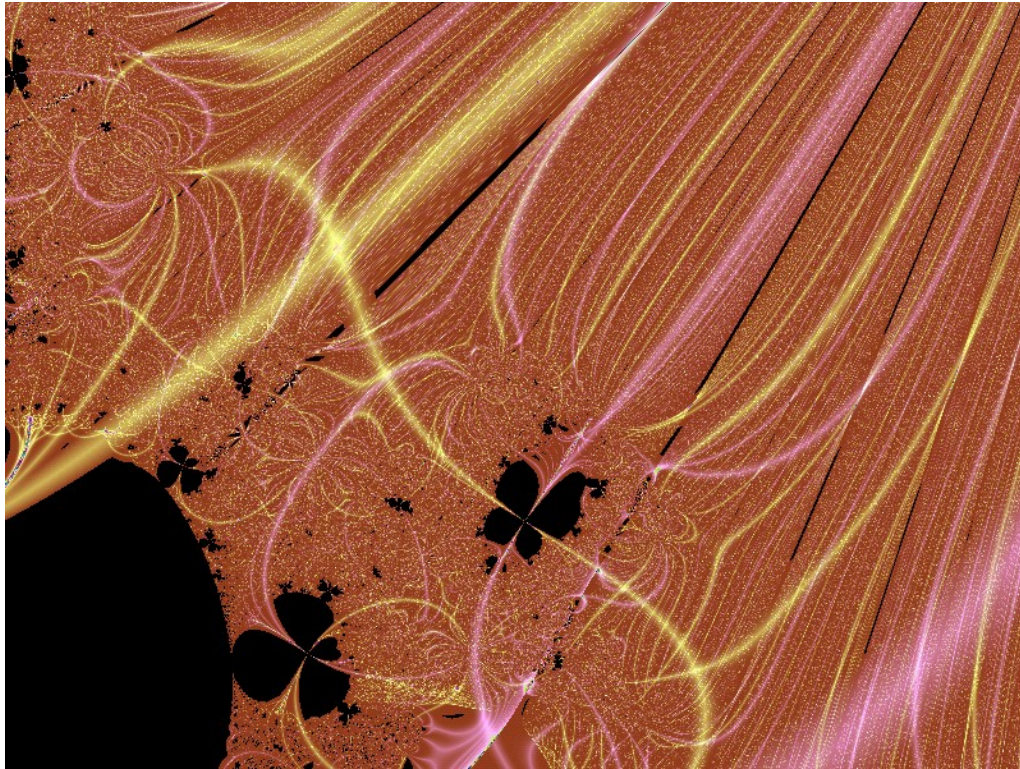


Fig 57. Top right, helmet streamers with a prominence density cavity at the base. On the top of the density cavity, a dead zone cavity with electric plasma.

Lightning:

Lightning is an electric phenomenon. We think of it as free electrons discharging to Earth surface following the least resistive path. It actually occurs when electric flux flows from one cavity to another. It does that in a zigzag paths. The path of lightning is predetermined by the cavities positions. When lightning strikes the plasma inside the cavities becomes visible. In other words when the electric plasma of the cavities is energized it shows as lightning.

Synclines:

Folds are thought to be the result of contention of Earth layers due to tectonic movements. When folded under pressure and high temperature the layers are presumed to migrate to the surface of Earth. They are then subject to erosion creating synclines and anticlines.

Actually we find these structures not only in Earth layers but also, among others, in agate stones. Synclines exist not only in a celestial body layers but also in its atmosphere. Earth surface and its atmosphere are connected.

Synclines exist not only in Earth crust but in every layer. Inside Earth, in the main chamber, these layers patterns form anticlines.

Spicules:

Spicules are magnetic field lines originating from the top cloud layer. Magnetic flux tubes, coming out of different density cavities, cross each other, two by two, giving these spicules shape. At the intersection magnetic plasma, in lozenge shape, is formed. See Fig 58b/c/d. After interconnecting the two magnetic field lines propagate into space in a parallel way. Both flux tubes have the same scale but originate from cavities with different sizes. These intersections exist at all scales of course. These features are better visible at the northern hemisphere in the fractal model.

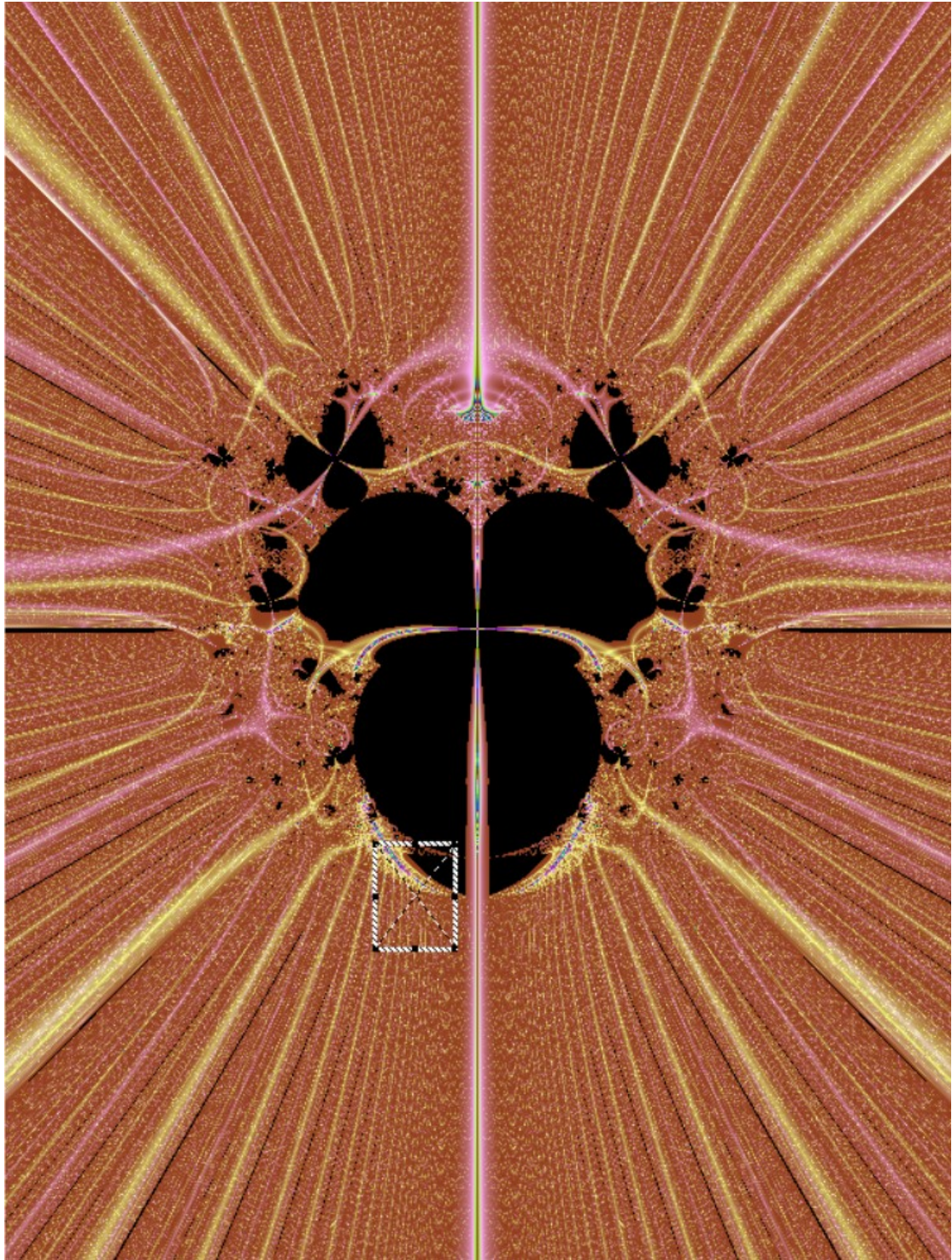


Fig 58a. We will zoom in this region looking for spicules.

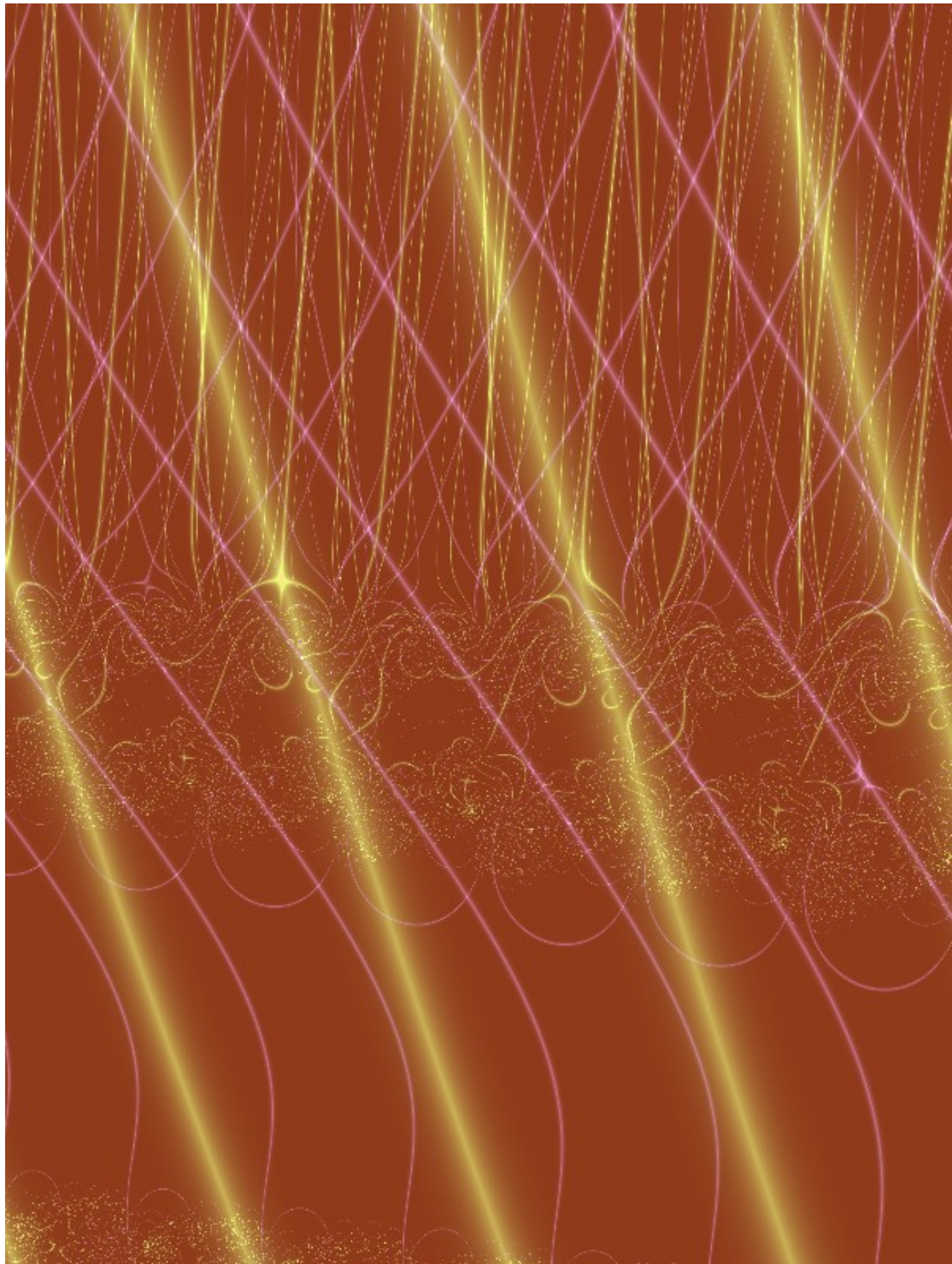


Fig 58b. Inter-plumes rays originating from both layers intersect with each other in the corona. The magnetic flux tubes originating from the top layers are what we call spicules.

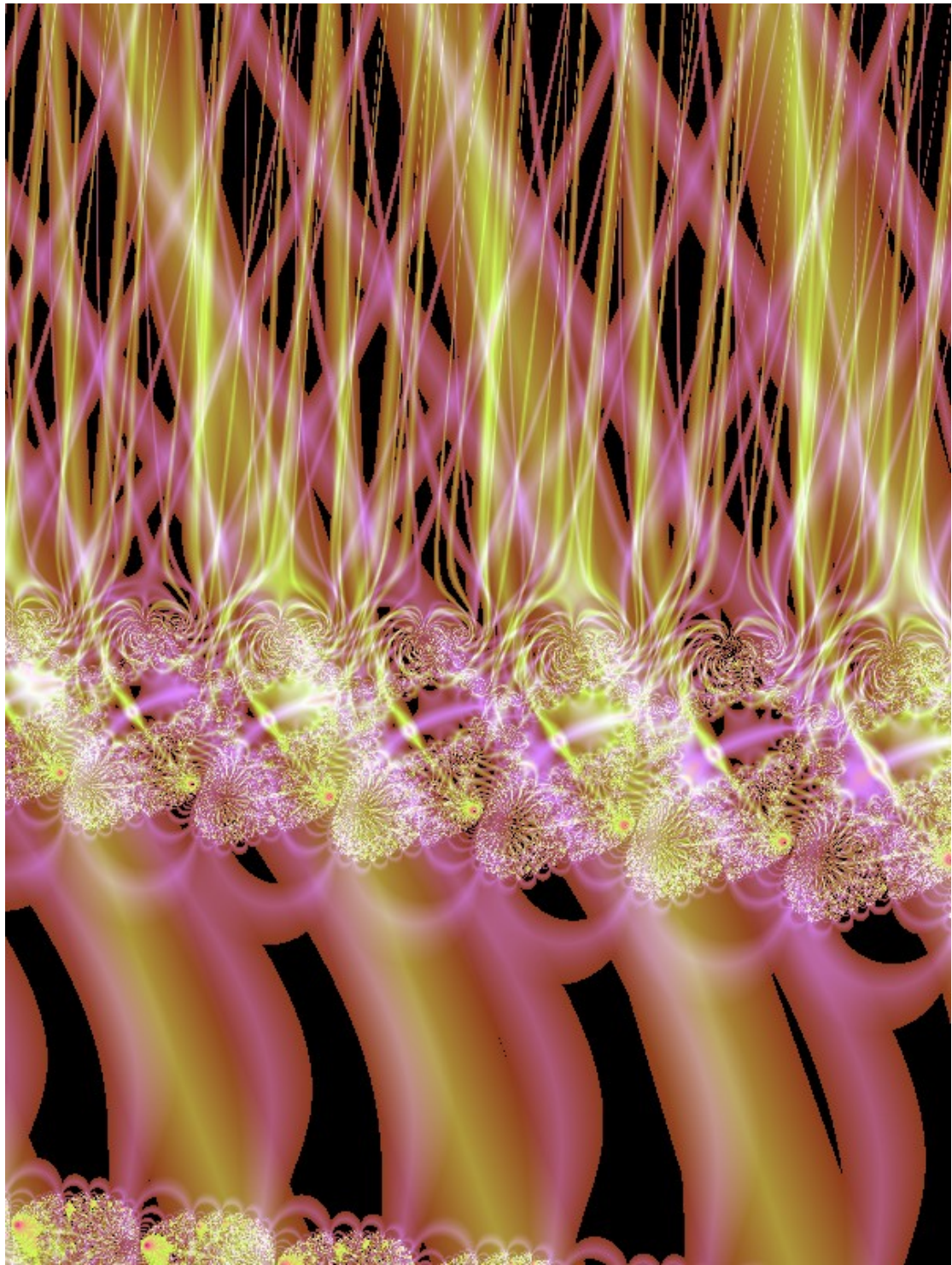


Fig 58c. Spicules at the to of clouds.

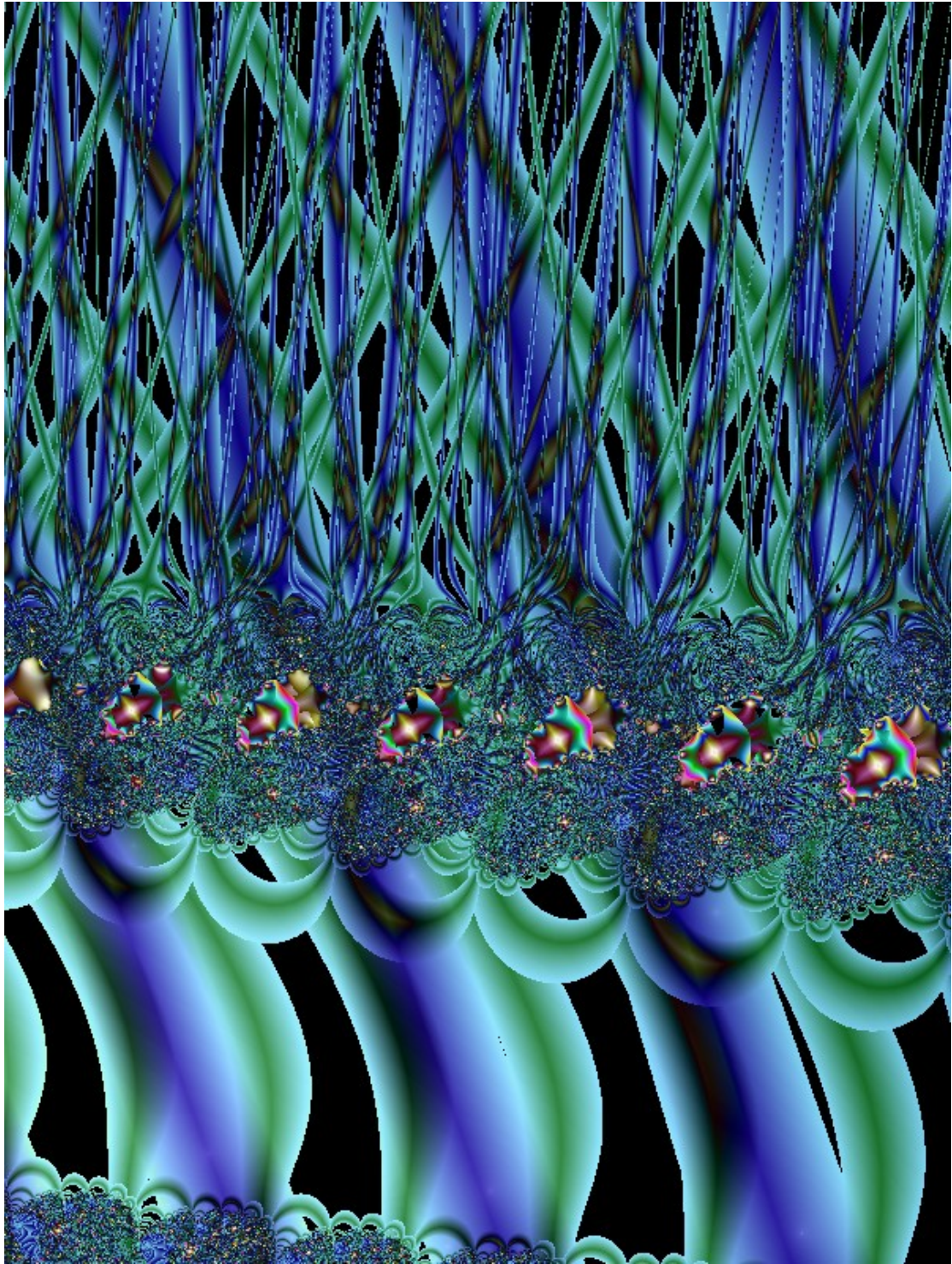


Fig 58d. Spicules at the to of clouds.

Coronal heating problem:

The so-called "coronal heating problem" is an unsolved problem in physics. The sun's corona is much hotter than the sun surface. The

sun surface is about 6000 K when the corona can reach temperatures of a 1 million K. Even more strange is a layer in-between with a temperature of only 4000 K. How come a region away from the sun can be hotter than the sun surface? Based on the second principle of thermodynamics we expect heat to flow from warm to cold area, not the other way around. And what makes that these layers are separate from each other. The answer lays in the way celestial bodies create radiation from separate electric and magnetic flux tubes and how layers are separated from each other. The electric and magnetic flux tubes coming out of the sun interior are propagated into space as an electromagnetic radiation which brings the corona to higher temperatures. On Earth the atmosphere becomes warmer at certain altitude due to the radiation created by top cloud layers. Sunspots and coronal holes are windows to the sun's lower atmosphere. The temperatures of sunspots and coronal holes are much lower than the chromosphere. There is no radiation inside the sun. There is relatively little radiation under the chromosphere. The chromosphere name comes from "chroma" which means colour. In the fractal model you don't see radiation between the layers. Radiation exist only after the top layer and thus colours occur.

Thermoclines:

Thermoclines, also known as thermal layer, is a fluid body phenomenon. The temperature change rapidly between the layers. Thermoclines are shallow to non-existent in the polar region, where the water column is cold from the surface to the bottom. In the fractal model, the layers start very thin at the poles opening and become thicker and wider equator-ward. Also the distance separating the layers increases. These are the reasons why thermoclines are shallow to nonexistent in the polar regions and permanent in the tropics.

Telluric current(Earth current):

The existence of these currents is known since 19th century. In 1986, a huge underground electric current has been found near Broken Hill (Australia). Another one exist in North America along

the strait of Georgia towards Oregon. These are underground electric currents. They also exist in the sea. The Telluric currents are these huge electric flux tubes that we see in the fractal model. They also exist on the sun and other celestial bodies. In addition electromagnetic flux tubes entering the Earth are split into a separate magnetic flux tubes and electric flux tubes. The electric flux tubes can also join the Telluric flux tubes currents. The Telluric current is strong on the day side of Earth. This is due to the solar radiation and solar wind that enter the Earth. Radiation enter the Earth after being split in separate electric and magnetic flux tubes together with solar wind. I call it solar wind, but actually these are flux tubes coming from everywhere in the cosmos.

Birkeland current:

Kristian Birkeland, a Norwegian scientist, organized several expeditions to Norway's high-latitude regions to study the aurora. He measured the magnetic field at these regions. He discovered a set of electric currents aligned to the geomagnetic field lines. Birkeland current is the same phenomenon as solar polar rays. The magnetic alignment is the same phenomenon as solar plumes. Measurements showed that the Birkeland current is stronger in the northern hemisphere than in the southern hemisphere. This is due to the electric dichotomy. The northern hemisphere is mainly electric whereas the southern hemisphere is mainly magnetic. In the northern hemisphere of the fractal celestial body model, electric flux tubes, emerging from the surface, extend radially. The magnetic flux tubes makes an angle with the radial. Magnetic flux tubes, inclined to the radial in opposite directions, cross each other in plasma form in the upper atmosphere. The bigger the flux tubes the higher the crossing point altitude. In the upper atmosphere, electric and magnetic flux tubes become finally aligned. In the north pole, the alignment can be measured at ground level. This is not the case in the south pole where the electric flux tubes originate, so to speak, from the cloud layers, together with the so called inter-plumes, and extend to space. Whereas the giant magnetic plumes originate from the magnetic belt. The electric and magnetic flux tubes are aligned in the upper atmosphere. Just like on the sun, magnetic plasma should be present at the foot point of the magnetic polar plumes.

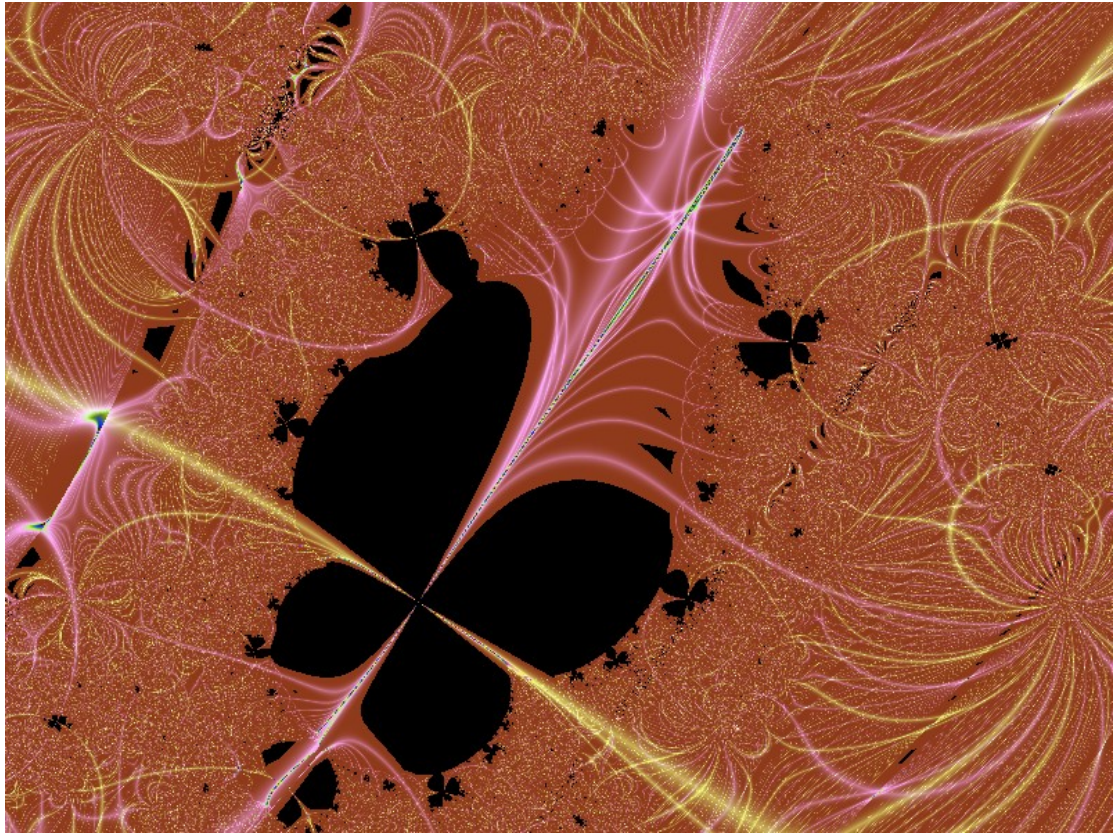


Fig 59a. A solar prominence density cavity. This cavity hangs in the sun atmosphere. The magnetic flux tube cross the cavity almost horizontal. The electric flux is almost vertical.

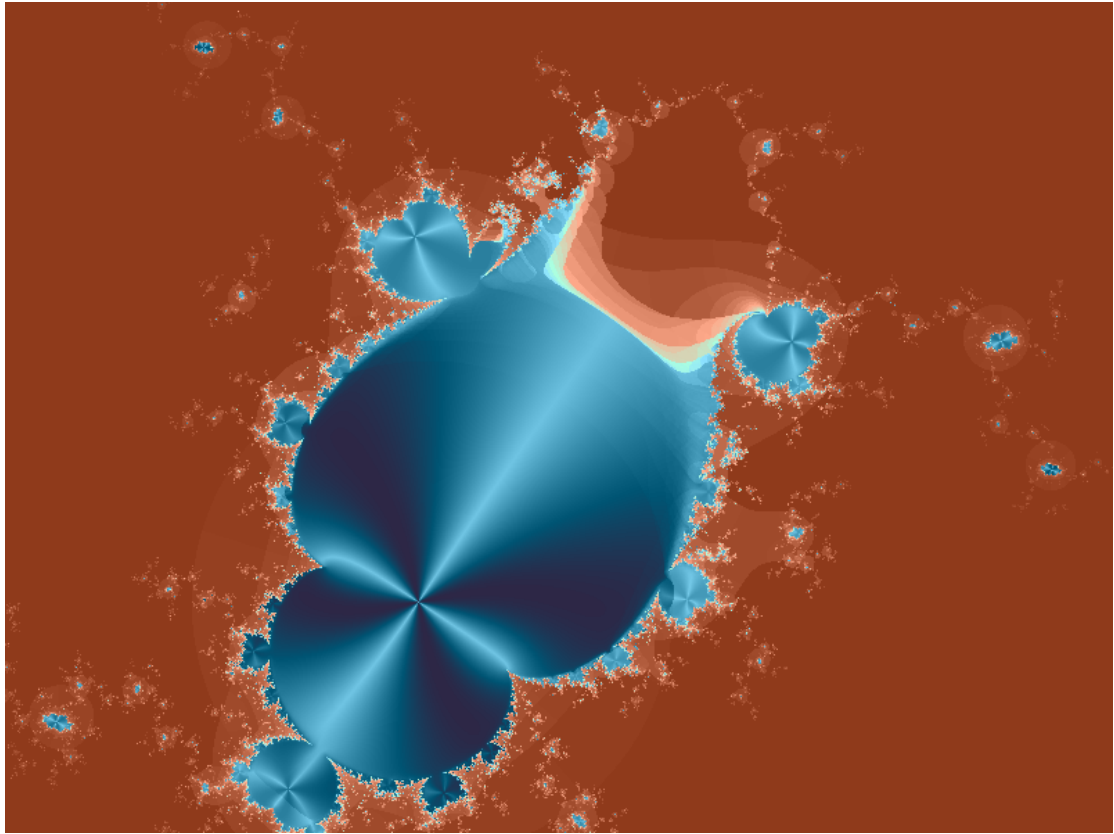


Fig 59b. The prominence density cavity overlap with a dead zone cavity here seen just above.

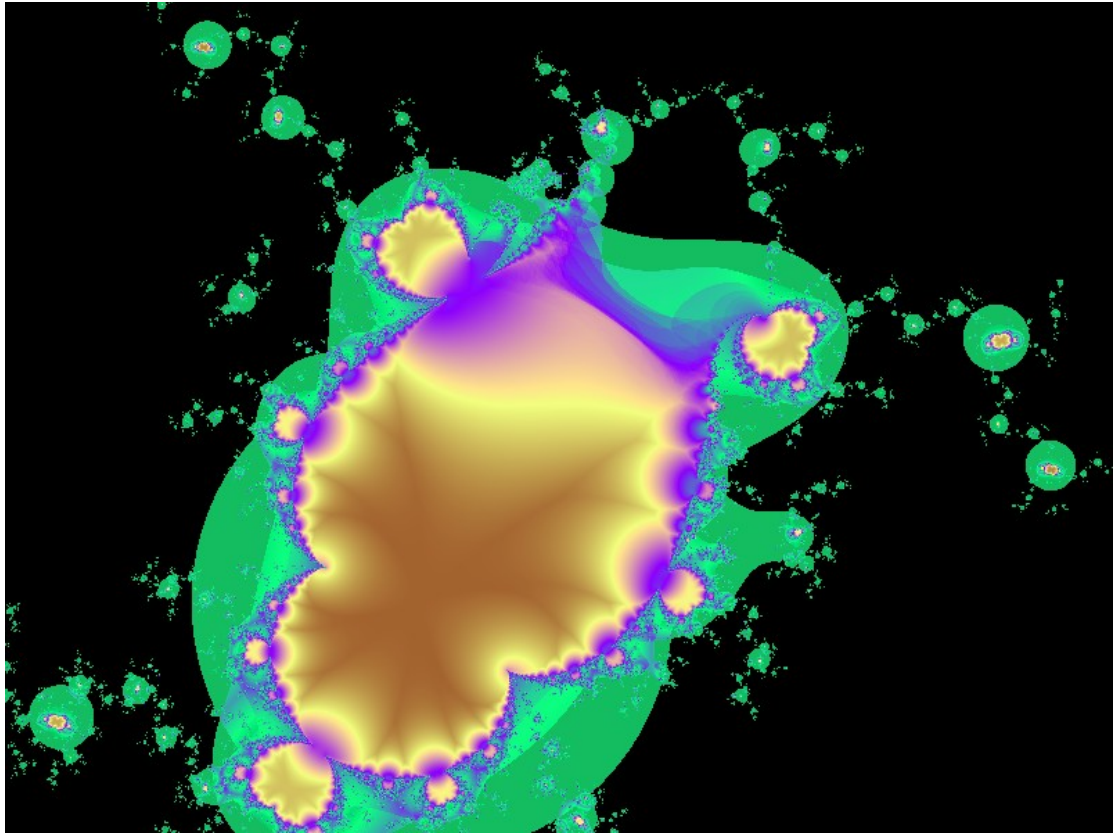


Fig 59c. At the top of the prominence density cavity we see a dead zone cavity. Both cavities overlap and are connected. The dead zone density cavity is confined in small connected density cavities. These small cavities at it's edge are all connected between them. They are also all connected to the prominence density cavity.

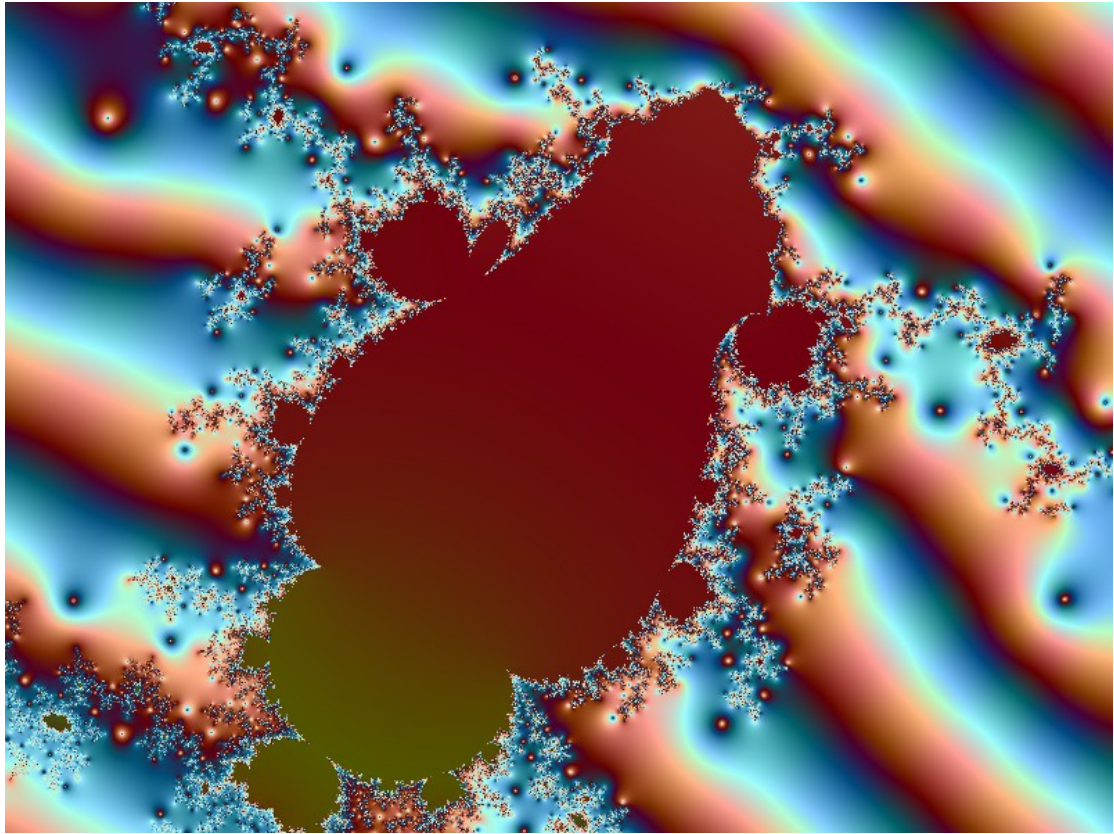


Fig 59d. The prominence density cavity pulling the atmospheric layers up.

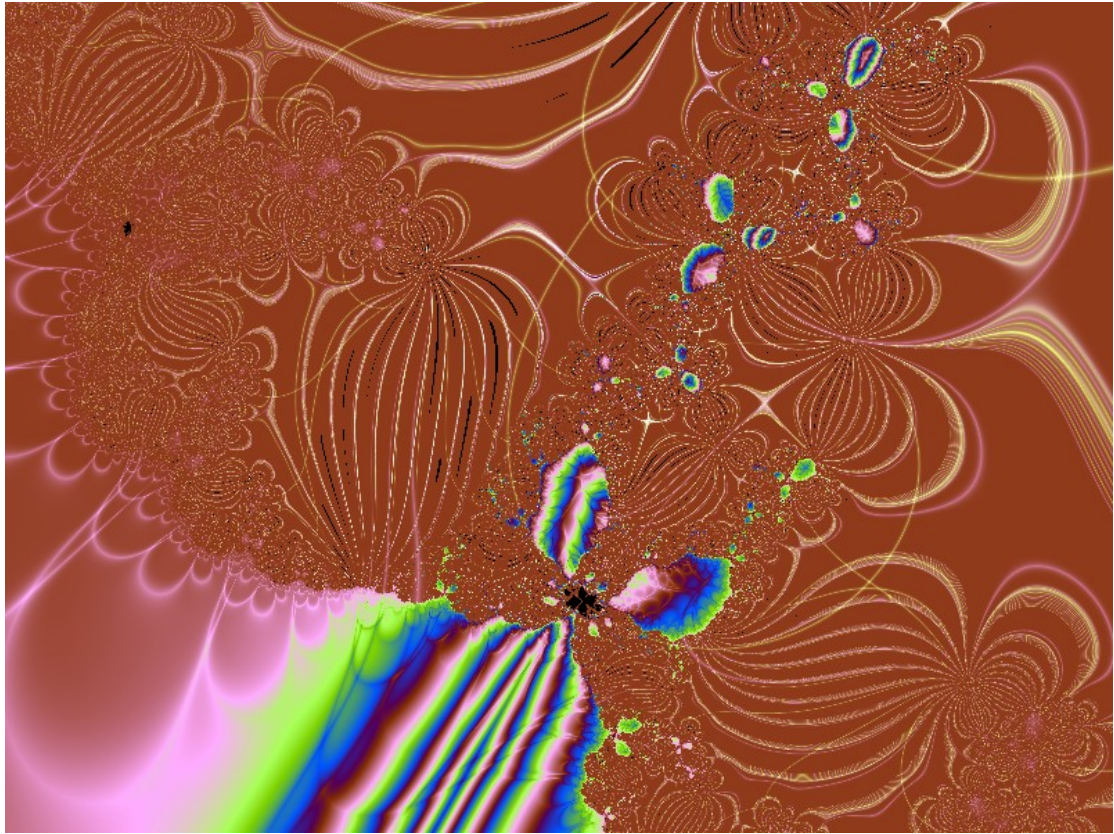


Fig 59e. Pixies on the top of a prominence density cavity.
Pixies has been observed at the top of sun prominences and are thought to be free electrons.

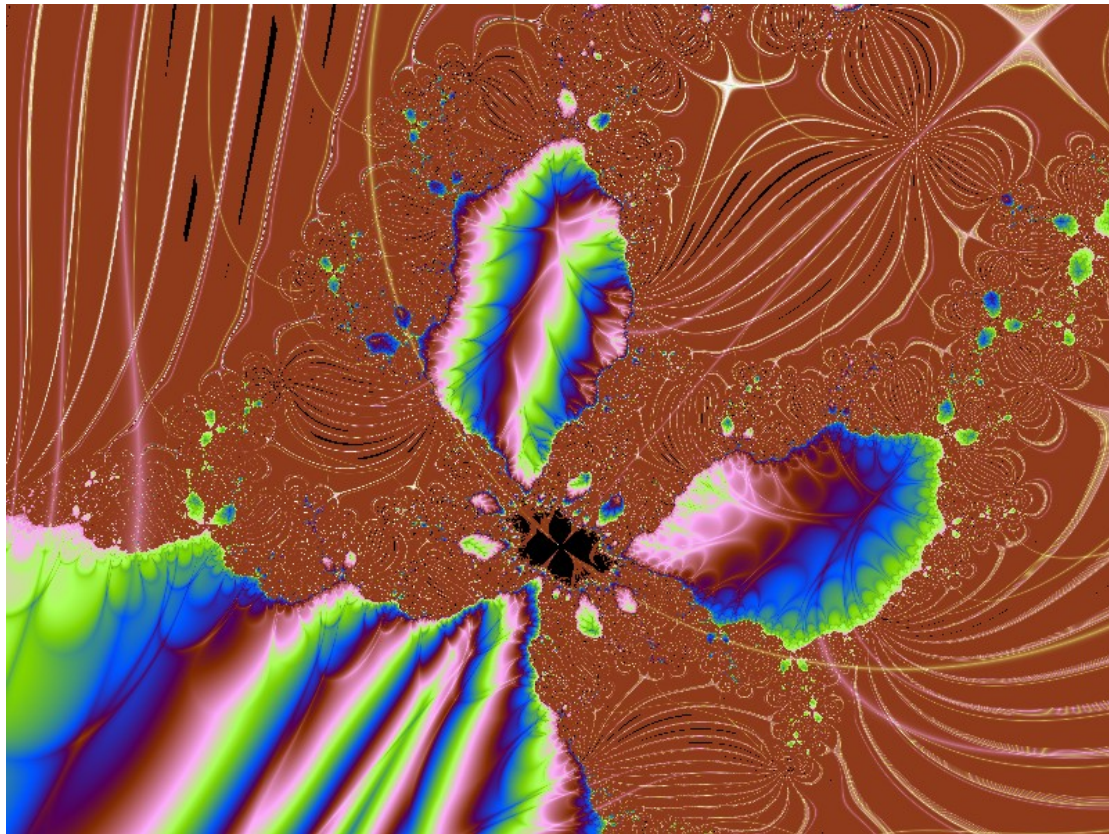


Fig 59f. Pixies are continuously connecting and reconnecting with their surrounding.

Maunder Minimum:

The Maunder Minimum is a 70 years period between 1645 and 1715 during which sunspots were very rare. This period happens to roughly coincide with the middle part of the little Ice Age. During this period Europe and north America experienced lower temperatures than average. Until now the relation between the sunspots and the climate on Earth has not been established. This theory will do that.

The absence of sunspots in that period indicate a low activity of the solar electric and magnetic fields. The number and the size of sunspots are an indication of the amount of radiation produced by the sun. During the little ice age there were very few sunspots. Nevertheless sunspots are always there they are just not visible. The sun was, so to speak, dormant. The density cavities does not emerge to the surface together with the sunspots that surround them. Sunspots are radiation fabrics. They are the final gate for electric and magnetic flux tubes to propagate into space as an electromagnetic radiation. Sun wind passes also by sunspots giving them a brightness and colours. So

both sun radiation and sun wind were weak. Prominences also pass by sunspots. Of course we shouldn't consider only the sun as source of energy, every celestial body radiates including planets. If the sun was asleep in that period then I expect the Earth to do the same. With other words the Earth wasn't producing radiation neither. Probably punch holes on Earth were then rare too.

22 years cycle of sunspots and tree rings:

Another correlation between sun activity and Earth climate are the tree rings and the solar cycle. The age of a tree can be deduced from the number of its rings. Every year a new ring is generated. The thickness of the ring depends on the precipitation during that year. Andrew Ellicott Douglass discovered a correlation between tree rings and sunspots cycle. He noticed that the variation of the ring thickness had the same periodicity as the sunspots cycle namely 22 years.

Sunspots numbers vary during the solar cycle. The solar activities varies the same way. The higher the number of the observed sunspots the more active the sun is. The sun is connected to Earth by elongated electric and magnetic flux tubes. This means that Earth electric and magnetic flux tubes are energized by the sun. This will cause Earth density cavities and punch holes to be more active. This means more clouds and more precipitations. So the number and intensity of the observed sunspots and density cavities on the sun have an influence on the number of air pockets and punch holes on Earth and thus precipitations. Earth, and other planets, have also an influence on the sun.

Redshift:

In 1929, Edwin Hubble announced that light of distant galaxies shifted more to the red than close ones. This is what we call red shift. Based on this observation, he concluded that the universe is expanding. This idea is at the base of the big bang theory. By using the analogy with sound waves we deduced that distant stars travel faster away from us than the close ones. But, if we consider light as electric and magnetic flux tubes that propagate into space in an alternate fashion and that the "EM alternance length" could increase with the distance, for a reason or another, this could explain the red

shift phenomenon.

Binary stars:

Binary stars are connected. Somewhere in the middle, along the electric plasma axis, the magnetic plasma cross the electric plasma in a density chamber. The density chamber reside in the southern hemisphere, just below the frontier line. Beside the density chamber, two cavities reside along the electric plasma axis. A small one in the northern hemisphere and a big one in the southern hemisphere. One thing very unusual about the binary star fractal model is that the punch holes are superimposed on the top of the density cavities. Still we see only two plasma crosses. Binary star are made of two celestial bodies that rotate around each other forming a single entity. Both bodies are situated along the north south axis.

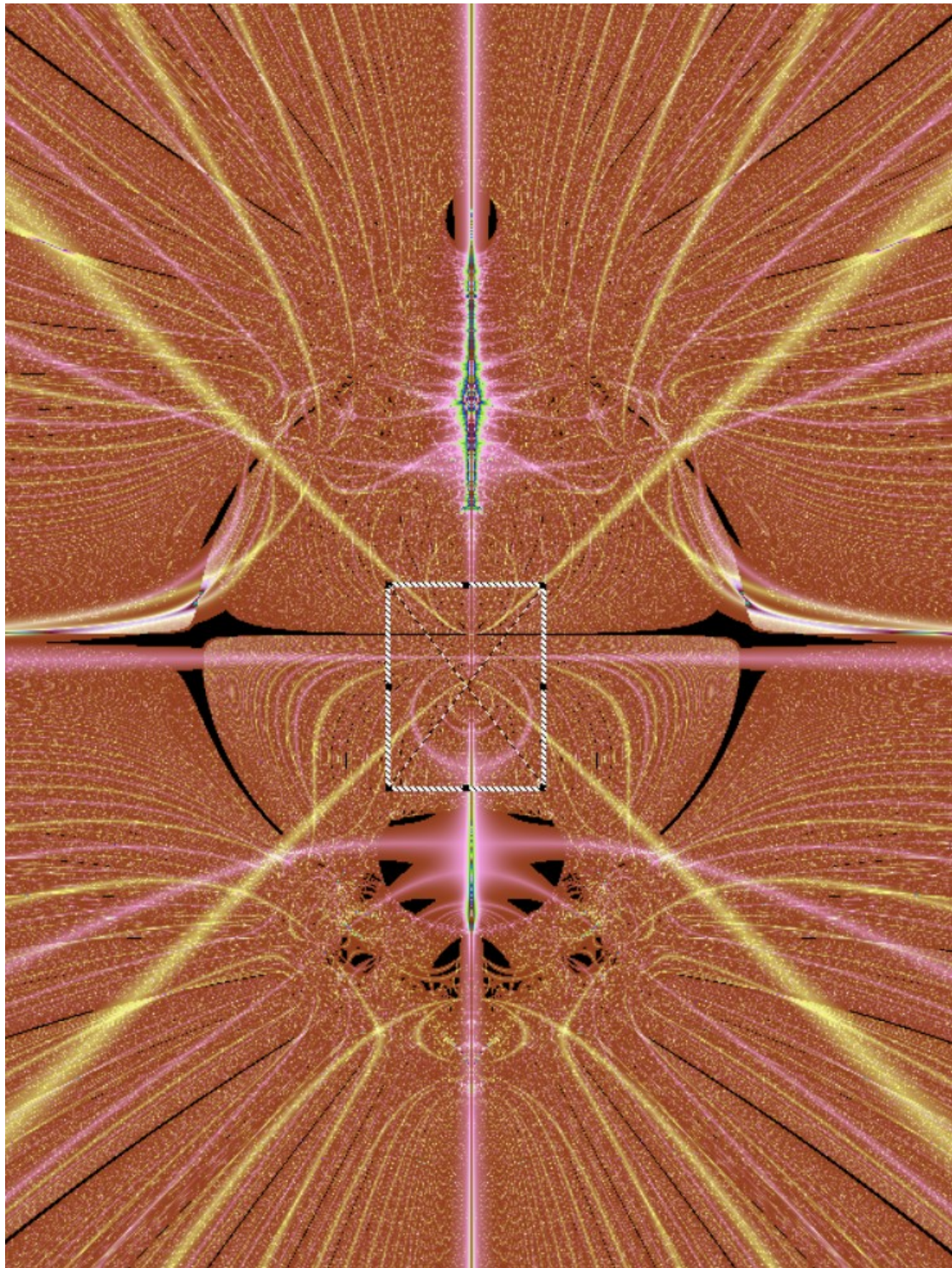


Fig 60a. Binary start with a dead zone border, residing in their atmosphere, split both stars into two globes. Magnetic flux tubes(yellow). Electric flux tubes(white).

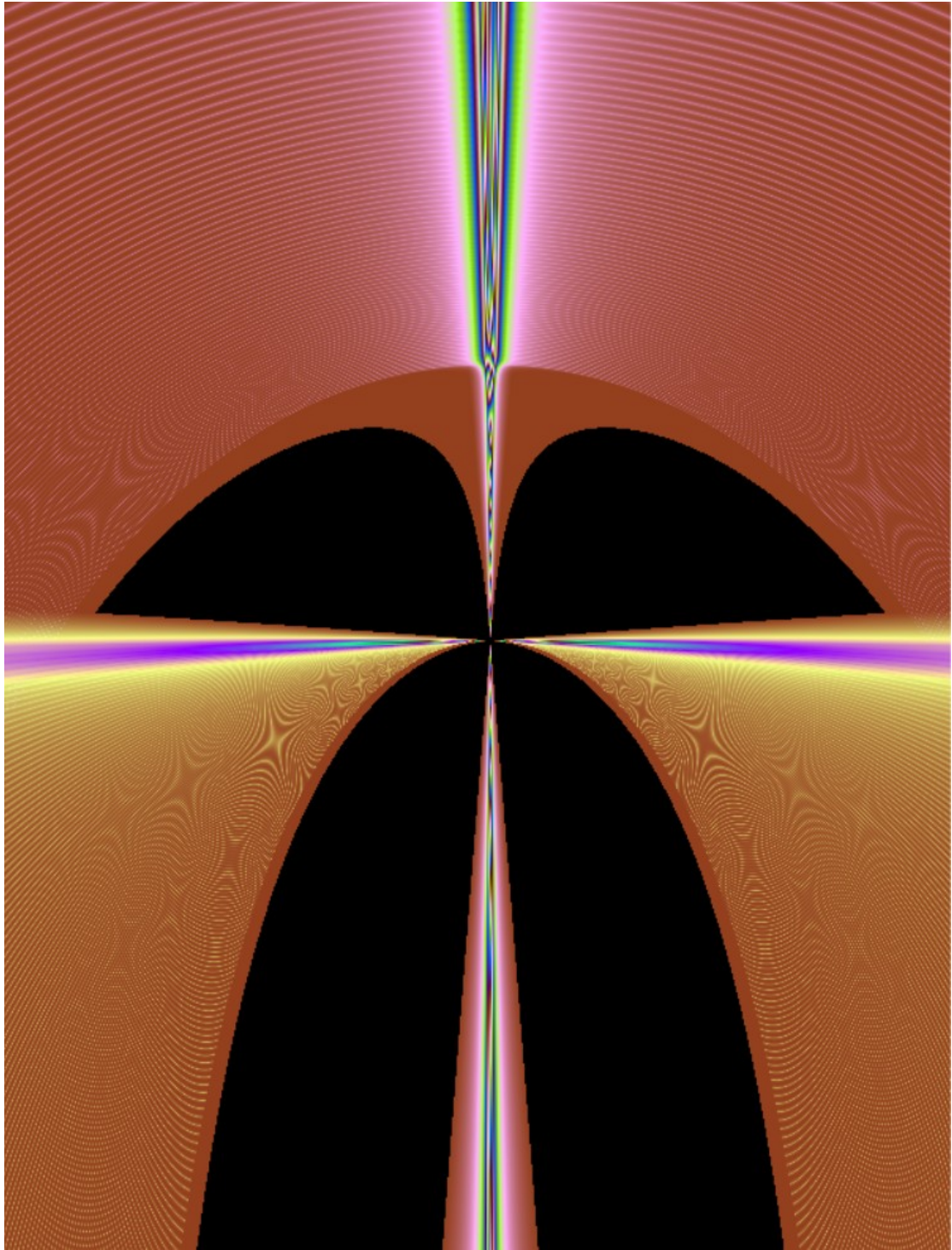


Fig 60b. The main chamber is located at the side of the higher mass star just under the dead zone border.

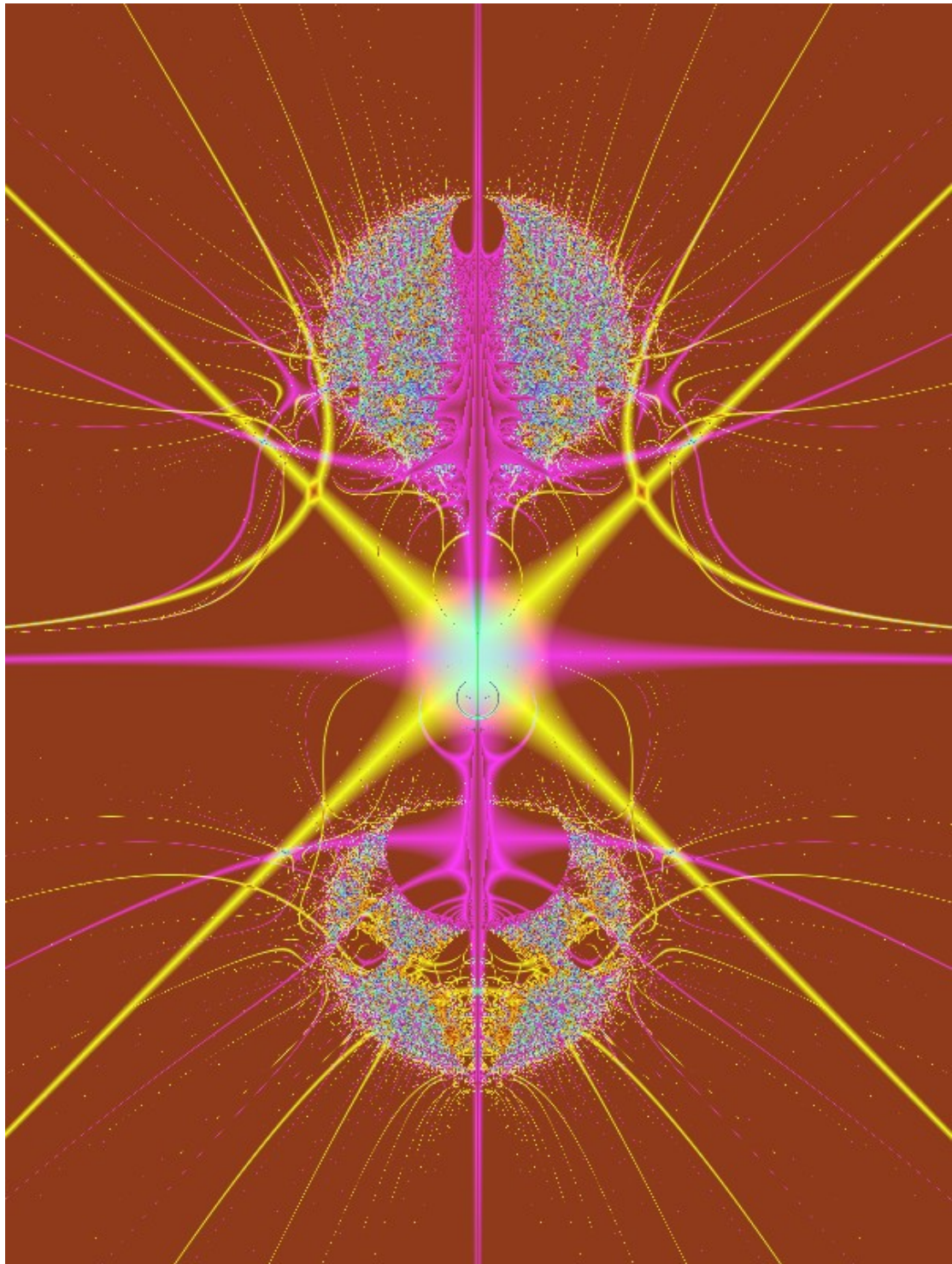


Fig 60c. Binary star consist of two celestial bodies with an electric flux tube just below the dead zone border. The magnetic flux tubes makes a U-turn giving the impression that they cross each other. Magnetic flux tubes(yellow). Electric flux tubes(red),

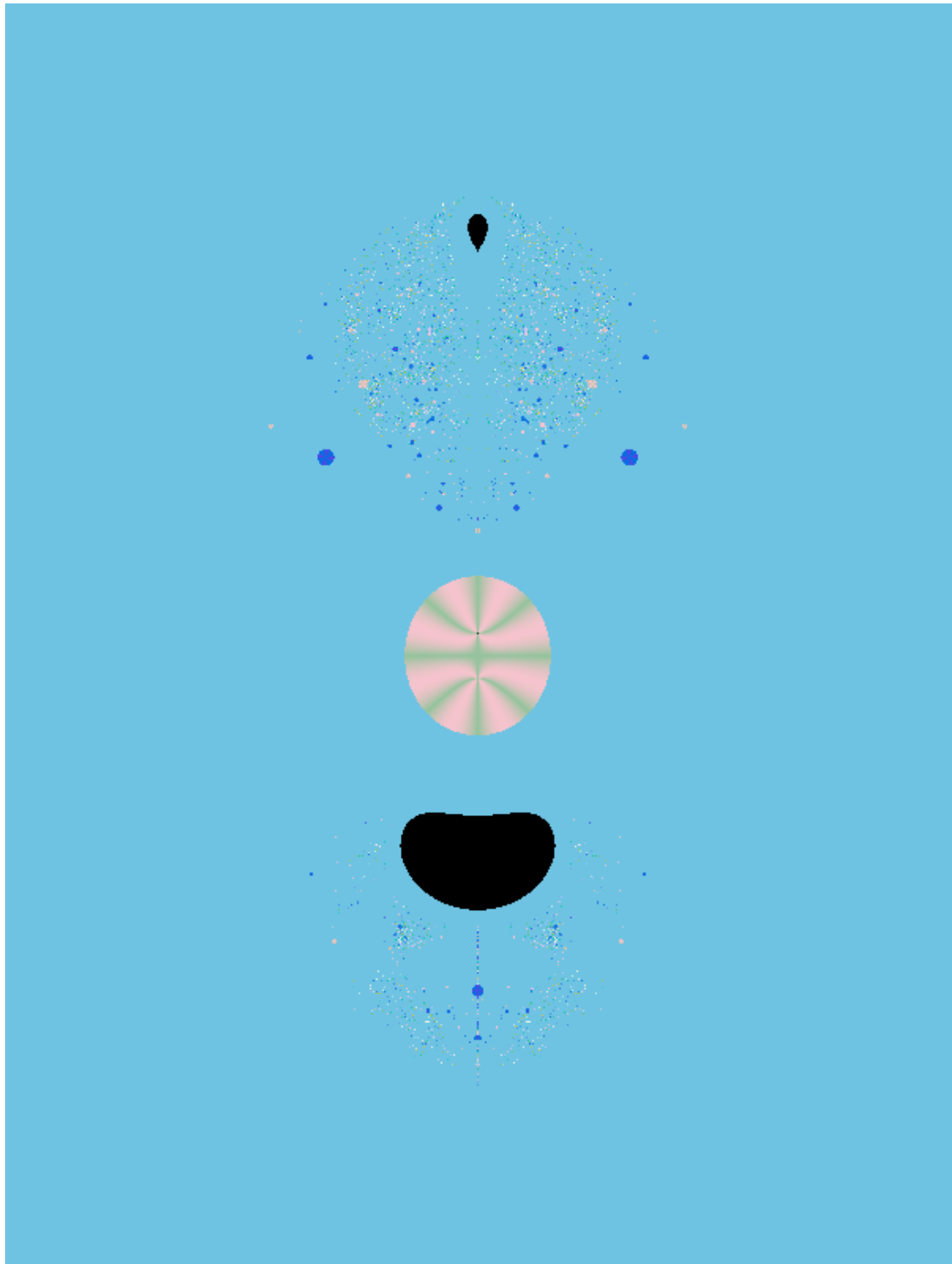


Fig 60d. A binary star consist of two stars. A higher mass star and a lower mass star. The above features in brown correspond to cavities along the north-south axis.

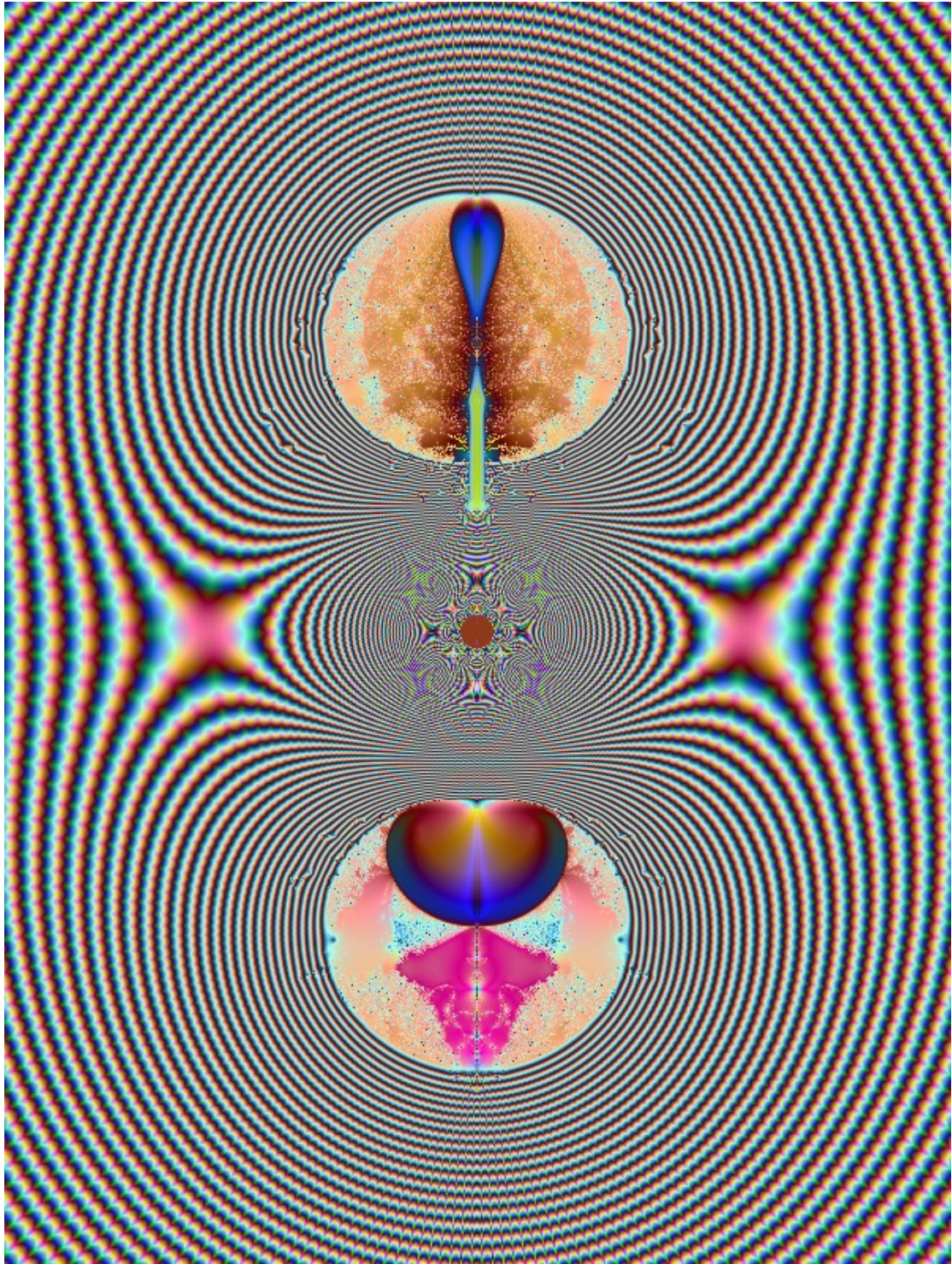


Fig 60e. Binary star consist of two celestial bodies each with it's own atmosphere.

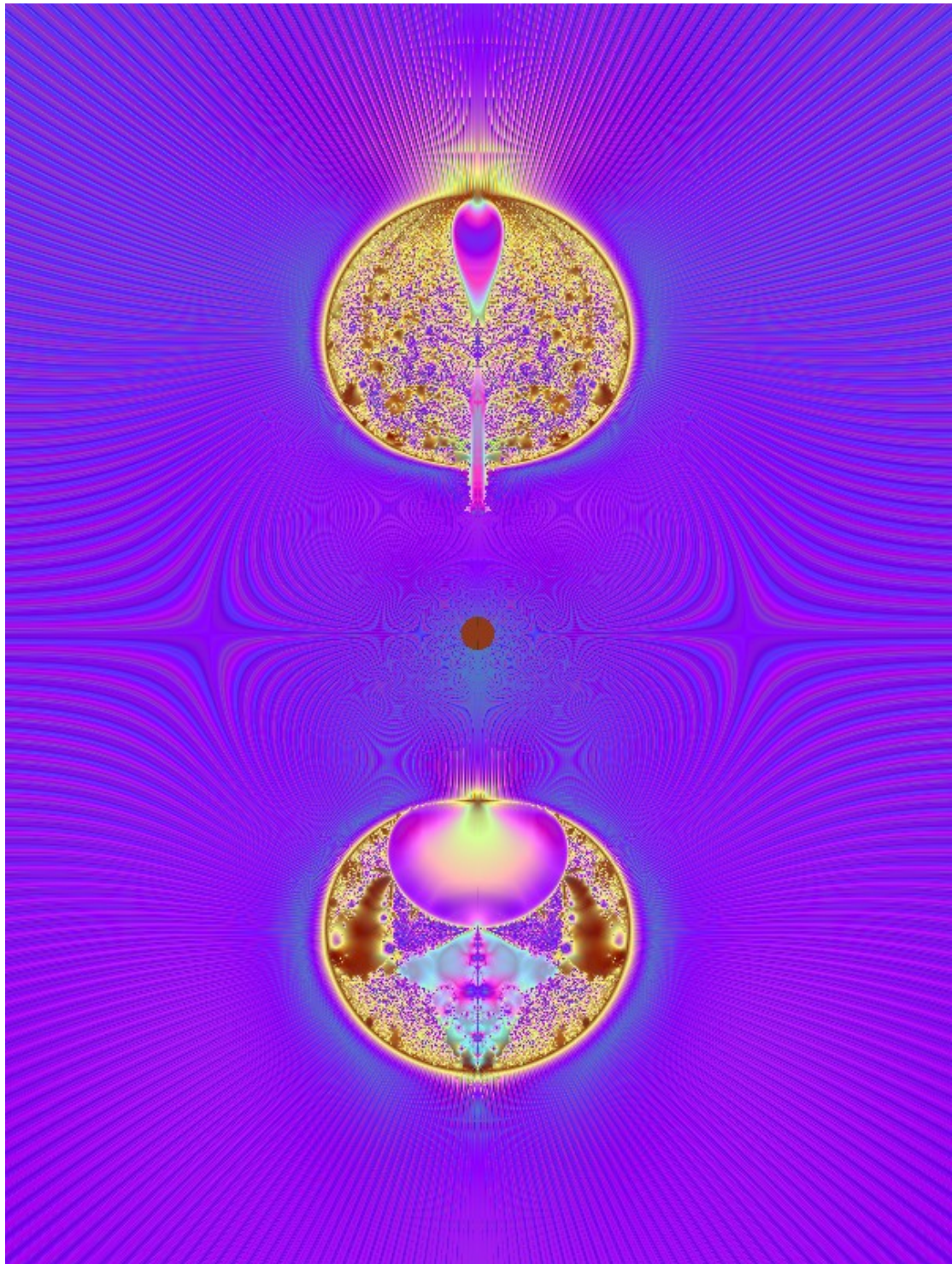


Fig 60f. A binary start with two bodies and a zero density sphere at the centre.

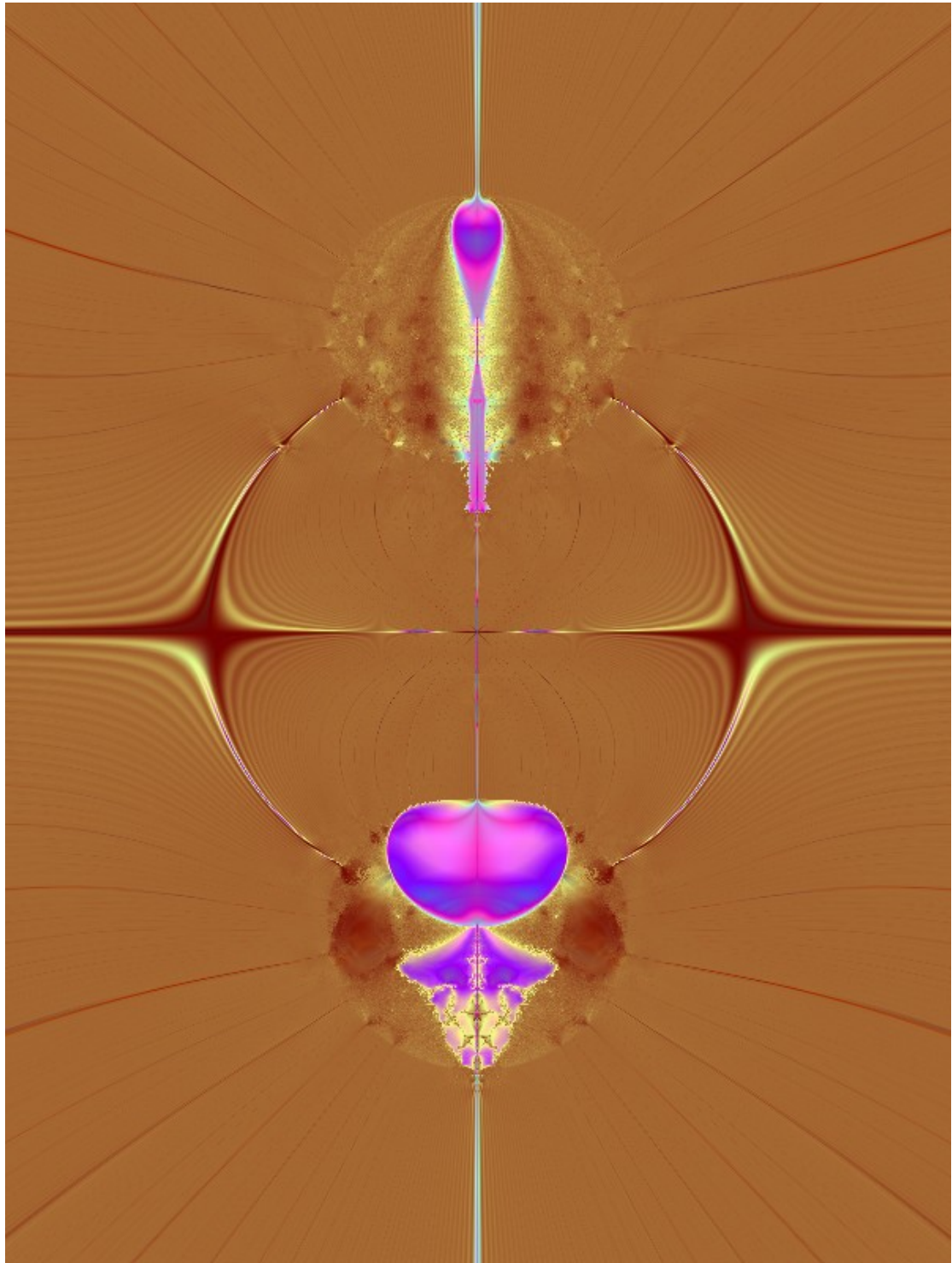


Fig 60g. Binary star. The splitting is equatorial.

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Fig 61. Just like celestial bodies agates stones are hollow. Notice the synclines at the crust of the agate. In the hollow cavity crystals form anticlines.

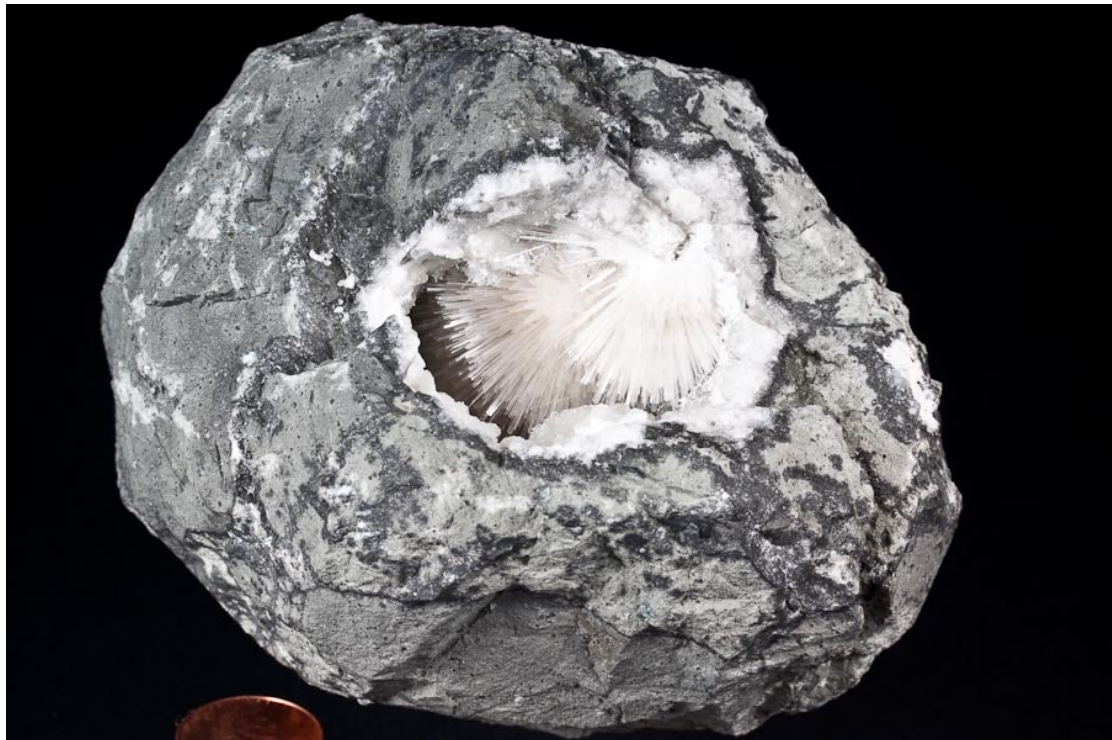


Fig 62. Geode with a mother and a daughter centrosome.



Fig 63. Geode with a mother and a daughter centrosome.



Fig 64. In dividing cell, the centrosome determine the position at which the spindle poles will form, through interactions between microtubules and capture sites that are located on the cortical surface of the cell.

Agate stones:

Agates stones are hollow just like celestial bodies. If we consider the agate as a living cell we should recognize some cell components in it. One of the most common components are these fibers at the edge of the agate. My theory is that these are the centrosome of the agate. Centrosomes play a role in the cell division. There is a mother and daughter centrosome in every cell.

Centrosomes in a cell are attached to the cortex of the cell.

Centrosomes of an agate has a low hardening. They can be easily solved with heat or acid. It is thought that agates start with a cavity upon which layers of siliceous matter are formed. It is very simple to make, you would be attempt to think, yet no one has ever succeeded in making an agate. It is like saying we can make a biological cell. You can let a cell replicate itself, but you can't create a cell from assembling its components. Agates structures are very complicated. But using fractal geometry we will understand agates much better.

In dividing cell, the centrosome determine the position at which the spindle poles will form, through interactions between microtubules and capture sites that are located on the cortical surface of the cell.



Fig 65. A chakra at the top of a cloud. These are colourful concentric rings on the top of a cloud.



Fig 66. Chakra concentric rings on the top of a cloud.



Fig 67. Chakra concentric rings on the top of a cloud.



Fig 68a. In this celestial body fractal model we see two chakras along the north-south axes, a small and a big one.



Fig 68b. In this fractal model we see two chakras. A small and big one. The petals of the main/central chakra originating from the center of the density chamber, exactly where electric and magnetic plasma cross each other.

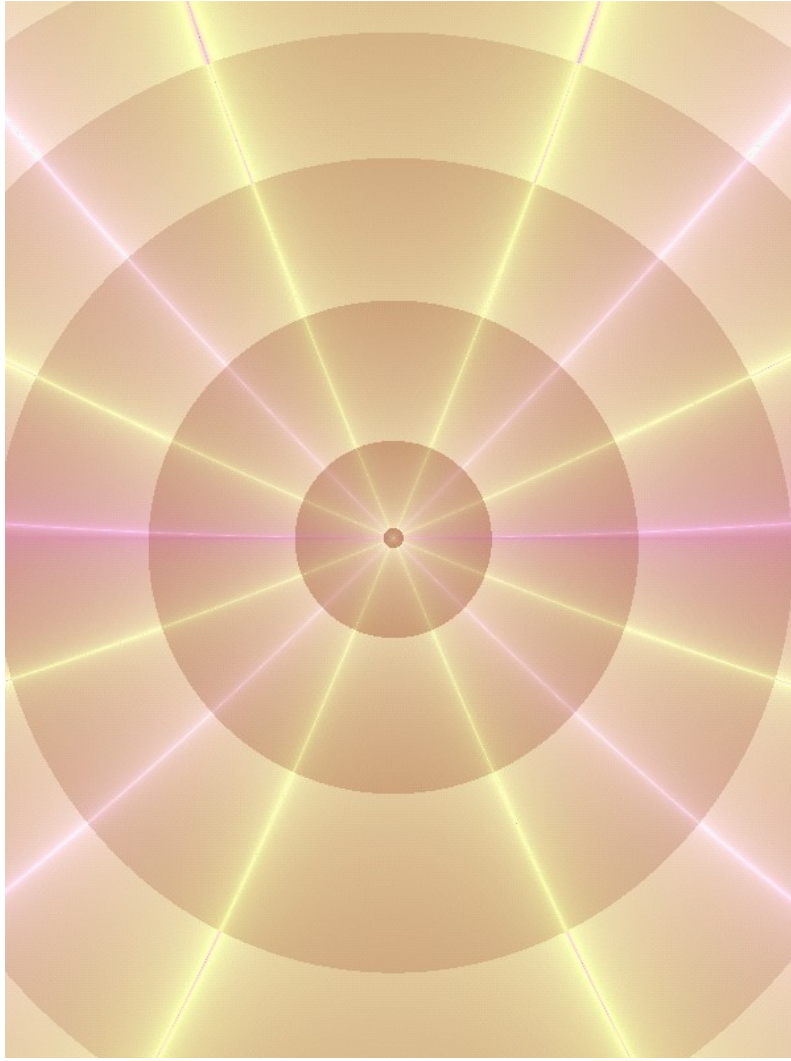


Fig 68c. Chakra's flux tubes and wheels.

Chakra's energy field:

Chakras has been seen, photographed and videotaped on the top of some clouds, but we didn't know what they were. These are colourful concentric rings on the top of a cloud. A YouTube video, taken on the 17 of September 2015 in Costa Rica, shows a rainbow clouds with beautiful colours appearing in the sky, on the top of a cloud. This is one of many videos that has been recorded. Also there are many pictures of chakras clouds on the internet. Chakras are visualized as lotus with different number of petals. In the fractal model the chakra has 14 petals. See Fig 68a/b. We know a lot about chakras. The question is, where did this knowledge come from? Chakras are rotating wheels with petals shapes. They consist of several concentric circles nested in each other. Starting from the centre of chakra and going outward, the colors of these circles, shift from yellow to red to blue. Chakras are very colorful. See Fig 65/66/67. In the fractal model we see two chakras. A small and big one. See Fig 68b. The petals of the main/central chakra originating from the centre of the density chamber, exactly where electric and magnetic plasma cross each other. The second chakra is located somewhere lower on the south side. Both Chakras are connected and share their outside circles(wheels). Both chakras reside along the electric plasma axis. This is the axial channel that Hindus call the sushumna nadi.

The chakra populate the main chamber. Chakra energy field, like the electromagnetic field, is also composed of two kind of tubes that correspond to the electric and a magnetic tubes. These chakra flux tubes form structures that are different than the electromagnetic flux tubes, and sometimes they are similar. Like when they plunge together with electromagnetic flux tubes into punch holes. They can also form a flux loop attached to the punch hole. Chakras flux tubes are much lighter than electromagnetic flux tubes. In the fractal model they look translucent. When chakras flux tubes cross density cavities, they are squeezed against each other forming a chakra plasma with a sea stars shapes with 12 arms. These sea stars are very colourful.

In a book called "The smoky god" written by George Emerson in 1908, Olaf Jansen, a Norwegian, described an inner sun he saw, together with his father, in their journey inside hollow Earth.

He described it as hazy-red bronzed appearance which change to white light like a luminous cloud. Little did they know that they were watching the Earth's chakra.

Conclusion:

The whirlwind I observed is made of electric and magnetic flux tubes.

Electric and magnetic flux tubes are real and physical.

Flux tubes loops are the building blocks of nature. Electricity and magnetism are not a products of matter but rather matter it self.

Matter is electric and magnetic flux tubes tangled together.

Electricity is continuous not particulate and there are no charged particles.

If we consider electricity continuous, then we will have to review all theories based on the hypothesis that electricity is particulate.

Electric flux tubes, like magnetic flux tubes, are close loops.

Light/radiation is not a wave nor is it a particle. Light is electric and magnetic flux tubes that propagate into space parallel and in an alternate fashion.

The universe is a fractal.

Punch holes and sunspots are light fabrics.

Plasma are flux tubes that are squeezed against each other or cross each other inside a dead zone or inside a cavity.

Plasma can be electric, magnetic or electromagnetic.

When electric and magnetic flux tubes cross each other a density cavity is formed.

A density cavity may break loose from a celestial body and propagate into space together with the electric and magnetic flux tubes. The question remains: does this density cavity has a chakra?

My guess is that the coronal mass ejection chakra energized the Earth's chakra creating the aurora Borealis.

Solar flares and these colorful concentric colors on the top of clouds are the same phenomenon. They are both density cavities with a chakra at their hearts.

Acknowledgment:

The fractal models has been produced by Stephen C. Ferguson.

The images has been downloaded from the internet.