Fires in the Sky

Considerations on Planetary Capacitance and its Effects on EU Geology

What are these things?

"The onslaught was so sudden that the family could only run to the center of an immense clearing on their farm where nothing combustible stood. They hoped to be safe, several hundreds yards from structures or trees.

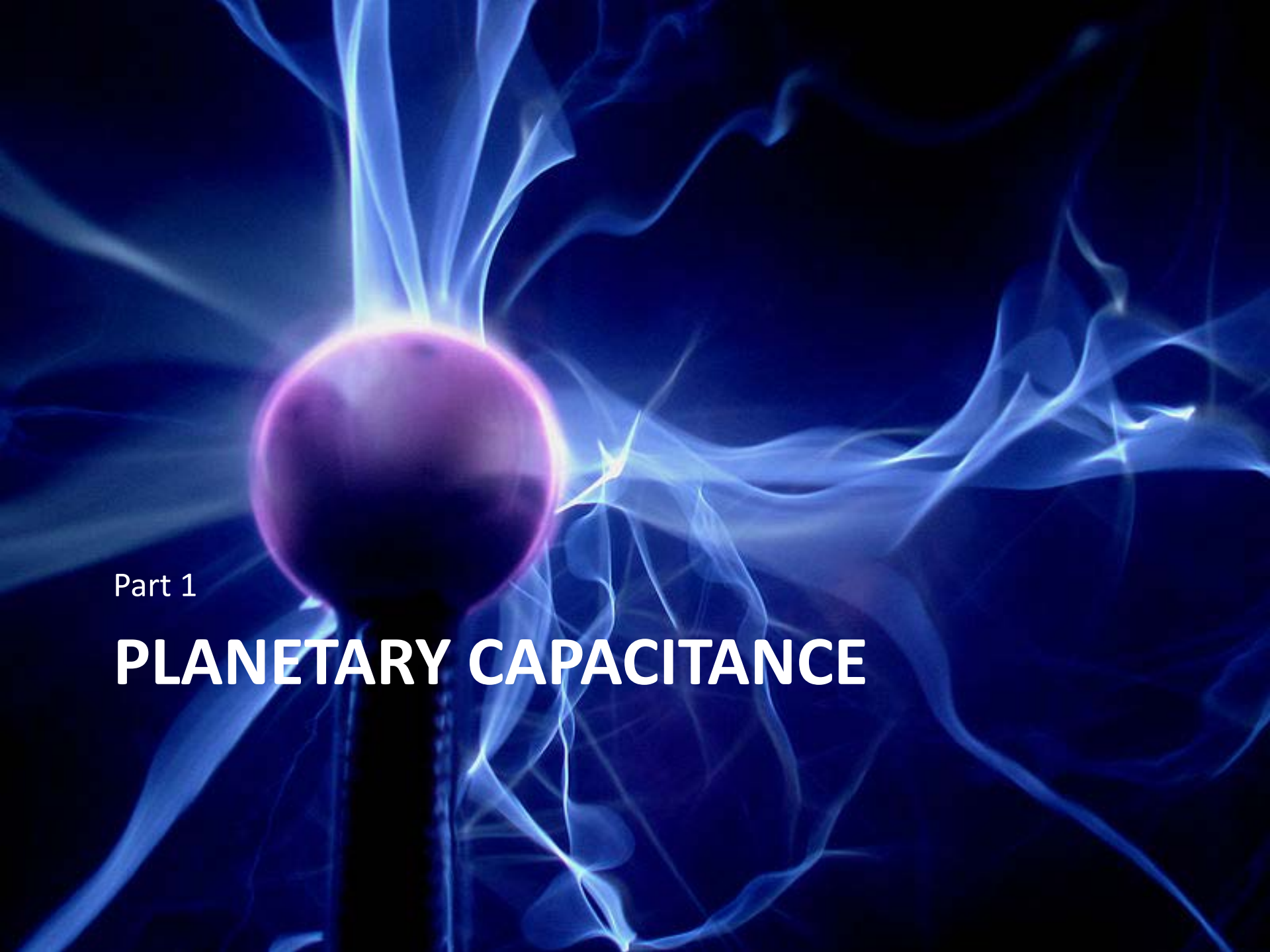
"When the fire came, rushing on all sides of them, it did not in fact touch them. But eyewitnesses saw them die. A great balloon of fire dropped on them – father, mother, and four children. They were incinerated in an instant. Almost nothing was left of them".

"Many survivors described these great balls of fire falling from the sky. The whole sky was filled with them; round smoky masses about the size of a large balloon, traveling at unbelievable speed. They fell to the ground and burst". Waskin says that a brilliant blaze of fire erupted from the balloons as they landed, instantly consuming everything they touched.

The Great Chicago Fire – Thunderbolts.info

What we will be exploring

- An overview of what planetary capacitance means.
- An overview of EU Geology mechanisms and the basic principles in which they behave.
- How this change in concept helps explain many more EU Geology mechanisms.



Part 1

PLANETARY CAPACITANCE

The Basics of Charge

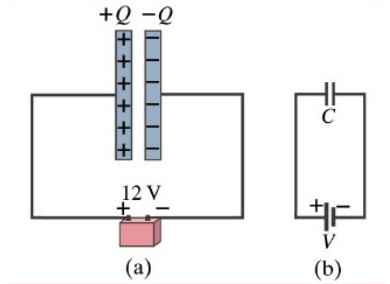
- The coulomb (unit symbol: “C”) is the International System of Units (SI) unit of electric charge. It is the charge (symbol: Q or q) transported by a constant current of one ampere in one second.

A 1 farad capacitor, when charged with 1 coulomb of electrical charge, has a potential difference of 1 volt between its plates.

The **capacitance** is a function only of the area of the plates and the distance between them, and the permittivity of the dielectric material between the plates.

We know the Earth has a Voltage between its ionosphere and ground of about 500,000 Volts. This is called the Fair Weather Voltage, but for us it is just V (or sometimes E, capitalized)

Capacitors and Capacitance



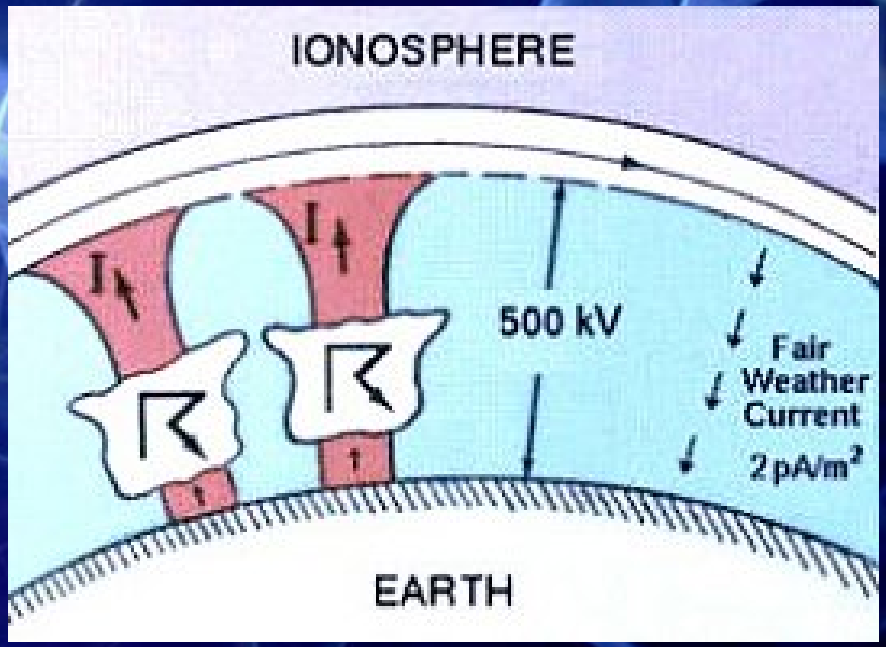
A capacitor in a simple electric circuit.

Charge Q stored:

$$Q = CV$$

The stored charge Q is proportional to the potential difference V between the plates. The capacitance C is the constant of proportionality, measured in Farads.

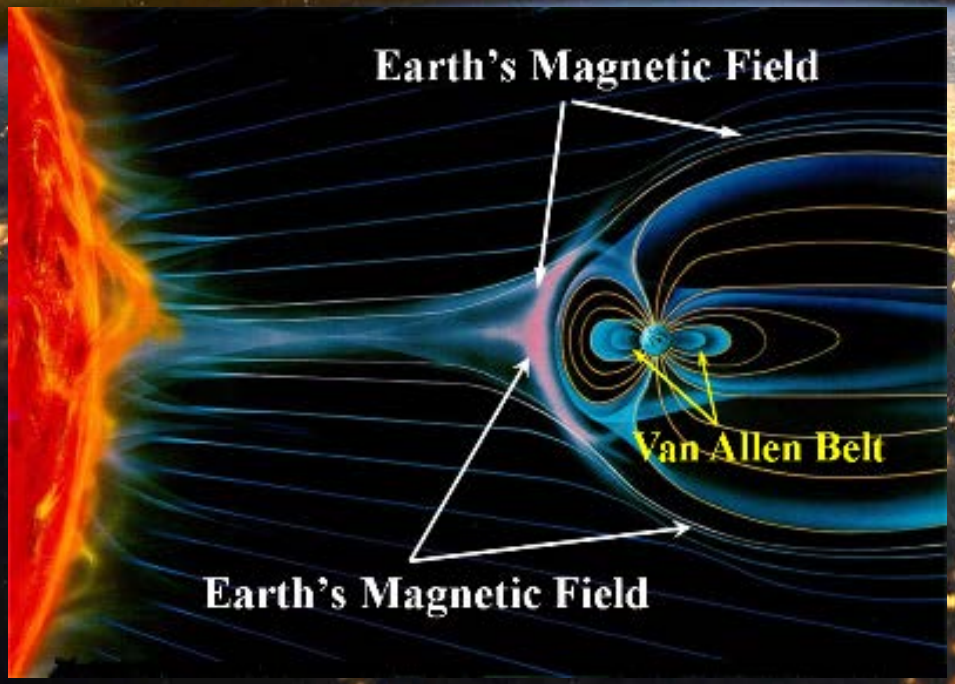
Farad = Coulomb / Volt

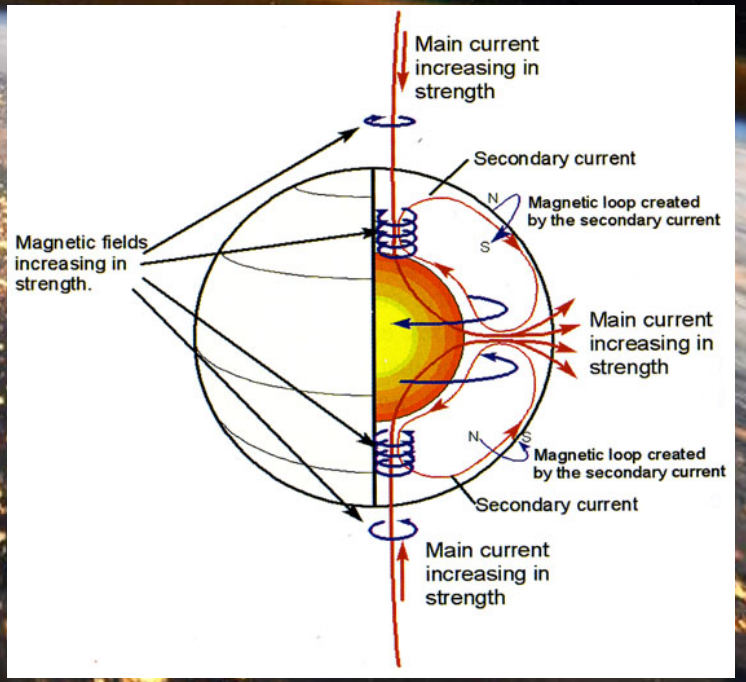


The Circuit

The Earth is a Faraday motor and a planetary transformer that processes CME's by storing the massive slow moving charge as increased potential voltage inside its belts. These currents are always present in dark glow mode in the near atmosphere and atmosphere and on the Earth and within it.

These circuits would serve to divert any incoming currents as they would be the path of least resistance to most charged particles. If sufficient energy is put into the circuit these flows could be damaging they overwhelm the ability to process the electric current, as secondary and tertiary currents are induced off the primary circuit, right beside one another.





Earth's Shield

- Capacitors resist changes in voltage. It takes an amount of time to charge their plates. They allow alternating current through, and stop direct current.
- We know the ionosphere to ground circuit leaks slowly and connections between the ionosphere and the ground do not occur today, but that secondary currents can be made by disbalancing the charge of the ionosphere (CME's).
- This charge protects the Earth by causing intruders to electrically detonate as they cross into layers of higher and higher charge.
- The Ionosphere can only get so close to the Earth because the Earth has a positive layer inside that is keeping it from getting to close.

How does it work?

Force on any particle:

$$F_p = \frac{1}{4\pi\varepsilon_0} \times \frac{Q_1 Q_2}{r^2}$$

$$F_p = \frac{K_e (Q_1 Q_2)}{r^2}$$

$$F_p = \frac{9\text{billion}\,(\text{Total Charge})}{\text{distance apart}^2}$$

Solve for distance:

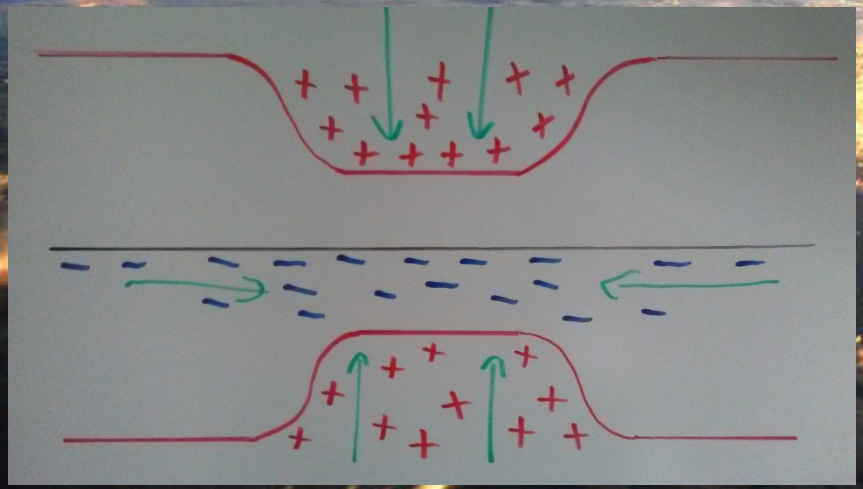
$$C = \frac{\varepsilon A}{d} = \frac{Q_1 Q_2}{V}$$

$$\frac{Q}{V} = \frac{\varepsilon A}{d}$$

$$Q = \frac{\varepsilon A \cdot V}{d}$$

$$\text{Plate Distance} = \frac{\varepsilon A \cdot \text{Voltage}}{\text{Charge}}$$

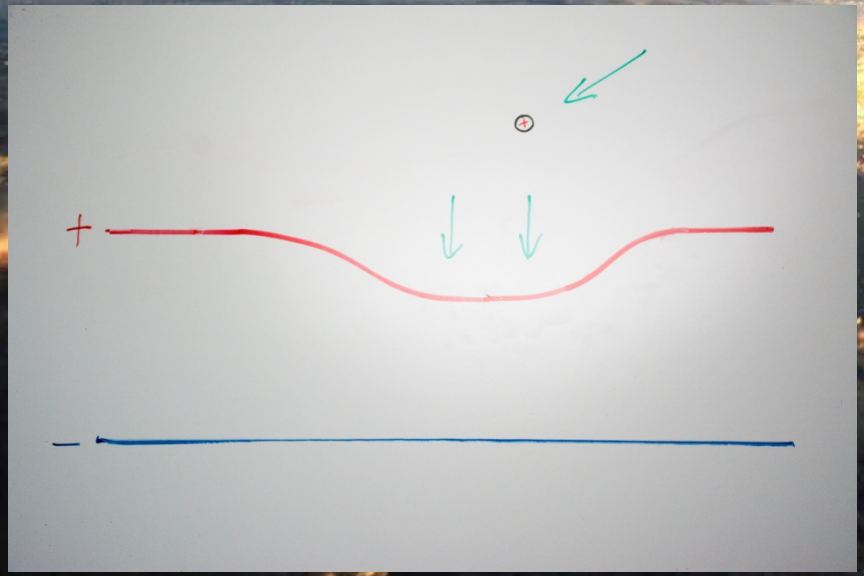
Moving the Plates

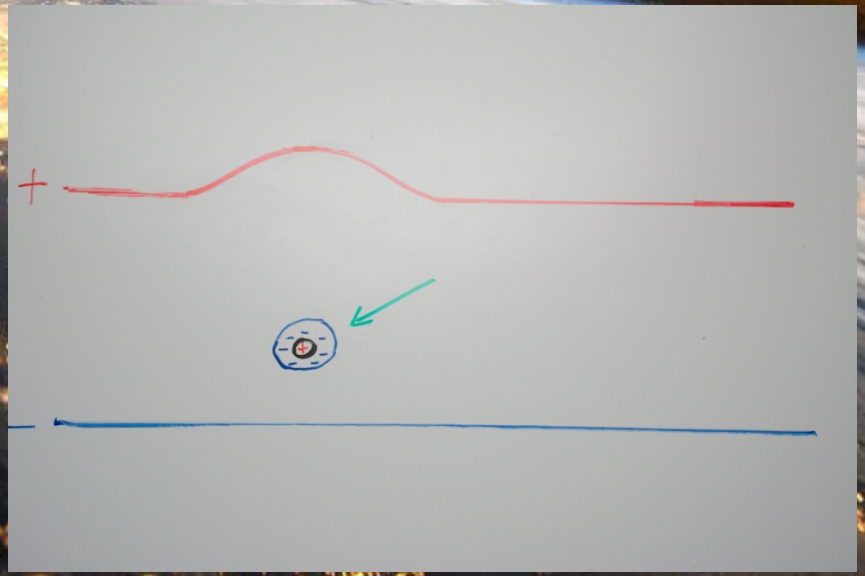


- During the 2004 Tsunami, The 9.3 magnitude earthquake caused the ionosphere to dip 30-40 km into the atmosphere. Or was the Earthquake the result of the change in the ionosphere? The formulas work both ways.
- If the charge moves in the Ionosphere they also move inside the Earth itself.

Earth's Shield

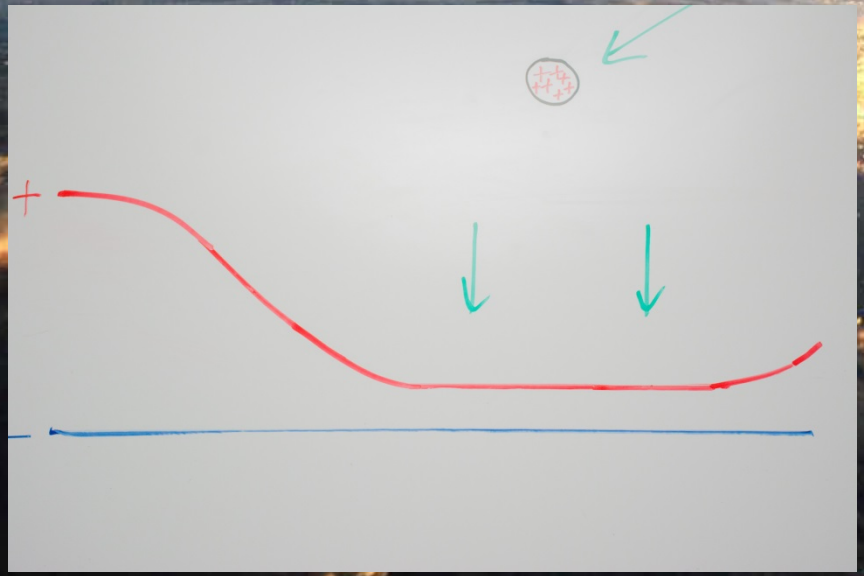
Incoming Bolide at Low Charge

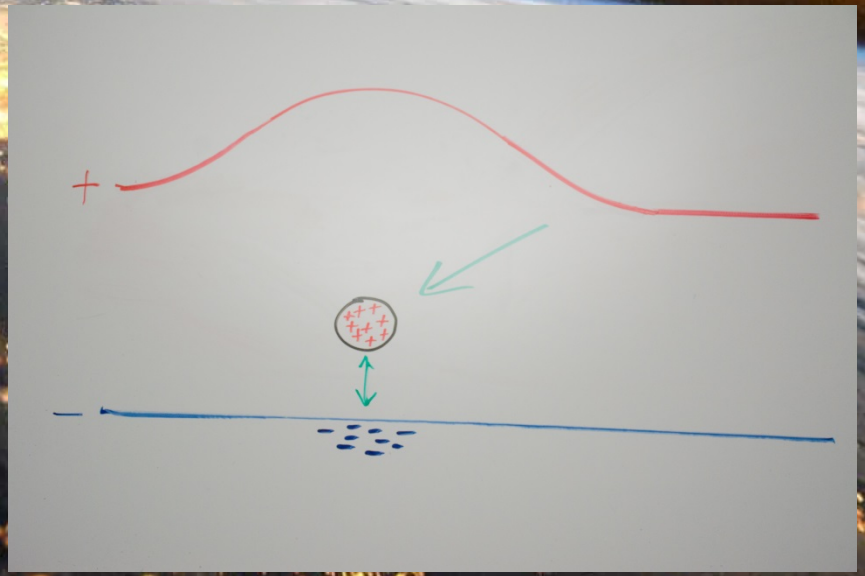




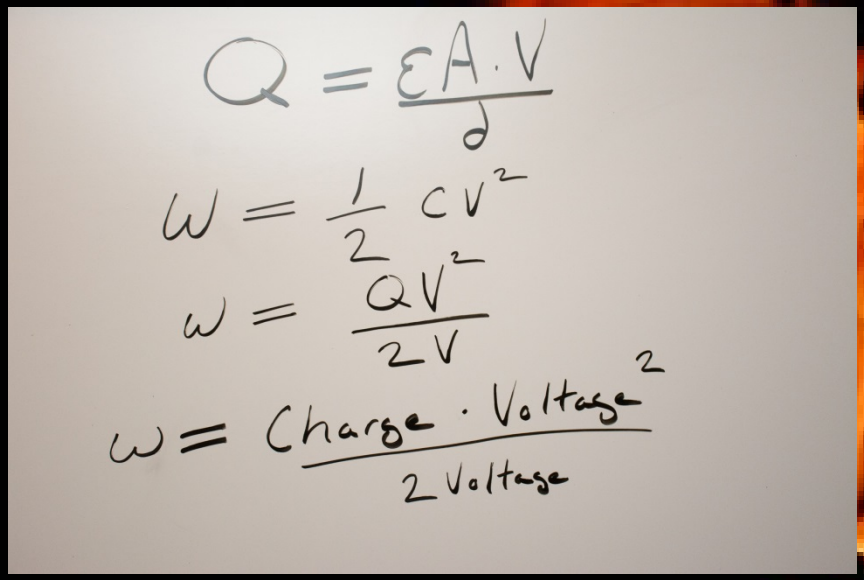
Earth's Shield

Incoming Bolide Moderate Charge





The Energy in a Fireball



Part 2

THE ELECTRIC GEOLOGIC TOOLBOX

The Electric Geologic Toolbox

Electrical Excavation –

1. Lichtenberg Excavation / V- Shaped Trenches
2. Electric Cratering
3. Blue Holes

Electrical Deposition –

1. Mountains
2. Electrical Layering / Welded Tuff
3. Eskers / Drumlins

Both –

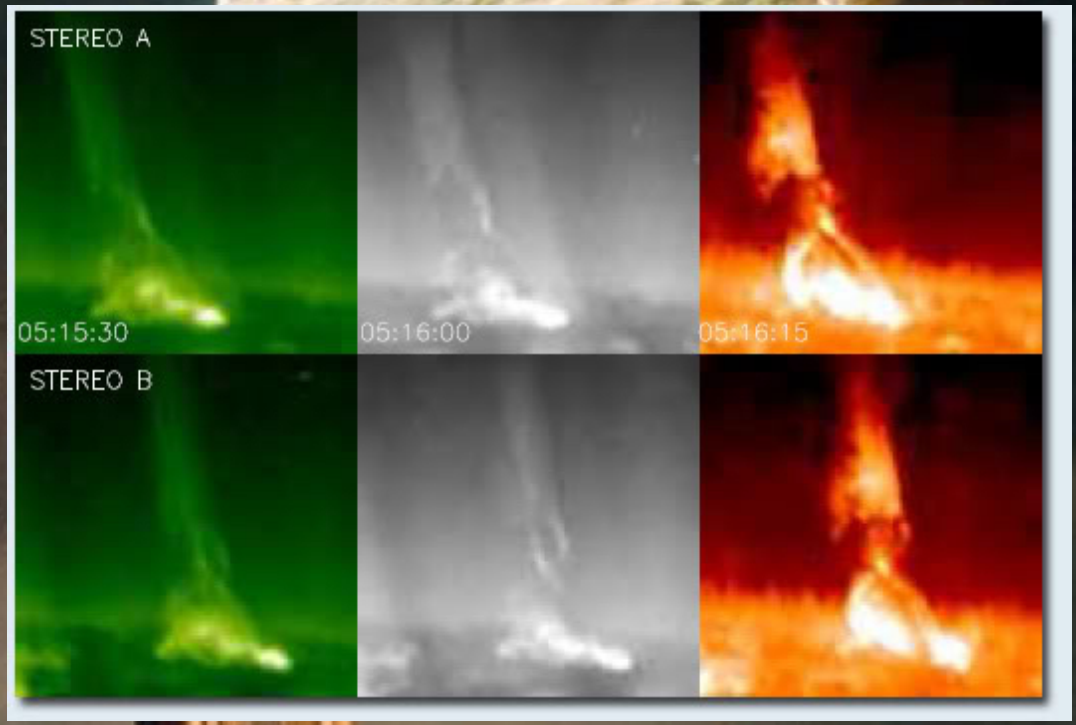
1. Mesa / Plateau Formation
2. Tower Formation
3. Rock Metamorphosis / Sorting / Concretions / Geodes / Nodules

Mechanical Effects –

1. Arc Blasting / Shockwave Patterns / Cymatics / Astroblemes
2. Inundation / Mass Sedimentation
3. Glaciers

Highly Suspected –

1. Volcanoes
2. Earthquakes
3. Static Coulomb Effects

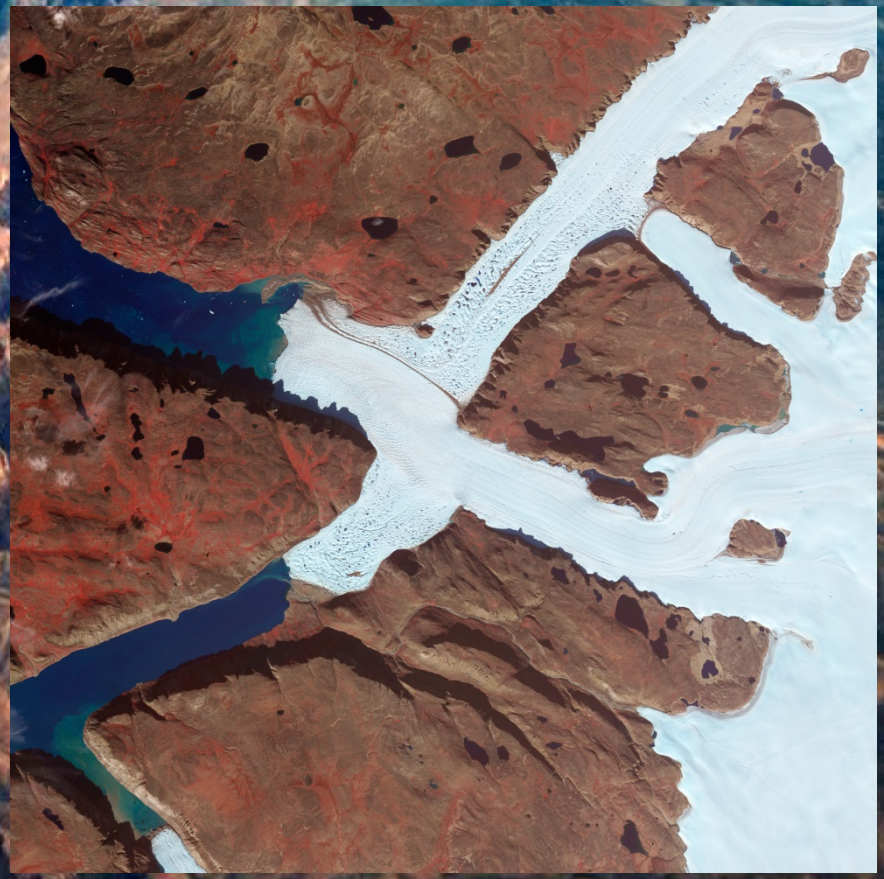


Electrical Excavation

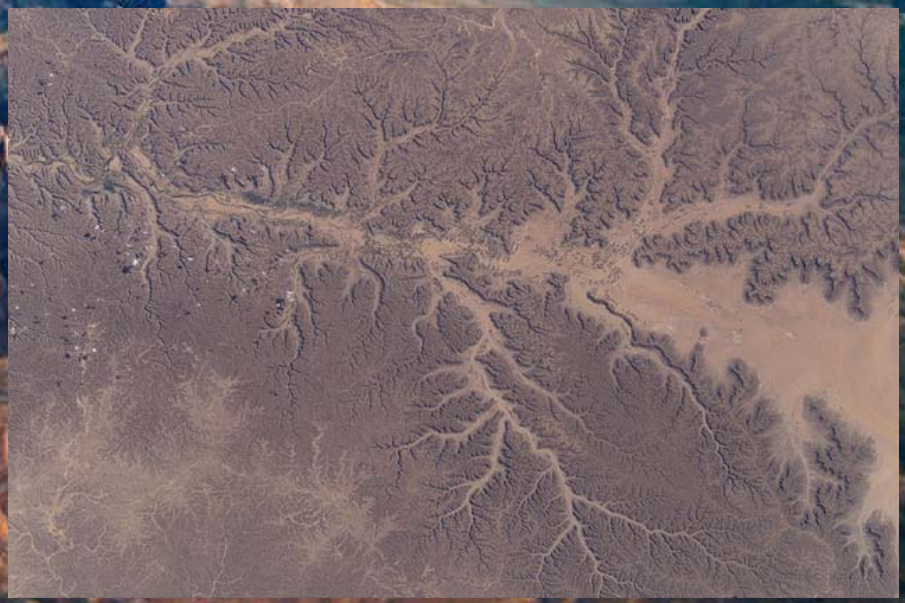
Any charge imbalance which results in material being removed from a planet's surface. Also referred to as Electric Discharge Machining.

1. Lichtenberg Excavation and V - Shaped Trenches

- These are classic electric phenomenon first discovered by Georg Christoph Lichtenberg in 1777. In a sense the first EU Geologist.
- They can be found on every continent landscapes in various sizes.
- Characteristic Shape is the Stepped V-Trench caused by a Townsend Avalanche Effect.
- Caused when a body is unable to provide enough electrons to an interloping bolide or body.
- Known for near right angle connections, cris crossing patterns and ignore slope.
- Tends to have cleaner, flatter, shocked appearance than depositions.
- Universally Dielectric Breakdown events.

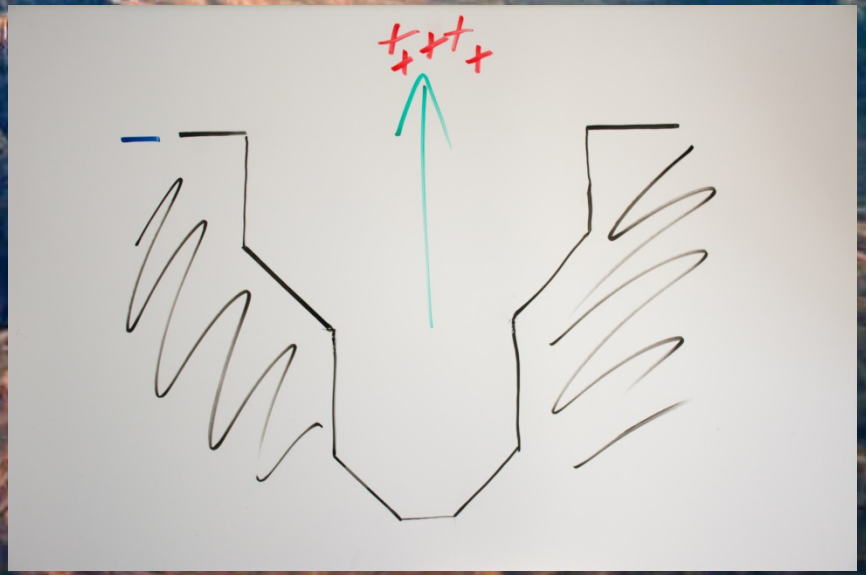


Lichtenberg Dendritics with or without water. (Egypt &Yemen)

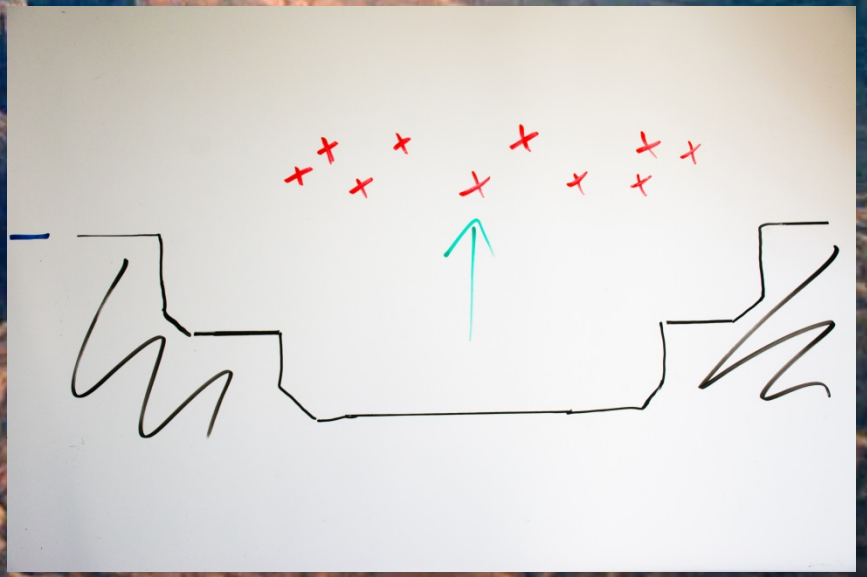


Stepped V-Shaped Trenches

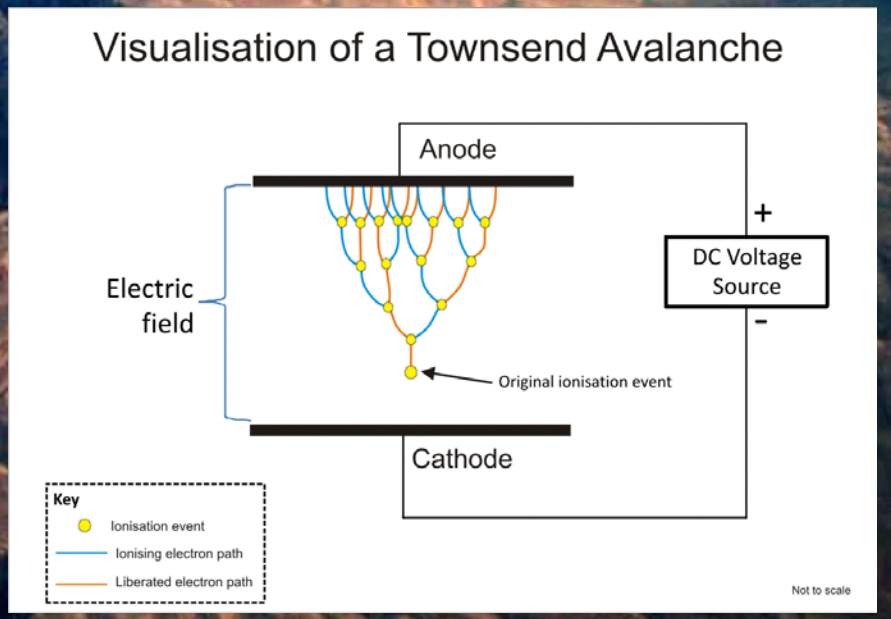
Step depth indicates Voltage



Step width indicates Current



Ignores slope direction of previous terrain.



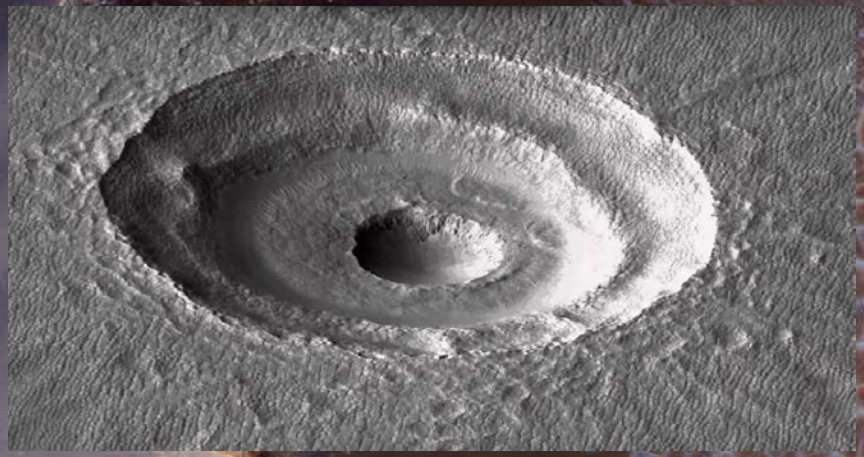
Spires are common in trailing edges of discharges.

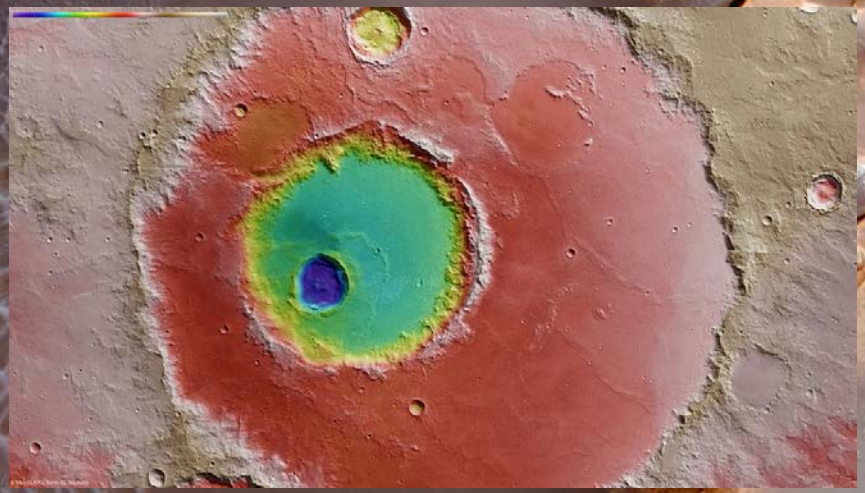
Electrical Excavation

2. Electric Cratering

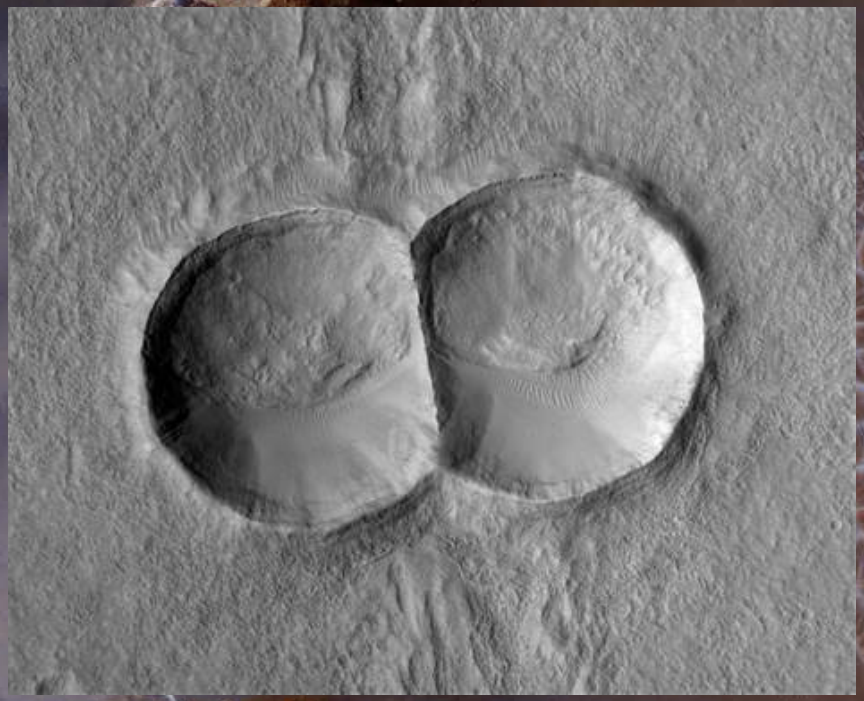
- Another classic electrical form.
- Again, caused when a body is unable to provide enough electrons to an interloping bolide or body.
- When Birkeland currents make direct contact with the land and they spin into the surface.
- Usually in 2 or 6 simultaneous sympathetic streamers.
- As power decreases the rim increases as material falls local to the crater instead of being lofted skyward.

Layering and repeat strikes



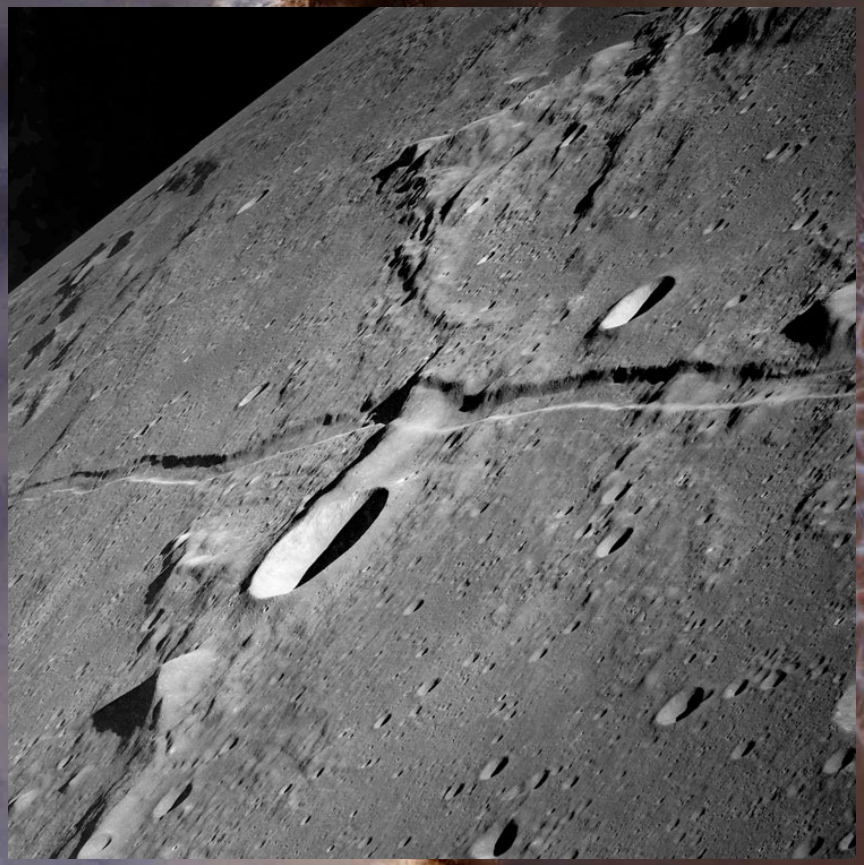


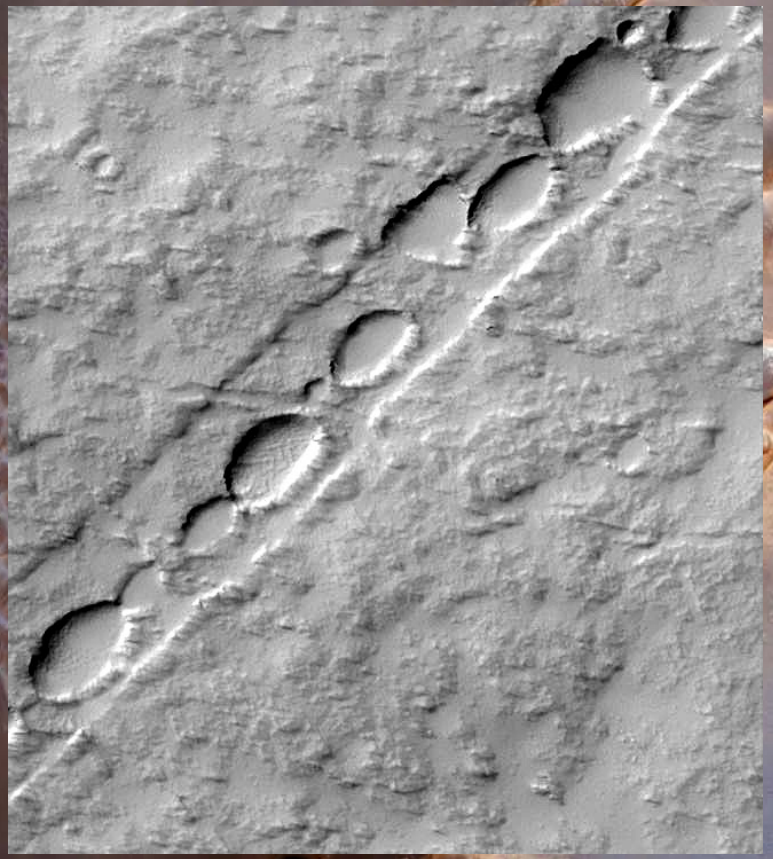
Incomplete and Overdone



Same V Shape, and Lichtenbergs

Undeniable Falsifications





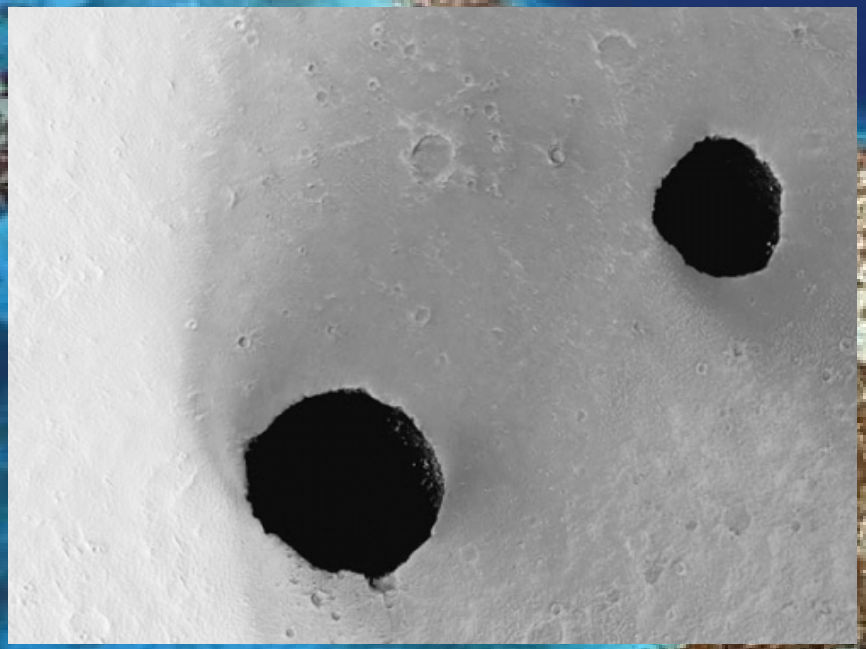
Half Craters / half Canyons?

Electrical Excavation

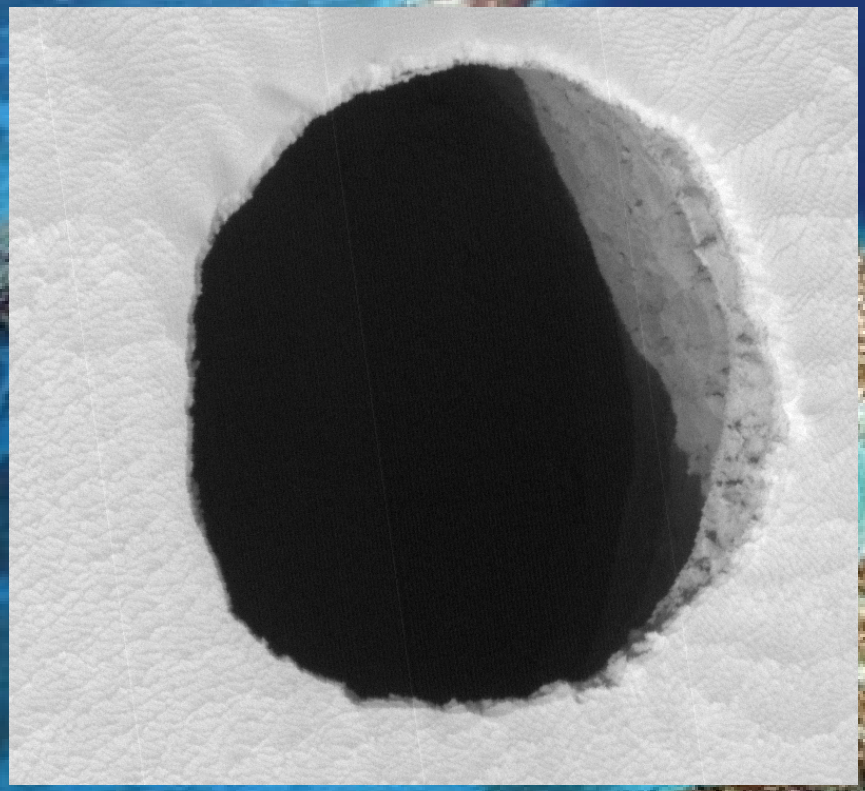
3. Blueholes

- Again, caused when a body is unable to provide enough electrons to an interloping bolide or body.
- When a single tornado like pillar of plasma burrows into the same location through a resistive geologic layer until it reaches a more conductive material.
- A lower power effect that would take a sustained discharge, likely at the trailing end of a larger event.
- Bores through material excavating down.

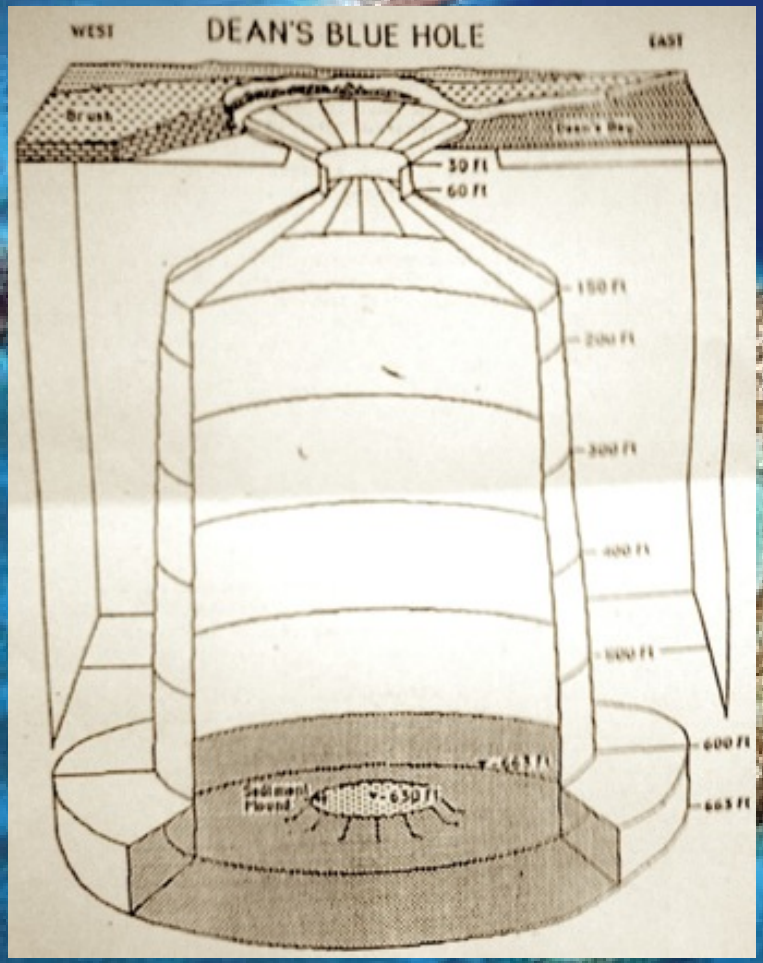
Circular and often with a debris field.



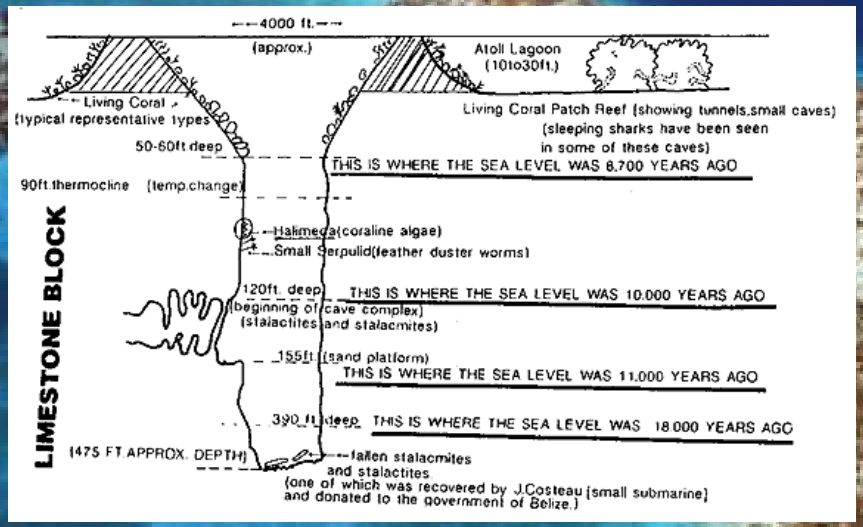
Occur on other planets



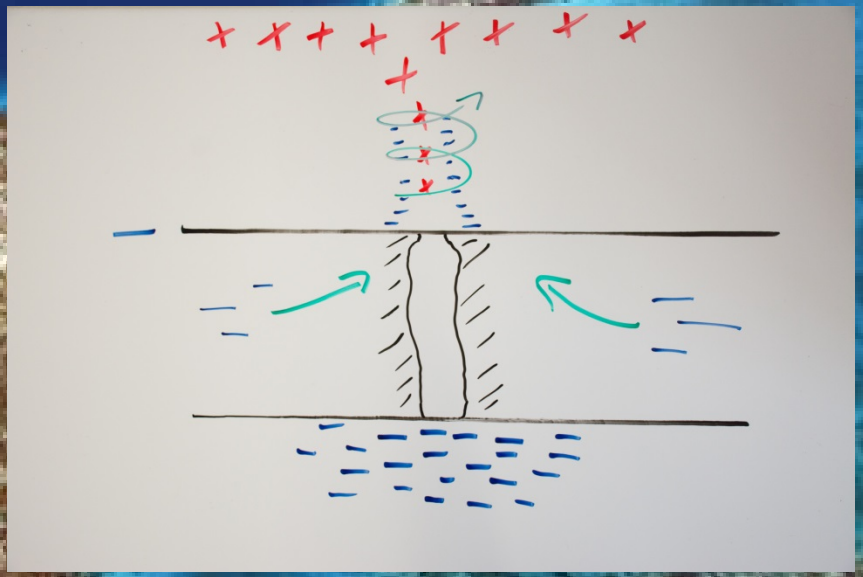
Long straight boreholes with rough etched sides.



A “pillar of fire” fixed upon an area boring through resistive rock.



Overcharged Charge Sheath Vortex



Electrical Deposition

Any charge imbalance which results in material being deposited on a planet's surface. Sometimes referred to as Cathode Sputtering or Sputter Deposition.

4. Mountains

- Usually heavier basalt material partially molten and incandescently layered.
- Multiple blast patterns and subject to capacitance layered effects and magnetic effects.
- Instances of tuff building but usually of one substance and of a massive scale.
- Massive deposition covering large areas.
- Large areas imply large currents and giant towering indicates a lowering in voltage. Mountains seem to be among the last things to fall, likely due to iron content.
- Also affected by water, but may also completely bury the water.

Subject to magnetic and blast effects

Electrical Deposition

5. Electrical Layering /Welded Tuff

- Incandescent material in the air subject to winds, shockwaves and electrical organization.
- Has a windward and leeward side.
- Does not hold to the V Trench Shape.
- Instead of material being removed it is built up and into the wind by this falling material.
- Falls as electrically sorted. Basalts seem to be separated.
- Particularly subject to being rerouted by running water.

Sorted or Layered Preferentially

Affected by Water

Electrical Deposition

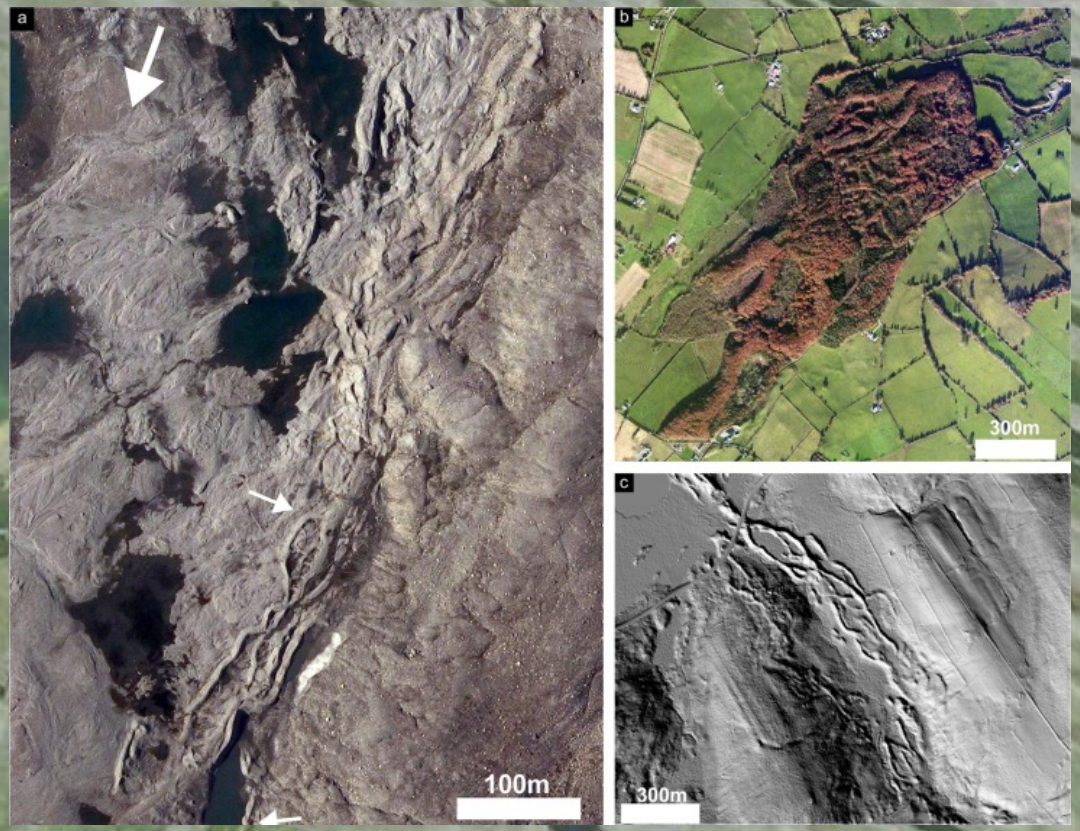
6. Eskers /Drumlins

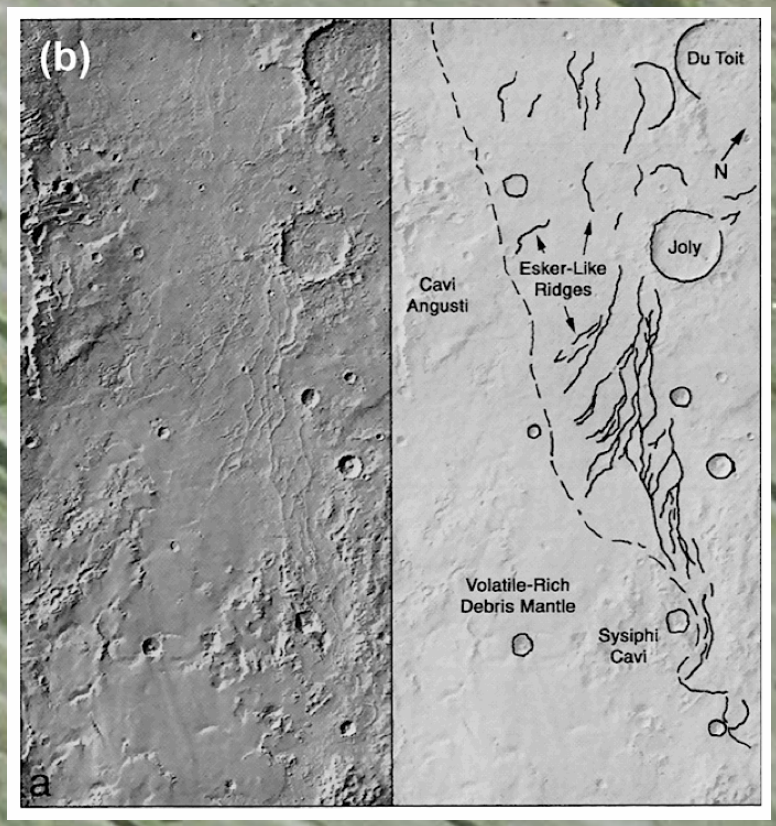
- Often associated with Glacial activity. Some Eskers and Drumlins may indeed be glacial. But many, such as those on bone dry planets like Mars are not.
- Non glacial's usually associated with strike deposits.
- Eskers can form positive Lichtenberg figures.
- Not hot enough to fuse together. Indicating lower power. These are deposits at the end of the events, loosely conglomerated by EM forces and Ionic winds.
- Eskers and Drumlins electrically deposited will not show a preference to run downhill.

Eskers

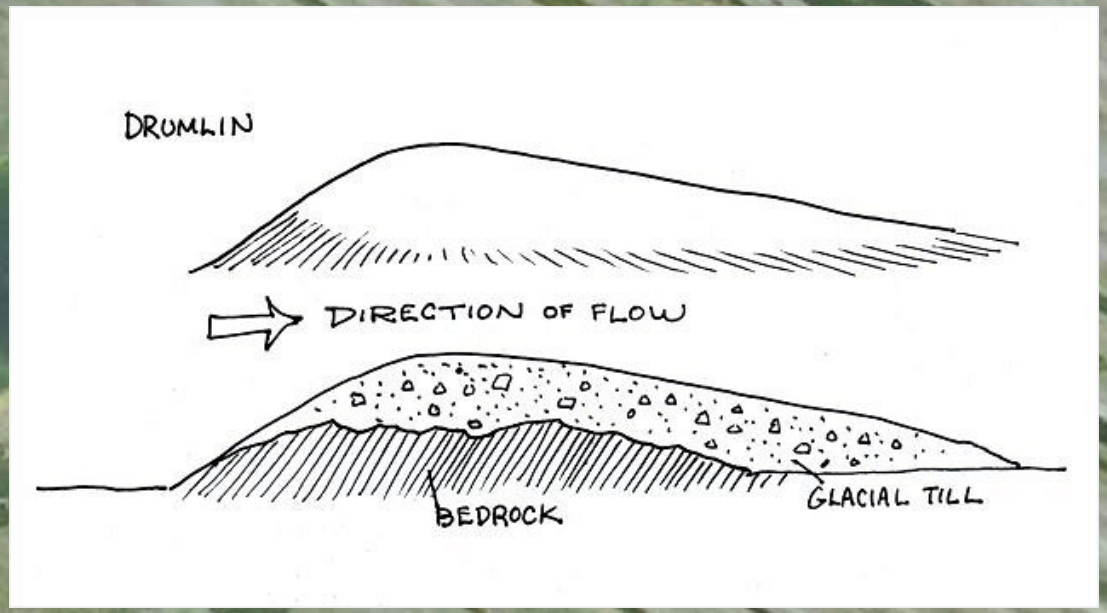
Supposedly all Glacial Deposits

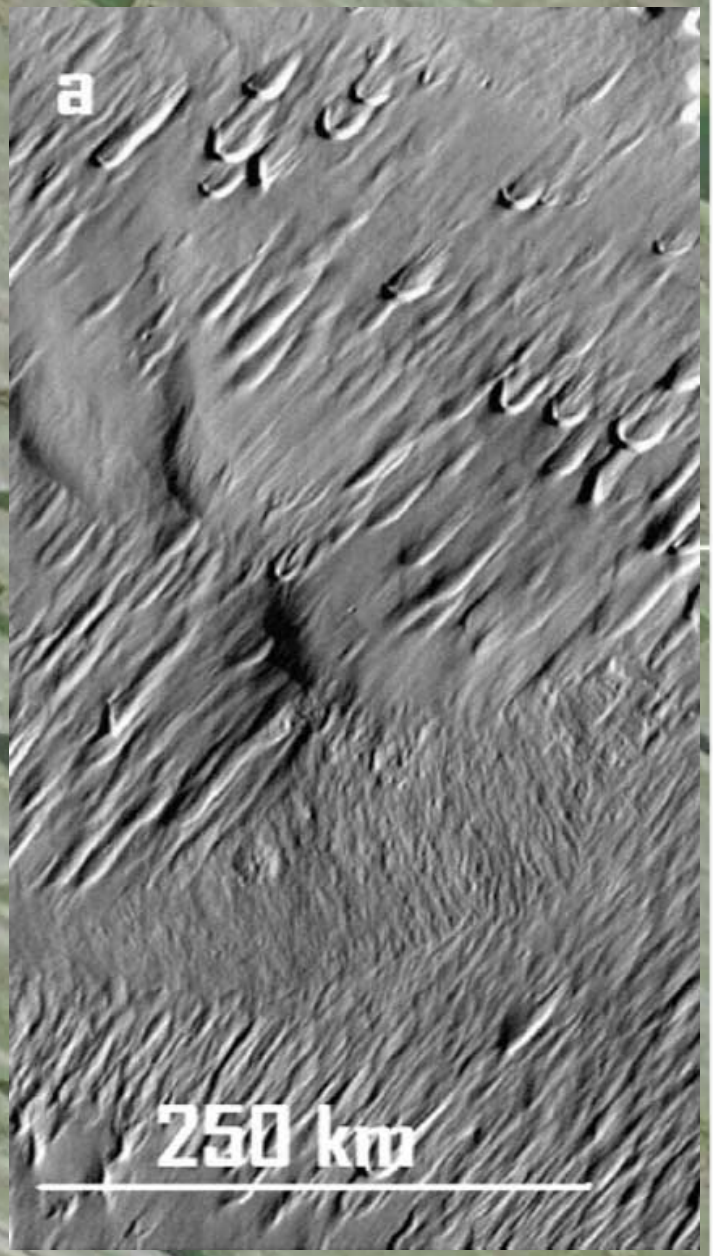
Eskers on Mars and Earth





Drumlins





Drumlins on Mars and Earth

Ionic debris

Same 30 degree cross etching

Both

Consisting of both Excavation and Deposition in the same area and with primary, secondary and tertiary currents.

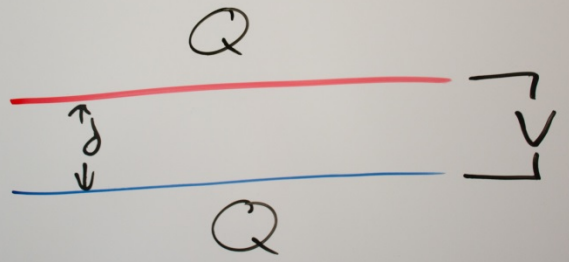
7. Mesa /Plateau Formation

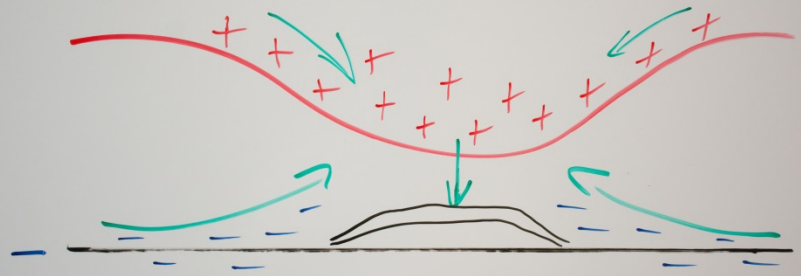
- Can exhibit some broken V shapes because of material build up due to positive material being pulled in and negative scouring from right beside.
- V shape does not occur in neat steps and often have elongated sides or damaged or cut appearance.
- Often exhibiting melted features on top of the structures.
- Undercutting of the top layer is common.
- Top layers are often fused by intense heat.
- Higher metal content and eddy currents can make columns and not just piles.

Long slopes where material was pulled towards the plateau

The Falling Sky

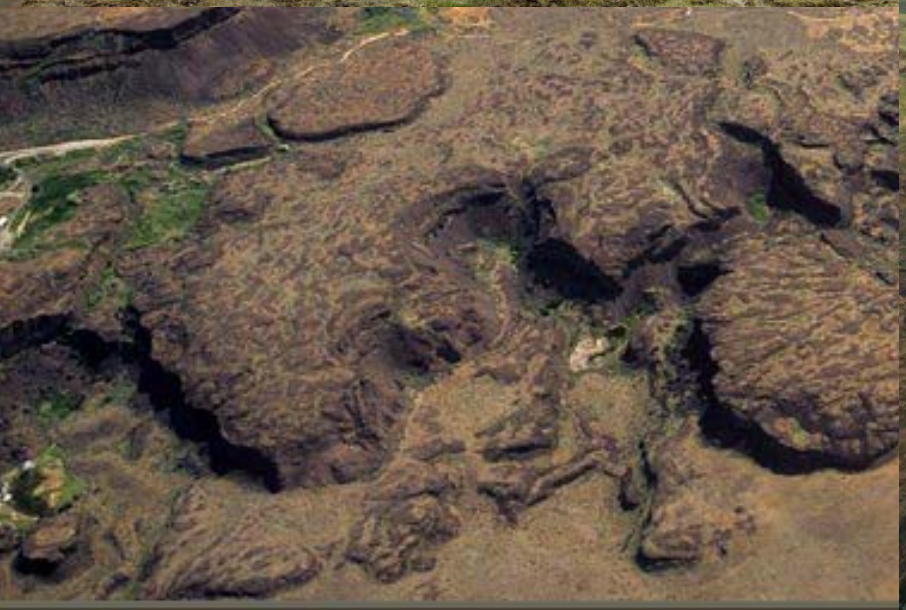
$$d = \frac{\varepsilon A V}{Q}$$





V shapes are no longer required

If V shapes exist they will appear disjointed as this is a usually a sustained event

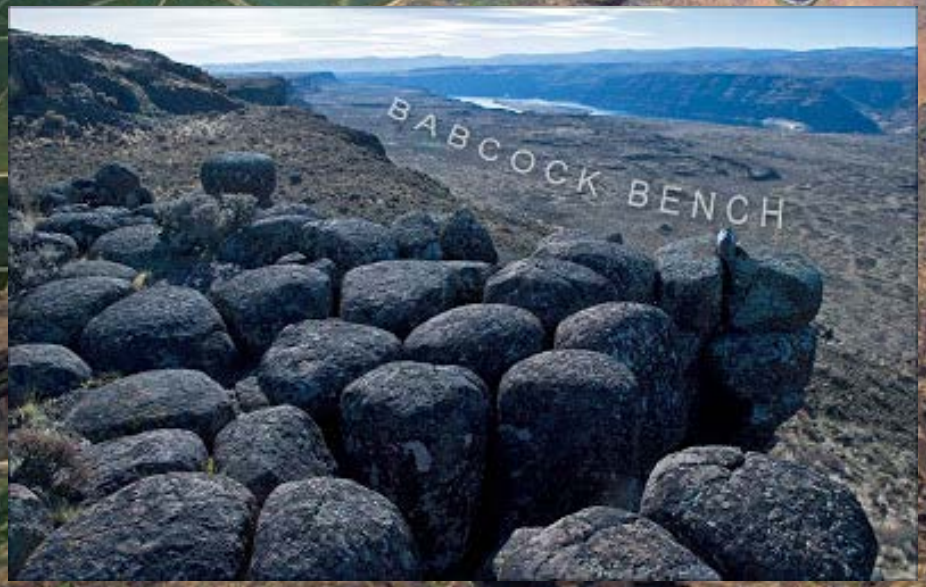


Slopes can have tortured or melted terrain

Signs of rippling buildup become clear such as columns

Columning can suddenly cease and chaotic building continue.

Tops will often have melted terrain



Fused material on top allows undercutting excavation as the fused material conducts much better.

Both

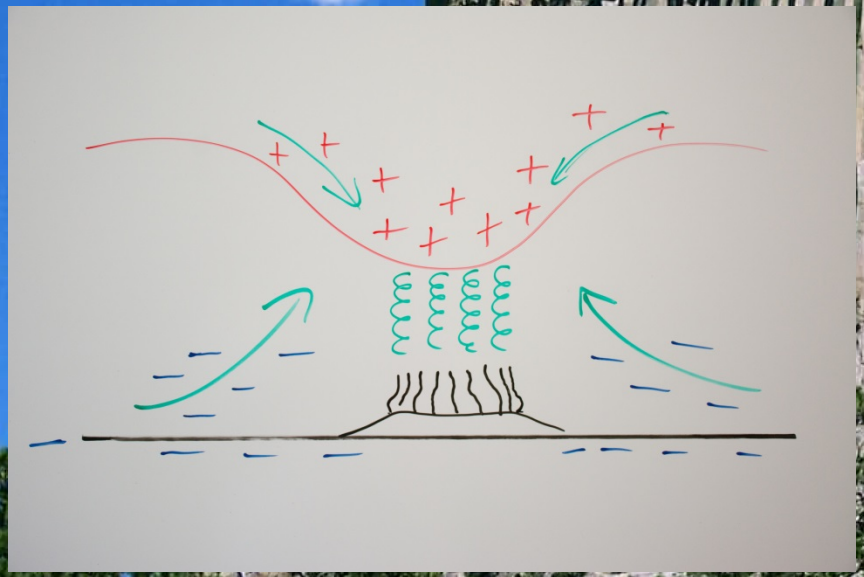
8. Towers

- Towers are formed be *either* electrical excavations which have not completely disintegrated the landscape or by pulling up material, like the mesa or plateau, but extremely focused.
- One is more indicative of extreme excavating arcs and the other a grouping of field aligned currents pulling material in and layering it without significant disruption from blasts or winds.
- Devil's Tower has the hallmarks of top heating and like the Mesa/plateau can only get so tall before the force acting on the particles will lift them away faster than they are being laid down.

Wind blasts usually disrupts the construction before towers are built

If cut off during building it can continue on top as the iron rich rock facilitates magnetic confinement

Stable positive streamers



Both

9. Metamorphosis / Sorting / Geodes / Concretions

- Resistive material is usually whisked away. Conductive material will more easily allow currents to pass through it.
- Material subjected to extreme heating and property changes can end up coating other materials. Especially in high arc events.
- Concretions and geodes are to be formed high amperage blasts.
- Geodes are held in place, concretions fall to Earth.
- Plasma tends to sort material and forms cells. This material can be sorted in layers or clumps.

Rocks can be altered by currents or crystals drawn out of them

Z Pinch remnants

Mysterious features

Displays of polarity

Part 3

CONCLUSIONS

New Implications

- Categorization
- Relative Strength
- New Mechanisms
- AC versus DC
- Falsifiable Hypothesis
- Capacitance and Charge can provide a link between Comets and other astral bodies and Earthquakes / Vulcanism