Earth’s Magnetosphere

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- Its composition and properties
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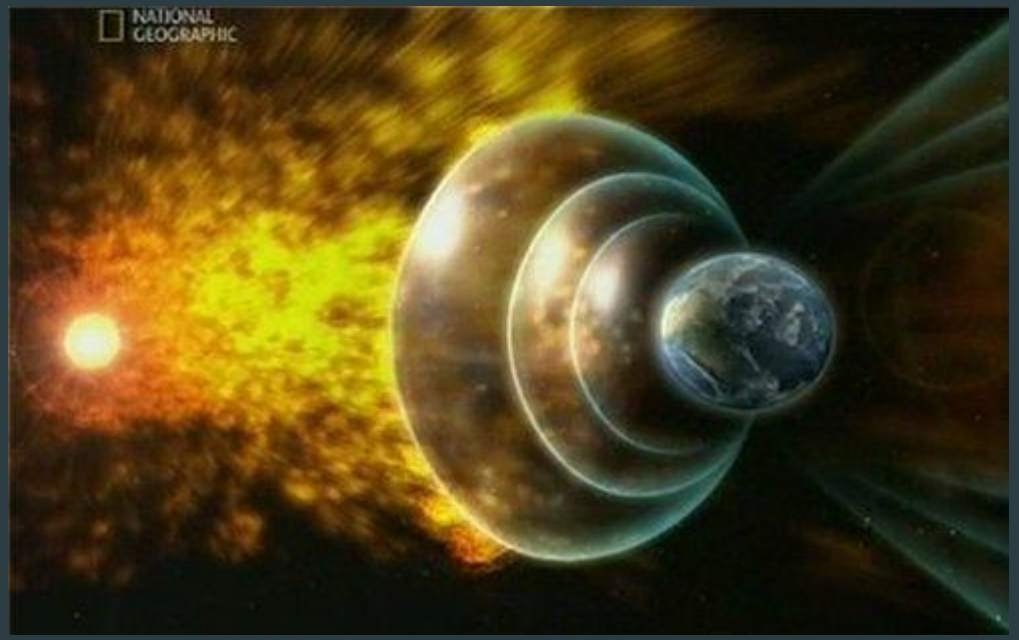
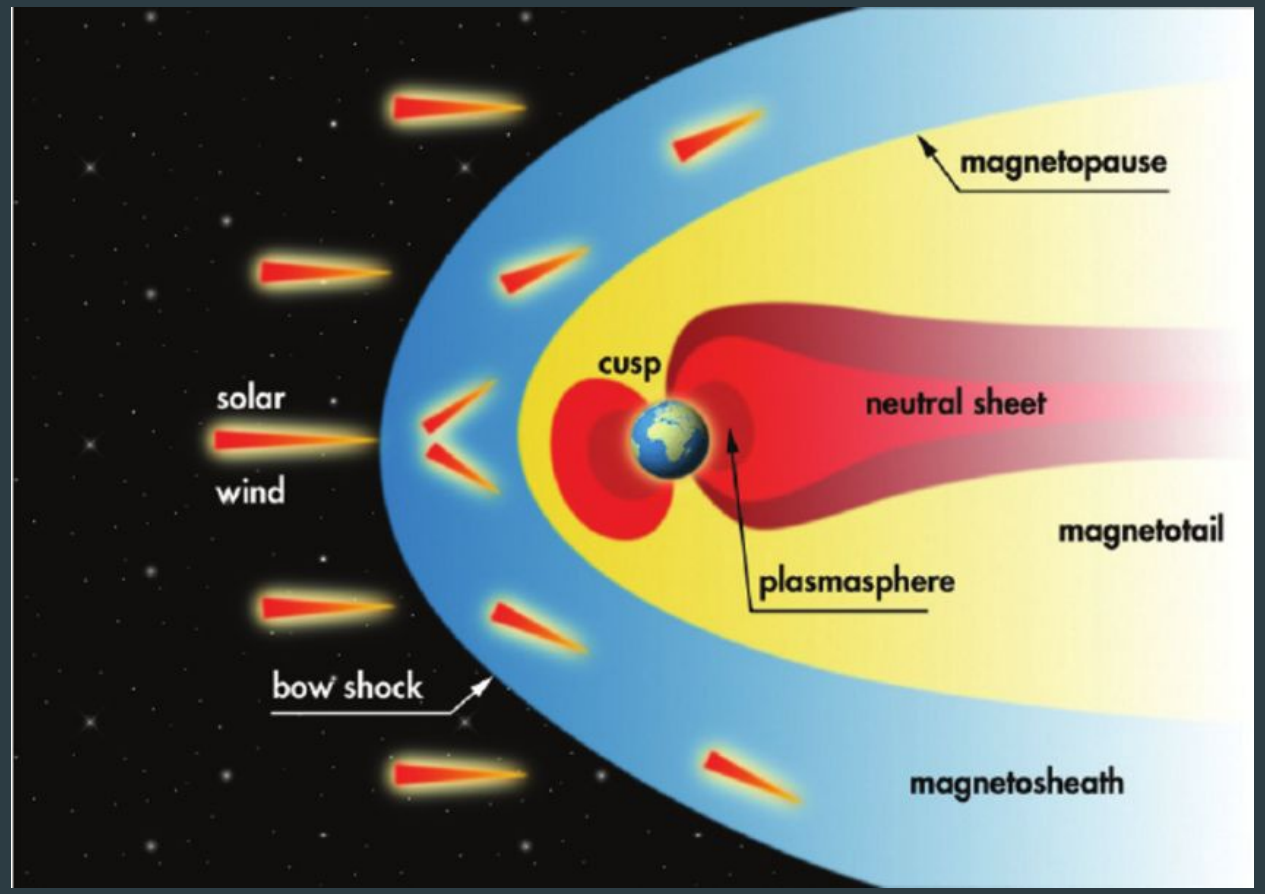
Our shield



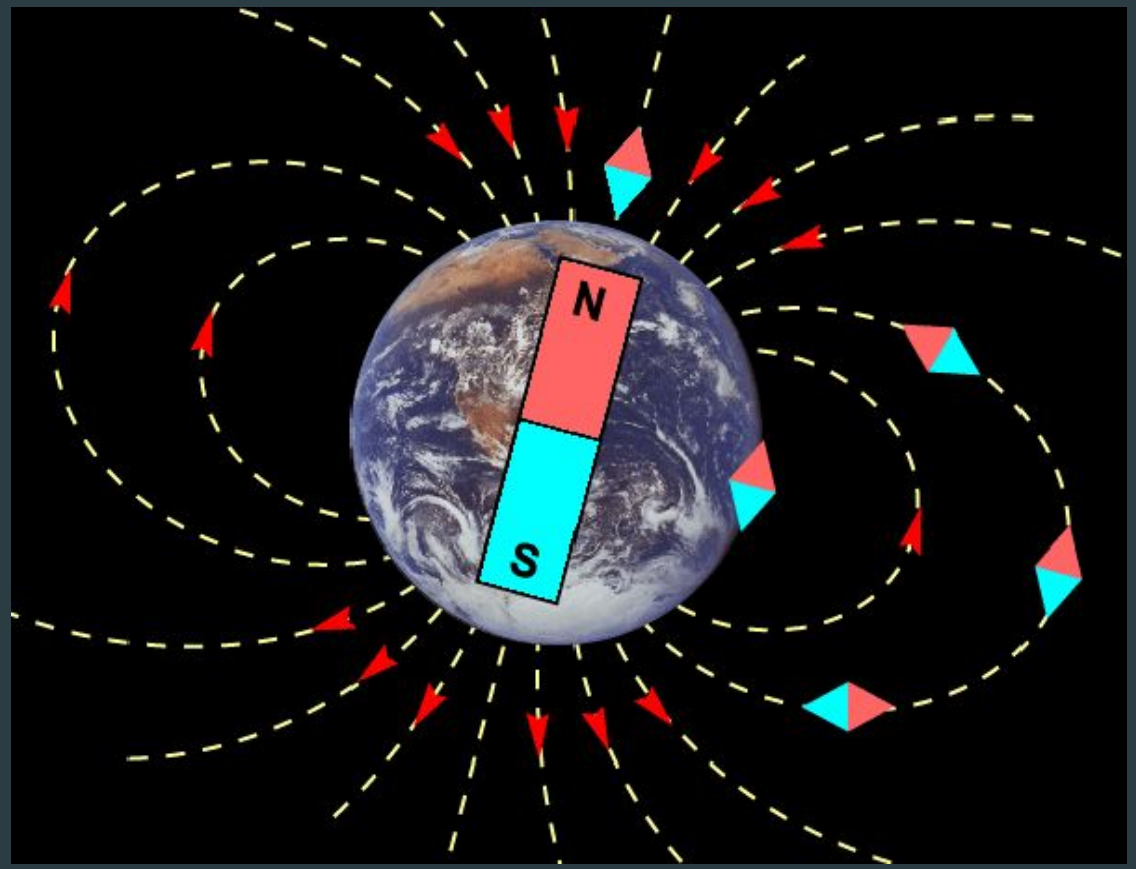
Study of Earth's magnetosphere began in 1600, when William Gilbert discovered that the magnetic field on the surface of Earth resembled that on a terrella, a small, magnetized sphere.

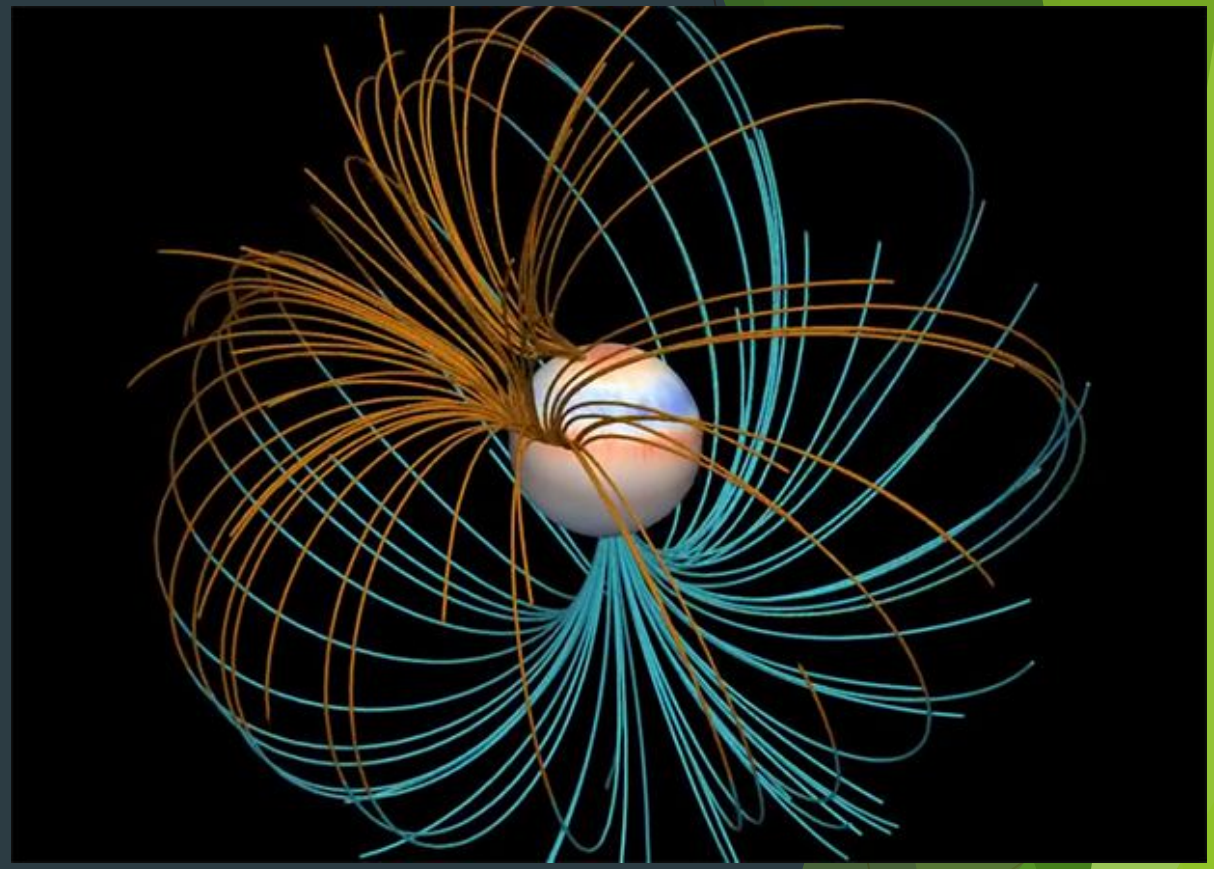
It consists and properties



Magnetospheres depend on several variables: the type of astronomical object, the nature of plasma and pulse sources, the period of rotation of the object, the nature of the axis around which the object rotates, the axis of the magnetic dipole, the magnitude and direction of the solar wind flow.

Poles and axis

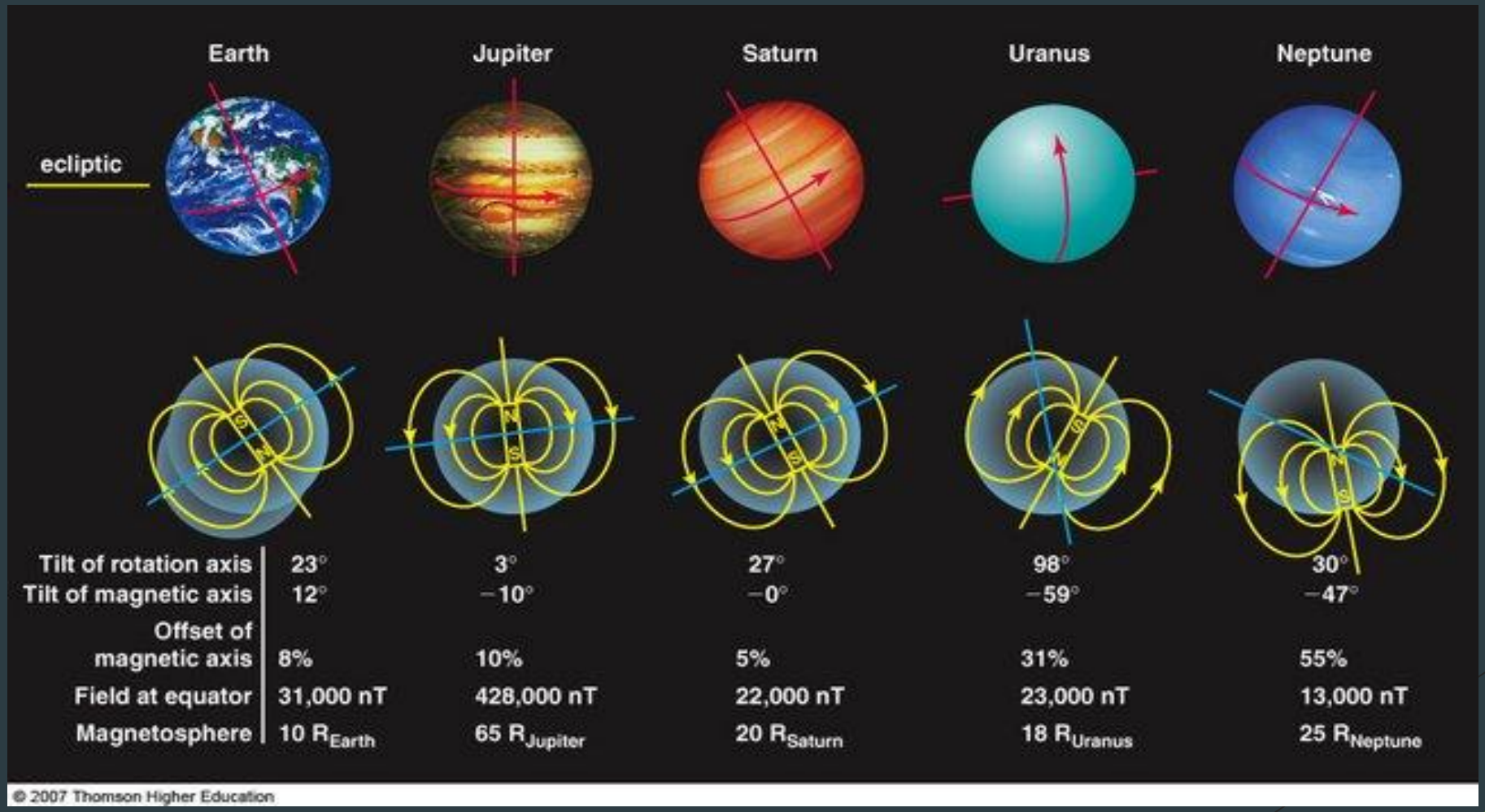




“It seems that the location of the North magnetic pole is determined by two very large sections of the magnetic field - one is located under Canada, and the other under Siberia”

“Nature” journal

Magnetic field of other planets



Conclusion

- Magnetosphere is a very important part of our planet, that protects us from harmful effects of the Sun and space in general.
- Many astronomical objects generate and maintain magnetospheres. In the Solar System this includes the Sun, Mercury, Jupiter, Saturn, Uranus, and Neptune.
- The magnetosphere has North and South poles, so we can use a compass.

Links

- en.wikipedia.org/wiki/Magnetosphere
- spacegid.com/magnitosfera-zemli.html
- ria.ru/20190129/1550035242.html