



# Earth Science



# What is Earth Science?

**Fields of science dealing with planet Earth:**

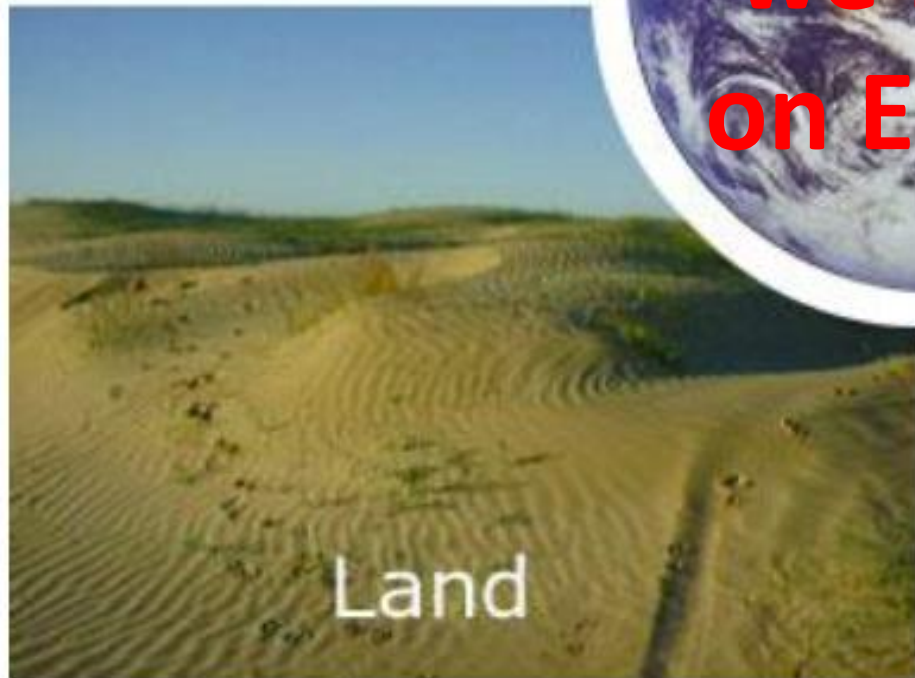
**Geography, Geology, Geophysics, Hydrology, Glaciology,  
Meteorology, Atmospheric Physics, Ecology, etc.**

## What does Earth Science study?

**How the Earth system works, and how it  
evolved to its current state.**

**What's *Earth system*?**





**What do  
we have  
on Earth?**

# **Six Spheres of the Earth**

**Lithosphere**

**Hydrosphere**

**Atmosphere**

**Magnetosphere**

**Biosphere**

**Anthroposphere**

# Six Spheres of the Earth

## 1. LITHOSPHERE: The Solid Earth

- Internal structure
- Tectonic processes
- Volcanic processes



## 2. HYDROSPHERE: The Water

- Physical state of water
- Water cycle
- Ocean circulation, tides
- Glaciers





# Six Spheres of the Earth

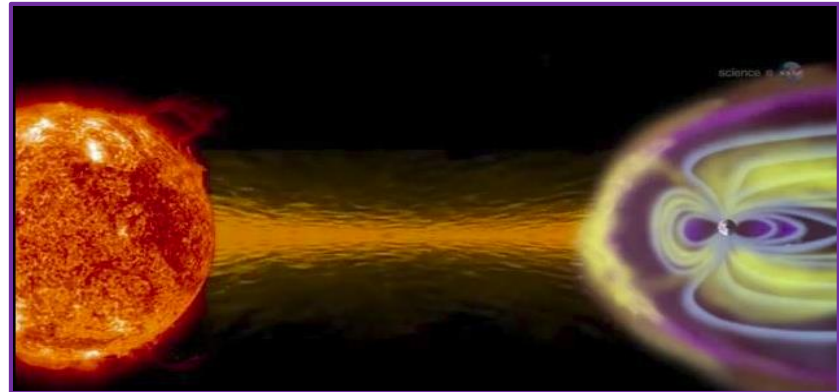
## 3. ATMOSPHERE: The Air

- Layers
- Air masses and wind
- Weather and storms



## 4. MAGNETOSPHERE: Magnetic Field

- Structure
- Solar wind
- Aurora Borealis



# Six Spheres of the Earth

## 5. BIOSPHERE: All Living Matter

- Ecosystem
- Biomes



## 6. ANTHROPOSPHERE: Homo Sapiens Impact

- Ecology
- Pollution
- Deforestation



*\*this course does not cover these two\**

**What is Earth?**

**What is Earth made of?**

**How does Earth work?**

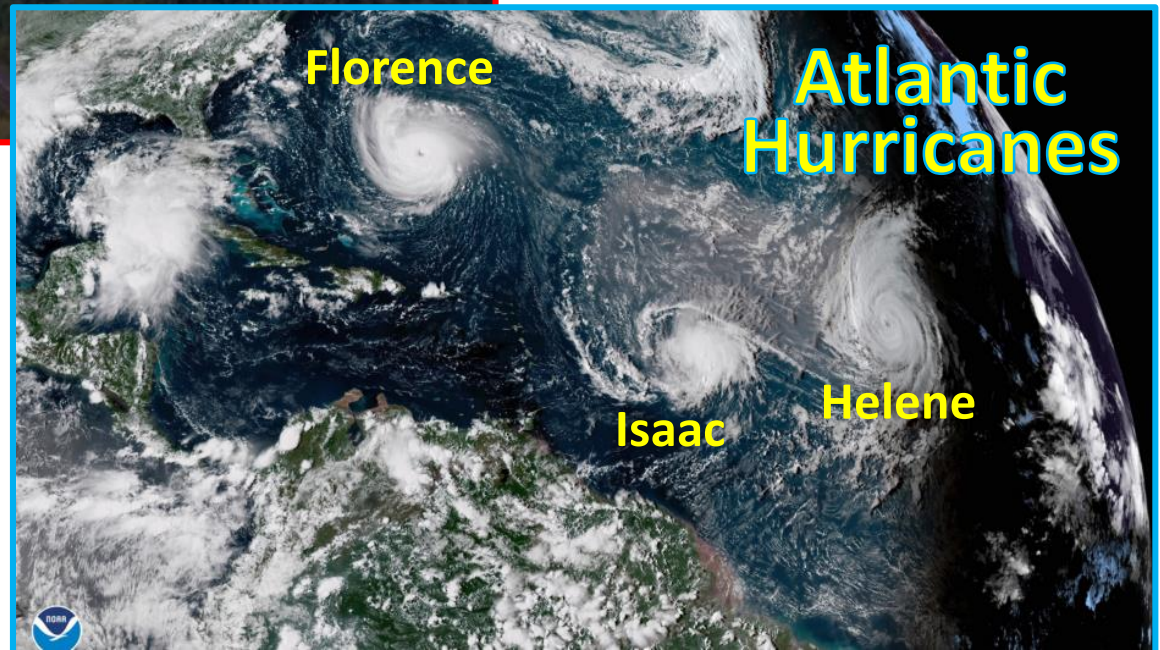


# What do we see on Earth?





# What's happening on Earth now?





# What do we see from Earth?

Sun



Moon



Lunar Eclipse



Milky Way



Constellation Orion



Mars





**Where is Earth?**