

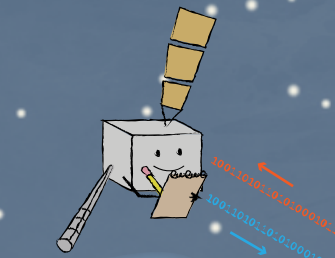


Making a weather forecast

I'm GOES-R. I'm a new weather satellite, and one of my jobs is to keep an eye on Earth's weather as I orbit above.

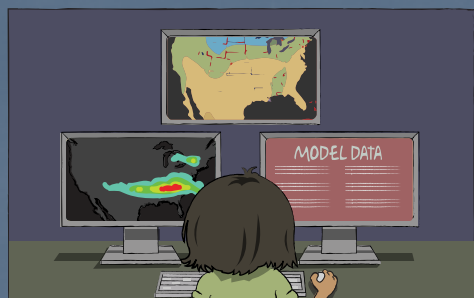
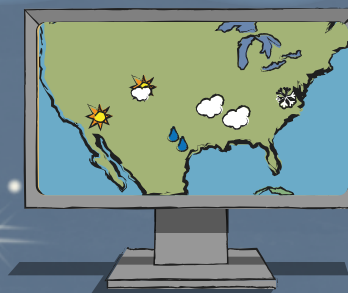


First, I point my special camera at Earth and take pictures of the clouds I see below.



I send my pictures and notes in a computer language of ones and zeros.

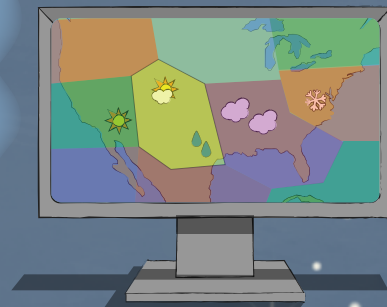
Computers connected to the antenna organize my notes and pictures and translate them into weather maps. They send a version of the maps back up to me.



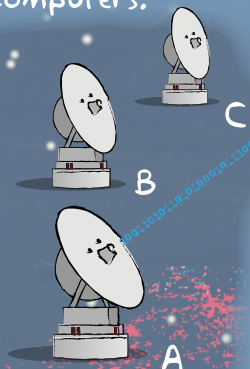
I also take the maps that I received and send them out to companies that specialize in making the maps more colorful and better for viewing on TVs and computers.



Another copy of the maps is split into smaller pieces. This helps the maps move faster from one place to another.



The forecaster combines the information from these maps with lots of other information like model forecast data and radar data to make predictions about the upcoming weather in your area.



The map pieces are then sent for processing before being sent back up in the sky to a communications satellite.

From there, the maps are picked up by antennas at the National Weather Service Forecast Offices in each region.

