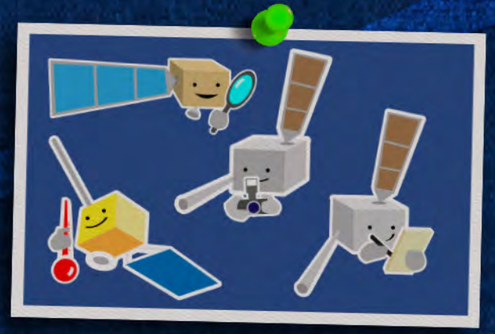
Meet Cosmic-2



Researchers from the United States, Taiwan and other countries are working together to make a new team of satellites called COSMIC-2. These satellites will help us predict weather better than ever before.

The six COSMIC-2 satellites don't take pictures of Earth. They observe our atmosphere in a totally different way.

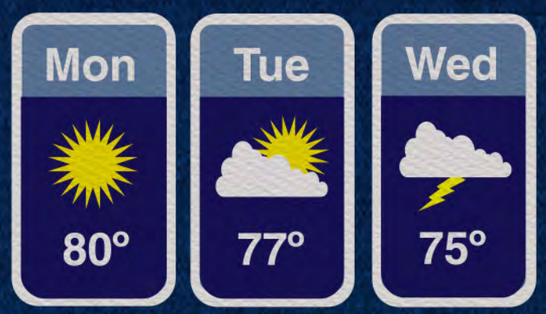
COSMIC-2 satellites look at the atmosphere using signals from GPS satellites–the same satellites that you might use to find your way around town.

If you take a look at a weather forecast on your phone, it's actually created with information from a team of satellites orbiting Earth.

Each satellite on the team collects different weather information or views a different part of the Earth.

Here's how it works: GPS satellites orbit high above Earth. We always know where they are because they are constantly sending out signals.

COSMIC-2 satellites orbit much closer to Earth's surface and they receive these GPS signals.



At a certain point, COSMIC-2 satellites and GPS satellites are positioned with a bit of Earth's atmosphere between them.

As the GPS signal passes through Earth's atmosphere, the signal changes a little bit.

These changes in the signal provide COSMIC-2 with a snapshot of conditions in our atmosphere, such as temperature, pressure, density and water vapor content.

After collecting this information, the COSMIC-2 satellites send it to partners around the world.

Scientists then use this information to make predictions about Earth's weather and climate.

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