Practical Application of Satellite for Pilots

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Satellite Pros and Cons

Satellite Pros

- **Real Time:** Satellite imagery shows what is going on in near real time with typical 5 minute refresh rate, with a few 1 min refresh rate windows.
- **Color Imagery:** Different color imagery can identify different weather conditions.
- **Coverage:** Weather satellite imagery covers nearly the entire globe.
- Detailed: Satellite can show weather features that other sources (such as radar) cannot.
- **Free:** Weather satellite imagery is free and can be accessed from any area with internet connection.

Satellite CONS

- **Parallax:** This is where a weather feature looks to be in one area on Satellite but is in fact in a slightly different area, this is caused by the viewing angle of the satellite. ONLY AFFECTS SOME WEBSITES, usually showing "raw" imagery. see HERE more details.
- **Obscuration:** Features of interest can be obscured by clouds and such above it. This is because the weather satellite as a top down view.
- **High Data Usage:** Satellite can use a lot of data and may take a while to load in low internet speed areas.
- **Resolution:** Satellite will have low resolution when zoomed in, about a 0.5km square pixel.
- **Timing:** Day/night makes a difference, you can't use visible imagery at night.

NWS Satellite Page

RAMMB/CIRA Slider (Also NOAA)

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TakeAway

Use Satellite to Have a Safe Flight