

GOES-R Proving Ground Product Categories

- **Basic Imaging: MODIS bands**
 - Visible 0.65 μm (Band 1) – CIMSS
 - Cirrus Detection 1.6 μm (Band 26) - CIMSS
 - Snow-Ice Discrimination 2.1 μm (Band 7) - CIMSS
 - Shortwave IR 3.7 μm (Band 20) - CIMSS
 - Water Vapor 6.7 μm (Band 27) - CIMSS
 - IR Window 11.0 μm (Band 31)– CIMSS
- **Cloud Properties**
 - Cloud Phase (MODIS) - CIMSS
 - Cloud Top Temperature (MODIS) - CIMSS
- **Convective Indices**
 - Lifted Index (MODIS) - CIMSS
 - K Index (MODIS) - CIMSS
 - Total Totals Index (MODIS) - CIMSS
 - CAPE (AIRS) - CIMSS
 - Nearcasting product (GOES Sounder) - CIMSS
- **Dust Enhancements**
 - GOES-Based Advanced Blowing Dust Technique – CIRA
 - MODIS-Based Blue Light Absorption Technique for Mineral Dust Enhancement- CIRA
- **Fog / Stratus / Low Clouds Products**
 - Fog / Stratus Product (11.0 – 3.7 μm) (MODIS) - CIMSS/SPoRT
 - Low Cloud/Fog Product (GOES) - CIRA
- **Hazard Products**
- **Lightning Products**
 - Total Lightning Source Density Product – NASA/SPoRT
- **Moisture products**
 - TPW (MODIS) – CIMSS
 - TPW (AIRS) - CIMSS
 - Nearcasting product (GOES Sounder) - CIMSS
- **Multi-Layer Blended Products**
 - GeoColor Multi-Layer Blending of Products - CIRA
- **Ozone**
 - Total Column Ozone (GOES) - CIMSS
- **Snow/Cloud and Snow/Ice Discrimination**
 - GOES-based Snow / Cloud Discrimination Product - CIRA
 - MODIS-based Snow / Cloud Discrimination Product – CIRA
 - Snow-Ice Discrimination (MODIS 2.1 μm) - CIMSS
- **Surface Temperature Products**

- Composite Sea Surface Temperature (MODIS) – SPoRT
- Sea Surface Temperature – CIMSS/SPoRT
- Land Surface Temperature - CIMSS/SPoRT
- **Synthetic Satellite Imagery**
 - CRAS Forecast IR and WV Imagery – CIMSS
- **Total Precipitable Water Products**
 - TPW Orographic Precipitation (SSMI/GFS model) – CIRA
 - MIMIC Total Precipitable Water (Blended SSMI + AMSR) - CIMSS
 - Total Precipitable Water (MODIS) - CIMSS
 - Total Precipitable Water (AIRS) - CIMSS
- **True Color**
 - Simulated True Color (MODIS) - CIRA
 - Simulated True Color (MODIS) - SPoRT
 - True Color RGB (24 bit) (MODIS) - CIMSS
- **Vegetation Products**
 - Normalized Difference Vegetation Index (NDVI) – CIMSS
- **Volcanic Products**
 - Volcanic Ash Enhancement - blue light absorption technique (MODIS) CIRA
 - Volcanic Ash Enhancement - Principle Component Imagery PCI (GOES) - CIRA
 - Volcanic ash retrieval products (AVHRR, GOES) - CIMSS
 - “Cirrus detection” (1.6 μ m) imagery (MODIS) - CIMSS