

Product Name	Product Type / Application	Description	GOES Legacy/Blended Satellite Missions	Sensors	GOES-16 Product Equivalent or Future Status	Format (Legacy)	Dissemination (Legacy)	Dissemination (GOES-16)	Resolution (Legacy)	Resolution (GOES-16)	Refresh (Legacy)	Refresh (GOES-16)	Product Area Lead
Aerosol Optical Depth(GASP)	Atmosphere > Aerosols	Product provides aerosol optical depth (AOD) using GOES visible channel imagery and utilizes a cloud screening algorithm. A look-up table is used to estimate the AOD using the difference in reflectance between current cloud free pixels and those of a 28 day clear sky composite image.	GOES-13, GOES-15	Imager	Suspended Matter/Aerosol Optical Depth and Aerosol Size Parameter	Binary	PDA	PDA	4km	2km	30 minutes	5/15 minutes	Liqun Ma (liqun.ma@noaa.gov)
Arctic Composite Imagery (GOES, POES)	Atmosphere > 4 km hourly Arctic POES/GOES composite imagery / AWIPS-COM	With the focus on Arctic data coverage, this composite imagery product is generated every one hour at the Visible, Infrared, Shortwave Infrared, Longwave Infrared, and the Water Vapor bands by using the following GOES and POES Imagers: GOES-13, GOES-15, Meteosat-7, MSG-10, Himawari-8, NOAA-18, NOAA-19, MetOp-A, MetOp-B, Aqua and Terra.	GOES-13, GOES-15, Himawari-8, Meteosat-7, Meteosat-10, NOAA-18, NOAA-19, MetOp-A, MetOp-B, Aqua and TERRA	AVHRR, MODIS, ABI, AHI, SEVIRI, and HRIT	Product will continue to be produced but may be degraded due to lack of GOES-16 input	netcdf, png and McIDAS	ADDE, DDS and PDA		4 km		Hourly		John Paquette (john.paquette@noaa.gov)
ASOS Categorical Cloud Amount (Imager)	Atmosphere > Clouds / IASOS	The GOES Satellite Cloud Product (SCP) is a text product that complements the National Weather Services (NWS) Automated Surface Observation System (ASOS). These text products, sometimes referred to as ASOS SCP, detect the cloud cover conditions over the ASOS stations, and list them by state. The product detects the cloud cover conditions at the middle (631-400 MB) and high (above 400 MB) layers of the atmosphere. The cloud cover product is categorized as OVC (overcast), BRK (broken), SCT (scattered), and CLR (clear). The product is generated using Imager data.	GOES-13, GOES-15	Imager	ASOS Cloud Product/Low Fog/Cloud Products from ABI	text	DDS/PDA	PDA	8 Km	4km	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
ASOS Categorical Cloud Amount (Sounder)	Atmosphere > Clouds / GINI	The GOES Satellite Cloud Product (SCP) is a text product that complements the National Weather Services (NWS) Automated Surface Observation System (ASOS). These text products, sometimes referred to as ASOS SCP, detect the cloud cover conditions over the ASOS stations, and list them by state. The product detects the cloud cover conditions at the middle (631-400 MB) and high (above 400 MB) layers of the atmosphere. The cloud cover product is categorized as OVC (overcast), BRK (broken), SCT (scattered), and CLR (clear). The product is generated using Sounder data.	GOES-13, GOES-15	Sounder	ASOS Cloud Product/Low Fog/Cloud Products from ABI	text	DDS/PDA	X	12 Km	X	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
ASOS Categorical Cloud Height (Imager)	Atmosphere > Clouds / IASOS	Cloud Height is the height of the clouds in thousands of feet (base - top). This product is generated using imager data.	GOES-13, GOES-15	Imager	ASOS Cloud Product/Low Fog/Cloud Products from ABI	text	DDS/PDA	PDA	8 Km	4 Km	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
ASOS Categorical Cloud Height (Sounder)	Atmosphere > Clouds	Cloud Height is the height of the clouds in thousands of feet (base - top). This product is generated using Sounder data.	GOES-13, GOES-15	Sounder	ASOS Cloud Product/Low Fog/Cloud Products from ABI	text	DDS/PDA	no	12 Km	X	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
ASOS Cloud Top Height (Imager)	Atmosphere > Clouds	The CLD TOP (cloud top) is the height of the clouds in thousands of feet (base - top). This product is generated using Imager data.	GOES-13, GOES-15	Imager	ASOS Cloud Product/Low Fog/Cloud Products from ABI	text	DDS/PDA	TBD	8 Km	4 Km	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
ASOS Cloud Top Height (Sounder)	Atmosphere > Clouds / SFOV SCP	The CLD TOP (cloud top) is the height of the clouds in thousands of feet (base - top). This product is generated using Sounder data.	GOES-13, GOES-15	Sounder	ASOS Cloud Product/Low Fog/Cloud Products from ABI	text	DDS/PDA	X	12 Km	X	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
ASOS Cloud Top Pressure (Imager)	Atmosphere > Clouds	Clouds Top Pressure is the .pressure at the top of the cloud layer. This product is generated using Imager data.	GOES-13, GOES-15	Imager	ASOS Cloud Product/Low Fog/Cloud Products from ABI	text	DDS/PDA	TBD	12 Km	4 Km	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
ASOS Cloud Top Pressure (Sounder)	Atmosphere > Clouds / SFOV SCP	Clouds Top Pressure is the .pressure at the top of the cloud layer. This product is generated using Sounder data.	GOES-13, GOES-15	Sounder	ASOS Cloud Product/Low Fog/Cloud Products from ABI	text	DDS/PDA	x	12 Km	x	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
ASOS Effective Cloud Amount (Imager)	Atmosphere > Clouds	The ECA (effective cloud amount) represents the percentage of cloud detected at that pressure level using Imager. The product is broken down into several regions Central US (CR), Eastern US (ER), Southern US (SR), and Western US (WR).	GOES-13, GOES-15	Imager	ASOS Cloud Product/Low Fog/Cloud Products from ABI	text	DDS/PDA	TBD	12 Km	4 Km	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
ASOS Effective Cloud Amount (Sounder)	Atmosphere > Clouds / SFOV SCP	The ECA (effective cloud amount) represents the percentage of cloud detected at that pressure level using Sounder. The product is broken down into several regions Central US (CR), Eastern US (ER), Southern US (SR), and Western US (WR).	GOES-13, GOES-15	Sounder	ASOS Cloud Product/Low Fog/Cloud Products from ABI	text	DDS/PDA	x	12 Km	x	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
Automated Biomass Burning Algorithm (ABBA)	Human Dimensions > Natural Hazards, Land > Fire and Smoke Events	Product developed by the biomass burning monitoring team at CIMSS using the GOES Imager to detect and monitor fires (wildfires, prescribed burns and agricultural burns).	GOES-13, GOES-15, METEOSAT-10	Imager, SEVIRI	Fire/Hot Spot Characterization	ASCII, Mcidas	PDA	PDA	Same as GOES-13/15	2km	Every 30 min	Every 5/15 Min	Liqun Ma (liqun.ma@noaa.gov)
AWIPS NH Composite	Atmosphere > geostationary composite imagery products	A northern hemisphere composite image consisting of GOES-East and GOES-West data coverage in visible, longwave, and water vapor spectral bands.	GOES-15, GOES-13	Imager	Product will continue to be produced with only GOES-15 data and may be degraded due to lack of GOES-16 input.	GINI/AWIPS	GINI, NCF/SBN	N/A	24km	N/A	30min	N/A	John Paquette (john.paquette@noaa.gov)
AWIPS Super National Composite	Atmosphere > geostationary composite imagery products	The Super National product provides less coverage, but higher spatial resolution than the NH Composite product. The product also consists of GOES-East and GOES-West data coverage in visible, longwave, and water vapor spectral bands.	GOES-15, GOES-13	Imager	Product will continue to be produced with only GOES-15 data and may be degraded due to lack of GOES-16 input.	GINI/AWIPS	GINI, NCF/SBN	N/A	8km	N/A	30min	N/A	John Paquette (john.paquette@noaa.gov)
Bleaching Area Alerts	Oceans > Ocean Temperature	Regional Statistics which indicate relative likelihood of coral bleaching based on prolonged thermal stress	GOES-13, GOES-15, METEOSAT-10, METOP-B, NPP, Himawari-8	AVHRR, VIIRS, GOES Imagers, SEVIRI, AHI	Product will continue to be produced but may be degraded due to lack of GOES-16 input						2/week		John Sapper (john.sapper@noaa.gov)
Blended Biomass Burning Emissions Product	Human Dimensions > Natural Hazards / GRBEP	The Blended Biomass Burning Emissions Product (BBEP) system is to produce daily biomass burning emissions (PM2.5, BC, CO, CO2, OC and SO2) released from wildfires using fire radiative power. It is the average of AOD-adjusted BBEP-Geo emissions and QFED/Quick Fire Emission Dataset) emissions.	AQUA, GOES-13, GOES-15, METOP-A, METOP-B, NOAA-18, NOAA-19, TERRA	AVHRR, Imager, MODIS	Product will continue to be produced but may be degraded due to lack of GOES-16 input	GRIB2, NetCDF4	DDS/PDA	PDA	0.25 degree	4km	Every 6 hours	Every 6 Hours	Hanjun Ding (hanjun.ding@noaa.gov)
Clear Sky Brightness Temperatures (Imager)	Instrument Products > Brightness Temperatures / CSBT NCEP	The Clear Sky Brightness Temperature (CSBT) is produced from GOES-East and GOES-West using a Imager data	GOES-13, GOES-15	Imager	Clear Sky Mask	BUFR, binary	DDS/PDA	TBD	8 Km	4 Km	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
Clear Sky Brightness Temperatures (Sounder)	Instrument Products > Brightness Temperatures CSBT NCEP	The Clear Sky Brightness Temperature (CSBT) is produced from GOES-East and GOES-West, which is output in BUFR format and distributed through NWS Telecommunications Gateway. It has 11x17 pixel resolution.	GOES-13, GOES-15	Imager	Product will continue to be produced until GOES-5 is operational, but may be degraded due to lack of GOES-16 input	GRIB2, NetCDF4	DDS/PDA	PDA	11x17 pixel	4km	Hourly	Hourly	Hanjun Ding (hanjun.ding@noaa.gov)

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Cloud Top Temperature (GOES)	Atmosphere > Clouds	Temperature at the top of the cloud layer derived from a sounder for GOES-East and GOES-West.	GOES-13, GOES-15	Sounder	Product will continue to be produced with only GOES-15 data.	BUFR, binary	DDS/PDA	x	12 Km	x	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
Convective Area Potential Energy (GOES)	Atmosphere > Atmospheric Temperature	Convective Area Potential Energy derived from a sounder data for GOES-East and GOES-West.	GOES-13, GOES-15	Sounder	Product will continue to be produced with only GOES-15 data.	BUFR, binary	DDS/PDA	x	12 Km	x	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
DPI Cloud Top Pressure	Atmosphere > Clouds / GINI	Derived Product Imagery for cloud top pressure using a sounder data for GOES-East and GOES-West.	GOES-13, GOES-15	Sounder	Product will continue to be produced with only GOES-15 data.	BUFR, binary	DDS/PDA	x	12 Km	x	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
DPI Lifted Index (Imager)	Atmosphere > Atmospheric Temperature	Derived Product Imagery for Lifted Index using a Imager data for GOES-East and GOES-West.	GOES-13, GOES-15	Imager	Derived Stability Indices	BUFR, binary	DDS/PDA	TBD	8 Km	4 Km	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
DPI Lifted Index (Sounder)	Atmosphere > Atmospheric Temperature	Derived Product Imagery for Lifted Index using a sounder data for GOES-East and GOES-West.	GOES-13, GOES-15	Sounder	Product will continue to be produced with only GOES-15 data.	BUFR, binary	DDS/PDA	x	12 Km	x	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
Effective Cloud Amount (GOES)	Atmosphere > Clouds /GINI	Effective Cloud Amount generated using sounder from GOES-East and GOES-West.	GOES-13, GOES-15	Sounder	Product will continue to be produced with only GOES-15 data.	BUFR, binary	DDS/PDA	x	12 Km	x	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
Ensemble Tropical Rainfall Potential (eTRaP)	Atmosphere > Precipitation	Provides quantitative precipitation forecast guidance (rainfall estimates) and probabilities of precipitation for active cyclones anywhere on the globe.	GOES-13, GOES-15, METEOSAT-10, Himawari-8, METOP-A, METOP-B, NOAA-18, NOAA-19, F18, F17, SNPP, GCOM, GPM	AMSU-B, Imager, MHS, SEVIRI, SSMIS, AMSR2, ATMS, GMI	Product will continue to be produced but may be degraded due to lack of GOES-16 input	ASCII, Mcidas	PDA	N/A	8km	N/A	Every hour	N/A	Liquan Ma (liquan.ma@noaa.gov)
Evaporative Stress Index(ESI)	Land>Evaporative Stress Index	Evaporative Stress Index(ESI) from GET-D	GOES-13, GOES-15	Imager	Product will continue to be produced with only GOES-15 data.	GRIB2, NetCDF4	DDS/PDA	PDA	8km	4km	Daily	Daily	Hanjun Ding (hanjun.ding@noaa.gov)
Evapotranspiration (ET)	Land>Evapotranspiration (ET)	Evapotranspiration (ET) from GET-D	GOES-13, GOES-15	Imager	Product will continue to be produced with only GOES-15 data.	GRIB2, NetCDF4	DDS/PDA	PDA	8km	4km	Daily	Daily	Hanjun Ding (hanjun.ding@noaa.gov)
Fire and Smoke Analysis (HMS)	Human Dimensions > Natural Hazards /HMS	Global Mapping System - Data Pre-processing and Graphical User Interface for fire spots analysis	AQUA, GOES-13, GOES-15, METOP-A, METOP-B, NOAA-18, NOAA-19, TERRA	AVHRR, Imager, MODIS	GOES-16 Fire/Hot Spot Characterization will be the input to the HMS	txt kml shape jpeg	PDA	PDA	4km	2km	Daily	Daily	Zhaohui Cheng (zhaohui.cheng@noaa.gov)
Geo SST GOES E-W Merged 3-hourly gridded	Oceans > Ocean Temperature	Gridded 3-hourly sea surface temperature from GOES East and West merged together	GOES-13, GOES-15	Imager	Product will be discontinued	binary	DDS / PDA		~6km		every 3 hours		John Sapper (john.sapper@noaa.gov)
Geo SST GOES E-W Merged daily gridded	Oceans > Ocean Temperature	Gridded daily sea surface temperature from GOES East and West merged together	GOES-13, GOES-15	Imager	Product will be discontinued	binary	DDS / PDA		~6km		daily		John Sapper (john.sapper@noaa.gov)
Geo SST GOES E-W Merged hourly gridded	Oceans > Ocean Temperature	Gridded hourly sea surface temperature from GOES East and West merged together	GOES-13, GOES-15	Imager	Product will be discontinued	binary	DDS / PDA		~6km		hourly		John Sapper (john.sapper@noaa.gov)
Geo-Polar Blended Global 5km Nighttime-only SST Analysis	Oceans > Ocean Temperature / Blended SST	Gap-filled sea surface temperature analysis generated using a multi-scale optimum interpolation with inputs from numerous geostationary and polar orbiting satellites using only nighttime data.	GOES-13, GOES-15, METEOSAT-10, METOP-B, NPP, Himawari-8	AVHRR, VIIRS, GOES imagers, SEVIRI, AHI	Night-only blended SST		PDA		5km		Daily		John Sapper (john.sapper@noaa.gov)
Geo-Polar Blended Global 5km SST Analysis	Oceans > Ocean Temperature / Blended SST	Gap-filled sea surface temperature analysis generated using a multi-scale optimum interpolation with inputs from numerous geostationary and polar orbiting satellites.	GOES-13, GOES-15, METEOSAT-10, METOP-B, NPP, Himawari-8	AVHRR, VIIRS, GOES imagers, SEVIRI, AHI	Blended SST		DDS / PDA		5km		Daily		John Sapper (john.sapper@noaa.gov)
Global Mosaic of Geostationary Satellite Imagery (GMIS)	Atmosphere > geostationary composite imagery products	A global composite image consisting of primary international geostationary satellite data coverage from 60N to 60S in visible, shortwave and longwave spectral bands.	GOES-15, GOES-13, Meteosat-10, Meteosat-8, and Himawari-8	Imager	Product will continue with GOES-16 data (reduced resolution) to replace GOES-13.	NetCDF4, McIDAS	DDS, PDA, GEODIST		8km	8km	3 hours	3 hours	John Paquette (john.paquette@noaa.gov)
GOES GIS Imagery	Atmosphere > Imagery / GIS-PRODS	GOES channel 2, 3, 4, 6, and visible Imagery in Geotif format	GOES-13, GOES-15	Imager	Product will continue to be produced with only GOES-15 data.	Geotif	DDS/PDA	N/A	4km	Unknown	30 Min	30 Minutes	Hongming Qi (hongming.qi@noaa.gov)
GOES Histogram	Atmosphere > Precipitation	The GOES Precipitation Histograms Program generates 24-bin histograms of 10.7 micron (GOES Channel 4 IR) equilibrium black body brightness temperature (EBBT) for each 1 degree x 1 degree box in a region extending from 50 degrees north to 50 degrees south of the equator and from 50 degrees west to 50 degrees east of the nominal subsatellite point. The program also generates the temperature mean and variance for each box. GOES-East and GOES-West versions of the program are run once every 3 hours. Each version generates 10,000 histograms.	GOES-13, GOES-15	Imager	Product will continue to be produced with only GOES-15 data. Histogram will discontinue when GOES-15 is decommissioned.	Binary	PDA	N/A	1 degree	N/A	Twice/each day	N/A	Liquan Ma (liquan.ma@noaa.gov)
GOES SST CoastWatch	Oceans > Ocean Temperature	3-hourly gridded sea surface temperature from GOES cut out for CoastWatch Regions	GOES-13, GOES-15	Imager	Product will continue to be produced with only GOES-15 data.	binary	DDS / PDA		~6km		every 3 hours		John Sapper (john.sapper@noaa.gov)
GOES-Based Multi-Platform Tropical Cyclone Surface Wind	Atmosphere > Atmospheric Phenomena / TCFP	MTCSCWA product is the estimation of the surface wind field around active tropical cyclones	GOES-13, GOES-15, METEOSAT-10, Himawari-8, METOP-A, NOAA-18, NOAA-19, AQUA	AMSU-B, Imager, MHS, SEVIRI, AHI, ASCAT, MODIS	MTCSCWA (will continue with GOES-16 data)	ASCII/binary	PDA	N/A	10km	N/A	Every two hours	Planned Every two hours	Liquan Ma (liquan.ma@noaa.gov)
GSIP Photosynthetically Active Radiation Extended Hemisphere	Atmosphere > Atmospheric Radiation / GSIP-FD	GSIP Photosynthetically Active Radiation (PAR) for Extended Hemisphere	GOES-13, GOES-15	Imager	Product will continue to be produced with only GOES-15 data.	GRIB2, NetCDF4	DDS/PDA	PDA	14km	4km	Hourly	Hourly	Hanjun Ding (hanjun.ding@noaa.gov)
GSIP Photosynthetically Active Radiation Full Disk	Atmosphere > Atmospheric Radiation / GSIP-FD	GSIP Photosynthetically Active Radiation (PAR) for Full Disk	GOES-13, GOES-15	Imager	Product will continue to be produced with only GOES-15 data.	GRIB2, NetCDF4	DDS/PDA	PDA	14km	4km	Every 3 hours	Every 3 Hours	Hanjun Ding (hanjun.ding@noaa.gov)
GSIP Shortwave Downward Surface Radiative Flux Extended Hemisphere	Atmosphere > Atmospheric Radiation / GSIP-FD	GSIP Shortwave Downward Surface Radiative Flux (Insolation) for Extended Hemisphere	GOES-13, GOES-15	Imager	Product will continue to be produced with only GOES-15 data.	GRIB2, NetCDF4	DDS/PDA	PDA	14km	4km	Hourly	Hourly	Hanjun Ding (hanjun.ding@noaa.gov)
GSIP Shortwave Downward Surface Radiative Flux Full Disk	Atmosphere > Atmospheric Radiation / GSIP-FD	GSIP Shortwave Downward Surface Radiative Flux (Insolation) for Full Disk	GOES-13, GOES-15	Imager	Product will continue to be produced with only GOES-15 data.	GRIB2, NetCDF4	DDS/PDA	PDA	14km	4km	Every 3 hours	Every 3 Hours	Hanjun Ding (hanjun.ding@noaa.gov)

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High Density IR Cloud Drift Winds (GOES)	Atmosphere > Atmospheric Winds / CSBT NCEP	Incorporate GOES IR Channel Imagery and NCEP forecast model data to generate remotely sensed cloud motion vectors	GOES-13, GOES-15	Imager	Derived Motion Winds (Band 14)	McIDAS MD, BUFR	DDS/PDA	PDA			1 hour	Every 1 Hour Full Disk	Hongming Qi (hongming.qi@noaa.gov)
High Density Shortwave IR Winds (GOES)	Atmosphere > Atmospheric Winds / GMSI	Incorporate GOES Shortwave IR channel Imagery and NCEP forecast model data to generate remotely sensed cloud motion vectors	GOES-13, GOES-15	Imager	Derived Motion Winds (Band 7)	McIDAS MD, BUFR	DDS/PDA	PDA			1 Hour	Every 1 Hour Full Disk	Hongming Qi (hongming.qi@noaa.gov)
High Density Visible Winds (GOES)	Atmosphere > Atmospheric Winds / GOES-SW-WINDS	Incorporate GOES Visible channel Imagery and NCEP forecast model data to generate remotely sensed cloud motion vectors	GOES-13, GOES-15	Imager	Derived Motion Winds (Band 2)	McIDAS MD, BUFR	DDS/PDA	PDA			1 Hour	Every 1 Hour Full Disk	Hongming Qi (hongming.qi@noaa.gov)
High Density Water Vapor Winds (GOES)	Atmosphere > Atmospheric Winds / GOES-WV-WINDS	Incorporate GOES Watervapor channel Imagery and NCEP forecast model data to generate remotely sensed watervapor motion vectors	GOES-13, GOES-15	Imager	Derived Motion Winds (Band 8, 9, 10)	McIDAS MD, BUFR	DDS	PDA			1 Hour	Every 1 Hour	Hongming Qi (hongming.qi@noaa.gov)
High Density Water Vapor Winds (Sounder Ch. 10)	Atmosphere > Atmospheric Winds / GOES-S10-WINDS	Incorporate GOES Sounder watervapor channel Imagery and NCEP forecast model data to generate remotely sensed cloud motion vectors	GOES-15	Sounder	Will be produced from GOES-15 only.	McIDAS MD, BUFR	DDS/PDA						Hongming Qi (hongming.qi@noaa.gov)
High Density Water Vapor Winds (Sounder Ch. 11)	Atmosphere > Atmospheric Winds / GOES-S11-WINDS	Incorporate GOES Sounder watervapor channel Imagery and NCEP forecast model data to generate remotely sensed cloud motion vectors	GOES-15	Sounder	Will be produced from GOES-15 only.	McIDAS MD, BUFR	DDS/PDA						Hongming Qi (hongming.qi@noaa.gov)
Imagery GOES Infrared (GSS)	Spectral/Engineering > Infrared Wavelengths	GOES imagery on the web.	GOES-13, GOES-15	Imager	Product will continue to be produced with only GOES-15 data and may be degraded due to lack of GOES-16 input.							30 Min-3 Hours	Nancy Merckle (nancy.merckle@noaa.gov)
Imagery GOES Visible (GSS)	Spectral/Engineering > Visible Wavelengths	GOES imagery on the web.	GOES-13, GOES-15	Imager	Product will continue to be produced with only GOES-15 data and may be degraded due to lack of GOES-16 input.							30 Min-3 Hours	Nancy Merckle (nancy.merckle@noaa.gov)
Imagery GOES Water Vapor (GSS)	Atmosphere > Atmospheric Water Vapor	GOES imagery on the web.	GOES-13, GOES-15	Imager	Product will continue to be produced with only GOES-15 data and may be degraded due to lack of GOES-16 input.							30 Min-3 Hours	Nancy Merckle (nancy.merckle@noaa.gov)
Layer Precipitable Water (MSPS)	Atmosphere > Atmospheric Water Vapor / GINI	Layer Precipitable Water at the layer derived by GOES-East and GOES-West sounder data.	GOES-13, GOES-15	Sounder	Product will continue to be produced with only GOES-15 data.	Png	DDS/PDA	PDA	12 Km	X	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
Low Cloud Base Regional Imagery	Atmosphere > Atmospheric Phenomena / GINI	GOES Fog and Low Stratus uses multiple sources of data to determine the probability that Instrument Flight Rules (IFR) conditions are present. The coverage is CONUS nd OCONUS.	GOES-13, GOES-15	Imager	Fog and Low Stratus	GRIB2, NetCDF	DDS/PDA	PDA	4km	4km	Hourly	Hourly	Hanjun Ding (hanjun.ding@noaa.gov)
Mixing Condensation Level (GOES)	Atmosphere > Stability		GOES-13, GOES-15	Sounder	Product will continue to be produced with only GOES-15 data.							Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
Normalized CAPE (GOES)	Atmosphere > Atmospheric Temperature		GOES-13, GOES-15	Sounder	Product will continue to be produced with only GOES-15 data.							Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
North Atlantic Composite (NAC)	Atmosphere > geostationary composite imagery products	Providing Atlantic coverage, product consists of GOES-East and Meteosat Prime (0 degree) data in the thermal window longwave band only.	GOES-13, Meteosat-10	Imager	Product will continue to be produced with only Meteosat-10 data.	McIDAS	GEODIST	x	8km	x	Hourly	x	John Paquette (john.paquette@noaa.gov)
Parcel Dewpoint Temperature (GOES)	Atmosphere > Atmospheric Temperature	Dewpoint temperature of the parcel of the atmosphere layer derived by the GOES-East and GOES-West sounders.	GOES-13, GOES-15	Sounder	Product will continue to be produced with only GOES-15 data.	BUFR, binary	DDS/PDA	x	12 Km	x	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
Rainfall Estimate (GHE)	Atmosphere > Precipitation	Unified global Rainfall Estimate map over different time period from multi-satellites/sensors with the Hydro-Estimator algorithm	GOES-13, GOES-15, Himawari, METEOSAT-10, Metosat-8	Imager	Product will continue with GOES-16 data (reduced resolution) replacing GOES-13.	GRIB2, NetCDF4, McIDAS Area	PDA, McIDAS ADDE, AWIPS		4km	4km	1-hour, 3-hour, 6-hour, 24-hours, 2-days, 3-days, 5-days, 7-days	1-hour, 3-hour, 6-hour, 24-hours, 2-days, 3-days, 5-days, 7-days	Limin Zhao (limin.zhao@noaa.gov)
Rainfall Rate (GHE)	Atmosphere > Precipitation	Unified global Rain Rate map from multi-satellites/sensor with the Hydro-Estimator algorithm	GOES-13, GOES-15, Himawari, METEOSAT-10, Metosat-8	Imager	Product will continue with GOES-16 data (reduced resolution) replacing GOES-13.	GRIB2	PDA, McIDAS ADDE, AWIPS		4km	4km	15 mins	15 mins	Limin Zhao (limin.zhao@noaa.gov)
Sea Surface Temperature Full Disk 24-Hr Avg (GOES) / Geo SST	Oceans > Ocean Temperature	Sea Surface Temperature derived from thermal channels of the GOES imagers at every satellite field-of-view averaged over 24 full-disk scenes.	GOES-13, GOES-15	Imager	Product will continue to be produced with only GOES-15 data.	binary	DDS / PDA		~6km		Daily		John Sapper (john.sapper@noaa.gov)
Sea Surface Temperature Full Disk 3-Hr Avg (GOES) / Geo SST	Oceans > Ocean Temperature	Sea Surface Temperature derived from thermal channels of the GOES imagers at every satellite field-of-view averaged over 3 full-disk scenes.	GOES-13, GOES-15	Imager	Product will continue to be produced with only GOES-15 data.	binary	DDS / PDA		~6km		Every 3 hours		John Sapper (john.sapper@noaa.gov)
Sea Surface Temperature Hourly (GOES) / Geo SST	Oceans > Ocean Temperature	Sea Surface Temperature derived from thermal channels of the GOES imagers using northern and southern hemisphere imagery and averaged over an hour.	GOES-13, GOES-15	Imager	Sea Surface Temperature Hourly Composite	binary	DDS / PDA	PDA	~6km	2km	Hourly		John Sapper (john.sapper@noaa.gov)
Showalter Index (GOES)	Atmosphere > Atmospheric Temperature	Showalter Index is a parcel-based index, calculated in the same manner as the Lifted Index, using a parcel at 850mb.	GOES-13, GOES-15	Sounder	(ABI) Derived Stability Indices	BUFR, binary	DDS/PDA	x	12 Km	x	Hourly		Awdhesh Sharma (awdhesh.sharma@noaa.gov)
Smoke Aerosol Optical Depth (ASDTA Smoke)	Atmosphere > Aerosols	Generated to provide observational support for verification of NOAA / NWS HYSPLIT smoke (PM2.5) forecasts. ASDTA uses a source apportionment technique by fusing GOES observations of fire hot spots and GASP-East AOD maps at a 30-minute interval. GASP AOD is not retrieved where clouds are present.	GOES-13, GOES-15	Imager	Aerosol Detection Product	Binary/GRIB/GIF	PDA	PDA	4km	2km	daily	15 minutes	Liquan Ma (liquan.ma@noaa.gov)
Smoke Concentration(ASDTA Smoke)	Atmosphere > Aerosols / ASDTA Smoke-East	Generated to provide observational support for verification of NOAA / NWS HYSPLIT smoke (PM2.5) forecasts. ASDTA uses a source apportionment technique by fusing GOES observations of fire hot spots and GASP-East AOD maps at a 30-minute interval. GASP AOD is not retrieved where clouds are present.	GOES-13, GOES-15	Imager	Fire/Smoke Detection								Liquan Ma (liquan.ma@noaa.gov)
SST Anomalies	Oceans > Ocean Temperature / Geo SST	Sea Surface Temperature variance from a global SST climatology	Metop-B, NPP, GOES-13, GOES-15, Meteosat-10, Himawari-8	AVHRR, VIIRS, GOES Imagers, SEVIRI, AHI	Product will continue to be produced with GOES-16 data once GOES-16 SST product has reached operational status.						2/week (soon to be daily)		John Sapper (john.sapper@noaa.gov)

Product Name	Product Type / Application	Description	GOES Legacy/Blended Satellite Missions	Sensors	GOES-16 Product Equivalent or Future Status	Format (Legacy)	Dissemination (Legacy)	Dissemination (GOES-16)	Resolution (Legacy)	Resolution (GOES-16)	Refresh (Legacy)	Refresh (GOES-16)	Product Area Lead
SST Degree Heating Weeks	Oceans > Ocean Temperature / Blended SST	Summation of SST anomalies over a given number of weeks (currently 12) used to gauge persistence of anomalous temperatures.	GOES-13, GOES-15, METEOSAT-10, METOP-B, NPP, Himawari-8	AVHRR, VIIRS, GOES Imagers, SEVIRI, AHI	Product will continue to be produced with GOES-16 data once GOES-16 SST product has reached operational status.						2/week		John Sapper (john.sapper@noaa.gov)
SST Frontal Product (GOES)	Oceans > Ocean Temperature / Blended SST	Binary yes/no and magnitude of sea surface temperature fronts.	GOES-13, GOES-15	Imager	Product will continue to be produced with only GOES-15 data and may be degraded due to lack of GOES-16 input.	binary	DDS / PDA		~6km		Daily		John Sapper (john.sapper@noaa.gov)
SST L2P (GOES)	Oceans > Ocean Temperature / Geo SST	Sea Surface Temperature derived from the thermal channels of the GOES imagers computed at the native instrument resolution		Imager	Product will continue to be produced by STAR as ACSP0 GHRSS2 L2P and available on PDA and on STAR's CoastWatch ftp server.	NetCDF4 GHRSS2	DDS / PDA		~4km at nadir or native sensor resolution		Every Half Hour		John Sapper (john.sapper@noaa.gov)
SST Matchup Database	Oceans > Ocean Temperature	Sea surface temperature from GOES matched with buoy temperatures and other pertinent parameters used for validation.	GOES-13, GOES-15	Imager	Product will continue to be produced with only GOES-15 data and may be degraded due to lack of GOES-16 input.	binary	DDS / PDA		n/a		Half Hourly		John Sapper (john.sapper@noaa.gov)
Surface Skin Temperature (Imager)	Land > Land Surface Temperature	Skin temperature of the sea surface derived from an Imager	GOES-13, GOES-15	Imager	Land Surface Temperature	BUFR, binary	DDS/PDA	TBD	12 Km	4 Km	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
Surface Skin Temperature (Sounder)	Land > Land Surface Temperature / GINI	Skin temperature of the sea surface derived from a sounder	GOES-13, GOES-15	Sounder	(ABI) Land Surface Temperature	BUFR, binary	DDS/PDA	x	12 Km	x	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
Total Precipitable Water (Blended)	Atmosphere > Atmospheric Water Vapor	Unified global TPW map from multi-satellites/sensors	DMSP F17, DMSP F18, GOES-13, GOES-15, GPS-Met, METOP-A, METOP-B, NOAA-15, NOAA-18, NOAA-19, S-NPP, GCOM, GPM	AMSU, ATMS, MHS, SSMIS, GOES Sounder, GPS, AMSR2, GMI	Product will continue to be produced with only GOES-15 data and may be degraded due to lack of GOES-16 input.	HDF-EOS, McIDAS	PDA, McIDAS ADDE, AWIPS	x	16km	x	hourly	x	Limin Zhao (limin.zhao@noaa.gov)
Total Precipitable Water (Imager)	Atmosphere > Atmospheric Water Vapor / GVAR Data	Total precipitable water is the integrated precipitable water of a column in the atmosphere by an Imager instrument which can also be measured as water vapor mixing ratio and is defined as the number of grams of water per kilogram of air (g/kg).	GOES-13, GOES-15	Imager	Total Precipitable Water	BUFR, binary	DDS/PDA	TBD	8 Km	4 Km	Hourly	15, 30, 60 min	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
Total Precipitable Water (MSFS)	Atmosphere > Atmospheric Water Vapor		GOES-13, GOES-15	Sounder	(ABI) Total Precipitable Water							Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
Total Precipitable Water Anomaly (Blended)	Atmosphere > Atmospheric Water Vapor	The percentage of TPW normal of the unified global TPW map from TPW climatology	DMSP F17, DMSP F18, GOES-13, GOES-15, GPS-Met, METOP-A, METOP-B, NOAA-15, NOAA-18, NOAA-19, S-NPP, GCOM, GPM	AMSU, ATMS, MHS, SSMIS, GOES Sounder, GPS, AMSR2, GMI	Product will continue to be produced with only GOES-15 data and may be degraded due to lack of GOES-16 input.	HDF-EOS, McIDAS	PDA, McIDAS ADDE, AWIPS	x	16km	x	hourly	x	Limin Zhao (limin.zhao@noaa.gov)
Tropical Cyclone Formation Probability	Atmosphere > Atmospheric Phenomena	Estimate of the probability of tropical cyclone formation within the next 24 and 48 hours in 5 by 5 degree latitude/longitude areas.	GOES-13, GOES-15, METEOSAT-7, Himawari-8	Imager, MVIRI, AHI	Product will continue to be produced with only GOES-15 data and may be degraded due to lack of GOES-16 input.	GIF	GPS	N/A	500km	N/A	Every 2 hours	N/A	Liqun Ma (liqun.ma@noaa.gov)
Tropical Storm Classifier Advanced Dvorak Technique	Atmosphere > Atmospheric Phenomena	Product provides an automated, objectively-derived estimate of the tropical cyclone location and intensity using the latest official forecast bulletins from the Joint Typhoon Warning Center (JTWC) and from Regional Specialized Meteorological Centers (RSMC), such as the National Hurricane Center (NHC) and the Central Pacific Hurricane Center (CPHC).	GOES-13, GOES-15, METEOSAT-10, Himawari-8, F-15, F-17, F-18, GCOM, GMI	Imager, SEVIRI, SSMI, SSMIS, AMSR2, GMI	Hurricane Intensity Estimation	ASCII	PDA	PDA	4km	2km	every 30 minute	Every 15 Minutes	Liqun Ma (liqun.ma@noaa.gov)
Vertical Moisture Profiles-Dewpoint (GOES)	Atmosphere > Atmospheric Water Vapor /GINI	Vertical water vapor mixing ratio for the atmospheric specific layers derived from the GOES-East and the GOES-West sounders.	GOES-13, GOES-15	Sounder	Legacy Vertical Moisture Profiles	BUFR, binary	DDS/PDA	x	12 Km	x	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
Vertical Temperature Profiles (GOES)	Atmosphere > Atmospheric Temperature	Vertical temperature at the specific levels of the atmosphere derived from the GOES-East and the GOES-West sounders.	GOES-13, GOES-15	Sounder	Legacy Vertical Temperature Profiles	BUFR, binary	DDS/PDA	x	12 Km	x	Hourly	Hourly	Awdhesh Sharma (awdhesh.sharma@noaa.gov)
Volcanic Ash Imagery	Solid Earth > Volcanoes / Volcanic Ash	Volcano ash products for Volcano detection and tracking	GOES-13	Imager	Volcanic Ash Detection and Height	McIDAS	satcpsdist						Hongming Qi (hongming.qi@noaa.gov)
Volcanic Hazard Alerts	Solid Earth > Volcanoes / Volcanic Ash		GOES-13, GOES-15, METEOSAT-7, METEOSAT-8, METEOSAT-9, METEOSAT-10	Imager, MVIRI, SEVIRI	Product will continue to be produced with only GOES-15 data and may be degraded due to lack of GOES-16 input.							Every 6 Hours	Davida Street (davida.street@noaa.gov)
Volcanic Hazard Watch	Solid Earth > Volcanoes / Volcanic Ash		GOES-13, GOES-15, METEOSAT-7, METEOSAT-8, METEOSAT-9, METEOSAT-10	Imager, MVIRI, SEVIRI	Product will continue to be produced with only GOES-15 data and may be degraded due to lack of GOES-16 input.							Every 24 Hours	Davida Street (davida.street@noaa.gov)
Volcanic Multi-Spectral	Solid Earth > Volcanoes / vol-Multi-Spectral	Volcano CIRA and Ellrot products for detecting and tracking the volcanoes	GOES-13, GOES-15, Himawari-8	Imager, AHI	Product will continue to be produced with only GOES-15 data and may be degraded due to lack of GOES-16 input.	McIDAS	satcpsdist						Hongming Qi (hongming.qi@noaa.gov)
Volcanic PCI	Solid Earth > Volcanoes Volcano-PCI	Volcano PCI products for detecting and tracking the volcanoes	GOES-13, GOES-15, Himawari-8	Imager, AHI	Product will continue to be produced with only GOES-15 data and may be degraded due to lack of GOES-16 input.	McIDAS	satcpsdist						Hongming Qi (hongming.qi@noaa.gov)