



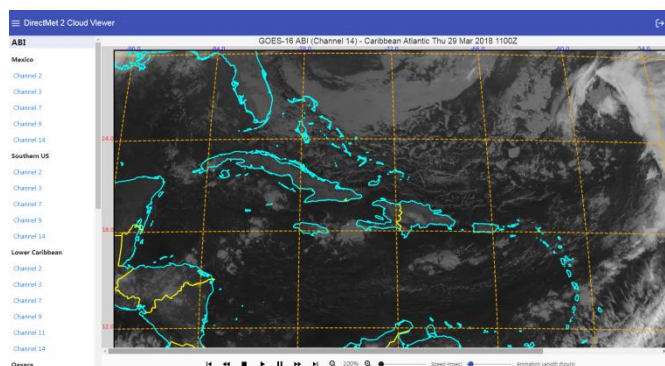
DirectMet[®]2 and DirectMet[®] Cloud

LOW COST, CUSTOMIZED DELIVERY OF GOES-16 SATELLITE DATA FOR YOUR OPERATIONS

Global Science & Technology (GST) delivers customized solutions of Geostationary Operational Environmental Satellite (GOES)-16 satellite data into workplace operations. DirectMet2 is GST's satellite processing system for GOES Rebroadcast (GRB) raw data. Even if you do not have a ground station, you can benefit from GOES-16 imagery, lightning, and derived products delivered by GST with our DirectMet Cloud service. All solutions are affordable and scalable. You can start with imagery and products from DirectMet Cloud, then add components that work your way up to a full DirectMet2 production system, with or without a ground station. The following descriptions are different configurations with DirectMet2 and DirectMet Cloud.

DirectMet Cloud Delivery of Imagery

This configuration fills the need for agencies that need access to imagery that can be customized for geographic areas that satisfy their operational needs. GST provides finished imagery products (PNG files) directly from our DirectMet Cloud service. The baseline service is 5 channels of Advanced Baseline Imager (ABI) and Global Lightning Mapper (GLM), produced every 15 minutes on two projections. You select which 5 ABI channels and projections best suit your operations. The finished products are delivered for internal use, including distribution to your webpages and social media. You can scale up the baseline delivery of channels and projections, if more are needed, because the DirectMet Cloud service is flexible to your operational needs. As part of this service, GST provides you access to the DirectMet Cloud Viewer, where you can display and animate the imagery on your office PCs (unlimited access).



DirectMet Cloud Viewer

GST will be pleased to set up a demonstration account of the DirectMet Cloud Viewer so you can experience the value of GOES 16 imagery tailored for your geographic area of interest and operations!

DirectMet2 with NetCDF Data Delivery from DirectMet Cloud

If you want in-house production without the cost of a ground station, this selection is for you: a single DirectMet2 workstation to process GRB data that is delivered in NetCDF format to your office via DirectMet Cloud. The NetCDF file is for a portion of the full disk that covers your operational area of interest. With this selection, you have full processing, production and dissemination of imagery **from all 16 channels** of the ABI data in the NetCDF file. You can combine channels for the Blue Marble and make certain Level 2 products that rely on combination of data from many of the ABI channels. The NetCDF file also contains GLM data. There are no limits to the number of geographic projections you define for your imagery within your area of interest. The DirectMet2 system includes an Analysis display that loops the imagery, puts overlays on it, and applies color enhancement curves. You control can quickly change enhancement curves and do comparative analyses. You will have the full benefit of a DirectMet2 workstation, but without the cost or physical space needed for satellite reception equipment.



DirectMet2 Analysis



DirectMet2 with GRB Ground Station

This configuration is for a DirectMet2 processing system that includes a full ground station (satellite dish, downconverter, struts, mounts, and demodulator). With a ground station, you have all 16 channels of ABI for the full disk *and* the lowest data handling time latency because the GRB data streams directly from the GOES 16 satellite to your dish. GLM data is included in the GRB broadcast. There are no limitations on the number of projections you create or where they are geographically on the full disk. The DirectMet2 GRB configuration has an *Ingest* workstation that hooks up directly to the demodulator and includes Ingest, Production, Storage, and Dissemination microservices. There is a separate Analysis workstation in the operational work area for the visualization and analytical functions. An optional workstation can be added for a dedicated Level 2+ production



4.5m dish GRB ground station

platform.

DirectMet2 with GNC-A Ground Station

This configuration is a single DirectMet2 workstation interfaced with a GEONETCast-Americas (GNC-A) satellite ground station for the back-end delivery of GOES-16 data. The content and frequency of the GOES-16 data on the broadcast is via the GNC-A specification, and *only operates with the ABI channels furnished by GNC-A*. The DirectMet2 workstation can be directly connected to the GNC-A demodulator, or act standalone with an existing GNC-A file system. The DirectMet2 workstation operates on the NetCDF files received from GNC-A. There are no limitations on the number of projections you create or where they are geographically on the GNC-A data. DirectMet2 can be delivered on one or two workstations, depending on whether or not there is need for a dedicated Analysis workstation in the work area.

Summary Comparison

Back End	Highlights
Cloud delivery of imagery	<ul style="list-style-type: none"> • Lowest cost delivery of imagery into operations • 5-16 channels ABI/GLM PNG files (you choose the channels!) • DirectMet Cloud Viewer access for visualization, including animation
Cloud delivery of GRB data	<ul style="list-style-type: none"> • Low cost delivery of actual GRB data into operations • All 16 channels ABI/GLM for your area of operation • No ground station equipment necessary • DirectMet2 Analysis and production for operations
Full GRB ground station	<ul style="list-style-type: none"> • All 16 channels ABI/GLM on full disk • DirectMet2 Analysis and production for operations • Optional Level 2+ production platform • Lowest latency (GRB transmission rate)
GNCA ground station	<ul style="list-style-type: none"> • 7 channels ABI per GNC-A specification • DirectMet2 Analysis and production for operations • Latency is per GNC-A transmission of GRB data

For additional information and pricing, please contact:

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