

GEONETCast



GEONETCast is a global network of satellite-based data dissemination systems providing environmental data to a world-wide user community. The current partners within the GEONETCast initiative include the China Meteorological Administration (CMA), the National Oceanic and Atmospheric Administration (NOAA), the World Meteorological Organization (WMO) and EUMETSAT, as well as many prospective data provider partners.

Aim of GEONETCast

GEONETCast is a milestone in the emerging Global Earth Observation System of Systems (GEOSS) that is being coordinated by the intergovernmental [Group on Earth Observations \(GEO\)](#), and is designed to put a vast range of essential environmental data at the fingertips of users around the globe. This user-driven, user-friendly and low-cost information dissemination service aims to provide global information as a basis for sound decision-making in a number of critical areas, including public health, energy, agriculture, weather, water, climate, natural disasters and ecosystems. Accessing and sharing such a range of vital data will yield societal benefits through improved human health and well-being; environment management, and economic growth.

Within the existing framework, GEONETCast is already partially realising this goal with environmental data exchange and data delivery available in Europe, Africa and the Americas. An additional data exchange is now being established covering the Asia Pacific region.

The following products and services are being made available to the GEONETCast user community:

- Meteosat image data
- GOES East and West image data
- FY-2 image data
- Land and Ocean Sea Ice Satellite Application Facility (SAF) products
- EUMETSAT meteorological products
- NOAA-NESDIS meteorological products
- NOAA-NESDIS Ocean colour and sea surface temperature products
- VEGETATION products from VITO
- MODIS Ocean colour products
- In-situ and observational data

GEONETCast Infrastructure

The conceptual idea of a global GEONETCast implementation is that several regional centres take on the responsibilities for establishing a satellite-based regional dissemination system — based upon Digital Video Broadcast (DVB) technology — and provide complementary services to a common user community.

GEONETCast Broadcast Streams

- › [EUMETCast](#) EUMETCast is the EUMETSAT contribution to GEONETCast with coverage over Europe, Africa and the Americas. Established in 2004, EUMETCast has more than 2,000 registered reception stations with more than 1,600 users benefiting from the environmental data it provides.
- › [CMACast](#) CMACast is the China Meteorological Administration's contribution to GEONETCast. CMACast utilises the AsiaSat 4 satellite beam to broadcast data and products to a user community in the Asia Pacific region.
- › [GEONETCast-Americas](#) Broadcast covering the Americas, managed by NOAA.

Key GEONETCast Satellite Data Providers

EUMETSAT Meteosat (every 15 minutes) and MetOp (per local satellite pass) satellite data

NOAA GOES and POES satellite data and NOAA-NESDIS products (atmospheric and marine)

CMA FY-1/2 satellite data

JMA MT-SAT satellite data

Key GEONETCast Product Data Providers

EUMETSAT

› [Meteorological products](#) for atmospheric, land and marine applications

EUMETSAT Satellite Application Facilities (SAFs)

› [Meteorological products](#) for atmospheric, land and marine applications

VITO

Various products derived from SPOT-Vegetation for land applications.

NOAA

› [NOAA-NESDIS products](#) for atmospheric applications

ECMWF/Met Office, Deutscher Wetterdienst, Météo-France

Observational and forecast products for atmospheric, marine and land applications

For a full list of services available on GEONETCast, consult the GEONETCast Product Guide.

User Registration

Users interested in receiving products and services delivered via GEONETCast should register with GEONETCast network provider covering their geographical location. Users should register on the › [EO Portal](#) for services provided by EUMETCast (EUMETCast-Europe, EUMETCast-Africa, EUMETCast-America). To register for FengYunCast reception, please contact the › [Chinese Meteorological Administration](#).

GEONETCast Feedback

GEONETCast partners welcome feedback from data providers interested in using the GEONETCast framework to disseminate their products and services to their user community. In addition, users of these services are welcome to provide their feedback on the types of services they would like to receive via the GEONETCast network. To do so, use the › [GEONETCast Feedback Form \(PDF, 73.4 KB\)](#).

Further Reading

- [GEONETCast Feedback Form \(PDF, 73.4 KB\)](#)
- [GEONETCast Implementation Plan \(PDF, 204 KB\)](#)
- [GEONETCast Global Design Document \(PDF, 367 KB\)](#)
- [TIFengYunCast Presentation \(PDF, 218 KB\)](#)
- [GEONETCast Americas \(NOAA\) \(PDF, 807 KB\)](#)
- [WMO GEONETCast Contribution \(PDF, 144 KB\)](#)
- [GEONETCast — GEO Capacity Building Task \(PDF, 52.7 KB\)](#)