



The First FENGYUN Satellite User Forum
15-17 November 2019, Haikou, Hainan Province, China



State space monitoring system of Roshydromet: current opportunities and development prospects

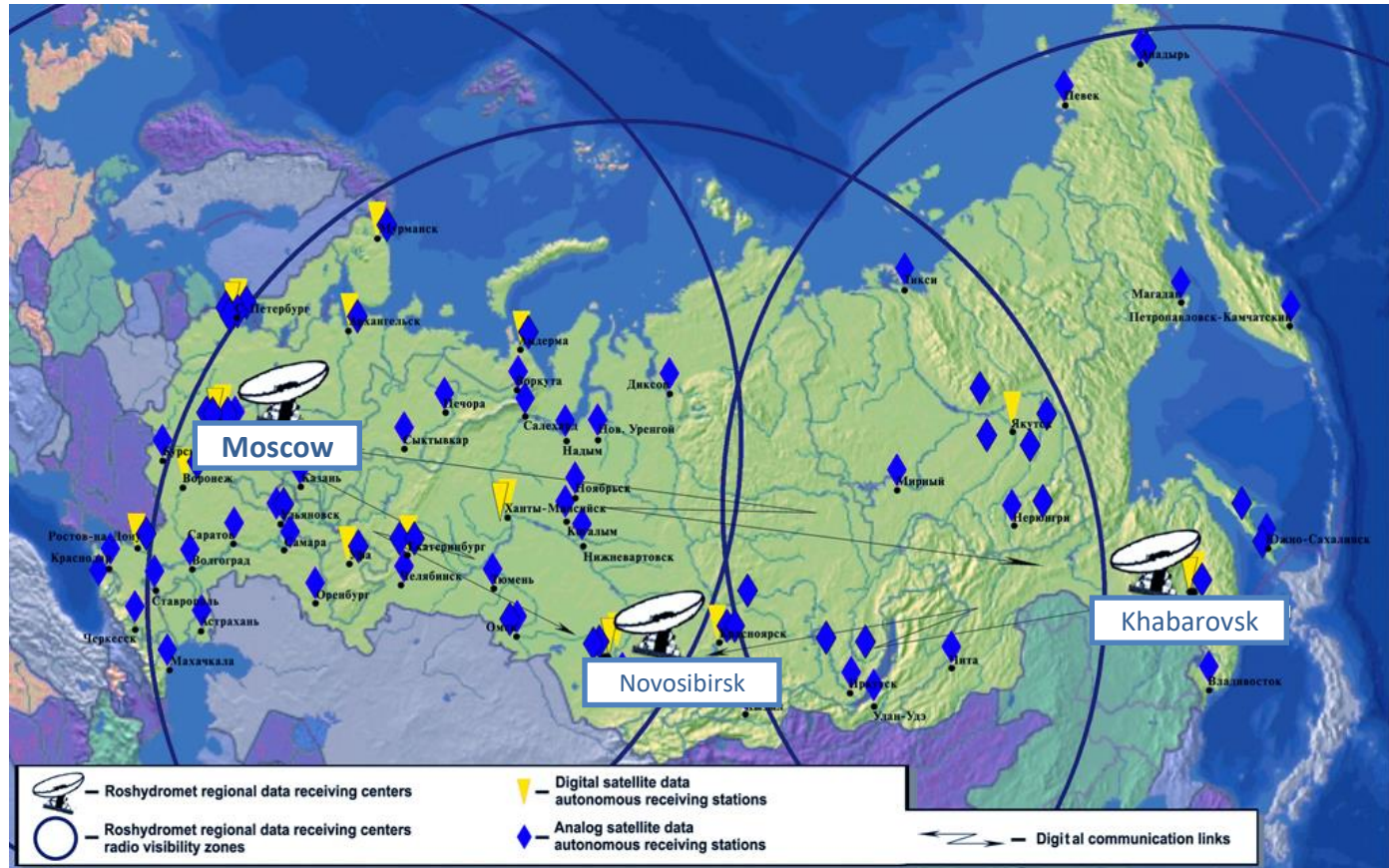
Anastasiya Voronova

**Siberian Center of «SRC «Planeta»
Novosibirsk, Russian Federation**

ROSHYDROMET CORE GROUND SEGMENT (CGS)

Ground system of receiving, processing, archiving and distributing of satellite data.

Scientific Research Center «Planeta»



Scientific Research Center of Space Hydrometeorology «Planeta»

Siberian Center

Terra/Aqua

Suomi NPP

Kanopus-V

Meteor-M

NOAA

Metop

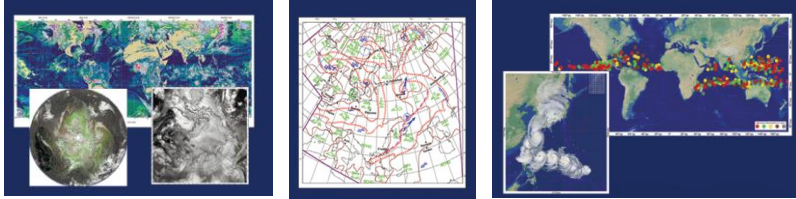
Resurs-P

Elektro-L

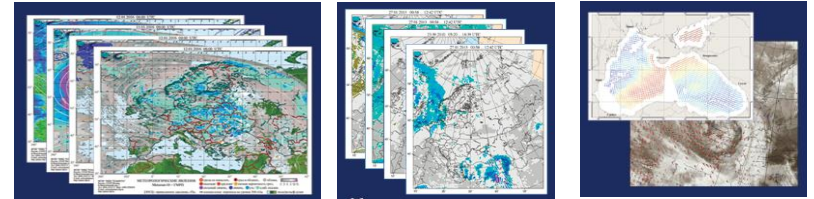


SATELLITE INFORMATION PRODUCTS

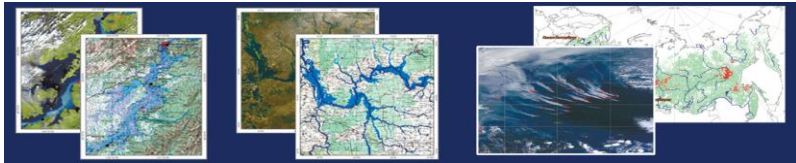
Cloudiness



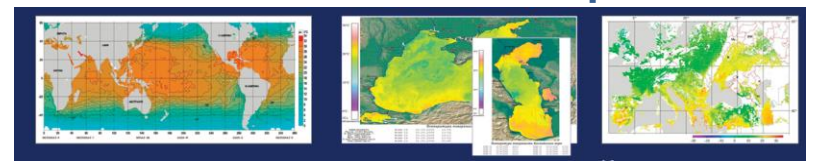
Precipitation and wind



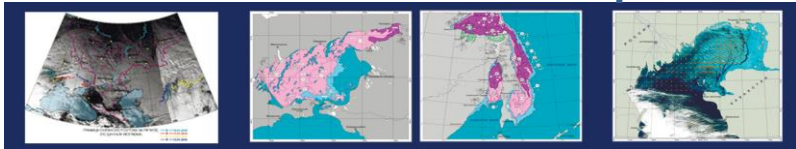
Floods and wildfires



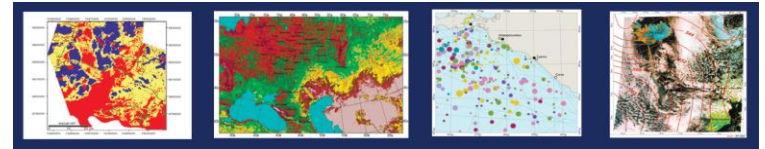
Sea and land surface temperature



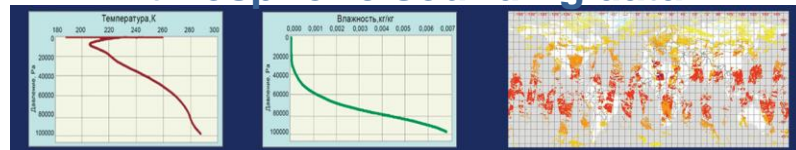
Snow and ice cover maps



State of the environment



Atmospheric sounding data

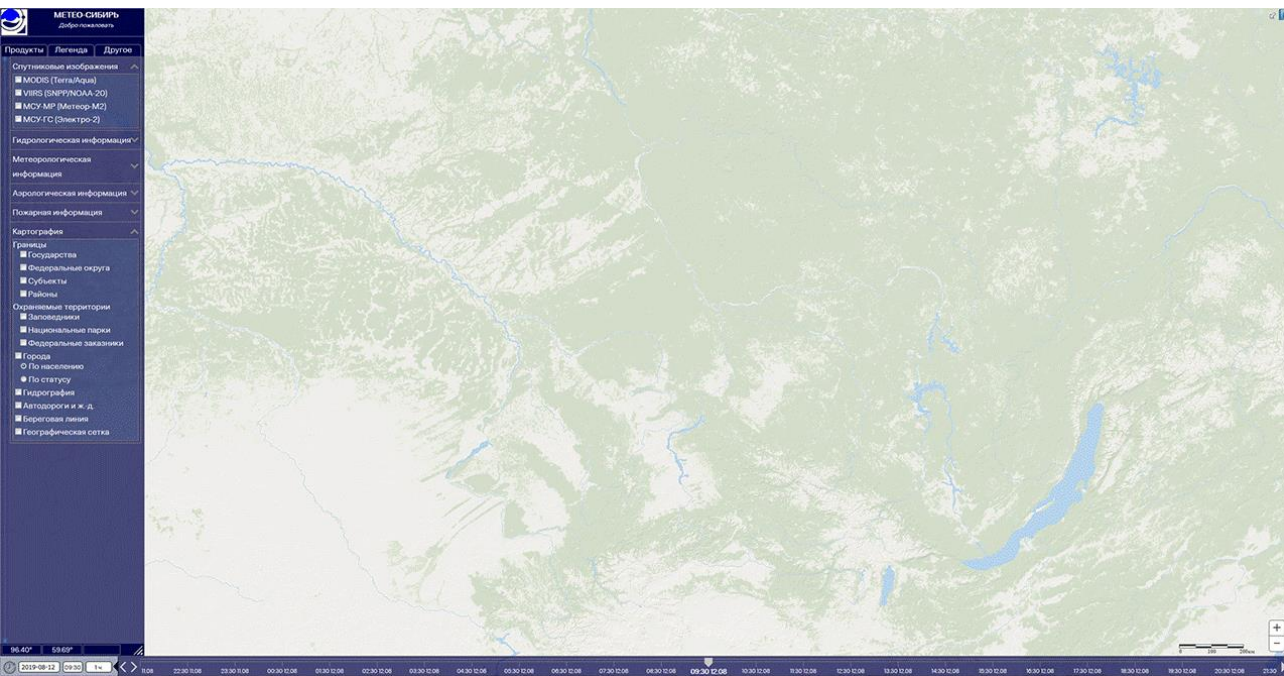


Series of climate data



GEOGRAPHIC INFORMATION SYSTEM "METEO-SIBERIA"

<http://ppi.rcpod.ru:85/MeteoSiber/>



Satellite images:

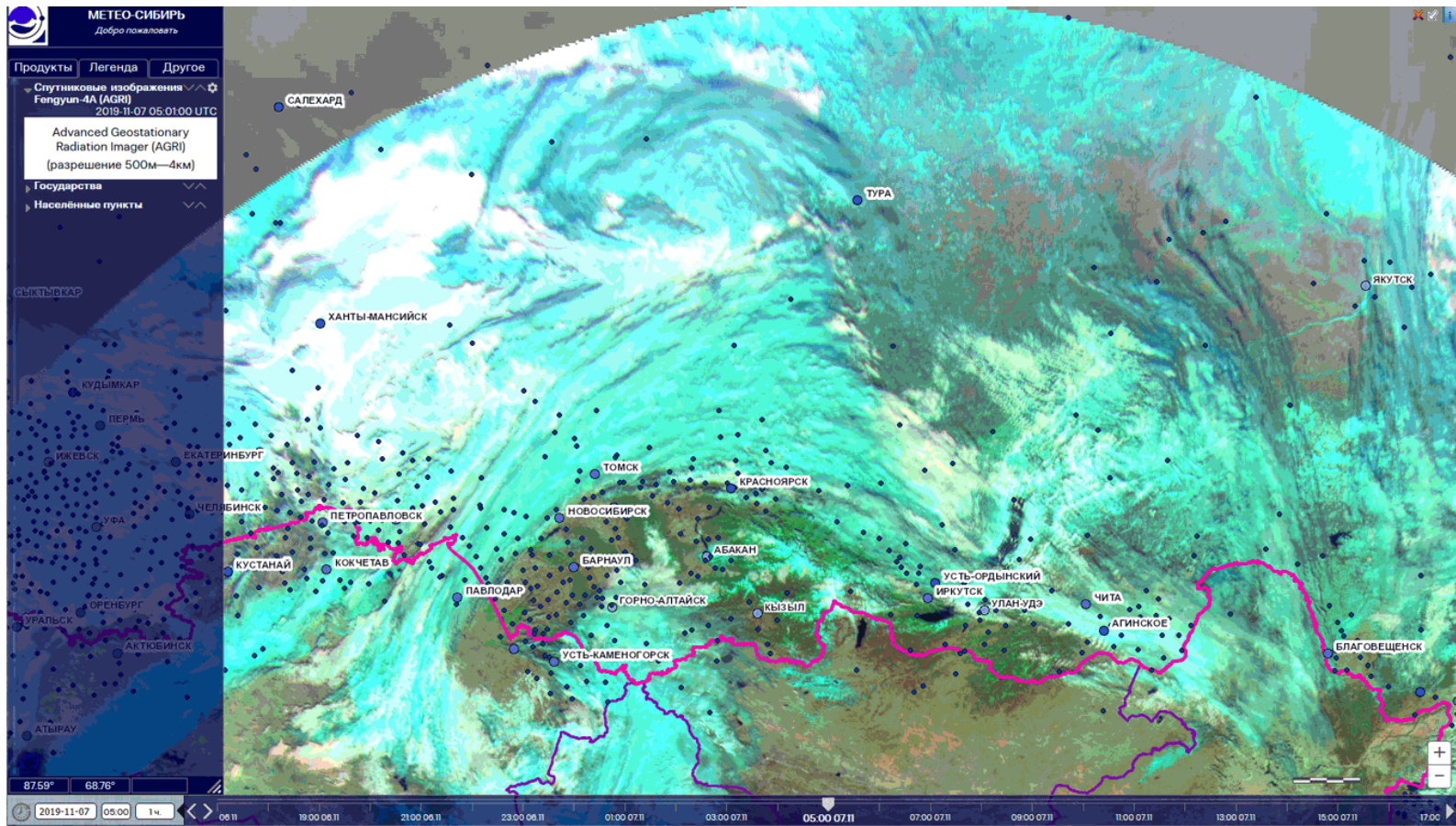
- Terra/Aqua (MODIS)
- Suomi NPP/NOAA-20 (VIIRS)
- Meteor-M №2 (MSU-MR)
- Elektro-L №2 (MSU-GS)
- Fengyun-4 (AGRI)

Satellite data products:

- Satellite images and animation
- Hydrological information
- Meteorological parameters
- Aerological products
- Floods and wildfires information

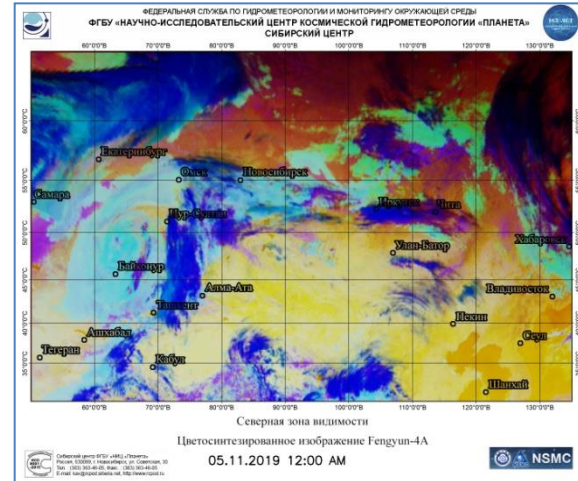
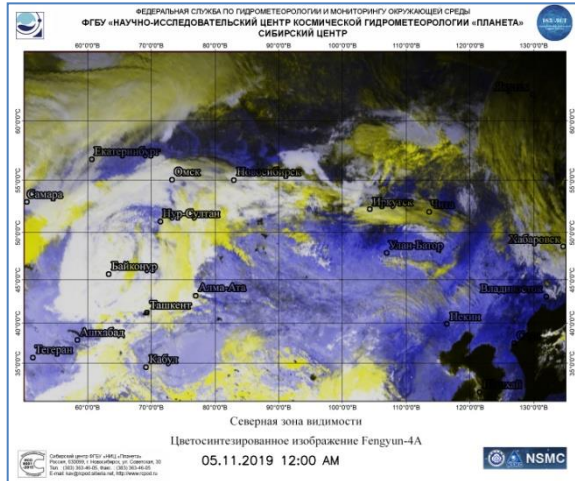
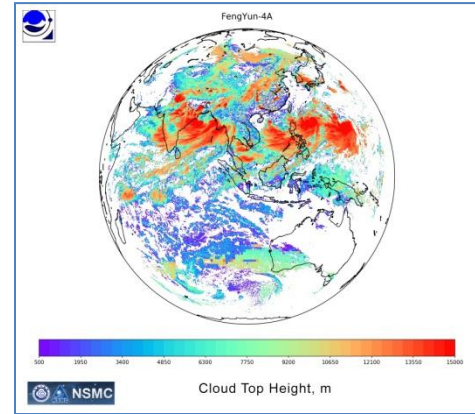
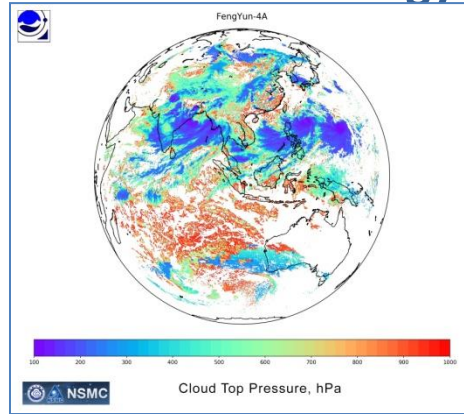
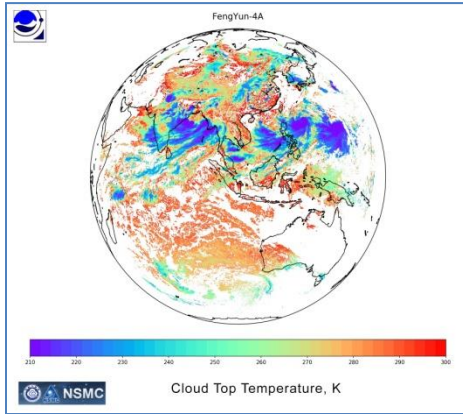
FENGYUN-4 SATELLITE DATA

APPLYING: Meteorology

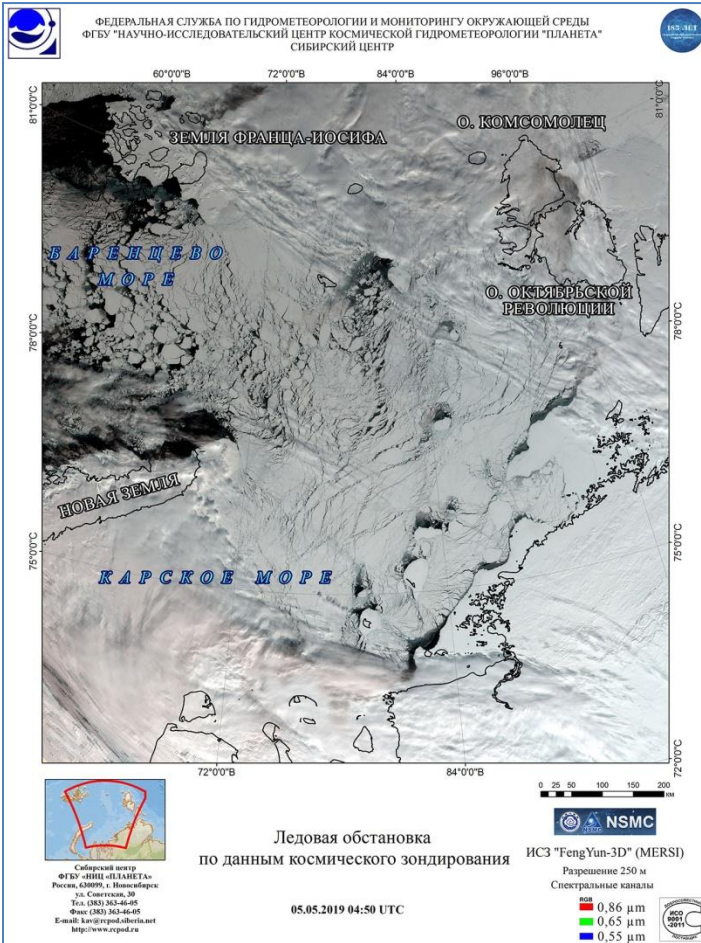


FENGYUN-4 SATELLITE DATA

APPLYING: Meteorology

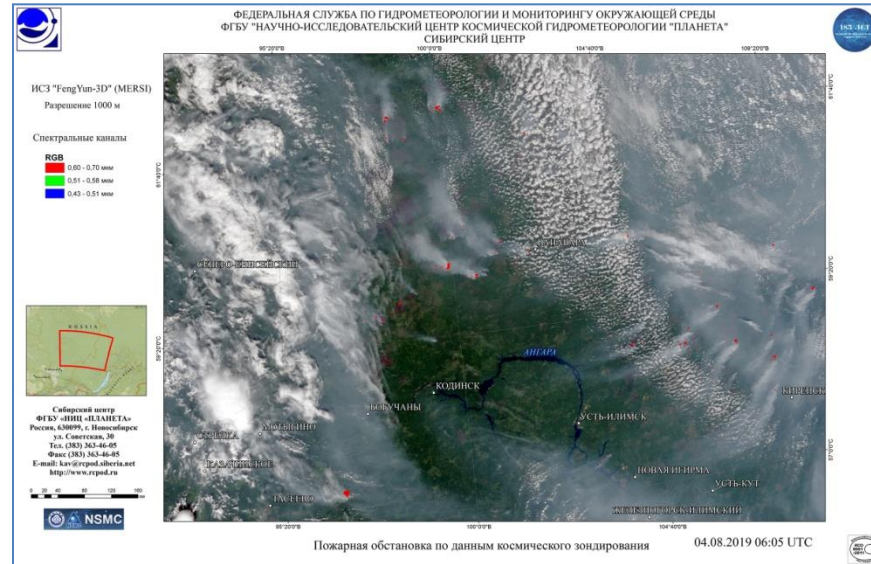


FENGYUN-3 SATELLITE DATA

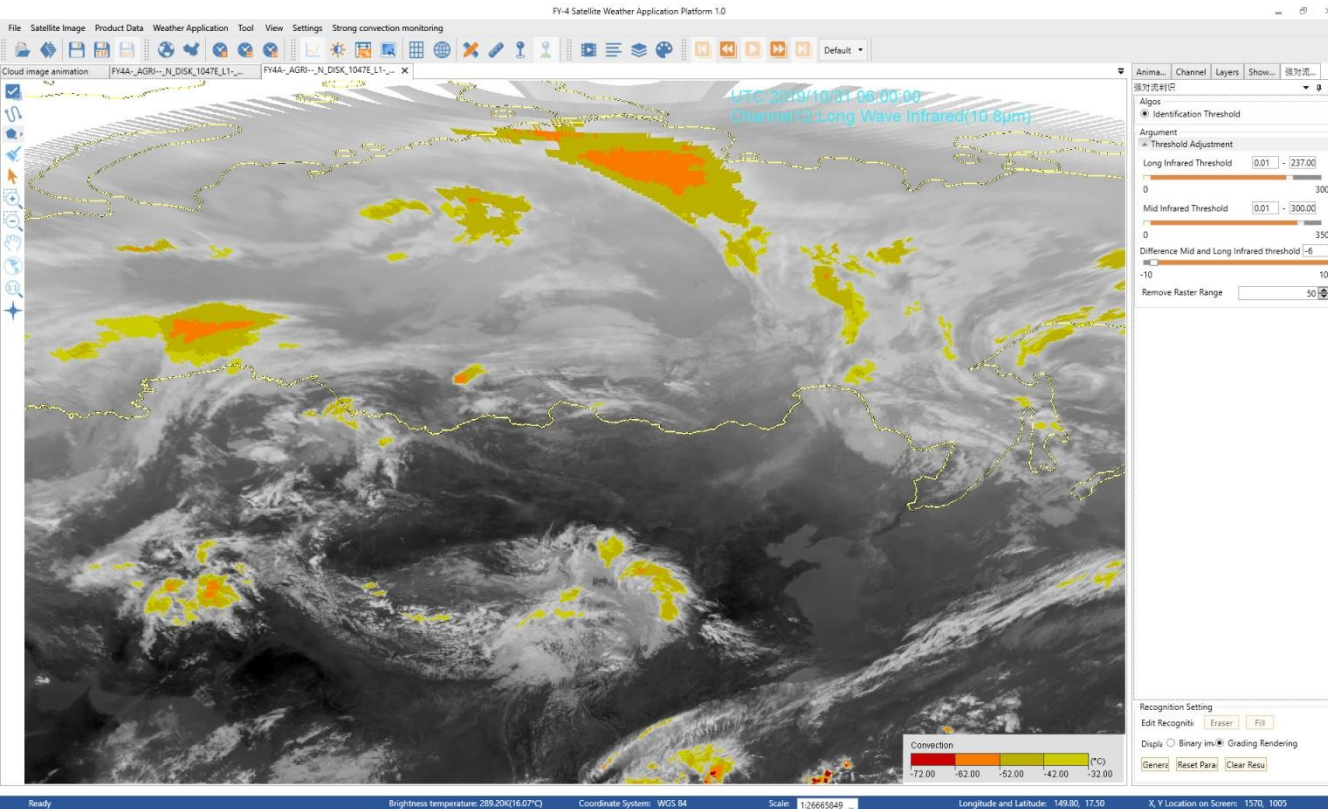


Applications:

- Wildfire detection
- Snow and ice cover maps
- Sea and land surface temperature
- Environmental monitoring



FENGYUN SATELLITE DATA SWAP



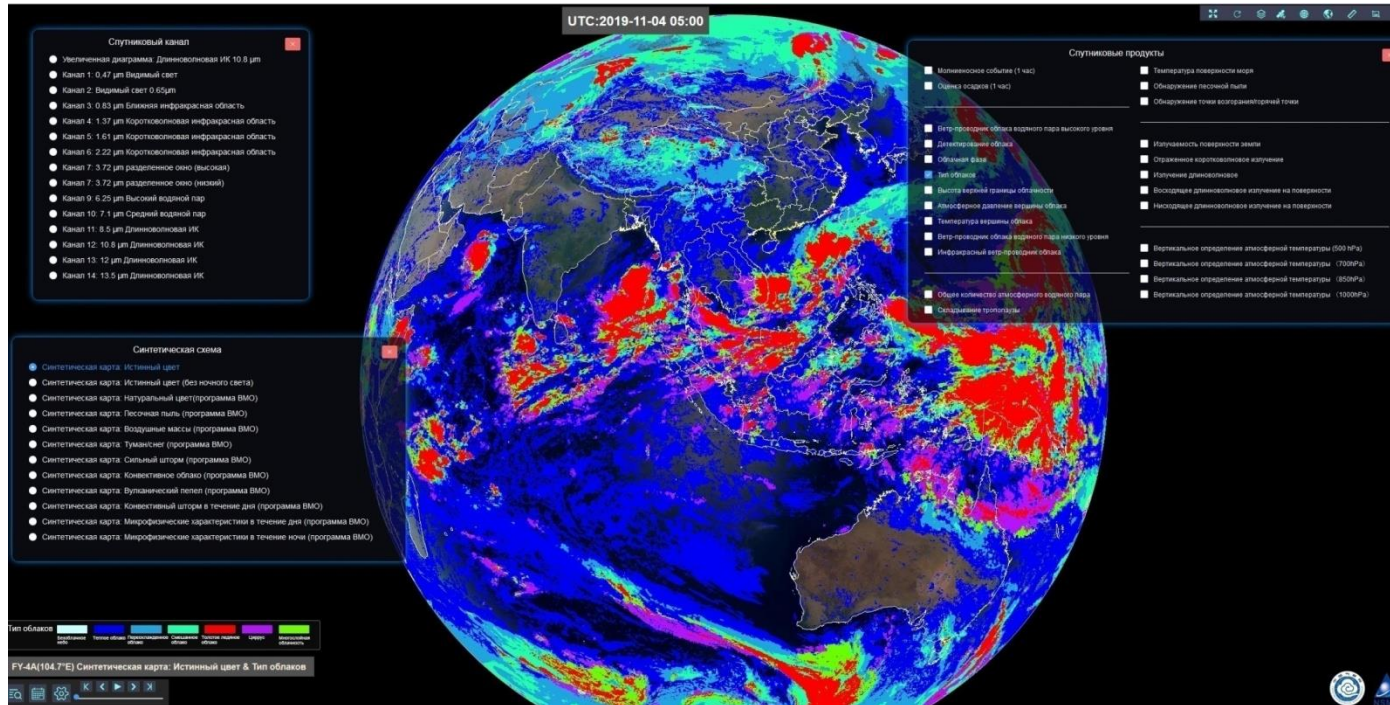
Advantages:

- GUI
- Usability
- Export animation
- English version

Issues:

- scales overlap
- no speed measurement
- not all tools in English version
- no manual

FENGYUN SATELLITE DATA



rsapp.nsmc.org.cn/geofy/

FENGYUN SATELLITE DATA

SUMMARY

Most interesting products:

- Tropopause folding
- Lightning frequency
- Atmospheric motion vector
- Aerosol detection
- Precipitation estimation
- Fire/hot spot detection
- Fog detection

Further prospects:

- FY-3 satellite data reception
- Technical support from the NSMC
- Verification and implementation of satellite products





Thank you for your attention!