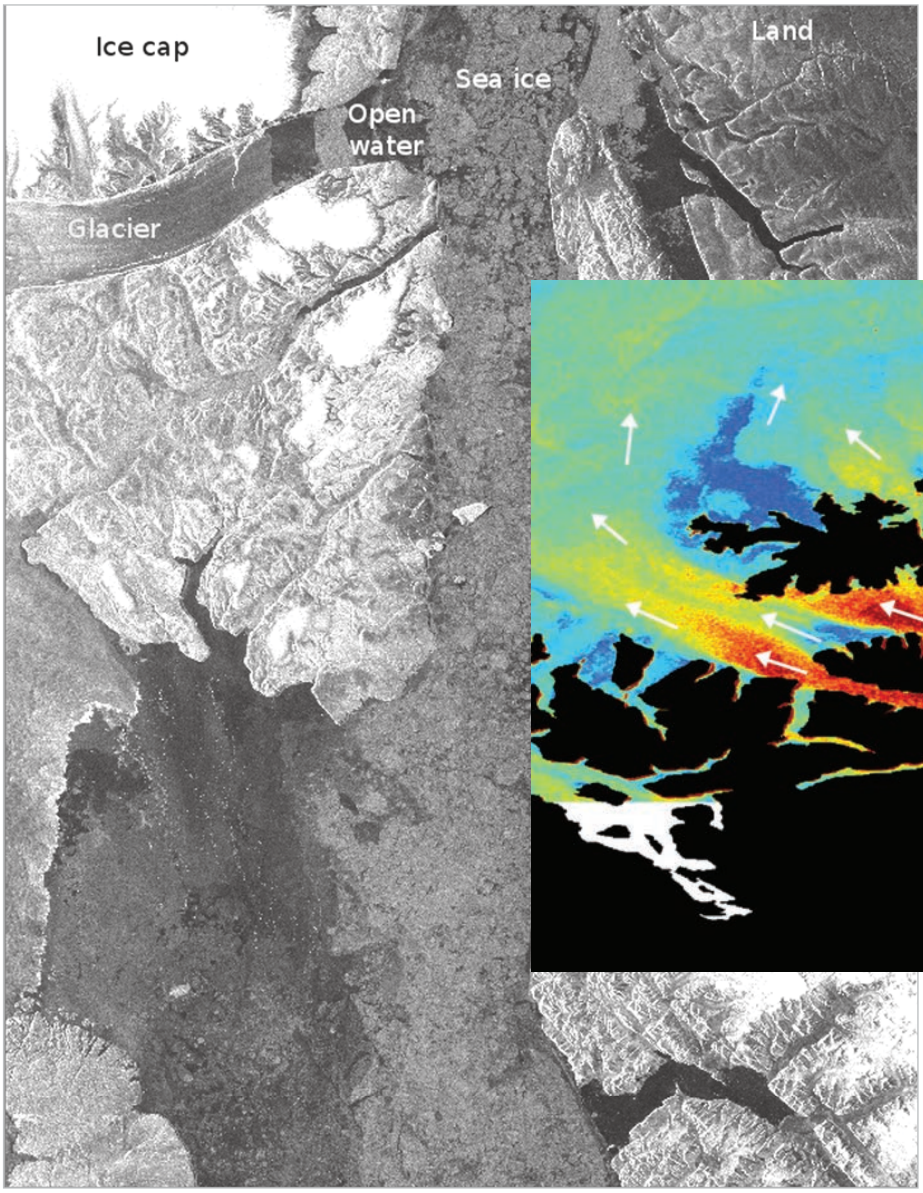
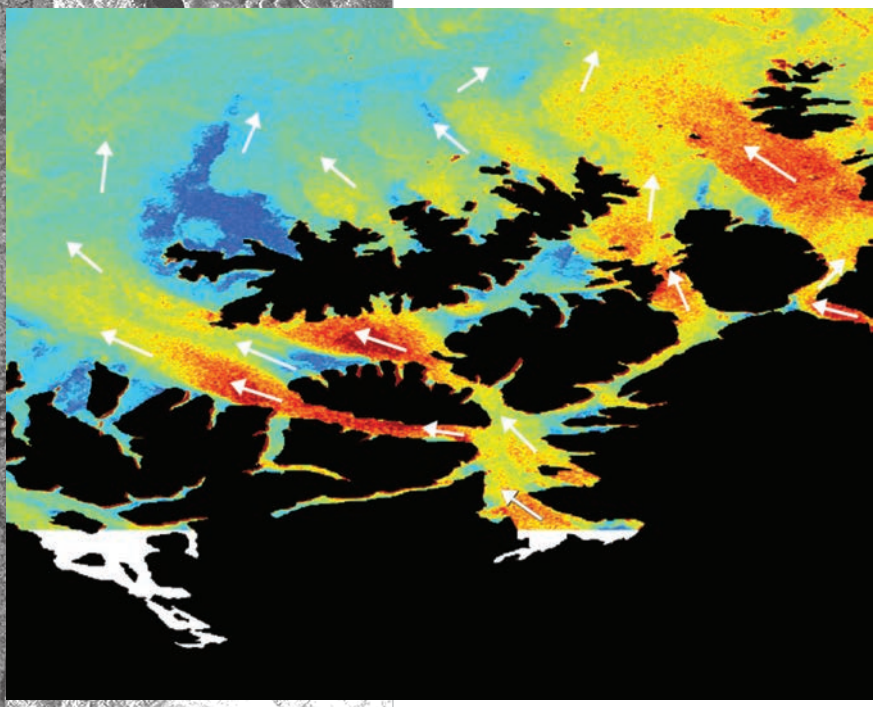
Satellite Products

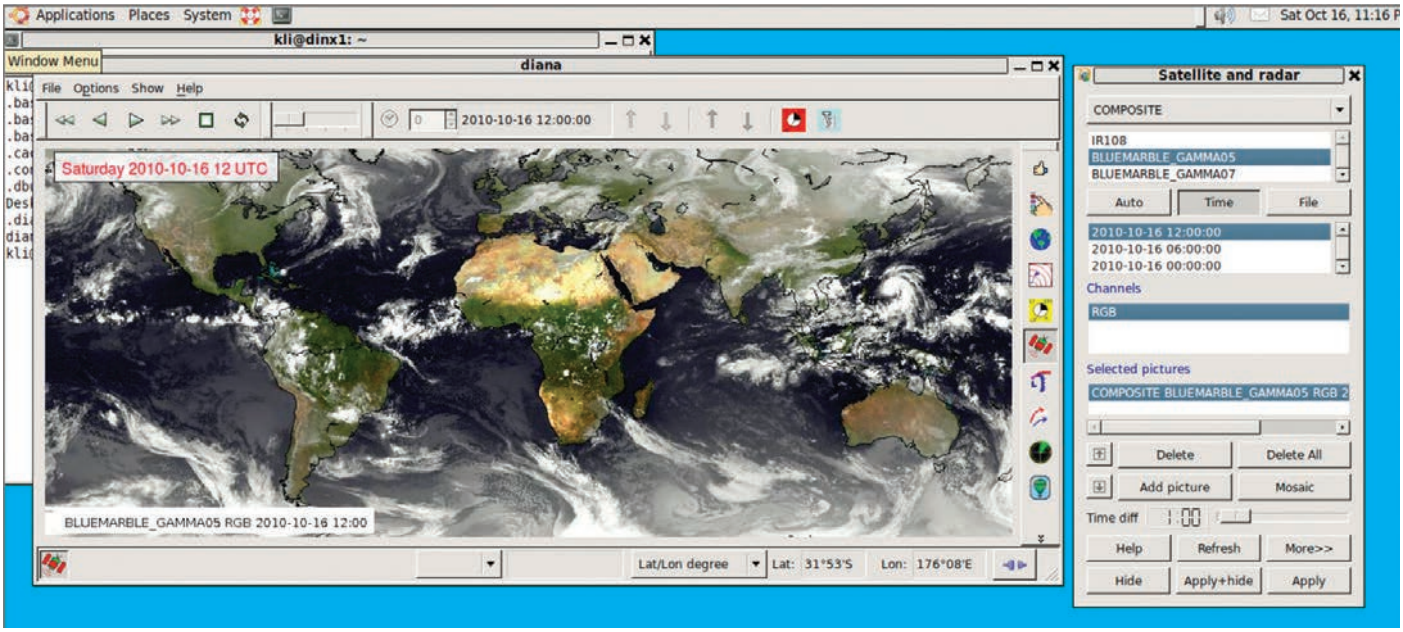
A large number of Earth-orbiting satellites are constantly and globally monitoring the state of the atmosphere, ocean and ice sheets. StormGeo acquires raw data from a wide range of these satellites, and produces derived products tailored to the needs of our customers.



A zoom in of Greenland Fjords



SAR wind speed at a resolution of 100 metres



Global composite showing cloud cover and storm systems

Invaluable source of information

Surface observational networks are costly to maintain and therefore generally sparse, in particularly offshore and at higher latitudes. Satellites, on the other hand, provide the broader picture and the context, with high spatial resolution. Satellite observations are providing the initial conditions for our model forecasts, and the latest satellite images are also directly valuable to our customers who want to be updated on the present situation in their region of interest. For situations of critical decision making, our satellite products make a perfect complement to the model forecasts.

Own receiving antenna

StormGeo operates its own receiving disc antenna to retrieve the latest raw satellite data only a few minutes after acquisition. This includes data from geostationary satellites with temporal resolution down to 15 minutes, and polar orbiting satellites with excellent coverage at higher latitudes. Complementary satellite data are acquired directly from the space agencies in near real time, including Synthetic Aperture Radar which penetrate clouds and operate independently of daylight, with spatial resolution of the order of 50 meters.

Useful parameters

With our high-performance processing software, a wide suite of derived products are made available in near real time. Our team of researchers are keeping updated on state-of-the art algorithms to retrieve parameters such as:

- *Offshore **Wind, Waves** and **Surface Currents***
- ***Clouds:** coverage, type, temperature, height and motion*
- ***Sea Ice:** coverage, type and drift*
- ***Temperature** of the ocean and land surface*
- ***Precipitation***
- ***Radiation Parameters** for solar energy applications and surface heat budget (e.g. icing)*
- *Offshore detection of **Ships** and **Oil Spills***

Our portfolio includes data from

***Geostationary satellites:** Meteosat/MSG, GOES E/W, MTSAT2, MTG (upcoming)*

***Polar orbiting satellites:** NOAA, MetOp, Envisat, GMES Sentinels (upcoming)*