Global models allow a full depiction of atmospheric and ocean conditions. Model data provide atmospheric and oceanographic information to better exploit satellite tracking data by coupling environmental conditions with a trajectory.

CLS has been processing satellite oceanographic data for more than 20 years and is connected to the highest quality atmosphere and ocean model data servers in the world (Copernicus, ECMWF, NOAA...).

We can now provide metocean model data to our clients along Argos tracks.

**Moving towards climate studies:**

Knowing air pressure, wind, temperature, and humidity conditions along bird trajectories, and ocean currents, plankton concentration and sea temperature along marine animal trajectories, are a crucial part of behaviour analysis for biologists. These environmental data are also key to assessing the impact of climate change.

### Meteorological data
- **Air temperature**
- **Humidity**
- **Rain**
- **Wind**
- **Pressure**

Source: Global meteorological weather prediction models (ECMWF, NOAA, Météo France)

### Oceanographic data

#### Satellite:
- **Sea level and geostrophic current**
- **Temperature**
- **Plankton**

#### Model:
- **3D temperature**
- **3D current**
- **3D Salinity**

Source: Satellite observation (CLS) and Global ocean circulation model (Copernicus)

### What we deliver:

<table>
<thead>
<tr>
<th>Reprocessed data</th>
<th>Additional MetOcean data</th>
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*Enrich animal tracks with contextual data (weather, ocean currents...)*

Use oceanographic data in your GIS software to enhance animal tracks.