

NRT (Near Real Time) data process chain for Copernicus marine data

Ocean Data Dojo, 15 Dec. 2022

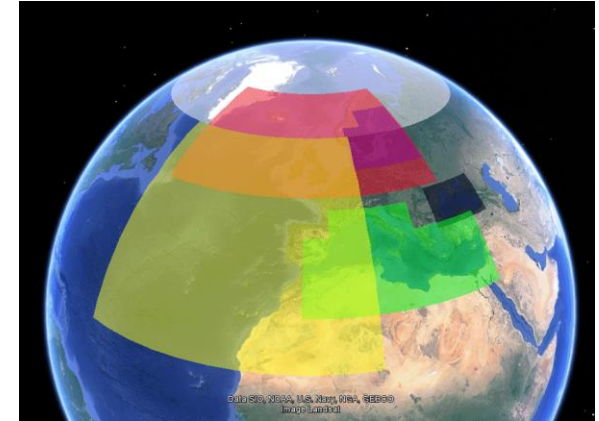
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Copernicus In Situ TAC

Copernicus Marine Environment Monitoring
Service In Situ Thematic Assembly Centre

- **Regions**

- Global (Ifremer)
- Arctic (IMR)
- **Baltic (SMHI)**
- **NWS (BSH)**
- **IBI (Puertos del Estado)**
- **MED (HCMR)**
- Black Sea (IOBAS)



- **Product units**

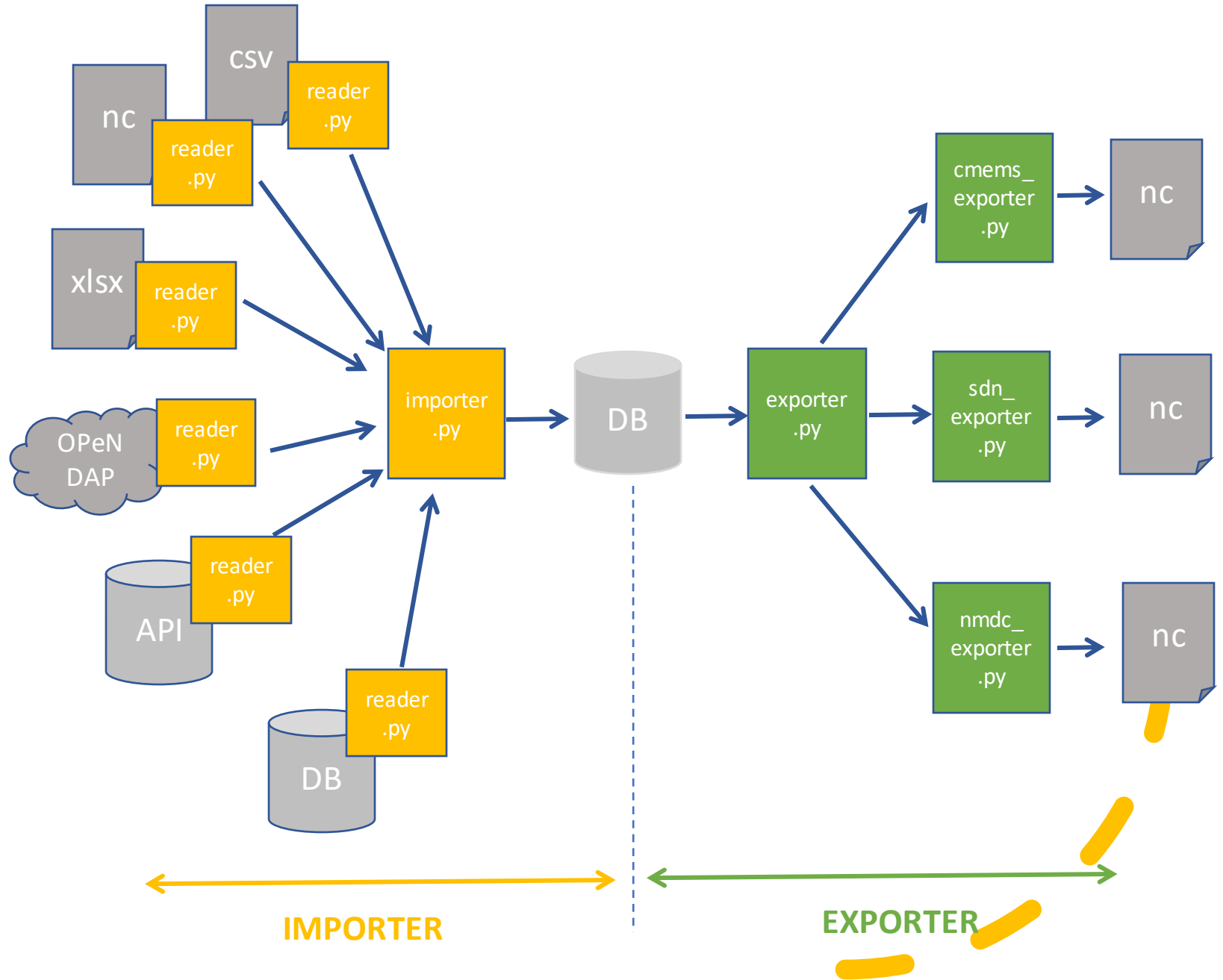
- Latest – day, platform / file for the latest 30 days (1H)
- Monthly – month, platform / file for the last 5 years (1M)
- History – platform / file (1M)



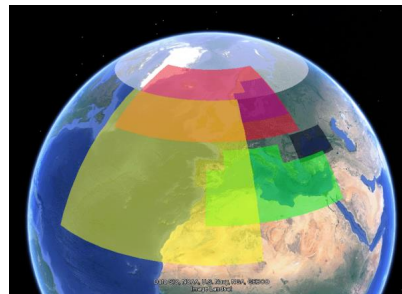
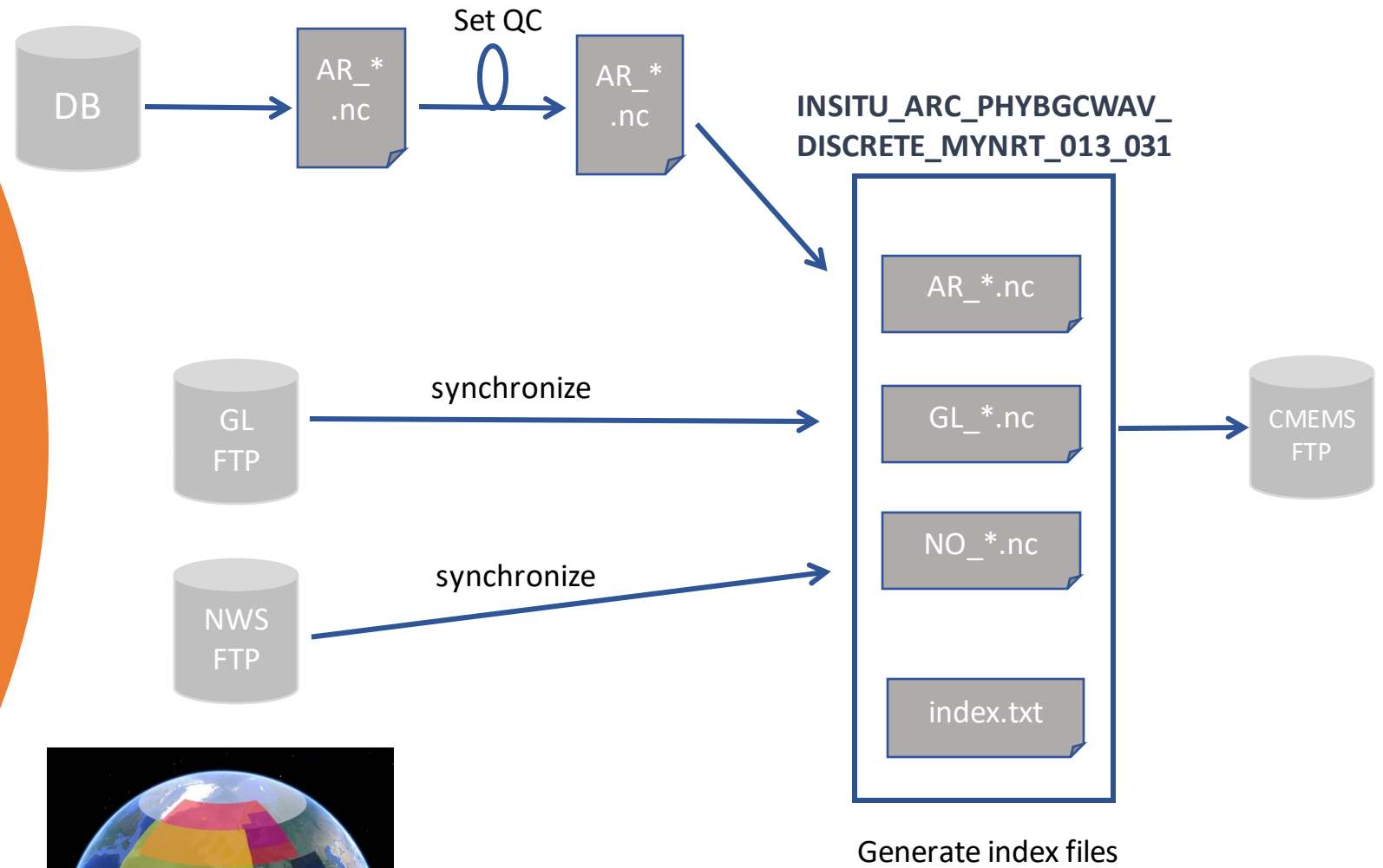
NRT (Near Real Time) Products

- NetCDF standard format
 - <https://archimer.ifremer.fr/doc/00488/59938/82780.pdf>
- Update every hour
- NRT QC
 - <https://archimer.ifremer.fr/doc/00251/36230/34790.pdf>
- IMR produces/updates about 65 datasets every hour.
 - e.g. 12/12/2022: CT(10), MO(52), GL(2)

Importer & Exporter



CMEMS Data Process Chain



Challenges

- Improvement of data format
 - Multiple instruments
- Improvement of the processing algorithms
- Improvement of RTQC and the algorithms
 - Find out outliers automatically (ML?)
- Development of new data provides
 - Collaboration with EMODnet
 - Data licence

