SeaDataCloud

Handling glider data (WP9.5.3)

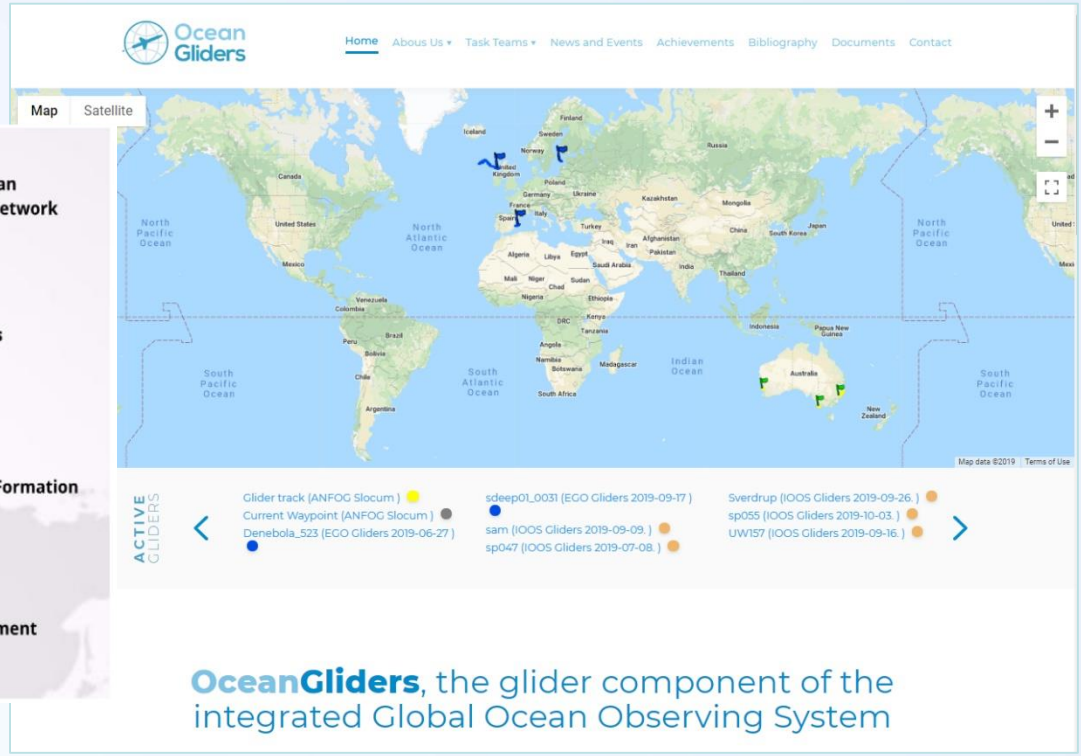
Mark Hebden (BODC)

SeaDataCloud 3rd Annual Meeting, Brest, 17-18th October 2019
sdn-userdesk@seadatanet.org – www.seadatanet.org

D9.14: SeaDataNet data management protocols for glider data (M32)

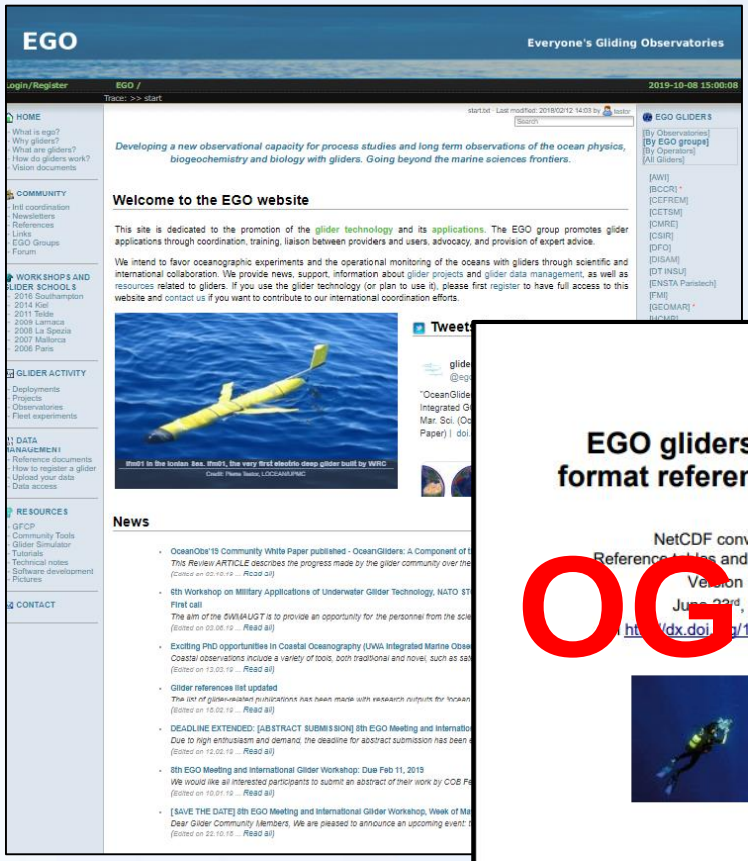
Source: Coriolis

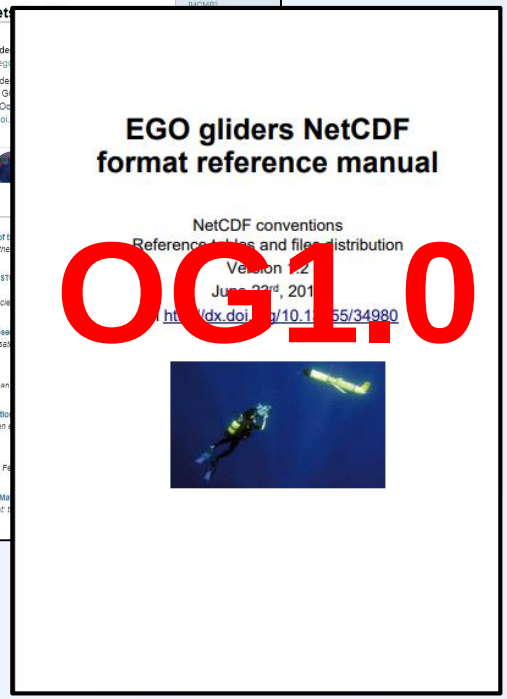
OceanGliders – international glider governance (since Sept 2016)



Global initiatives for glider data management

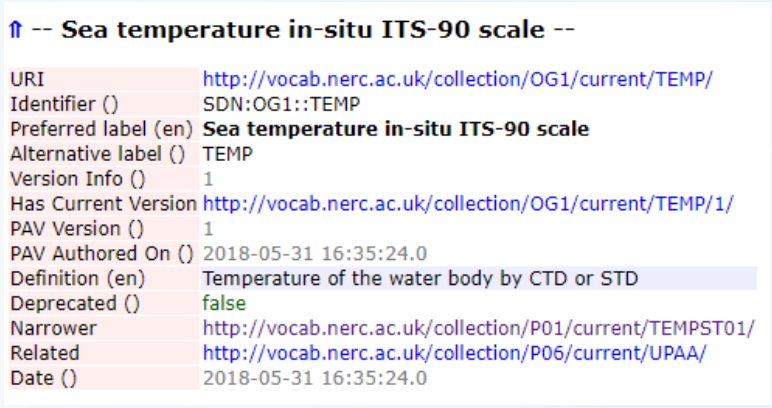
- Europe – EGO (Everyone's Gliding Observatories)
- U.S – IOOS (Integrated Ocean Observing System)
- Australia – IMOS (Integrated Marine Observing System)





EGO format and standards

- NetCDF based on Argo, OceanSITES, ANFOG
- Trajectories with 'phase' information stored
- Underpinned by common controlled vocabularies/catalogues: CF Standard Names, NVS (P01, P06), WMO and ICES Platform Codes, EDMO…
- Bespoke EGO reference tables, akin to Argo
- OG1 – Ocean Glider Network Parameter Usage Vocabulary



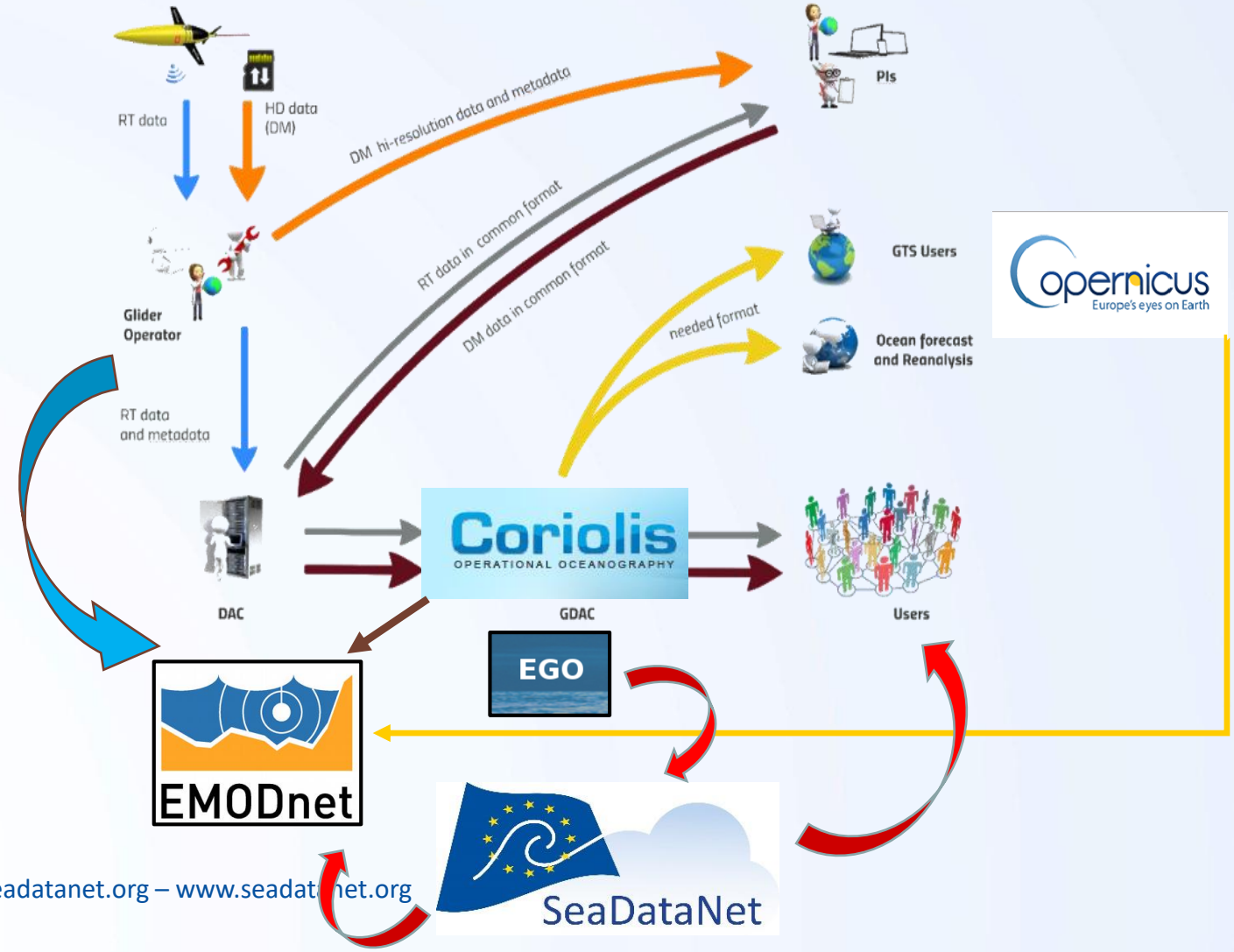
⇑ -- **Sea temperature in-situ ITS-90 scale** --

URI	http://vocab.nerc.ac.uk/collection/OG1/current/TEMP/
Identifier ()	SDN:OG1::TEMP
Preferred label (en)	**Sea temperature in-situ ITS-90 scale**
Alternative label ()	TEMP
Version Info ()	1
Has Current Version	http://vocab.nerc.ac.uk/collection/OG1/current/TEMP/1/
PAV Version ()	1
PAV Authored On ()	2018-05-31 16:35:24.0
Definition (en)	Temperature of the water body by CTD or STD
Deprecated ()	false
Narrower	http://vocab.nerc.ac.uk/collection/P01/current/TEMPST01/
Related	http://vocab.nerc.ac.uk/collection/P06/current/UPAA/
Date ()	2018-05-31 16:35:24.0

EGO resources

- EGO Data Exchange Format – V1.2 Processing chain - https://www.seanoe.org/data/00343/45402/
- Handles Seaglider, Slocum and SEAEXPLORER data
- Format checker for EGO compliance
- Community tools for QC

Exchange pathways in Europe



Integrating glider data within SeaDataNet

- Recommend alignment with EGO – liaise with national EGO DACs (or consider establishing one)

Handling glider data within our SeaDataNet infrastructure:

- Adopt AtlantOS recommendations:
- Mirror the SeaDataNet Argo example
- Coordinated pull of metadata and data from EGO GDAC
- Delivery through SeaDataNet as SeaDataNet NetCDF and ODV

Added complexity – **restricted data**

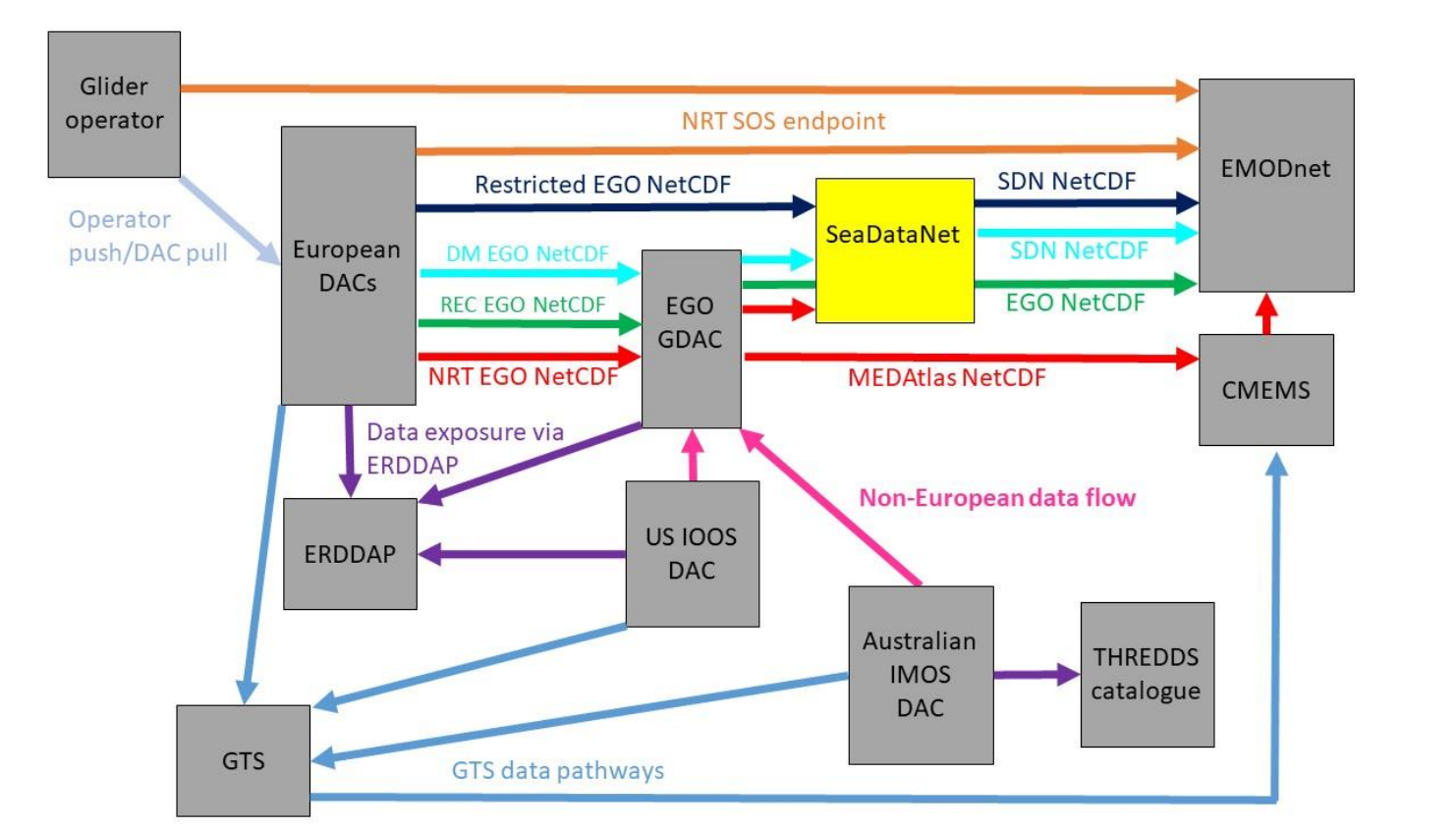
- Propose direct feed from partners into SeaDataNet infrastructure

Integrating glider data within SeaDataNet

- EGO to CDI mapping exercise:
- Good agreement
- Scope for further alignment
- Potential role for OGC-SWE (SensorML) in auto-population of CDI fields

- Promoting uptake of OGC-SWE services as an alternative pathway into infrastructure
- Enriching SeaDataNet with ‘collection level’ real time data – WP9.6

Integrating glider data within SeaDataNet



Next steps

- Close collaboration with OceanGliders to further align with SeaDataNet
- SeaDataNet partners embedded within OceanGliders Working Groups on data formats and quality control procedures
- Proof of concept assimilation of French ‘delayed mode’ glider data into SeaDataNet
- Continued uptake of OGC-SWE pilot schemes