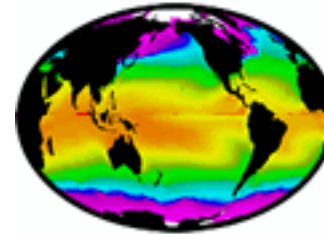




**ships4sst**  
shipborne radiometers for sea surface temperature



**GHR SST**  
GROUP FOR HIGH RESOLUTION  
SEA SURFACE TEMPERATURE

# Task Team Shipborne Radiometry

Werenfrid Wimmer

# Objective

- The Shipborne Radiometer Task Team was discussed at GHRSSST XVIII:
  - To set up network (framework is in place)
  - Format, DOI's (one per dataset)
- What we have:
  - Network is setup
    - Members : DMI, RAL, UoS, RSMAS, CSIRO/BoM, others ?
    - Web presence: [www.ships4sst.org](http://www.ships4sst.org)
    - Archive - Ifremer
  - Data format: L2R
    - Do we need updates to fields, what is important/necessary?
  - Coordination of activities
    - Protocols and procedures – on webpage
      - ◆ Updates to deployment protocols
      - ◆ Updates to deployment manuals
    - Inter-comparison
- Data collection very challenging during COVID 19 lock downs

# Archive

- FTP server at IFREMER
  - [via login on ships4sst](#)
  - Data structure
    - [instrument](#) -> data provider -> software version -> year
  - Management by Ifremer
    - First iteration of issue log:
      - ◆ manual, but record of issues:
      - ◆ In slides
      - ◆ FAQ on web page (soon)
    - User statistics have been requested.

■

# Progress

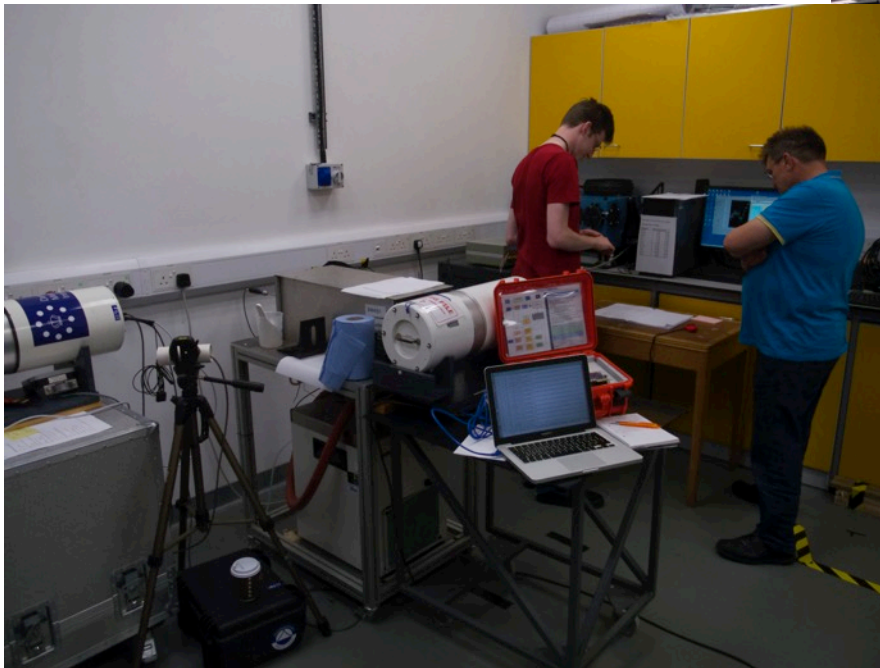
- Teleconferences
  - ◆ Planning for next radiometer inter-comparisons (22.10.2020)
    - Report available on ships4sst
  - ◆ Next generation radiometer (27.10.2020)
    - Report to be finished end of June
- Document on CIMR validation with radiometers
  - ◆ Poster at the CIMR from science to operations virtual conference (10-12 May 2021)
- Presentation of the ships4sst validation results at S3VT in Dec 2020.
- Integration with felyx
  - ◆ Ok, but timeliness could be better
  - ◆ S3B data now in felyx MDB files

# Progress

- Archive:
  - Now top level directories:
    - Archive – older data sets
    - Data: most current data from each rdac
    - Locations: location only nrt data (currently only UoS)
    - Removed : Duplicate or RDAC has requested removal
  - Structure in each top level directory the same as before:
    - **instrument** -> data provider -> software version -> year

# Inter-comparison

- Planning started for the next inter-comparison
  - ESA funding for 2021-23
  - SST only inter-comparison
  - Laboratory based work at NPL
  - Field location for SST



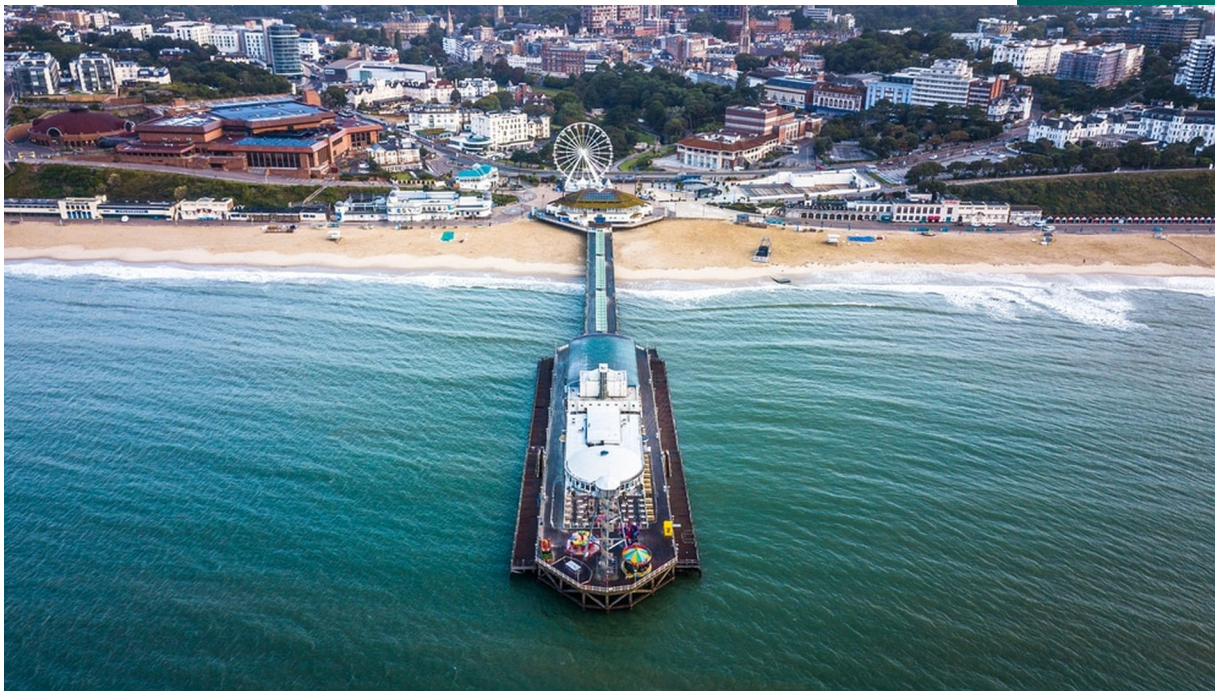
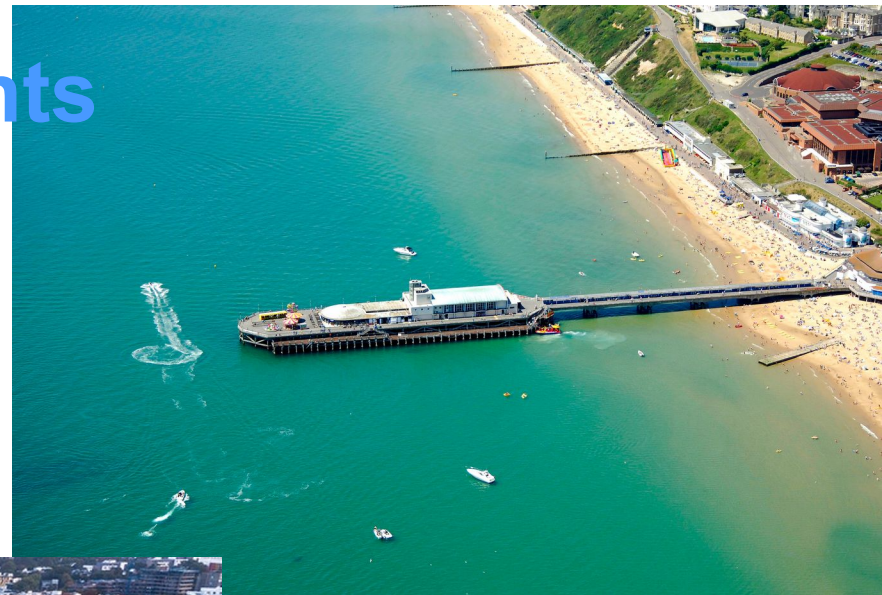
# Inter-comparison

- Telecom with potential participants on 22.10.2020
  - Pier better than Wraysbury
  - Access issue for larger instruments
  - Investigate pier on south coast UK. ( In porgess)
- Time to setup increase
  - The 30 min setup time is not enough for instrument warm up and configuration .
  - Discussion about making working days longer to accommodate this.
- Aperture too small
  - Aperture of amber not larger enough for some instruments
-



# SST - Field measurements

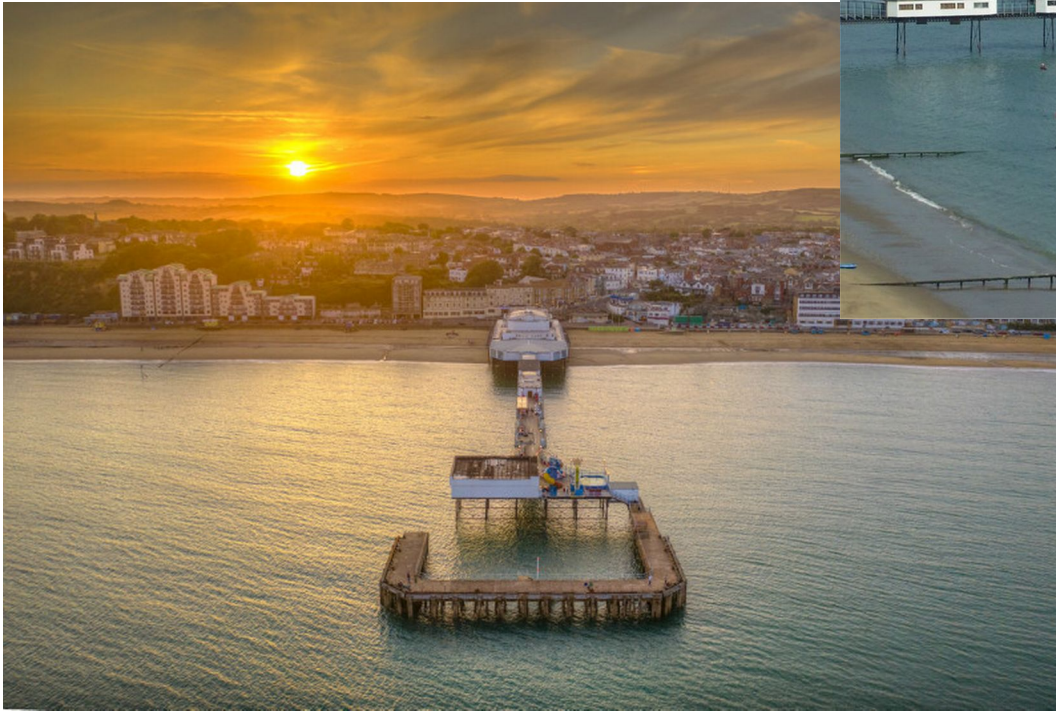
- Piers :
  - Bournemouth
- 





# SST - Field measurements

- Piers :
  - Sandown
- 



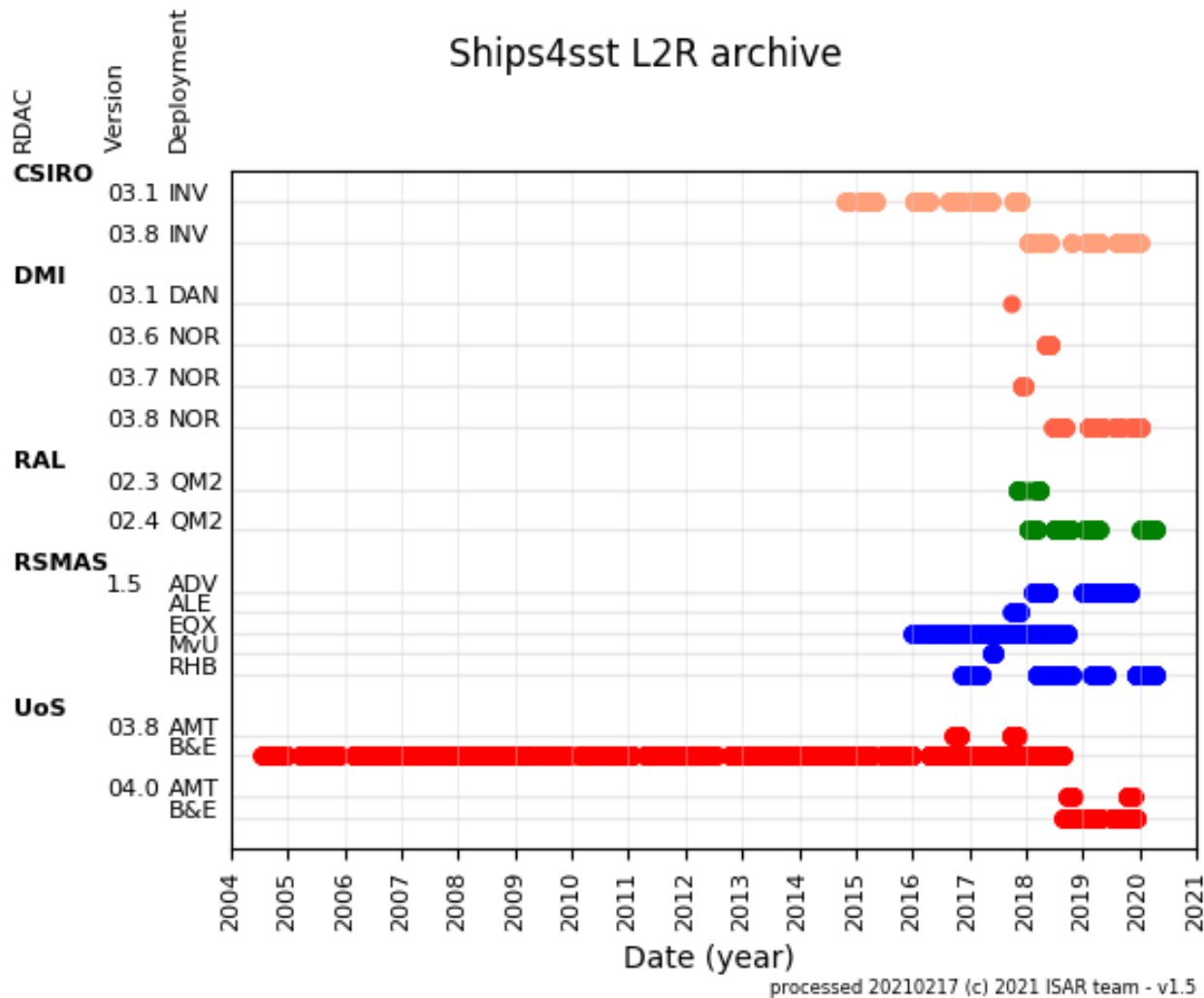
# Summary

- Good progress
  - Challenging data acquisition during COVID19
- Thinking about the future generation of IR radiometers
- The 2022 radiometer inter-comparison
  - Funding from ESA for NPL
  - SST field work on pier
- More members always welcome

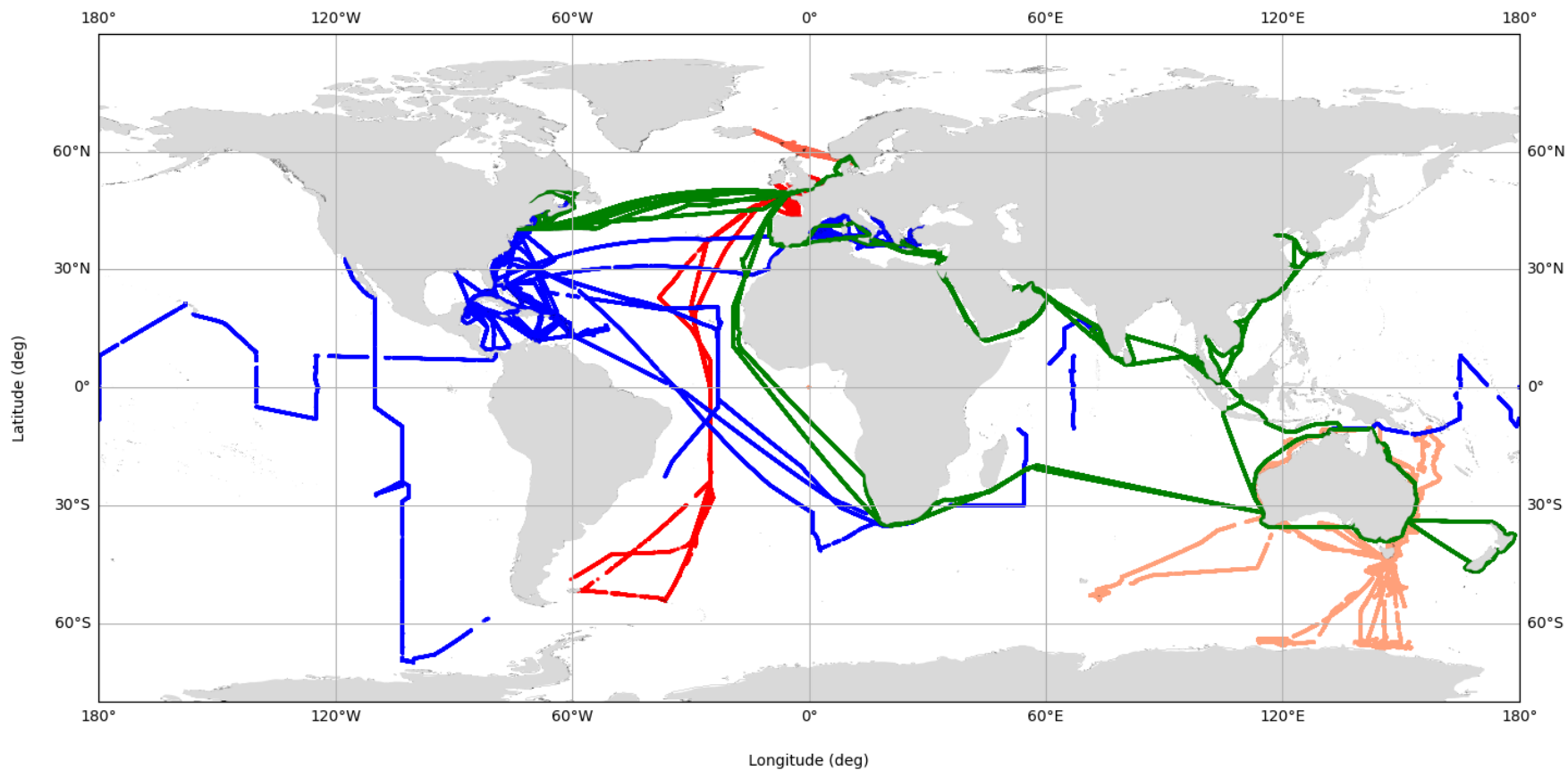
# Appendix

- Archive data plots
- Archive Issue log

# Archive – timeline



# Archive – map

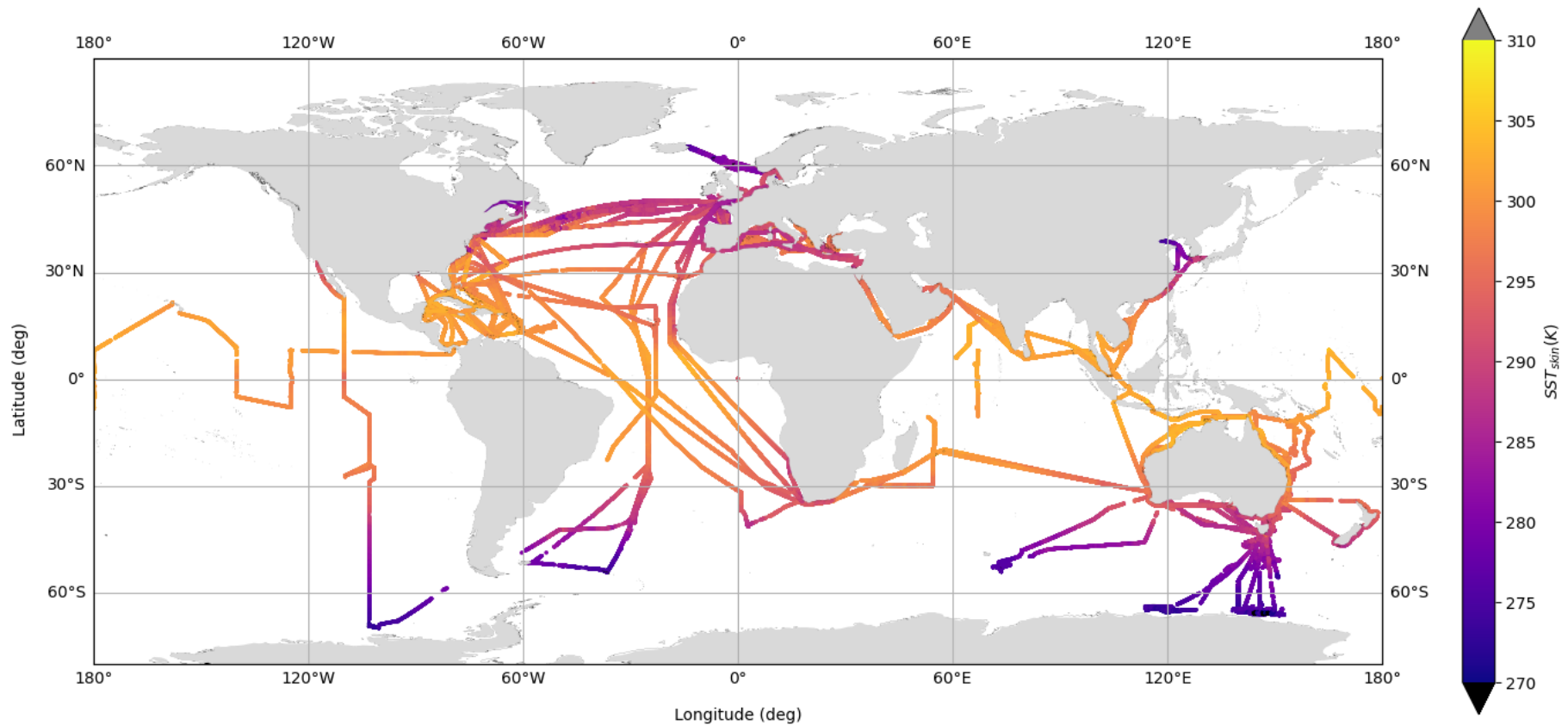


processed 20210602 (c) 2021 ISAR team - v1.5

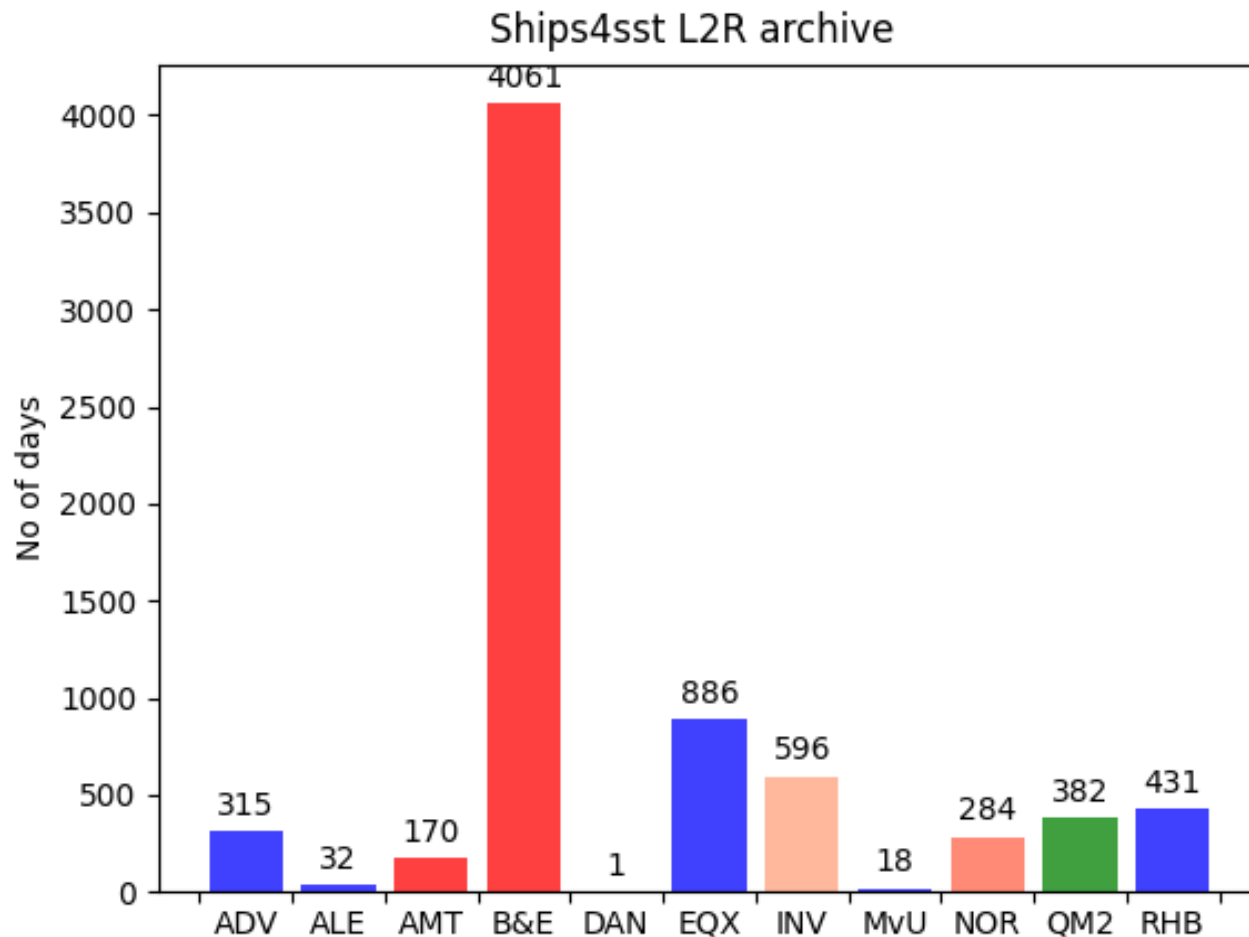


# Archive - SST

Ships4sst L2R archive

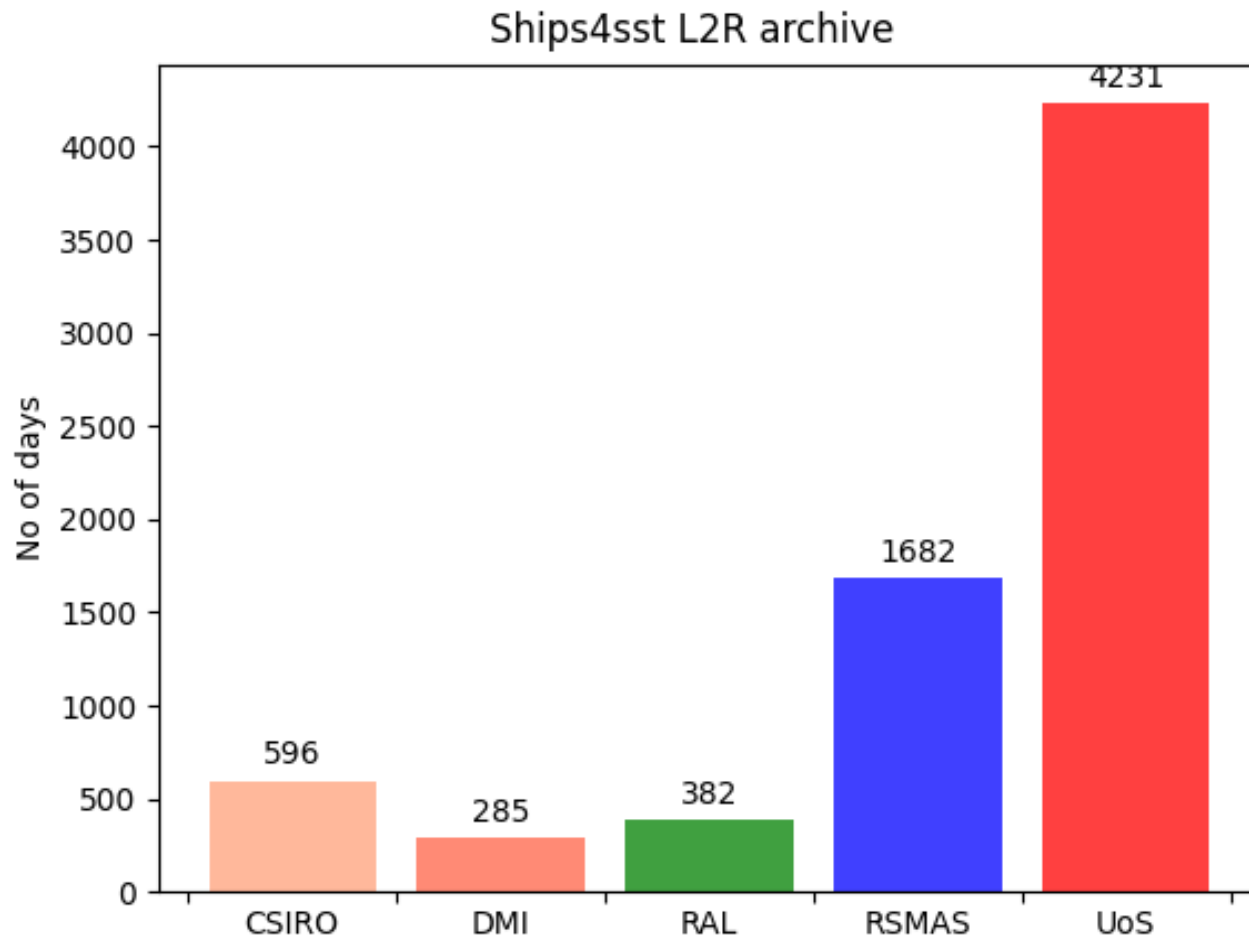


# Archive – days of data / route



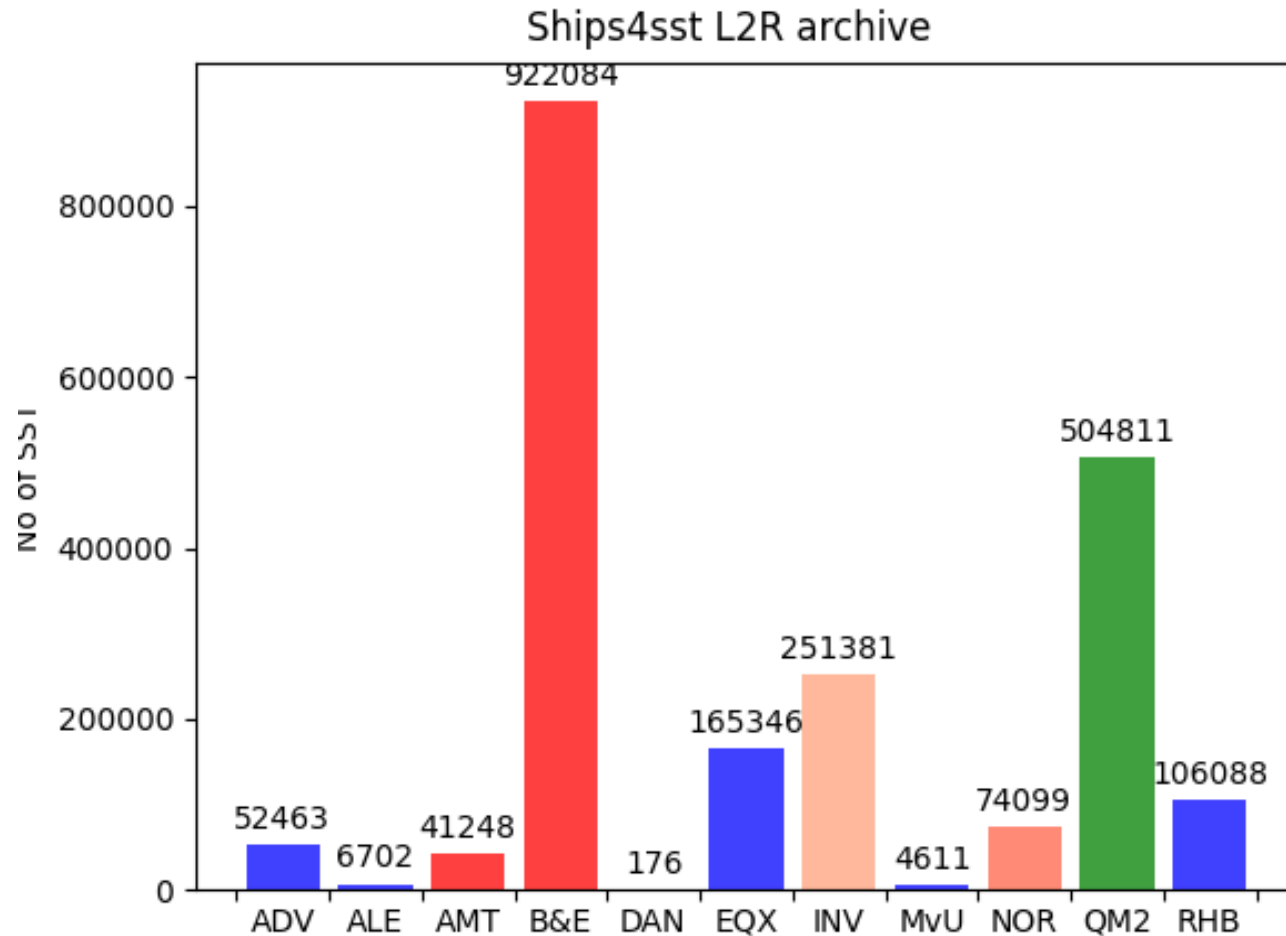
processed 20210602 (c) 2021 ISAR team - v1.5

# Archive – days of data / RDAC



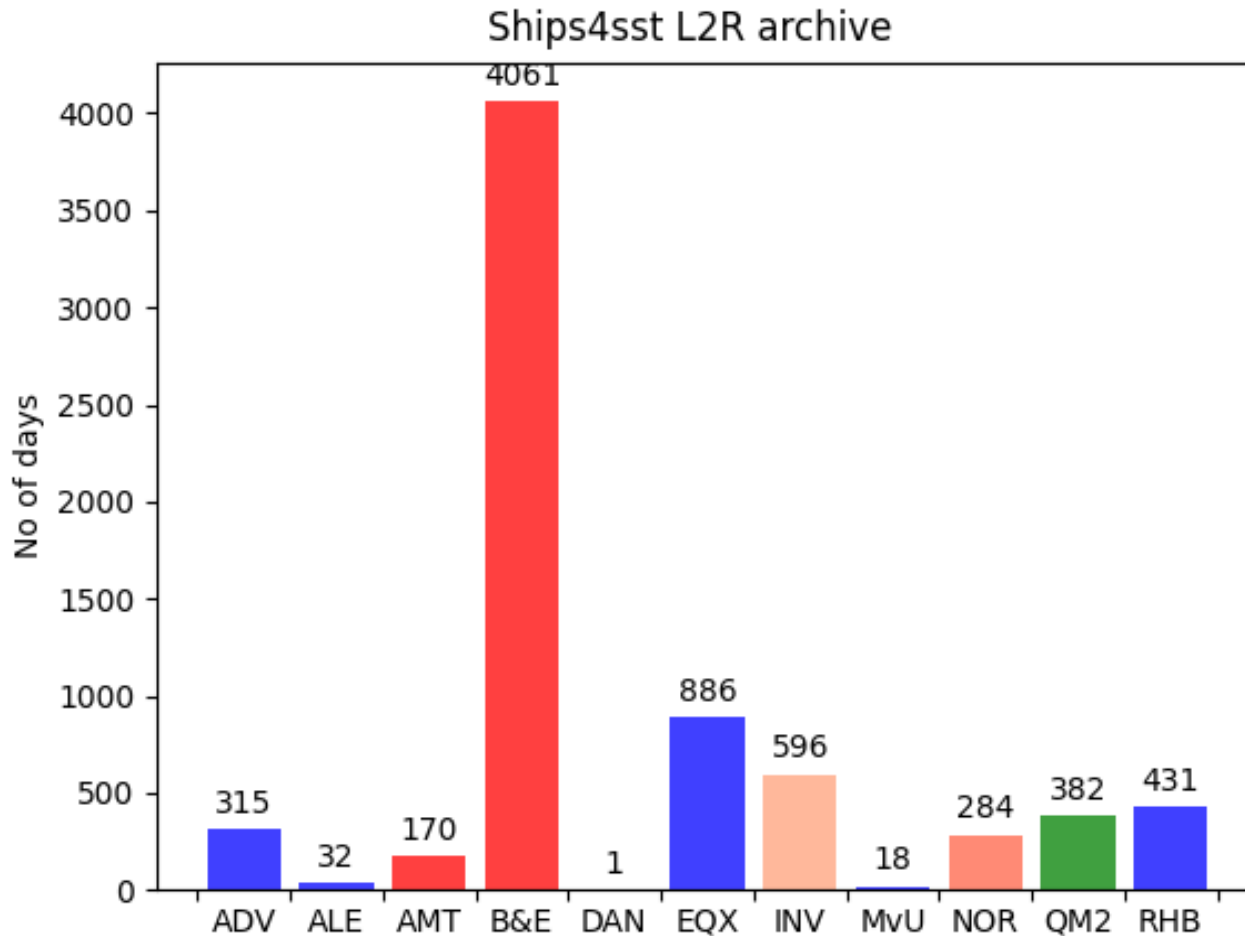
processed 20210602 (c) 2021 ISAR team - v1.5

# Archive – SST data points / route



processed 20210602 (c) 2021 ISAR team - v1.5

# Archive – SST data points / RDAC



processed 20210602 (c) 2021 ISAR team - v1.5



# Archive Issues

- File naming convention:
  - Date wrong
  - No Deployment information
  - Compressed data, also compression containers
  - Adding –partxx to file
  - Emails to users to resolve and reissue data by user
- Missing compulsory data fields
  - No total uncertainty
    - Email to user to resolve and reissue data by user
- New data no matching old data file number on replacement files provided.
  - Emails to user to resolve
- Folder Names generation if non alphanumeric characters in instrument name.
  - Resolved code update

# Archive Issues

- Changing ship names in L2R:
  - Please use consistent Platform names once used (e.g. always use RV in front of ship or never use it.). Do not change it from file upload to file upload !
- Removing bad quality data
  - Not automated, email to JF or WW
- Data duplication
  - Resubmission of previously data should be checked with JF first to avoid this, if it is the same file version!
  - New file version can be submitted as new submission
  - Need strategy to deal with duplication and old data, but need user to tell us what can be removed.