Copernicus FICE 2024

Training on

In situ Ocean Colour Above-Water Radiometry towards Satellite Validation

Ingesting TriOS data into HyperCP

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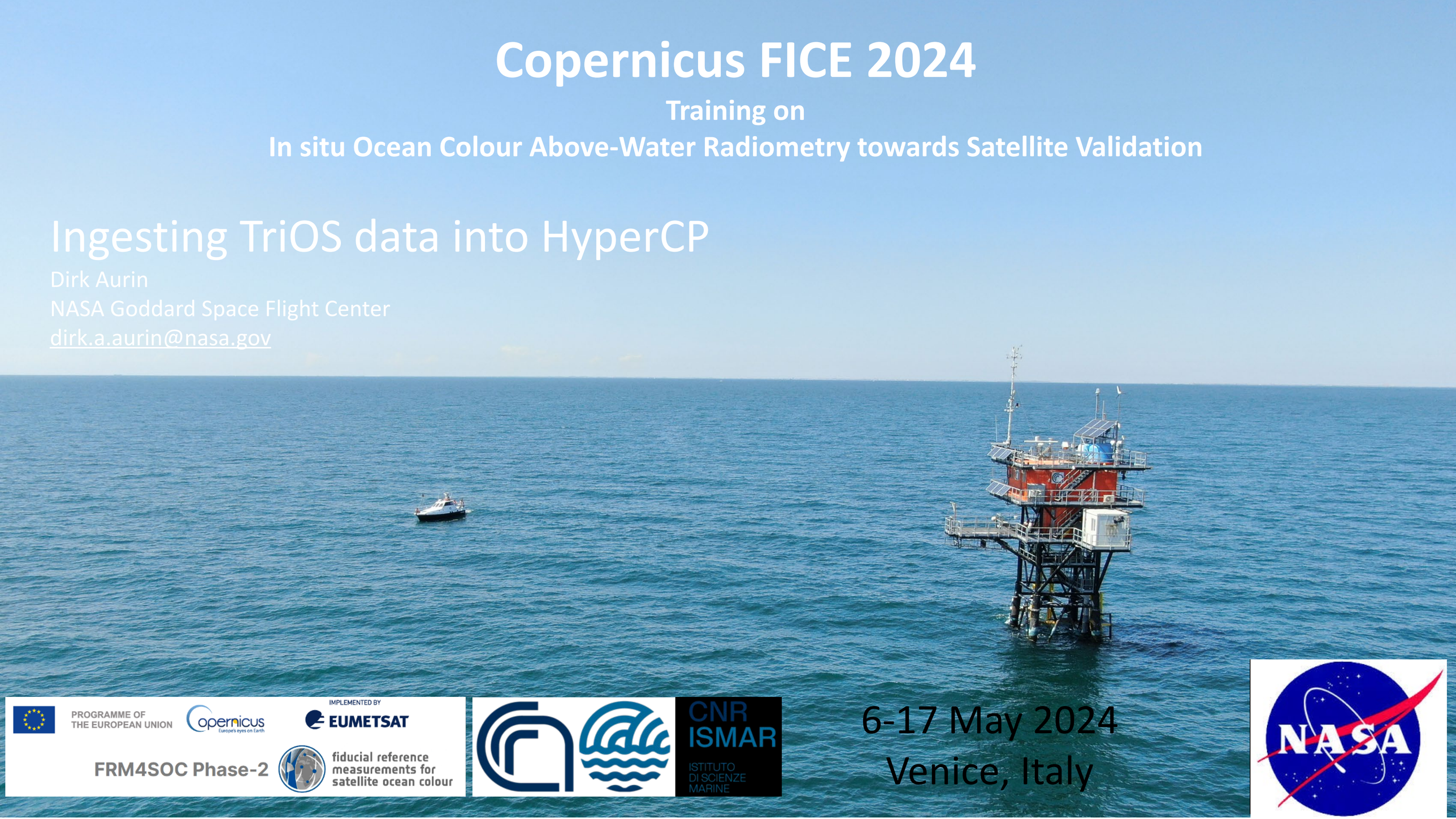
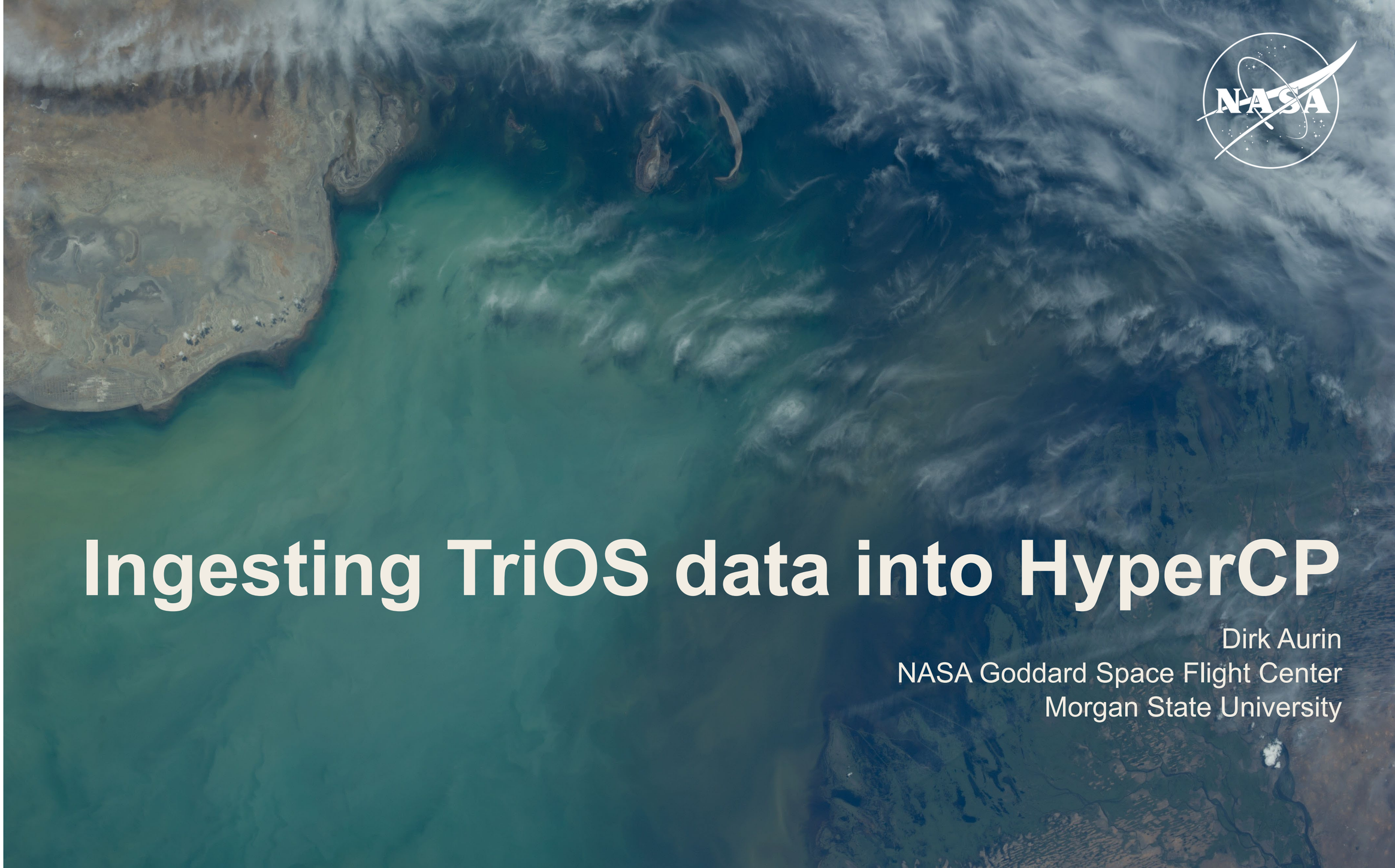


PROGRAMME OF THE EUROPEAN UNION
Copernicus Europe's eyes on Earth
IMPLEMENTED BY EUMETSAT
FRM4SOC Phase-2
fiducial reference measurements for satellite ocean colour
CNR ISMAR ISTITUTO DI SCIENZE MARINE

6-17 May 2024
Venice, Italy

NASA



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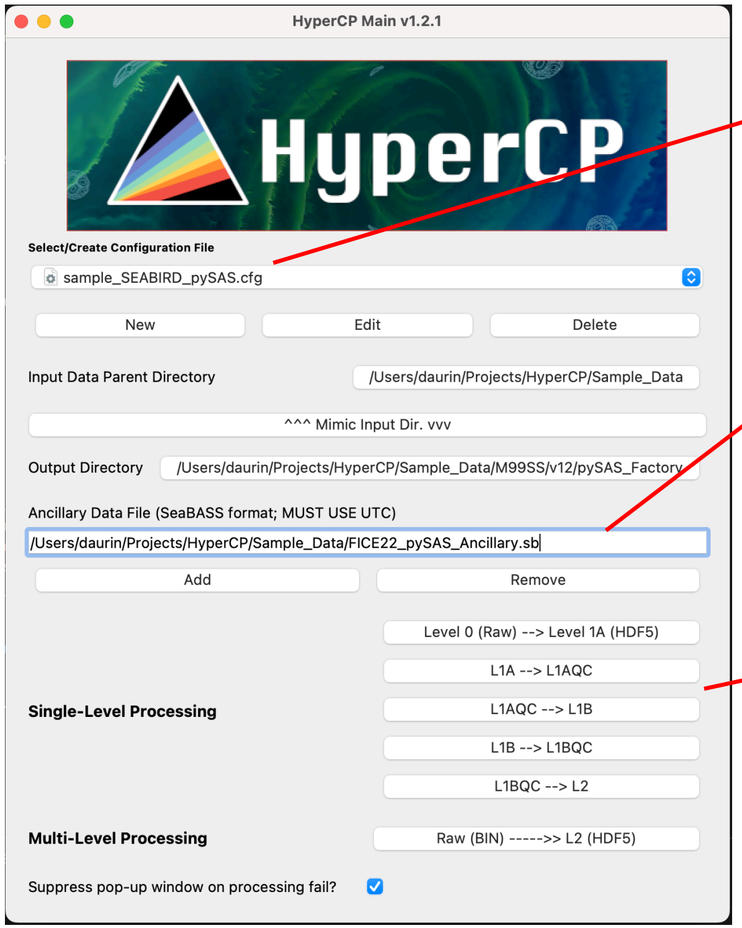
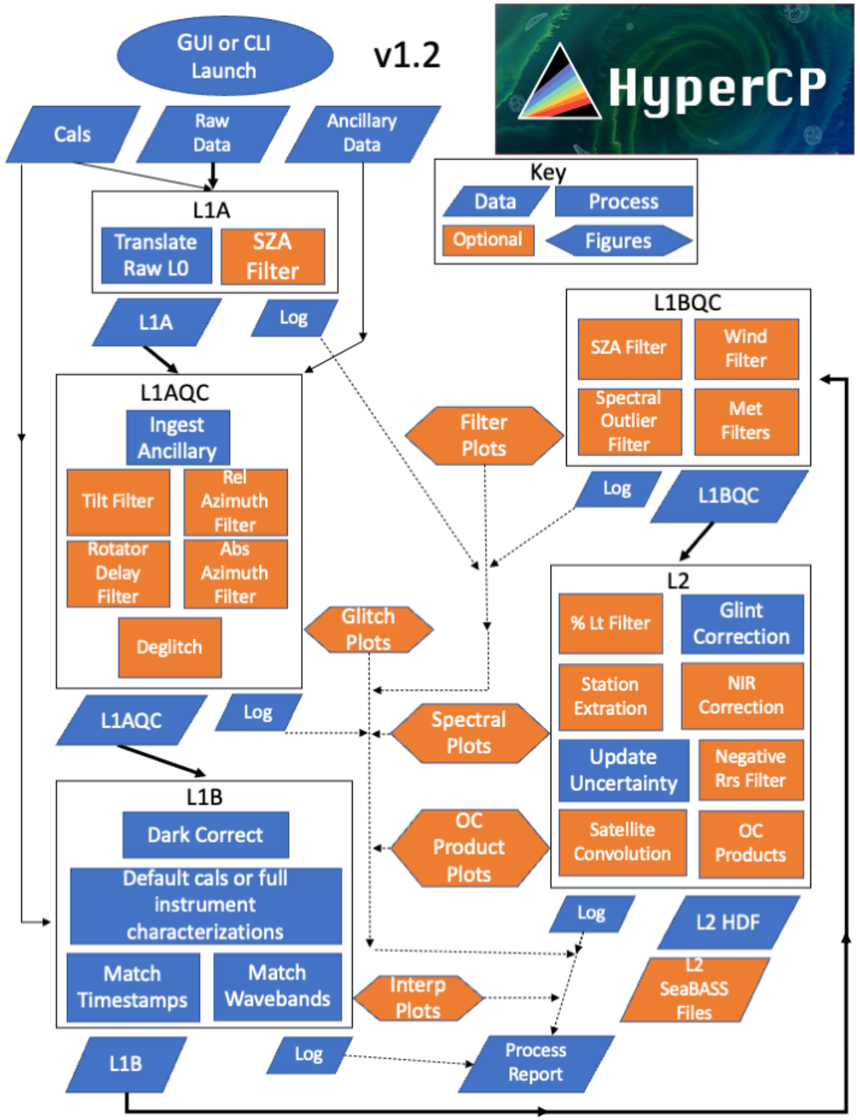
Overview



Each instrument deployment or cruise gets a unique configuration

The Ancillary file for the entire deployment/cruise is provided here. (**Not required for quick-look processing if an azimuth robot/sensor is present but required otherwise.**)

Processing can be run on one file or many files together, and can be run on one level or all levels together



Ancillary Data for Manually Operated TriOS

There will be more in-depth training on the Ancillary file and the SeaBASS format during Days 3-6. Until then, I suggest editing one of the sample Ancillary files to suite your temporary needs.

For each station:

FICE2024_TriOS_Ancillary template.sb

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/begin_header
/investigators=Your_Name
/affiliations=Your_Lab
/contact=Your@email
/experiment=FICE
/cruise=FICE2024
/station=AAOT
/data_file_name=FICE2024_Ancillary.sb
/documents=NA
/calibration_files=NA
/data_type=pigment
/data_status=final
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/end_date=20220721
/start_time=08:45:00[GMT]
/end_time=09:00:00[GMT]
/north_latitude=45.314[DEG]
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/water_depth=NA
/measurement_depth=0
/missing=-9999
/delimiter=comma
/fields=year,month,day,hour,minute,second,lat,lon,wind,wdir,Wt,At,sal,RelAz
/units=yyyy,mo,dd,hh,mn,ss,degrees,degrees,m/s,degrees,degreesC,degreesC,PSU,degrees
/end_header
2022,7,14,8,45,0,45.314,12.508,0.2,95,25.6,-9999.0000,-9999.0000,135
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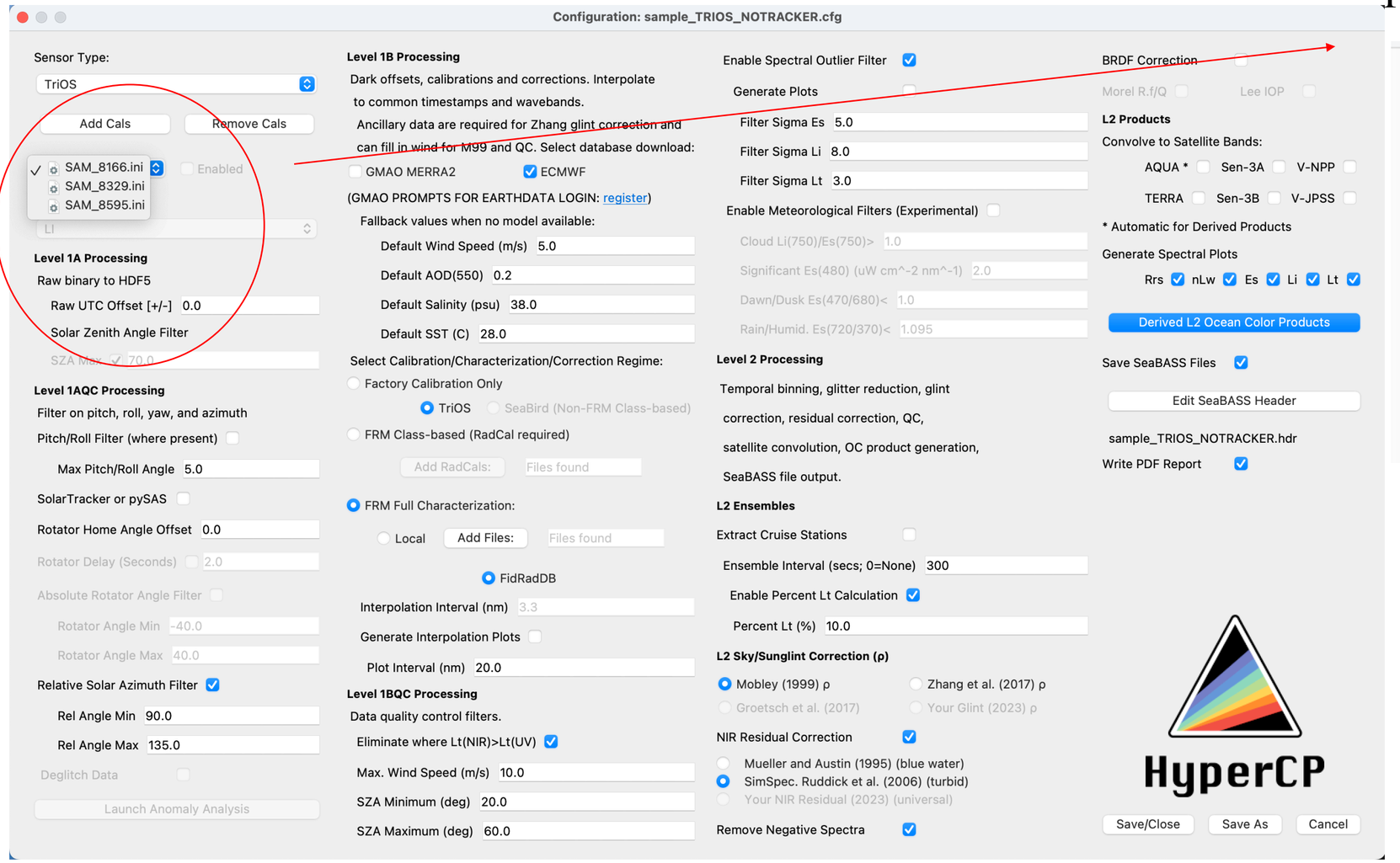
```

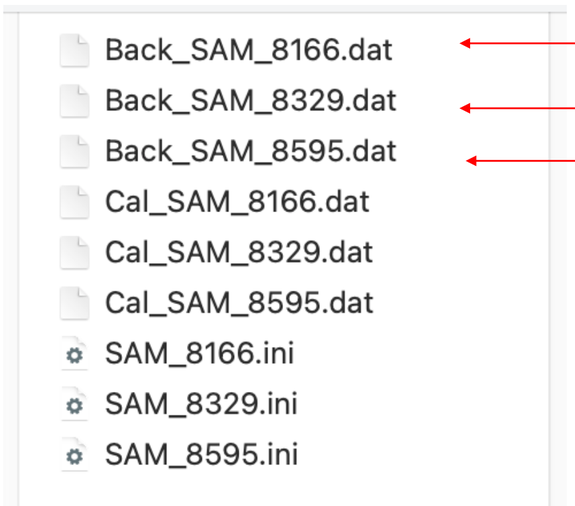
Most critical (for quick-look processing) is Relative Azimuth

GODDARD EARTH SCIENCES

HyperCP: Loading Instrument Calibration



TriOS RAMSES triplet



No GPS

Li

Es

Lt

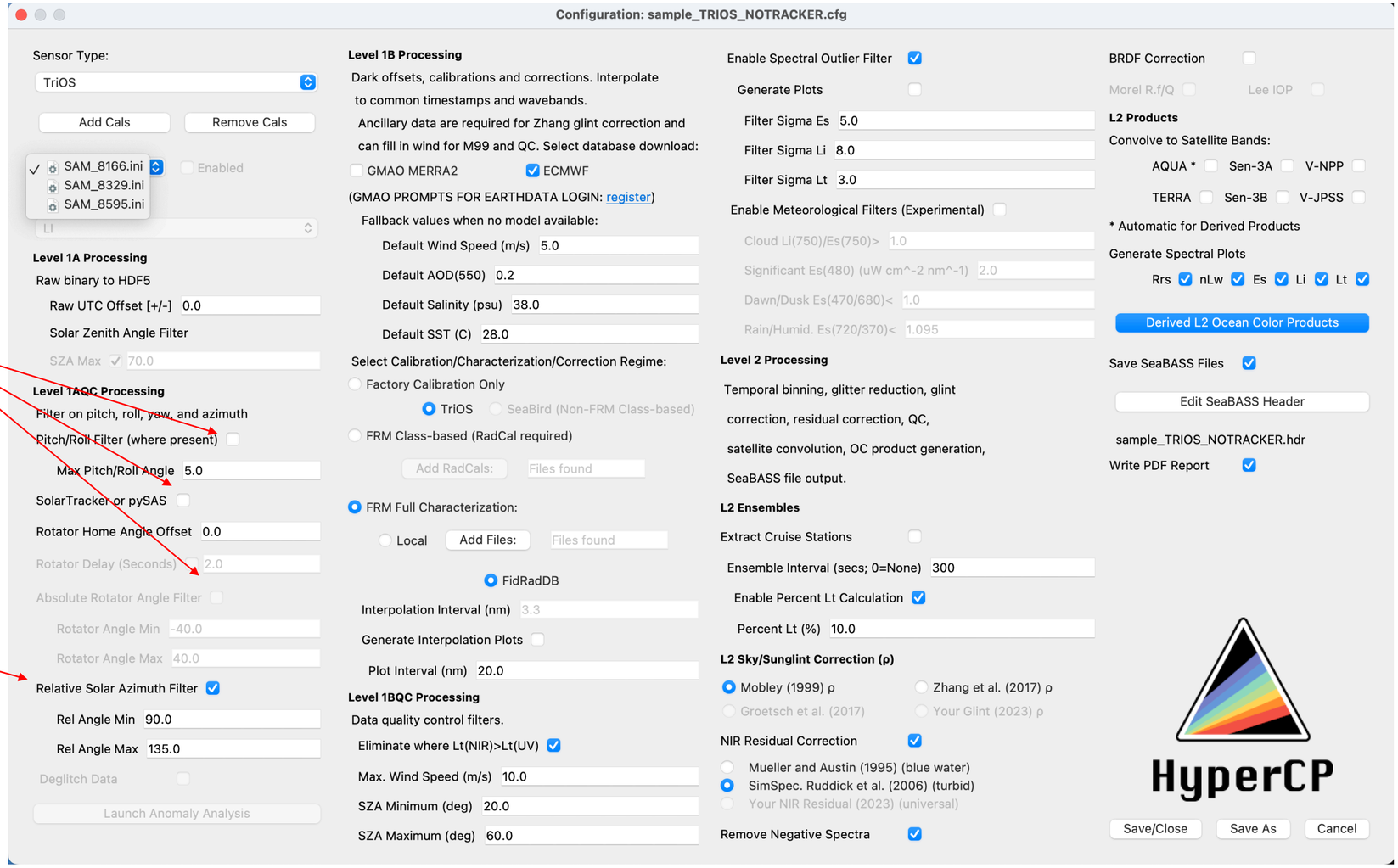
No Tilt-Heading sensor

No Azimuth control robot

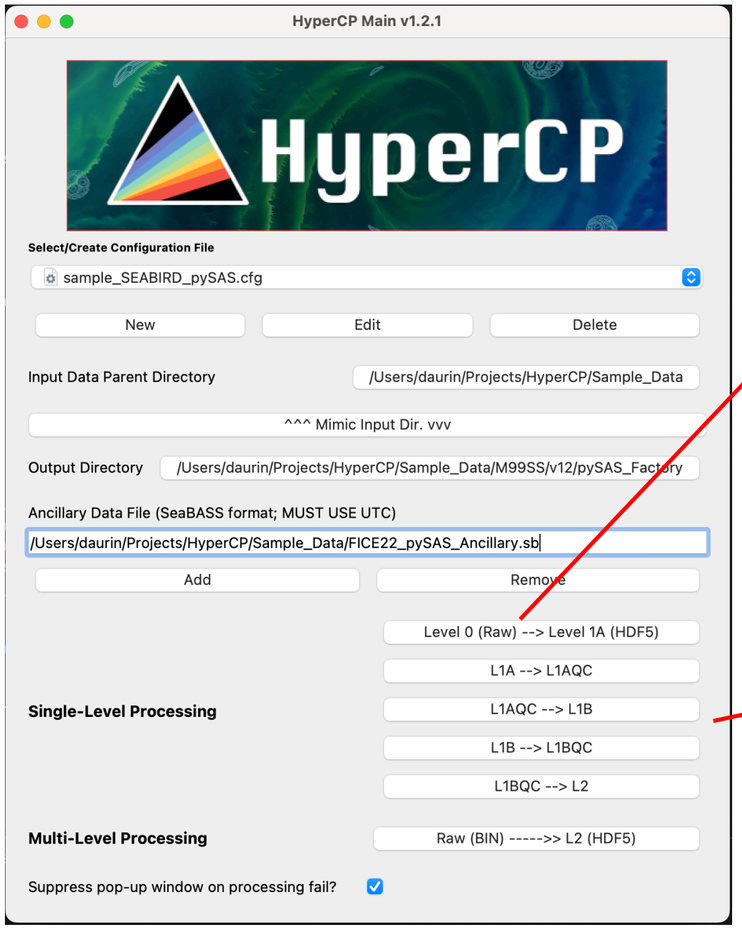
L1AQC for Manually Operated TriOS

Manually operated instruments with no tilt sensor, GPS, or azimuth robot

Relative azimuth is required.



Overview



SAM_8166_RAW_SPECTRUM_FRM4SOC2_FICE22_UT_20220719_080000.mlb
SAM_8166_RAW_SPECTRUM_FRM4SOC2_FICE22_UT_20220719_082000.mlb
SAM_8329_RAW_SPECTRUM_FRM4SOC2_FICE22_UT_20220719_080000.mlb
SAM_8329_RAW_SPECTRUM_FRM4SOC2_FICE22_UT_20220719_082000.mlb
SAM_8595_RAW_SPECTRUM_FRM4SOC2_FICE22_UT_20220719_080000.mlb
SAM_8595_RAW_SPECTRUM_FRM4SOC2_FICE22_UT_20220719_082000.mlb

For TriOS, raw files will look something like this, with one file for each radiometer at each sample station.

Processing can be run on one file or many files together, and can be run on one level or all levels together.

More extensive training on data processing in HyperCP will be provided during Days 3-6.