

L1A : Process RAW to L1A

Raw binary to HDF5 and filter data on SZA.

Processing Parameters and metadata:

HyperInSPACE version: 1.2.0

SZA Limit (L1A): 70.0

Example of HyperSAS with pySAS robot.

/version=R0

/investigators=The_Sampler

/affiliations=Sample_University

/contact=sample@sampleu.edu

/experiment=sample_pySAS

/cruise=sample_cruise

/documents=README.md

/instrument_manufacturer=Satlantic

/instrument_model=HyperSAS

/calibration_date=

/calibration_files=SATTHS0045A.tdf,SAS045_20210306.sip,GPRMC_NMEA0183v3.01.tdf,HLD385F.cal,S
ATMSG.tdf,HSE0488F.cal,HLD0386E.cal,HED0488F.cal,HSL385F.cal,GPGGA_NMEA0183.tdf,HSL0386
E.cal,UMTWR_v0.tdf

/data_type=above_water

/data_status=

/measurement_depth=0

/platform=sample_ship

Process log:

Process Single Level

ProcessL1a.processL1a: 21-Apr-2023 18:45:26

Bad Datetag or Timetag2 found. Eliminating record. 1776 DT: 3158326.0 TT2: 758134061.0

SZA passed filter: 50

L1A file produced:

/ssdwork/GitRepos/HyperInSPACE/Data/Sample_Data/L1A/SAMPLE_HYPERSAS_SOLARTRACKER_L1
A.hdf

Process	Single	Level:
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/ssdwork/GitRepos/HyperInSPACE/Data/Sample_Data/L1A/SAMPLE_HYPERSAS_SOLARTRACKER_L1 A.hdf - SUCCESSFUL		
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L1AQC : Process L1A to L1AQC

Low level QC (pitch, roll, yaw, and azimuth) and deglitching.

Processing Parameters:

Rotator Home Angle: 0.0

Rotator Delay: 5.0

Pitch/Roll Filter: 5.0

Rotator Min: -20.0

Rotator Max: 45.0

Rel Azimuth Min: 90.0

Rel Azimuth Max: 135.0

ES Dark Window: 11

ES Light Window: 5

ES Dark Sigma: 3.2

ES Light Sigma: 3.5

LT Dark Window: 11

LT Light Window: 5

LT Dark Sigma: 3.5

LT Light Sigma: 3.2

LI Dark Window: 11

LI Light Window: 5

LI Dark Sigma: 3.4

LI Light Sigma: 3.0

Process log:

Process Single Level

Found data: station

Found data: lat

Found data: lon

Found data: heading

Found data: wt

Found data: sal

Found data: wind

Found data: cloud

Found data: waveht

Found data: pitch

Found data: roll

Deglitching file Config/sample_SOLARTRACKER_anoms.csv found for sample_SOLARTRACKER. Using these parameters.

ProcessL1aqc.processL1aqc: 21-Apr-2023 18:51:33

No coincident ancillary data found. Check ancillary file. Aborting

L1aqc processing failed. Nothing to output.

Example Deglitching

Randomized. Complete plots of hyperspectral deglitching from anomaly analysis can be found in [output_directory]/Plots/L1AQC_Anoms.

None found.

None found.

None found.
None found.
None found.
None found.