

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 18:01:02

SZA passed filter: 44

L1A file produced:

/ssdwork/GitRepos/HyperInSPACE/Data/Sample_Data/L1A/SAMPLE_HYPERSAS_pySAS_NOTILT_L1A.
hdf

Process Single Level:

/ssdwork/GitRepos/HyperInSPACE/Data/Sample_Data/L1A/SAMPLE_HYPERSAS_pySAS_NOTILT_L1A.

hdf - SUCCESSFUL

L1AQC : Process L1A to L1AQC

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

Processing Parameters:

Rotator Home Angle: 0.0

Rotator Delay: 60.0

Pitch/Roll Filter: 5.0

Rotator Min: -55.0

Rotator Max: 90.0

Rel Azimuth Min: 90.0

Rel Azimuth Max: 135.0

ES Dark Window: 11

ES Light Window: 5

ES Dark Sigma: 3.5

ES Light Sigma: 3.5

LT Dark Window: 11

LT Light Window: 5

LT Dark Sigma: 3.5

LT Light Sigma: 2.9

LI Dark Window: 11

LI Light Window: 5

LI Dark Sigma: 3.4

LI Light Sigma: 2.9

Process log:

Process Single Level

Deglitching file Config/sample_pySAS_anoms.csv found for sample_pySAS. Using these parameters.

This file not found in parameter file. Resorting to values in ConfigFile.settings.

ProcessL1aqc.processL1aqc: 21-Apr-2023 18:06:52

Filtering file for GPS status

Percentage of data failed on GPS Status: 0 %

Filtering file for high pitch and roll

Pitch and roll data not found for tilt filter. Try adding to Ancillary Data. 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.