

**L1A : Process RAW to L1A**

Raw binary to HDF5 and filter data on SZA.

Processing Parameters and metadata:

HyperInSPACE version: 1.1.2

SZA Limit (L1A): 70.0

Example of HyperSAS with NO sun tracker robot

/version=R0

/investigators=Philip\_Marlow

/affiliations=Chandler\_U

/contact=trickydick@cu.edu

/experiment=sample\_NoSolarTracker

/cruise=sample\_cruise

/documents=README.md

/instrument\_manufacturer=Satlantic

/instrument\_model=HyperSAS

/calibration\_date=20180730

/calibration\_files=SATTHS0045A.tdf,HSL0386D.cal,GPRMC\_NMEA0183v3.01.tdf,HSE0488Ea.cal,HSL0385D.cal,SATMSG.tdf,SATPYR.tdf,HLD0385D.cal,IRP3397A.cal,HLD0386D.cal,SAS045\_20180730.sip,GP GGA\_NMEA0183.tdf,SATNAV0001A.tdf,HED0488Ea.cal

/data\_type=above\_water

/data\_status=preliminary

/measurement\_depth=0

/platform=sample\_ship

Process log:

Process Single Level

ProcessL1a.processL1a: 21-Apr-2023 19:30:16

L1A file produced:

/ssdwork/GitRepos/HyperInSPACE/Data/Sample\_Data/L1A/SAMPLE\_HYPERSAS\_NOTRACKER\_L1A.hdf

Process Single Level:

/ssdwork/GitRepos/HyperInSPACE/Data/Sample\_Data/L1A/SAMPLE\_HYPERSAS\_NOTRACKER\_L1A.hdf

f - SUCCESSFUL

## L1AQC : Process L1A to L1AQC

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

Processing Parameters:

Rotator Home Angle: 0.0

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: 3.0

LT Light Sigma: 3.2

LI Dark Window: 11

LI Light Window: 5

LI Dark Sigma: 3.2

LI Light Sigma: 3.4

ES Light Thresh. Band: None

ES Dark Thresh. Band: None

ES Min.: None

ES Max.: None

LI Dark Thresh. Band: 505.55

LI Min.: None

LI Max.: None

LT Dark Thresh. Band: None

LT Min.: None

LT Max.: None

Process log:

Process Single Level

Found data: station

Found data: lat

Found data: lon

Found data: wind

Found data: wt

Found data: sal

Found data: speed\_f\_w

Deglitching file Config/sample\_NOTRACKER\_anoms.csv found for sample\_NOTRACKER. Using these parameters.

ProcessL1aqc.processL1aqc: 21-Apr-2023 19:32:33

Required ancillary sensor azimuth is missing. Abort.

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.