# 1614106 lat lon date time

### L1E: Process L1D to L1E

**Process Single Level** 

LT has fewest records (as expected) - interpolating to LT; 467 records

Interpolate Data ES

Interpolate Data LI

Interpolate Data LT

Skip. Other instruments are being interpolated to this one.

Interpolate Data LATITUDE

Interpolate Data LONGITUDE

Interpolate Data COURSE

Interpolate Data SPEED

Interpolate Data REL\_AZ

Interpolate Data ELEVATION

Interpolate Data AZIMUTH

Interpolate Data HEADING

Interpolate Data HUMIDITY

Interpolate Data PITCH

Interpolate Data POINTING

Interpolate Data ROLL

Interpolate Data T

L1E file produced:

 $D:\Dirk\NASA\HyperPACE\Field\_Data\HyperSAS\Processed\KORUS\_Low\_QC\L1E\1614106\_L1E.hdf$ 

#### L2: Process L1E to L2

ProcessL2: D:\Dirk\NASA\HyperPACE\Field\_Data\HyperSAS\Processed\KORUS\L1E\1614106\_L1E.hdf

Model data for Wind and AOD may be used to replace blank values. Reading in model data...

Ancillary file found locally: N201614106\_MERRA2\_1h.nc

Ancillary file found locally: N201614106\_AER\_MERRA2\_1h.nc

Field wind data has 133 NaNs out of 164 prior to using model data

Field salt data has 164 NaNs out of 164 prior to using model data

Field sst data has 164 NaNs out of 164 prior to using model data

Field and data has 164 NaNs out of 164 prior to using model data

Field station data has 164 non-stations out of 164

Filling in field data with model data where needed.

Filling in ancillary data with default values where still needed.

Applying Lt quality filtering to eliminate spectra.

0.0% of spectra flagged

Percentage of data out of SZA and Wind limits: 0 %

Applying spectral filtering to eliminate noisy spectra.

0.0% of Es data flagged

0.0% of Li data flagged

4.3% of Lt data flagged

Remove IRRADIANCE Data

Length of dataset prior to removal 164 long

Length of dataset after removal 157 long: 4% removed

Remove RADIANCE Data

Length of dataset prior to removal 164 long

Length of dataset after removal 157 long: 4% removed

Remove ANCILLARY Data

Length of dataset prior to removal 164 long

Length of dataset after removal 157 long: 4% removed

Applying meteorological filtering to eliminate spectra.

0.0% of spectra flagged

Binning datasets to ensemble time interval.

26 spectra in slice (ensemble).

3 spectra remaining in slice to average after filtering to lowest 10.0%.

Calculating Ruddick glint correction

Rho\_sky: 0.0295 Wind: 6.5 m/s

Perform simple residual NIR subtraction.

109 spectra in slice (ensemble).

11 spectra remaining in slice to average after filtering to lowest 10.0%.

Calculating Ruddick glint correction

Rho\_sky: 0.0293 Wind: 6.1 m/s

Perform simple residual NIR subtraction.

Filtering reflectance spectra for negative values.

0.0% of Rrs HYPER spectra flagged

0.0% of nLw\_HYPER spectra flagged

Processing chlor\_a

Processing poc

Processing kd490

Processing ipar

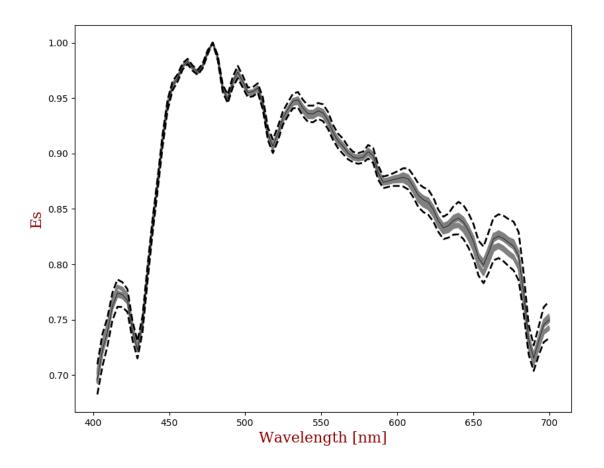
# 1614106 lat lon date time

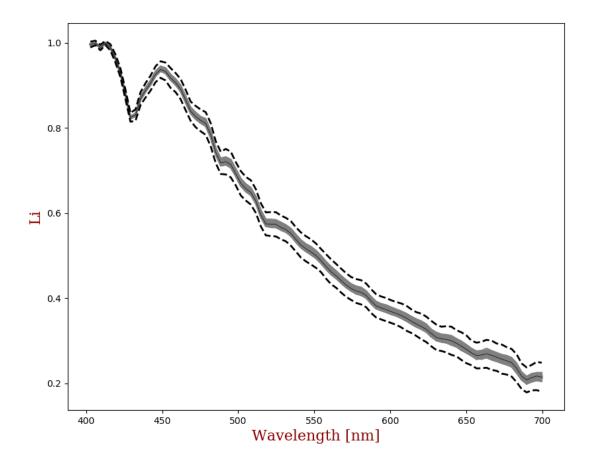
Processing avw Processing CDOM, Sg, DOC

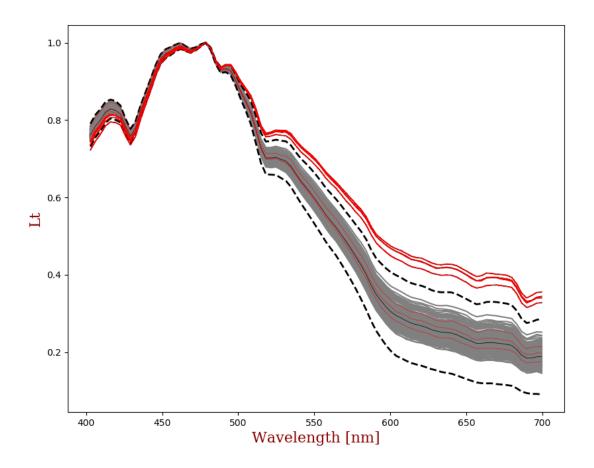
Processing qaa

 $D:\Dirk\NASA\HyperPACE\Field\_Data\HyperSAS\Processed\KORUS\L2\1614106\_L2.hdf$ 

### Spectral Filters







# Radiometry

