## Data Processing Flow for CHLAFLO and FLUBSCT L0/L1 Data Products from FLORD Instrument

## **NOTES** CHLAFLO and FLUBSCT Instruments are located on the following platforms: Mobile Platforms— Open Ocean Gliders, AUVs, and both types of Global Profilers (SPP/ shallow and WF) Fixed Platforms-Pioneer, Endurance, Global mooring risers and RSN 200m FLORD raw data stream arrives at CI (mobile platform data streams will include the FLORD raw data stream) WETLabs ECO Triplet w with only 2 channels enabled scale factor, dark counts, CG SPP CG WF Fixed Coastal/ Calibration backscatter wavelengths (preset), Instrument Global Profiler metadata deployment salinity, Driver Driver Driver Glider Driver X factor. theta angle CHLAFI O FLUBSCT scale factor, dark counts. backscatter L1 L1 Calibration Calibration scale factor. CHLAFLO wavelengths (preset), FLUBSCT dark counts metadata metadata DPS deployment salinity, DPS **KEY** X factor additional inputs theta angle to a process L<sub>1a</sub> Additional data CHLAFLO **FLUBSCT** products needed Secondary Secondary Secondary Post Secondary Post Data Post Depl. Post Depl. Instrument Deploy. Calib: Deploy. Calib: Product Raw Data Stream adjustment adjustment POLYVAL DPS POLYVAL DPS values values Process (specified Decision by a DPS) that Platform Platform Point NO NO changes flags or Instrument Instrument metadata, e.g. QC Recovered Recovered Process (specified by YES YES a DPS or a driver) Metadata that changes data Secondary Secondary Secondary Post Secondary Post values to create a Post Recovery Post Recovery Recovery Calib: Recovery Calib: new data product adjustment adjustment POLYVÁL DPS POLYVAL DPS values values Global Range Global Range Check QC DPS Check QC DPS Local Range Lat/Lon Local Range Lat/Lon Check QC DPS Check QC DPS Lookup Tables for individual QC DPS are provided Stuck Value Test Stuck Value Test separately QC DPS QC DPS L<sub>1</sub>b L<sub>1</sub>b CHLAFLO **FLUBSCT** The final QA/QC steps will be data Final QA/QC Final QA/QC product specific and will represent a Steps Steps trade-off between what is within scope (HITL here) (HITL here) and what will result in the most reliable/ accurate data products. L<sub>1</sub>c CHLAFLO

## **Document Control Sheet**

VERSION DATE	DESCRIPTION	ORIGINATOR
0-01 14-Mar-201 0-02 19-Mar-201 0-03 15-May-20 0-04 17-May-20 1-00 18-May-20 1-01 29-May-20 1-02 11-July-201	Formatting and metadata updates. Correction for Global Mooring riser Minor update to Lookup Table note. Initial Release Revised for FLUBSCT	M. Neely S. Webster M. Neely S. Webster E. Griffin M. Neely S. Webster