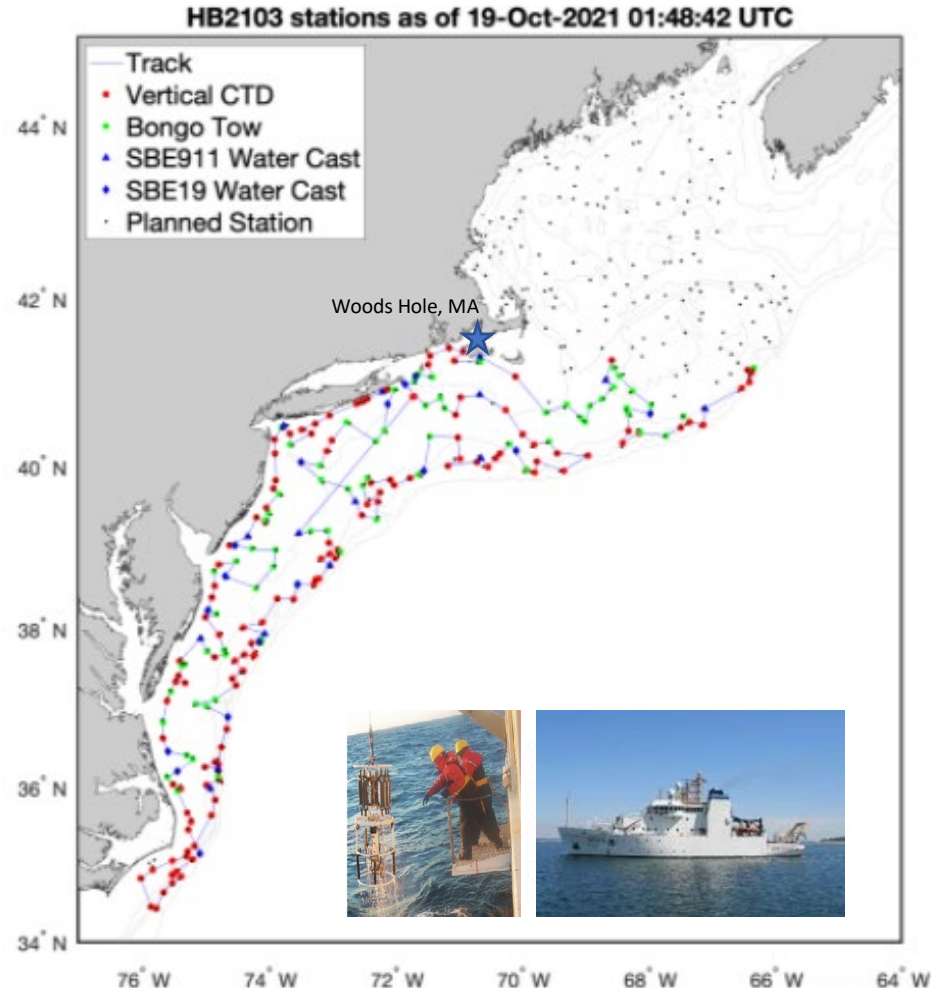


OASIS Example Data Flow

(Oceanography At-Sea Information System, Northeast Fisheries Science Center (NEFSC))



- CTD (conductivity, temperature, depth) recording instruments are deployed on a variety of (primarily) NOAA ships in support of a number of NEFSC programs
- Software and instrument training are provided by the NEFSC Oceans and Climate Branch (OCB), along with CTD instruments.
- Meta data (ex position, date/time, depth, deployment type) are collected using OASIS.
- CTD files undergo preliminary processing at-sea in order to validate profile and associated station data.
- OASIS operations meta data and raw CTD data files are uploaded nightly (assuming a stable internet connection) via an SFTP transfer to a server located in Woods Hole, MA.
- An automated Perl script is run nightly while the ships are at sea using an on premise server creating individual daily backup folders containing uploaded data files.
- The uploaded operations file is used by OCB to track cruise progress (shown at left). Comment files are reviewed for any reported problems allowing for feedback by OCB within a short time frame.
- Raw data are provided in near-real time for assimilation into oceanographic models by external researchers.
- The OASIS team is currently working on the next major release of the software. SFTP file transfers will no longer be supported by the NEFSC. In anticipation of this policy change (due to security concerns), the team is currently exploring a Cloud solution. Target deployment is Spring 2022.