## Integration of the Earth System Grid Federation (ESGF) with NERSC HPSS module

SDM, CRD, LBNL January-March 2018 FY18Q2 Quarterly Report

This report covers the first quarter of FY-2018 (January-March 2018). During this period, LBNL staff, in accordance with the task plan mutually agreed upon with LLNL, performed the following activities.

Project Summary: In the previous collaboration two years ago, the library package, called Berkeley Archival Storage Encapsulation (BASE) library, has been developed. In this collaboration work, the BASE library module will be integrated into the ESGF Gateway system for data browsing and retrieval functionalities for climate data files on NERSC HPSS based on the expectations from the ESGF. Figure 1 shows the use case scenario for typical data downloads from HPSS.

- In this quarter (FY18Q2), initial version of the integration has been developed, tested and delivered to LLNL.
- Installation manual page has been created: https://docs.google.com/document/d/1aCoLrHcrGg0RX0\_ft4POgE5VqAD25TMZHolBoY1Pfl4/
- Sasha Ames from LLNL visited LBNL for project deliverables discussion (2/26/2018), and followups have been discussed over the emails and Slack for the testing at LLNL.
- In the next quarter (FY18Q3), the integrated prototype will be further maintained and tested.

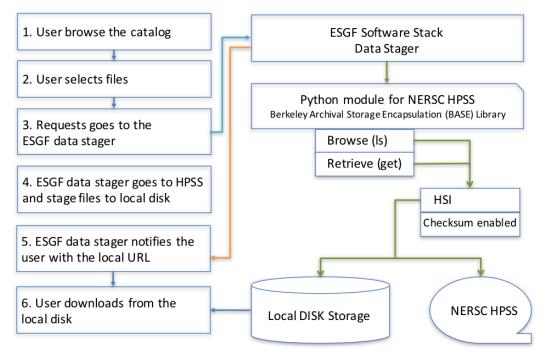


Figure 1: Use case scenario and BASE functionality in ESGF portal.