

[Improved Data Curation and Exploration: A Timeline for Visualizing Data Inventory \(DEMO\) \[1\]](#)

Submitted by aaron.sweeney@c... on Mon, 2016-12-19 16:08 **Event:** [Winter Meeting 2017](#) [2]

Abstract:

We report on the effectiveness of visualizing data inventory via timelines for improving the curation and exploration of archived ocean-bottom pressure data and coastal tide gauge data at the National Centers for Environmental Information (NCEI). Metadata about the inventories are expressed in Javascript Object Notation (JSON) format and visualized on a timeline through an open-source Javascript library (VisJS). Through this timeline, gaps in coverage immediately become apparent. Within the first two months of this timeline going live, our primary data provider used this inventory visualization to identify and submit for archive 17 at-risk data packages from the backlog of data collection that were not previously submitted for archive. Given the high cost of collecting these data, this represents a significant return on investment. Along with the inventory timeline, instrument deployment pages were also published providing time-series plots and direct access to unassessed data, quality-controlled data products, modeled tidal constituents, supporting metadata, and a list of associated tsunami events. These products support the research forecasting efforts of the Pacific Marine Environmental Laboratory (OAR/PMEL) which then transfers products to the NOAA Tsunami Warning Centers for operational usage. This occurs under the auspices of the US NOAA Tsunami Program. These products also support the broader tsunami modeling community. This timeline adds a new dimension to data stewardship and discovery. See <https://www.ngdc.noaa.gov/hazard/dart> [3].

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Author(s):

Name: [Aaron Sweeney](#) [9]

Organization(s): [NOAA National Centers for Environmental Information and CIRES](#) [10]

Email: aaron.sweeney@colorado.edu [11]

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[2] <https://commons.esipfed.org/2017WinterMeeting>

[3] <https://www.ngdc.noaa.gov/hazard/dart>

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