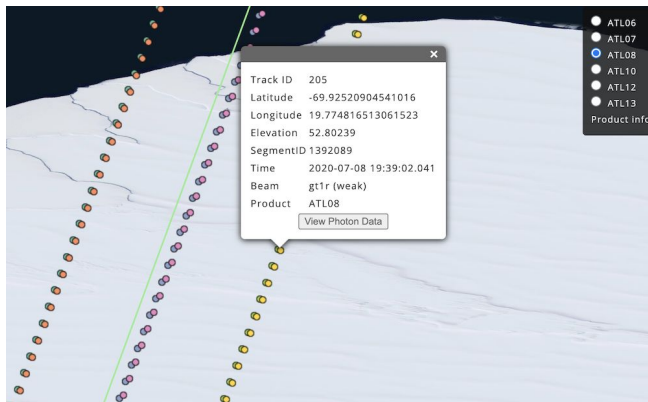


OpenAltimetry

[OpenAltimetry](#) is a web-based cyberinfrastructure platform for rapid discovery, access, and visualization of data from NASA's ICESat (Ice, Cloud and land Elevation Satellite) and ICESat-2 missions. These laser profiling altimeters are being used to measure changes in the topography of Earth's ice sheets, vegetation canopy structure, and clouds and aerosols.

These missions launched in 2003 and in 2018, respectively, and produce data that are fundamentally different from the gridded data products that are generated by most NASA Earth observing satellite missions. Polar orbiting satellite altimeters collect elevation data along densely sampled surface tracks that are widely separated in mid and lower latitudes. These data are only available as a set of file-based hierarchical data products, sequential in time but not spatially organized, with key parameters distributed among multiple data products. Non-expert users must therefore rely on data services provided by the mission and/or archive center, both of which are resource-limited and may not be attuned to the needs of all user constituencies.



OpenAltimetry provides a new paradigm for access to the data from these missions, to serve the needs of a diverse scientific community and to increase the accessibility and utility of these data for new users. The resource can be accessed online at www.openaltimetry.org through modern web browsers and does not require any additional software or add-ons.

To learn more visit openaltimetry.org/101/ or email us at info@openaltimetry.org. For more detailed information on the project, a journal article about OpenAltimetry is available as Open Access at <https://doi.org/10.1007/s12145-020-00520-2>:

Khalsa, S.J.S., Borsa, A., Nandigam, V., Phan, M., Lin, K., Crosby, C., Fricker, H., Baru, C. and Lopez, L., 2020. OpenAltimetry-rapid analysis and visualization of Spaceborne altimeter data. *Earth Science Informatics*, pp.1-10.

The OpenAltimetry project is supported by a grant from the National Aeronautics and Space Administration under award number NNX16AL89A and is a collaborative project between the Scripps Institution of Oceanography, San Diego Supercomputer Center, National Snow and Ice Data Center and UNAVCO.

FAIRsharing.org: OpenAltimetry; DOI: <https://doi.org/10.25504/FAIRsharing.M2wo00>