

Accessible Oceans: Exploring Ocean Data through Sound | AWARD # 2115751

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Project Description

This work explores the feasibility of using sonification to convey ocean science data in a way that is accessible to blind and low vision learners in informal settings.

Key Achievements

- Accomplishments:
 - Iterative design of sonifications for five ocean science datasets.
 - Testing with three schools for the blind and four informal science venues.
- We have learned that there is tremendous excitement and enthusiasm from multiple communities to create more accessible data engagement opportunities!

Audience & Settings

Audience: Blind and low vision learners, individuals with innumeracy low graph literacy, museum visitors

Disciplinary area: Ocean science

Learning environment: aquariums and science centers, with testing in partner schools for the blind

Access and Inclusion

Our primary audience is blind and low vision learners, aged middle school and up. We have conducted multiple sessions with students, their teachers, and BLV adults to get feedback on our designs.

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Due to the focus of this project on designing for blind and low vision learners, we have deliberately chosen not to include visual media. Click the links below to listen to the most up-to-date versions of our auditory prototypes on Samply.

Link to auditory prototype of [CO2 Flux Between Ocean and Atmosphere](#) (6 minutes, 21 seconds)

Link to [Longterm Axial Seamount Inflation Record](#) (Full version, 7-minute, 5 seconds)

[Link to Longterm Axial Seamount Inflation Record](#) (Short version, 2 minute, 34 seconds)

Link to [2015 Axial Seamount Eruption](#) (7 minutes, 1 second)

Link to [Ocean Response to Extratropical Storm Hermine](#) (9 minutes, 28 seconds)