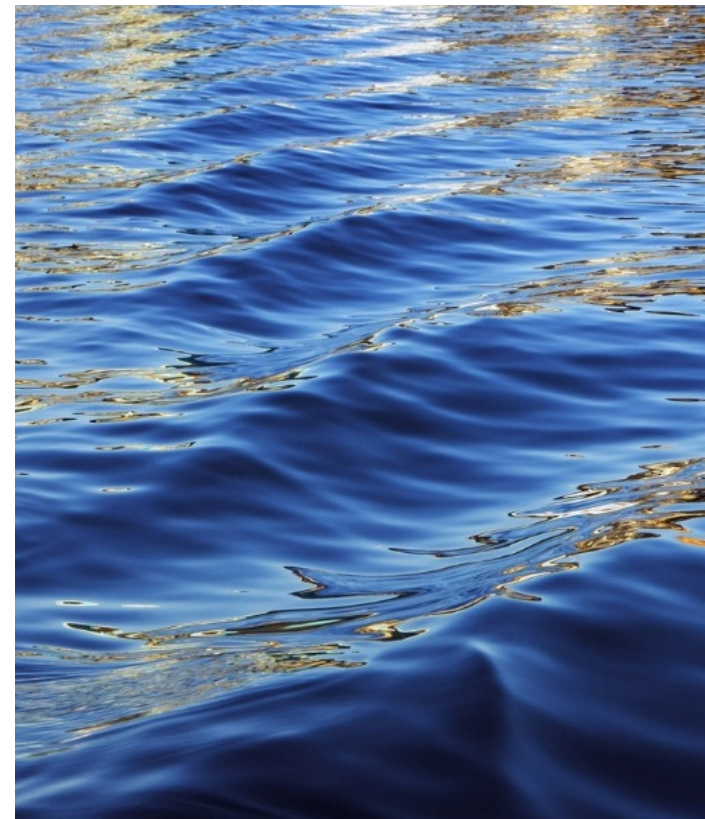# See O Too

Immersive Introduction to Climate Science

See O Too

See O Too is an augmented reality application that visually and immersively teaches the fundamentals of Climate Science

Guided Experience

- The guided experience—intended for museums, classrooms, or festivals—can be used with no prior exposure to AR or VR. It currently runs on the Microsoft HoloLens

- The material and terminology is designed for middle school science students through adults and can be completed in about 10 minutes

The Project

- See O Too is an open source project developed in Unity3D and hosted on GitHub

- It's being developed on a volunteer basis and is currently without external funding or partnerships

- We are seeking interested collaborators, particularly artists, animators, and developers with Unity3D expertise

Design Principles

Journalistic approach

Scientific reality, not advocacy

Open content methodology

References published on GitHub

Design decisions documented on GitHub

Extreme clarity about directly measured data versus projections and areas of active research

Data example: Current atmospheric CO_2 concentration

Active research example: Greenland ice sheet melt rate

Guided Experience

Three Chapters

1. Gasses in the Atmosphere
2. Warming and Melting
3. Effects and Mitigation

Interactive Experience

Includes the Guided Experience

Interactive explorations in each Chapter

Some examples from Chapter 1

- Explore details of each gas (e.g. Nitrogen cycle)
- See dry versus wet atmospheric composition
- Explore Water vapor and Water cycle

Accessibility

User input

Voice and simple gestures (default)

HoloLens clicker

Visual output

HoloLens display with head tracking (default)

Descriptive audio (app version on iPad/iPhone)

Audio output

Narration, music, and sound effects (default)

Floating subtitles

Localization

Languages: English (default), Spanish, French

Measurements: Imperial (default) or Metric

Setting for Imperial with Centigrade