
HABITABLE ZONE

Introduction

There is plenty of data about surface temperature on other bodies in the solar system that are within habitable range where humans can survive.

We wanted to make our habitable zones system visualize real, dynamic data as a different way to study the very real need to search for habitable zones within our solar system.

Components

Website

- Welcome page with icons for members of our solar system
- Each icon leads to detail page with 3D body and user specifies temperature range
- Matching temperature locations will be overlaid on the 3D image
- User can interact with 3D image: drag, rotate

Globe Projection

- User can click “Globe Mode” to project current image to external globe
- User can still interact with “Globe Mode” image: drag, zoom, rotate

Research, Education, and Exploration

Many opportunities for expansion of the Habitable Zones project

- Researchers and students may contribute own planetary science data to underlying database for visualization: gravity map, elevation, atmosphere composition
- Educator can use as engaging presentation tool for students to learn about planetary science
- Potential for mobile application
- Mathematical models can be written based on data loaded to help predict future habitable zones
- User can subscribe for future alerts when habitable zone is detected (as data is loaded)

The Habitable Zone is a collaborative project


NEPTUNE


SUN


EARTH


JUPITER


MERCURY


VENUS

Takeshi Osoekawa

Yuki Takeichi

Naoya Kurita

Hitoshi Nishihata

Ryan Zhang

Korina Ysabel

Arthur Choe