

Investigation 7: Investigating a Place in the Ocean

This investigation will help you to:

- Learn more about the great barrier reef.
- Learn more about the Japan trench.
- Learn more about the Marianas trench.
- Learn more about the Hawaiian islands.
- Learn more about the Mid-Atlantic ridge.
- Learn more about the Belize reef.
- Learn more about the Peru trench.
- Learn more about the Bering Strait.
- Find data on some ocean locations.

To learn more about the great barrier reef, visit the following web sites:

Great Barrier Reef, **Marine Park Authority**

Learn more about issues related to the management and protection of the reef.

To learn more about the Japan trench, visit the following web sites:

Seafloor Topography of the Plate Boundaries & Seismicity, **Japan Coast Guard**

View several different images of the Japan Trench.

Realtime Tidal Observation Data, **Japan Coast Guard**

Includes links for data around the Japanese islands.

Japan Seismic Hazard Information Station,

A public portal for seismic hazard information across Japan.

To learn more about the Marianas trench, visit the following web sites:

Marianas Trench Dive, **NOAA**

Take a virtual trip through the deepest point in the ocean.

Deepest Place in the Ocean - Challenger Deep, **Extreme Science**

Challenger Deep is the name given to the deepest point in the Marianas Trench. Find out more how it got its name and how it formed.

To learn more about the Hawaiian islands, visit the following web sites:

Pacific Sea Floor Mapping - Hawaiian Islands, **USGS**

Pick a Hawaiian Island and choose from three different map views of the island and seafloor.

"Hotspots:" Mantle Thermal Plumes, **USGS**

Read about the formation of the Hawaiian Islands.

Lo'ihi Seamount, Hawai'i's Youngest Submarine Volcano, **USGS**

The youngest Hawaiian island that is already 931m above the seafloor. Check out this site and see an image of this young volcano.

To learn more about the Mid-Atlantic ridge, visit the following web sites:

Descent to Mid-Atlantic Ridge, **Earthguide**

Information about a live expedition to the Mid-Atlantic Ridge from November 14 - December 14, 2000

The Mid-Ocean Ridge, by **Kenneth C. Macdonald and Paul J. Fox, UC Santa Barbara**

This article includes a detailed discussion of the geology of the Mid-Ocean Ridge and incorporates several diagrams and images.

Scroll down to the papers available on-line section of his website to access this paper.

To learn more about the Belize reef, visit the following web sites:

Belize Barrier Reef **By Sue Wells, UNDP/GEF Coastal Zone Management Project, Belize**

This study reviews the diversity, utilization, and threats to the Belize Barrier Reef.

Belize Reef Profile, **NOAA**

This page includes a description of the barrier reef as well as some black and white images and a Landsat image of the reef.

To learn more about the Peru trench, visit the following web sites:

Central Andean Topography, **Cornell University**

Compare two maps of the Chile-Peru Trench, one labeled and one blank.

Peru-Chile Trench, **UC Berkeley**

Largest Earthquakes in the World, **USGS**

Where was the largest earthquake since 1900? Read about the worst earthquake since 1900 centered in Chile through a series of short descriptions.

To learn more about the Bering Strait, visit the following web sites:

Whales and Walrus: Tillers of the Seafloor, **USGS**

This article summarizes a study done for potential impacts to gray whales and walrus of drilling for oil in the Bering Strait.

Bering Strait, **NASA**

A view of the Bering Strait from space.

To find data on some ocean locations, visit the following web sites:

Note: This table provides links to the same maps shown on the fact sheets.

Great Barrier Reef	Japan Trench	Marianas Trench	Hawaiian Islands	Mid-Atlantic Ridge	Belize Reef	Peru Trench	Bering Strait
3D Map	3D Map	3D Map	3D Map	3D Map	3D Map	3D Map	3D Map
Surface Map	Surface Map	Surface Map	Surface Map	Surface Map	Surface Map	Surface Map	Surface Map

*3D renderings by Peter W. Sloss, NOAA National Geophysical Data Center, from 2-minute (~1.85 km) gridded elevation data