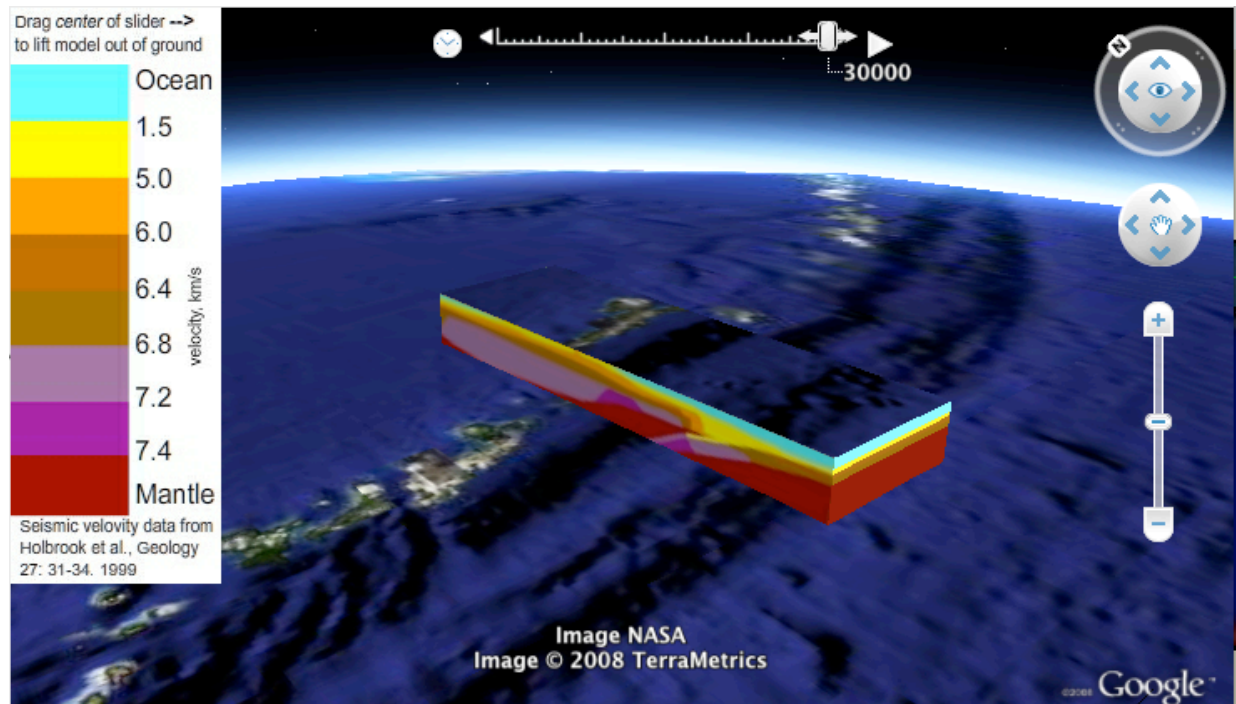


This archive contains instructor and student files for an exercise involving Google Earth. To use them you need to instal the latest version of Google Earth on your computer (Mac or PC). This is a free download from <http://earth.google.com>.

There are two KMZ files which you can open with Google Earth. Note that they overlap in space so only one should be viewed at a time.

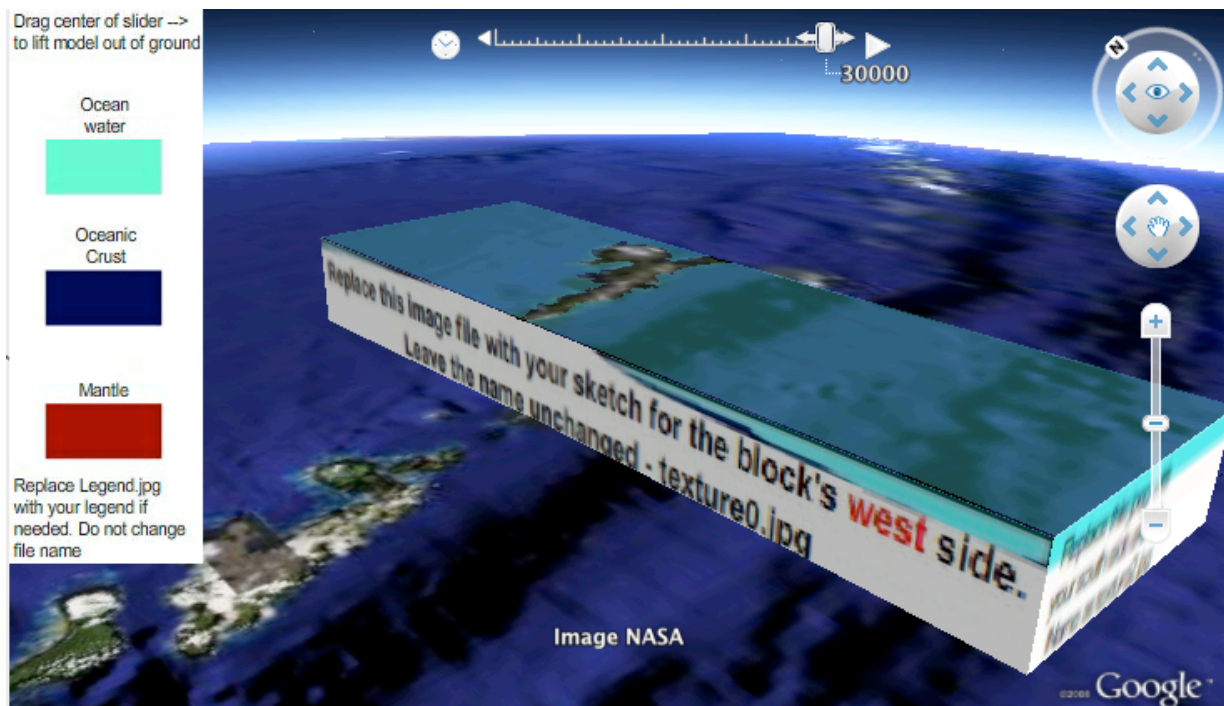
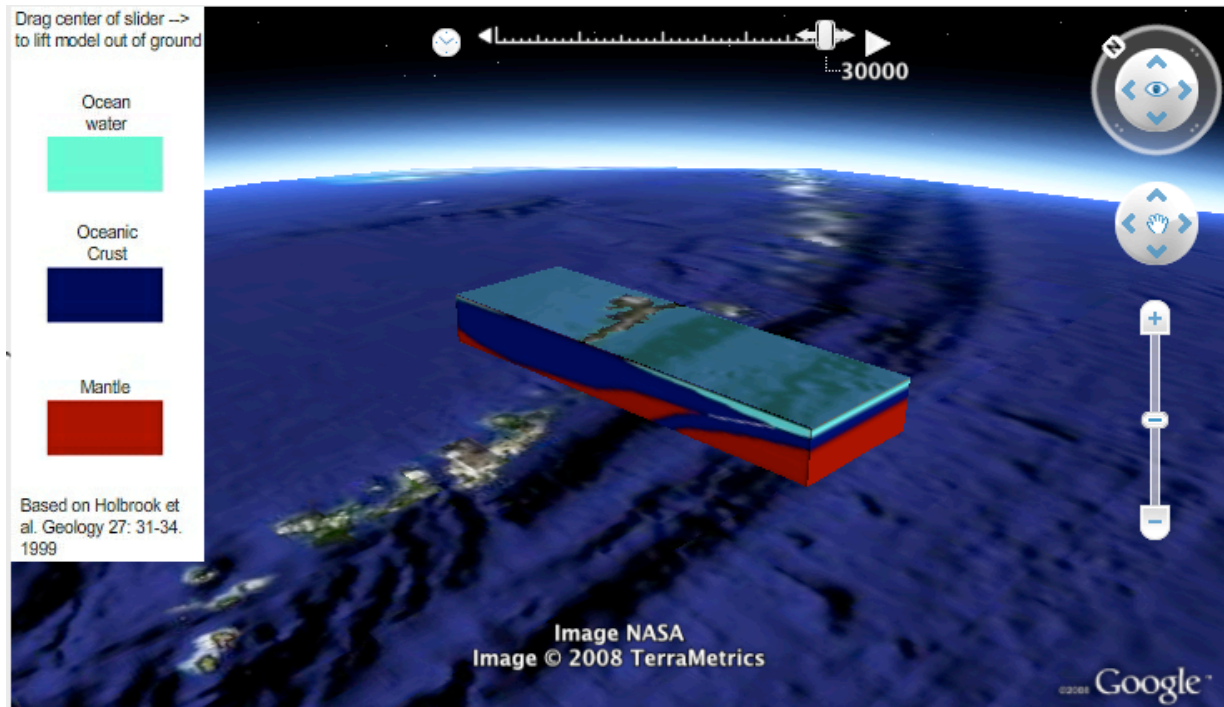


The first KMZ file is called AleutianData.kmz. It contains seismic velocity data based on Holbrook et al. *Geology* 27:31-34 (1999) projected onto the sides of a 3D block diagram. To help students appreciate that the data relates to the subsurface, the block is raised and lowered using a slider at the top of the Google Earth window. The slider number represents the number of meters that the block has been elevated. The maximum elevation is 30 km.

The second KMZ file is called AleutianModel.kmz. If you load it into Google Earth along with the first, be sure to check (make visible) only one file at a time in the Google Earth "Places" sidebar. This file contains a simple model interpretation of the Aleutian subduction zone based on the raw data described above. Students will note that there is a lot of additional detail in the raw data - some of which cannot be easily explained.

The archive also contains three folders called AleutianData, AleutianModel, and AleutianStudent. The first two are just unzipped versions of the KMZs (KMZ files are actually zip archives). Each contains a doc.kml file that can be opened with a text editor and modified by adventurous instructors.

The third folder contains the same block diagram as the others, but the jpeg images on its sides are replaced by placeholders. Double-clicking the doc.kml file loads the content S.



The placeholder images are located in a sub-folder called “images” and are named as follows:

texture0.jpg: the image for the west side of the block
texture1.jpg: the image for the east side of the block
texture2.jpg: the image for the south side of the block
texture3.jpg: the image for the north side of the block

Students may use a drawing program to create their own jpg images and substitute them for these placeholders. The substitute files must have the exact same (case-sensitive) names.

There is also a legend image which students may change if they decide to use their own color scheme or symbols.

Finally, there is a file called texture0.png which corresponds to the top of the block. This can be left unchanged or can be replaced with a sketch geologic map, for example.

Instructors may wish to present students with the blank block first before showing them the data or model interpretation. Instructors can also replace the placeholder images with their own images.