

## Activity: Discovering Plate Boundaries Part 1 – Plate Boundary Types

You will be assigned to one of four Scientific Specialty Teams. The Scientific Specialties are:

A. Seismology      B. Topography      C. Geochronology      D. Volcanology

- Assemble in your assigned specialty team and examine your team's map and the map of the locations of the plate boundaries. What patterns do you see? Compare your answers with others in your team. Classify the plate boundaries based on your observations of the data.
- How many types of boundaries can you identify based solely on your teams' observations? Briefly describe your boundary types below. Restrict yourselves to a maximum of about 4 boundary types (Boundary type 1, Boundary type 2, etc.). At this point, do not try to draw any inferences or explain the data; just observe!
- Color your first plate boundary map to locate your group's boundary types. If the data are asymmetric at a particular boundary type, devise a way of indicating that on your plate boundary map.
- Each person should make their own map and write down descriptions of the plate boundary classifications. Maps and descriptions will be turned in at the end of the exercise.

Boundary Type 1

Boundary Type 2

Boundary Type 3

Boundary Type 4

Taken from NC State University's MEA 110: Physical Geology Lab, Spring 2011. The original Discovering Plate Boundaries exercise was developed by Dr. Dale Sawyer, Department of Geology and Geophysics, Rice University. A complete description of the exercise is available at <http://terra.rice.edu/plateboundary/>

