Antarctica lies on one of the largest tectonic plates on earth, appropriately called the Antarctic Tectonic Plate. This plate is predominately made of mid-ocean ridges, where new sea floor is being created and pushed land towards its center, which would be the south pole. A study conducted by Natural Geographers suggests that if tectonic activity continues in this fashion, what little land there is under Antarctica’s ice will continue to grow, where the build up of land will break through the ice and cut off into the oceans (Natgeo.com, 11/30/14). In recent studies, seismologists have detected volcanic activity under the ice in west Antarctica. Scientists theorize that the extra-terrestrial energy could contribute towards the collapsing and melting of the ice shelves.