**Assignment 6 -Geographic Information**

**A computer screen capture

Description automatically generated with medium confidence**

Figure 1- Earthquakes all over the world

A study of earthquakes all over the world can be done using QGIS, based on their magnitude and the places where they occurred. Based on the magnitude, the earthquakes have been classified into three categories namely Mild (2.45 - 3.5), Moderate (3.6 – 5.0) and Severe (5.1 and above). The mild earthquakes are represented in green triangles, moderate as yellow squares and the severe ones as red circles. Figure 1 displays a map of the frequency of earthquakes over the last 30 days based on their severity, population, and rivers. From the above figure, we can see that most of the earthquakes under the mild category have mostly occurred on the West coast of USA and Canada. Mild range earthquakes are more common in states like California and Alaska in the United States. San Francisco, Los Angeles, San Jose, and San Diego are among the most populated cities in the United States, with 9763600 people in Los Angeles alone, and these earthquakes affect a large number of people. Ecuador, Chile and Peru in South America have been experiencing moderate range earthquakes. It can be seen that locations have also been subjected to Severe earthquakes as well. However, countries such as Japan, Philippines and Papua New Guinea have experienced the greatest number of Moderate level earthquakes within a span of 30 days. As seen in the video, about 10 of the most severe range earthquakes occurred on 03/06/21 globally. From the figure it is clearly seen that most of the Asian countries have been impacted the most with moderate level earthquakes over the past month.