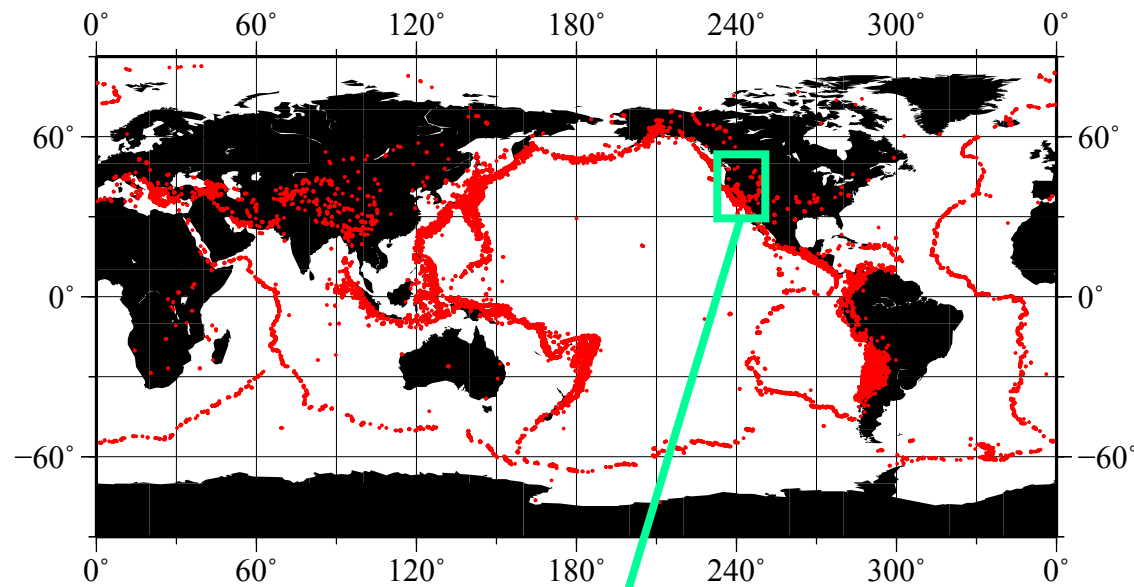
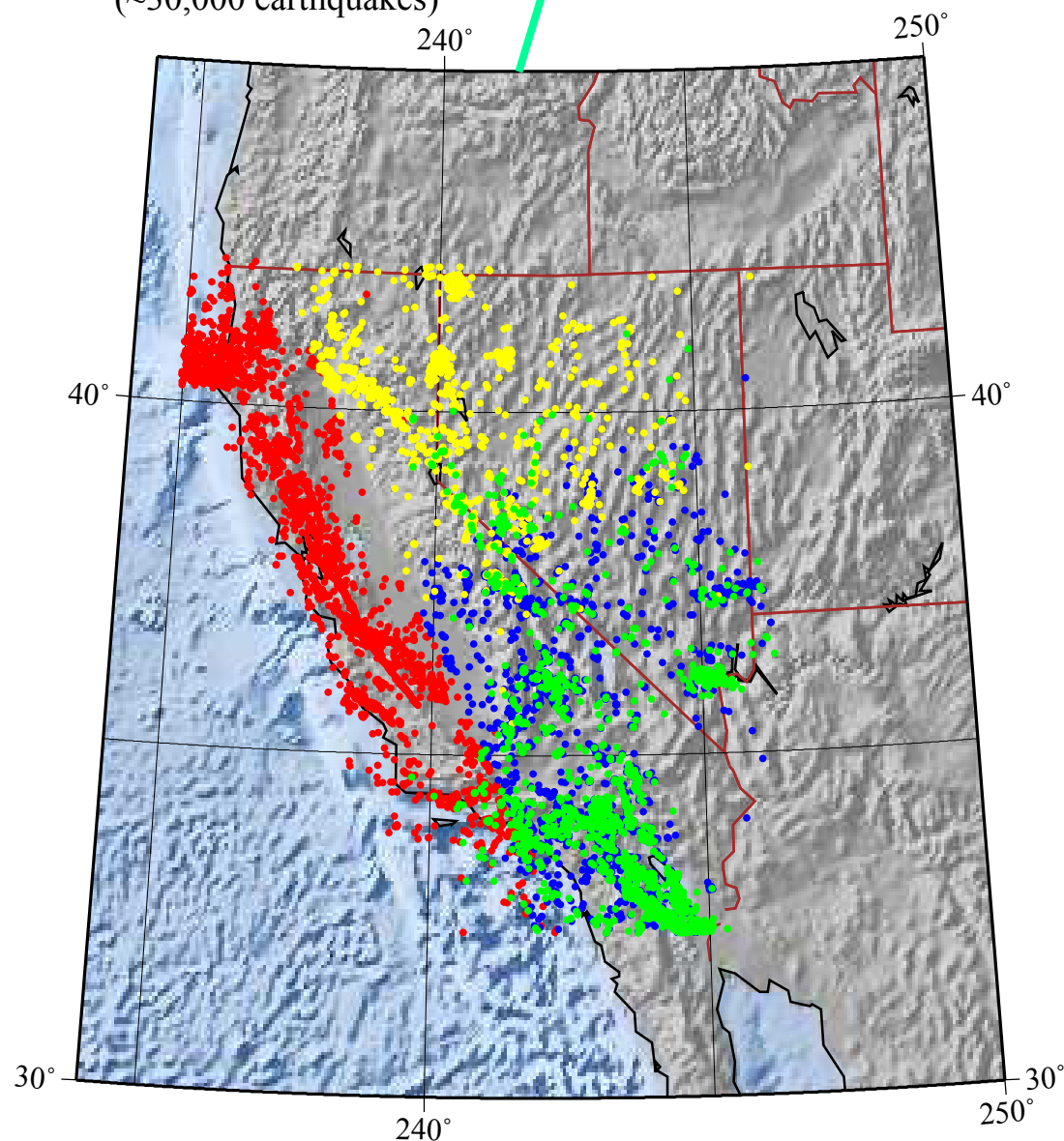


Figure 1

- (a) Distribution of global earthquakes occurred in the past 40 years  
(~millions of earthquakes)



- (b) Earthquakes in California and Nevada in the past 10 years  
(~30,000 earthquakes)



Earthquakes are mostly predictable in terms of their locations, and there are much more earthquakes than you think. Figure 1a shows the lateral distribution of earthquakes in the past 10 years. Although millions of earthquakes have occurred in the past, you can easily see that earthquakes occur only in certain area, they are not normally distributed on the Earth's surface. Figure 1b shows the earthquakes that occurred in California and Nevada in the past 10 years, there are 29,922 earthquakes in total. You may wonder, "What? On average, one earthquake per day? " Yes, that's true, but most of them are consecutive earthquakes of the main shock, and most of them are small or in area without many people, so people did not notice them. Different colors indicating different cluster of earthquakes, and different cluster indicate the earthquakes have different cause/source (i.e. different geological feature or fault; they are clustered using the K-means method).