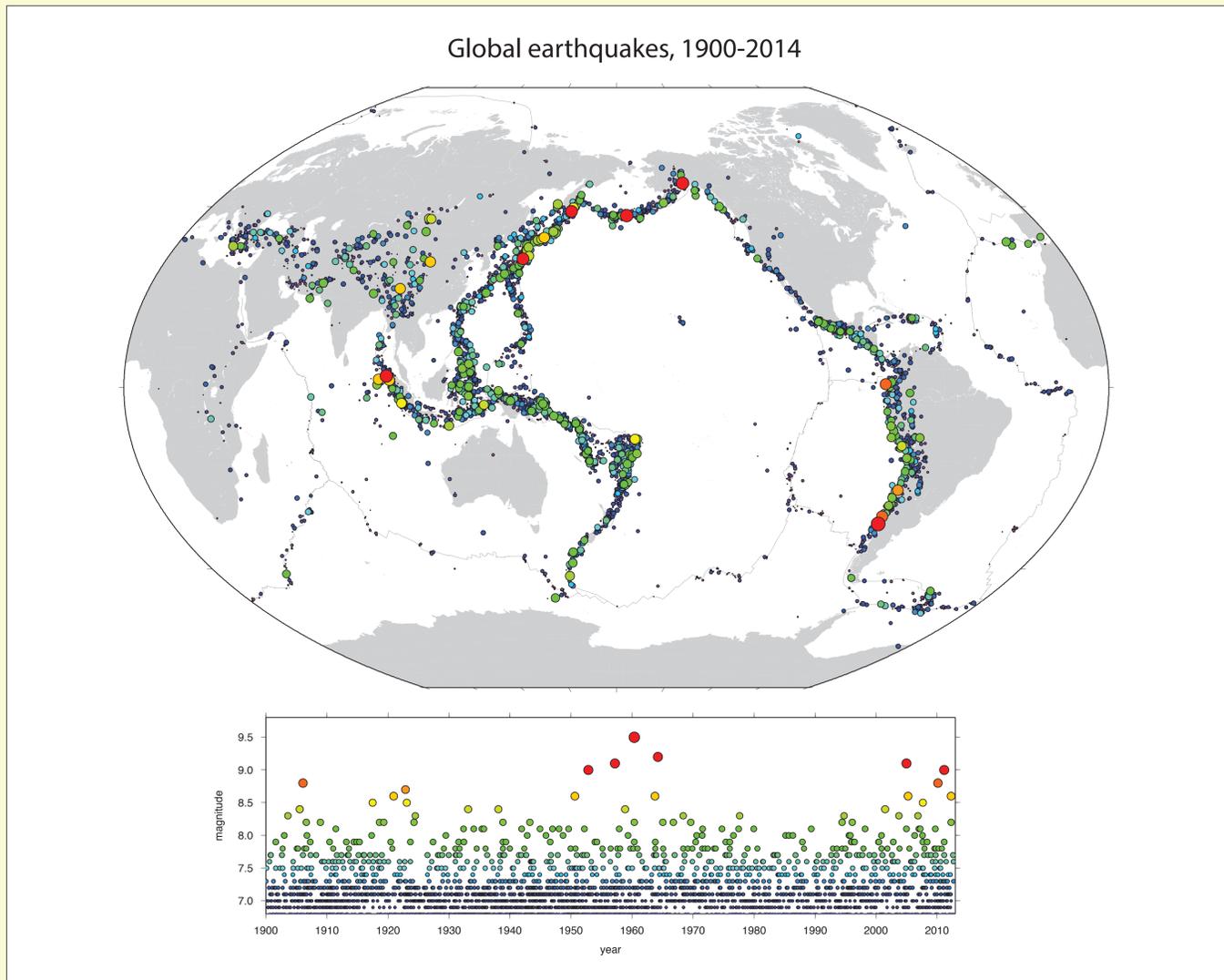
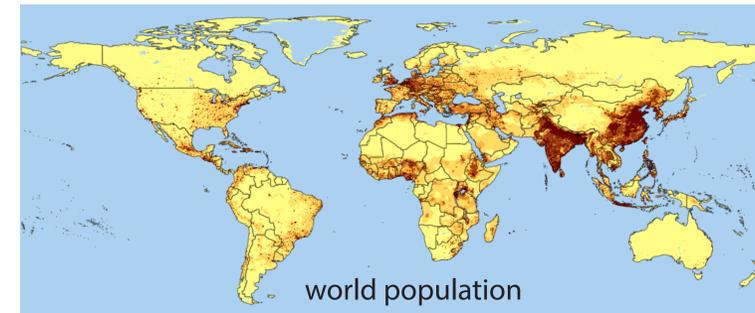


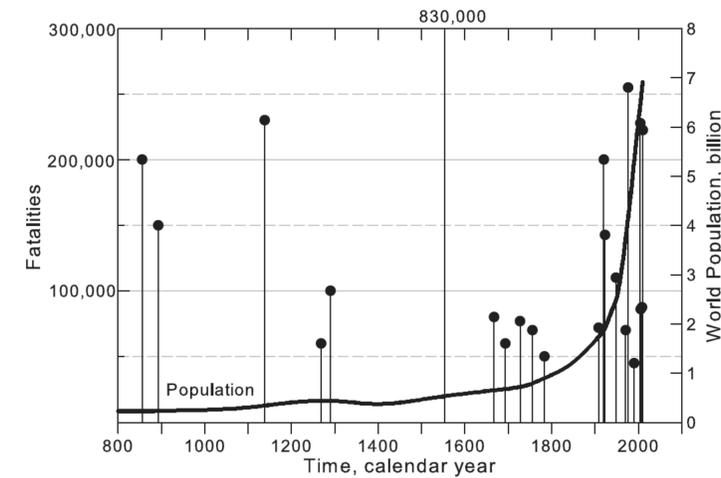
Is the Number of Large Earthquakes Increasing? No.



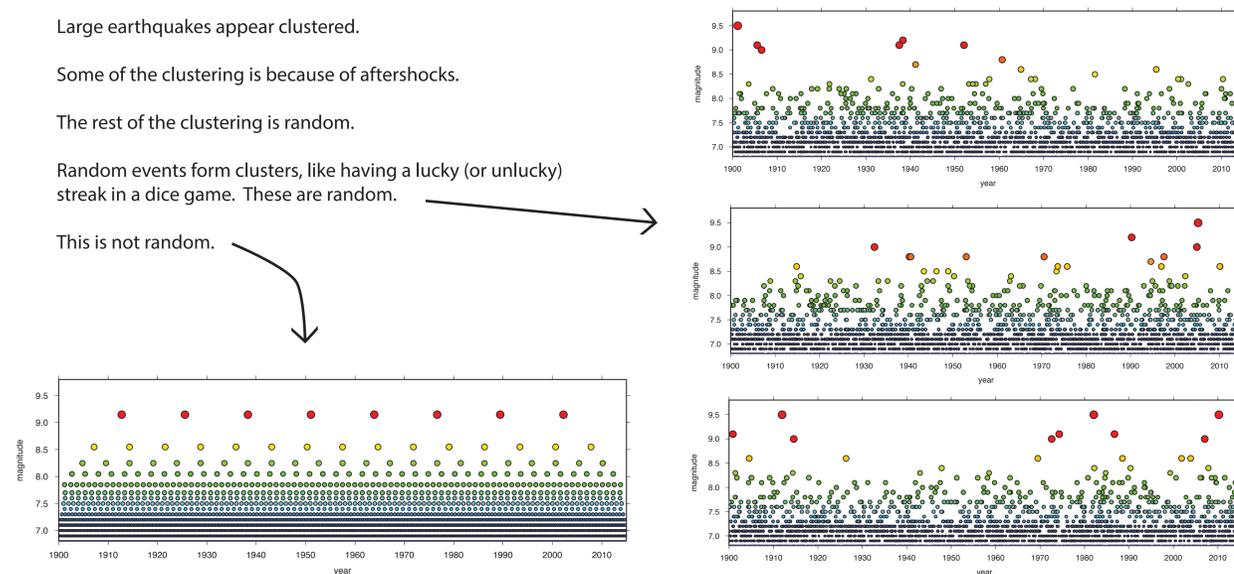
As the world population increases, earthquakes are more likely to occur in densely populated areas, and are more likely to cause damage and fatalities.



Catastrophic earthquakes (more than 50,000 fatalities) are more frequent as world population grows.



Large earthquakes appear clustered.
Some of the clustering is because of aftershocks.
The rest of the clustering is random.
Random events form clusters, like having a lucky (or unlucky) streak in a dice game. These are random.
This is not random.



Average global rate of large earthquakes:

| There's a magnitude... | About once every... | For example... |
|------------------------|---------------------|--|
| 9.0+ | 20 years | 2011 Japan earthquake & tsunami |
| 8.5-8.9 | 10 years | 2010 Chile earthquake & tsunami |
| 8.0-8.4 | year | 2008 China earthquake |
| 7.5-7.9 | 3 months | 1906 San Francisco earthquake |
| 7.0-7.4 | month | 2010 Haiti earthquake |
| 6.5-6.9 | week | 1989 Loma Prieta, 1994 Northridge (LA) |
| 6.0-6.4 | 3 days | 2014 Napa, 2011 New Zealand |
| 5.5-5.9 | day | 2007 Alum Rock (San Jose), 2011 Virginia |