| Date | 7 November 2022 |
|---|---|
| Team Id | PNT2022TMID13492 |
| Project Name | Natural Disaster Intensity Analysis andClassification Using AI |

## CYLONE

| Data Sources | Variables/Model | Units | Temporal Coverage | Spatial Coverage | Levels |
|---|---|---|---|---|---|
| NCEP/NCAR | geopotential height | m | 4-times daily and daily | 2.5 x 2.5 degree grid | multiple level |
| | precipitable water | kg m$^{-2}$ | 4-times daily | " | surface |
| | relative humidity | % | " | " | " |
| | sea surface pressure (SLP) | hPa | " | " | " |
| | u and v wind components | m s$^{-1}$ | " | " | " |
| | air temperature | °C | " | " | " |
| | relative vorticity | 10$^{-5}$ s$^{-1}$ | " | " | " |
| | moisture convergence* | g kg$^{-1}$ s$^{-1}$ | hourly | " | " |
| ECMWF | Convective Available Potential Energy (CAPE) | J kg$^{-1}$ | " | 0.5x0.5 degree grid | " |
| | total of precipitation | mm | " | " | " |
| APHRODITE | total of precipitation | mm | daily | 0.25x0.25-degree grid | " |
| NOAA ARL | HYSPLIT backward trajectory | AGL | hourly | 360 x 180 at 1 degree | multiple level |

*Moisture convergence was computed with GrADS software using 7 variables: relative humidity, air temperature, vapour pressure mixing ratio, u and v wind components and dew point temperature.
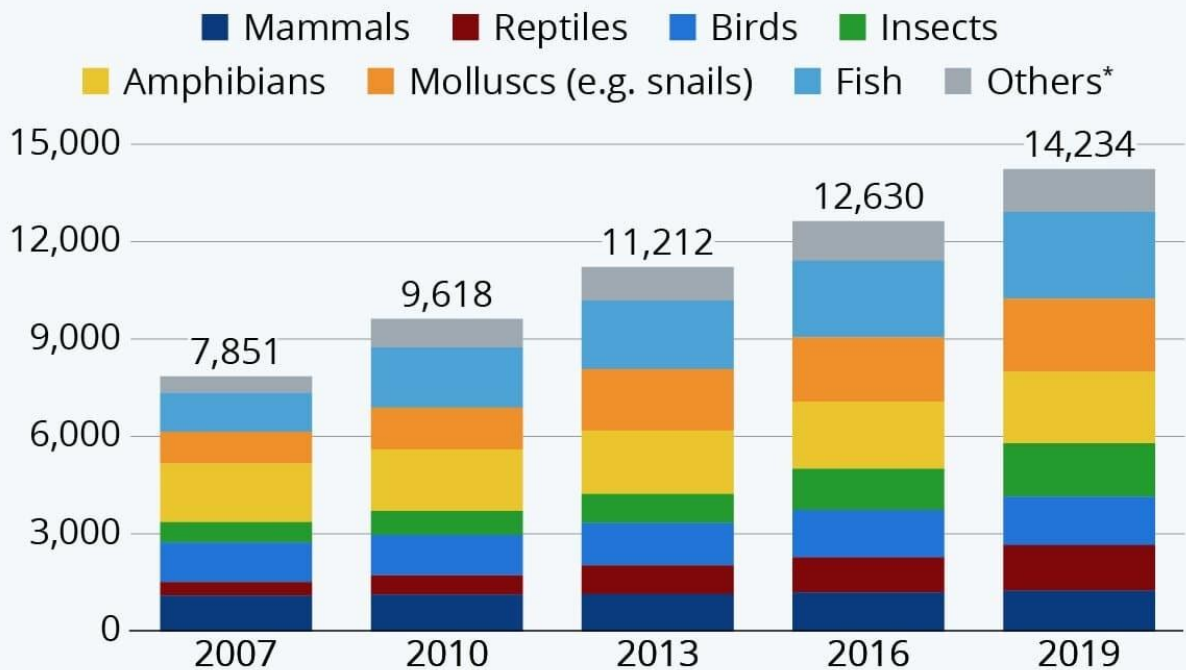
# EARTH QUAKE

| | | | | | |
|---|---|---|---|---|---|
| ΞQ01 Northridge – 1994[a] | 6.7 | 17.40 | 9.71 | 2.91 | 2.22 |
| ΞQ02 El Centro – 1940[a] | 6.9 | 2.14 | 3.49 | 2.37 | 1.47 |
| ΞQ03 Kobe – 1995 | 6.9 | 8.21 | 5.99 | 1.47 | 1.42 |
| ΞQ04 Loma Prieta – 1989[a] | 6.9 | 3.52 | 2.67 | 1.37 | 1.47 |
| ΞQ05 Christchurch – 2010[a] | 7.0 | 7.38 | 6.64 | 0.76 | 0.71 |
| ΞQ06 Miyagi Ken-Oki – 2003[b] | 7.1 | 8.25 | 11.10 | 7.89 | 6.96 |
| ΞQ07 Chi-Chi – 1999[a] | 7.7 | 2.92 | 4.34 | 3.66 | 1.61 |
| ΞQ08 Gorkha – 2015[a] | 7.8 | 1.54 | 1.60 | 0.22 | 0.22 |
| ΞQ09 Chile Coquimbo – 2015[a] | 8.3 | 6.77 | 5.45 | 5.70 | 8.73 |
| ΞQ10 Great East Japan – 2011[b] | 9.0 | 12.20 | 25.90 | 5.08 | 6.01 |

# The Number of Endangered Species is Rising

Number of animal species of the IUCN Red List, by class

Legend:
- Mammals
- Reptiles
- Birds
- Insects
- Amphibians
- Molluscs (e.g. snails)
- Fish
- Others*



Bar chart values:
- 2007: 7,851
- 2010: 9,618
- 2013: 11,212
- 2016: 12,630
- 2019: 14,234

Y-axis: 0, 3,000, 6,000, 9,000, 12,000, 15,000

* other invertebrate (spineless) animals, such as crustaceans, corals and arachnids (spiders, scorpions)
Source: IUCN Red List

statista

# FLOOD

## Ratio of flood events (RCP8.5/RCP2.6)