Date	13 November 2022
Team ID	PNT2022TMID52144
Project Name	Natural Disasters Intensity Analysis
	and Classification using Artificial
	Intelligence

Cyclone

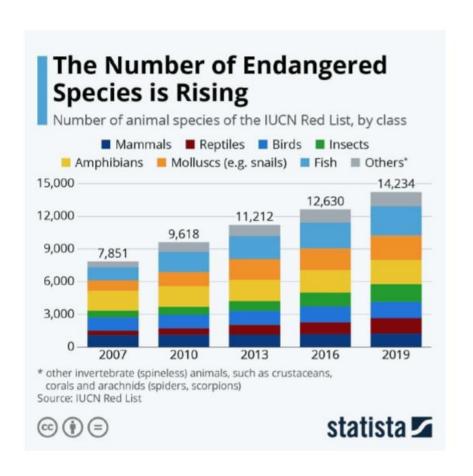
Data Sources	Variables/Model	Units	Coverage	Spatial Coverage	Levels	
NCEP/NCAR	geopotential height	m	4-times daily and daily	2.5 x 2.5 degree grid	multiple level	
	precipitable water	kg m ⁻²	4-times daily		surface	
	relative humidity	%		,	-	
	sea surface pressure (SLP)	hPa	(#2)		ft.	
	u and v wind components	m s ⁻¹	*		-	
	air temperature	°C	•		-	
	relative vorticity	10 ⁻³ s ⁻¹	*			
	moisture convergence*	g kg l s l	hourly	*		
ECMWF	Convective Available Potential Energy (CAPE)	J kg ⁻¹	*	0.5x0.5 degree grid	#	
	total of precipitation	mm	.e.	3#	*	
APHRODITE	total of precipitation	mm	daily	0.25x0.25-degree grid	8	
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 nixing ratio, u and v wind components and dew point temperature.

Earthquake

EQ01 Northridge - 1994 ^a	6.7	17.40	9.71	2.91	2.22
EQ02 El Centro – 1940ª	6.9	2.14	3.49	2.37	1.47
EQ03 Kobe - 1995	6.9	8.21	5.99	1.47	1.42
EQ04 Loma Prieta – 1989 ^a	6.9	3.52	2.67	1.37	1.47
EQ05 Christchurch – 2010 ^a	7.0	7.38	6.64	0.76	0.71
EQ06 Miyagi Ken-Oki – 2003 ^b	7.1	8.25	11.10	7.89	6.96
EQ07 Chi-Chi – 1999 ^a	7.7	2.92	4.34	3.66	1.61
EQ08 Gorkha – 2015 ^a	7.8	1.54	1.60	0.22	0.22
EQ09 Chile Coquimbo – 2015ª	8.3	6.77	5.45	5.70	8.73
EQ10 Great East Japan - 2011b	9.0	12.20	25.90	5.08	6.01

Wildlife



Flood

