

Locations of Earthquakes off Fiji

The data set give the locations of 1000 seismic events of MB > 4.0. The events occurred in a cube near Fiji since 1964.

Details

There are two clear planes of seismic activity. One is a major plate junction; the other is the Tonga trench off New Zealand. These data constitute a subsample from a larger dataset of containing 5000 observations.

Format

A data frame with 1000 observations on 5 variables.
lat - Latitude of event, long - Longitude, depth - Depth (km), mag - Richter Magnitude

Import Data

	lat	long	depth	mag	stations
0	-20.4200	181.6200	562	4.8000	41
1	-20.6200	181.0300	650	4.2000	15
2	-26	184.1000	42	5.4000	43
3	-17.9700	181.6600	626	4.1000	19
4	-20.4200	181.9600	649	4	11
5	-19.6800	184.3100	195	4	12
6	-11.7000	166.1000	82	4.8000	43
7	-28.1100	181.9300	194	4.4000	15
8	-28.7400	181.7400	211	4.7000	35
9	-17.4700	179.5900	622	4.3000	19
10	-21.4400	180.6900	583	4.4000	13

Data Preparation

	lat	long	depth	mag
10	20	20	20	20
11	28	28	28	28
12	25	25	25	25
13	21	21	21	21
14	39	39	39	39
15	34	34	34	34
16	35	35	35	35
17	38	38	38	38

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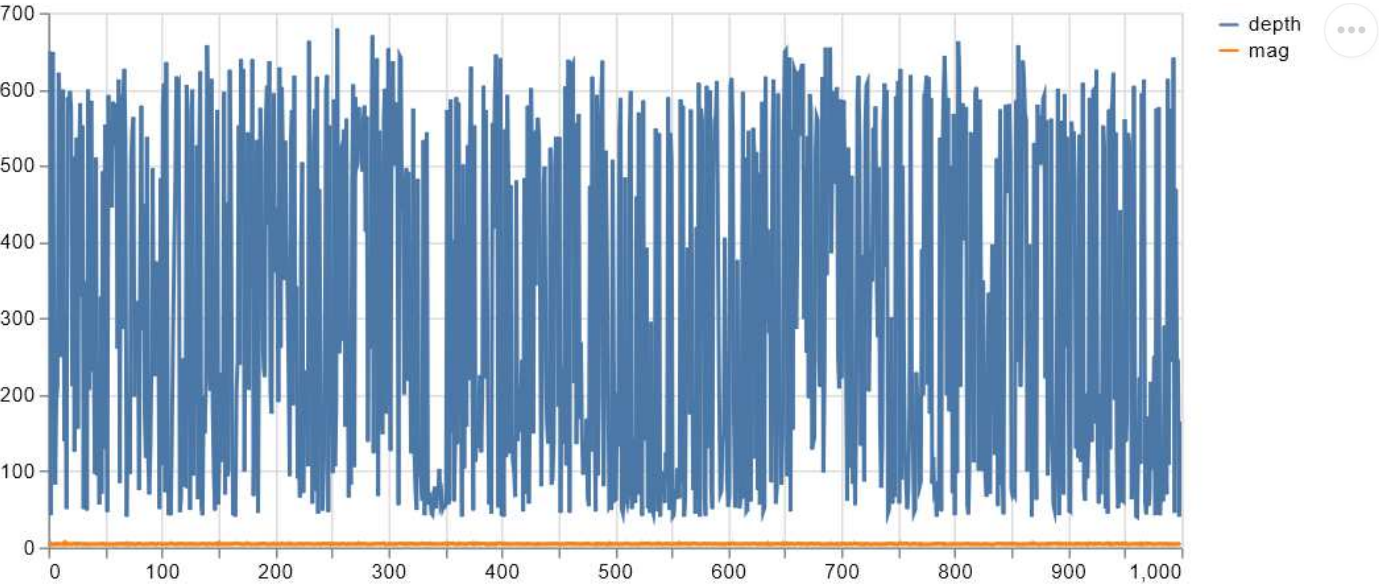
Grouping by Stations

	stations	lat	long	depth	mag
0	10	20	20	20	20
1	11	28	28	28	28
2	12	25	25	25	25
3	13	21	21	21	21
4	14	39	39	39	39
5	15	34	34	34	34
6	16	35	35	35	35
7	17	38	38	38	38
8	18	33	33	33	33
9	19	29	29	29	29
10	20	28	28	28	28

Grouping by Top 10 Stations

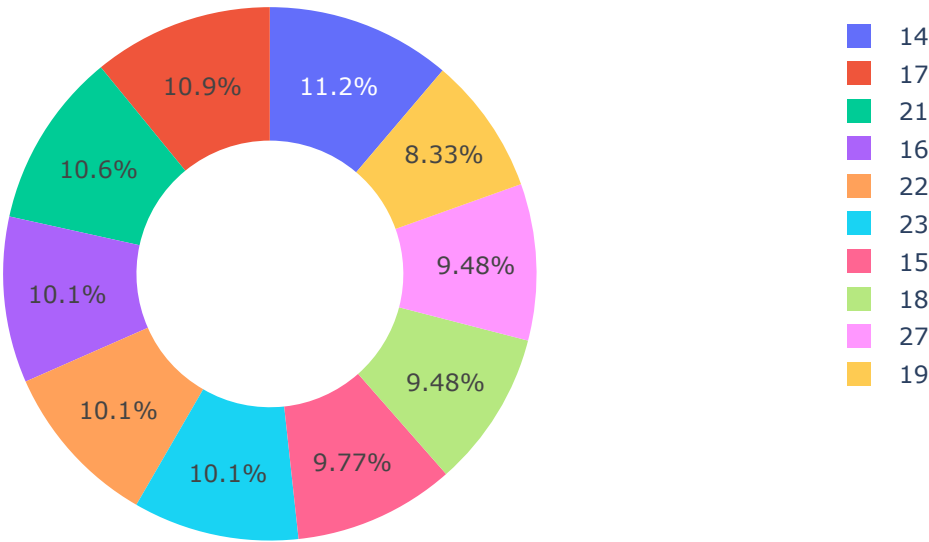
	stations	lat	long	depth	mag
4	14	39	39	39	39
7	17	38	38	38	38
11	21	37	37	37	37
6	16	35	35	35	35
12	22	35	35	35	35
13	23	35	35	35	35
5	15	34	34	34	34
8	18	33	33	33	33
17	27	33	33	33	33
9	19	29	29	29	29

Line Chart



Pie Chart

Top 10 Stations



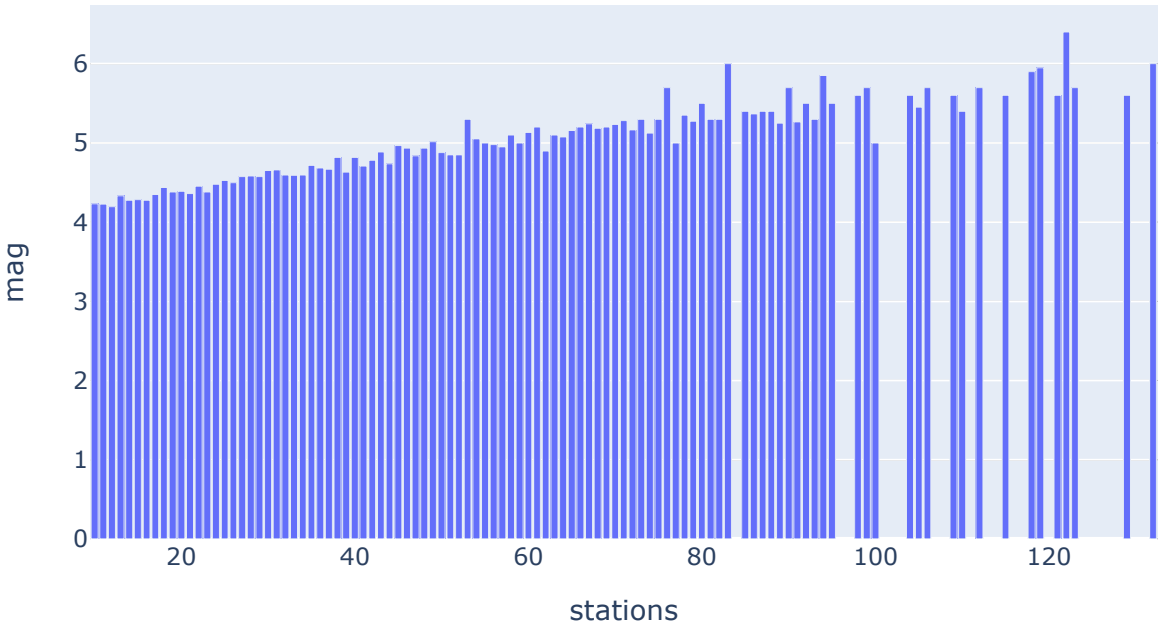
Bar Chart

Grouping by Stations with Mean values

	lat	long	depth	mag
10	-19.8375	182.4465	345.5000	4.2300
11	-20.8043	182.0071	338.2857	4.2286

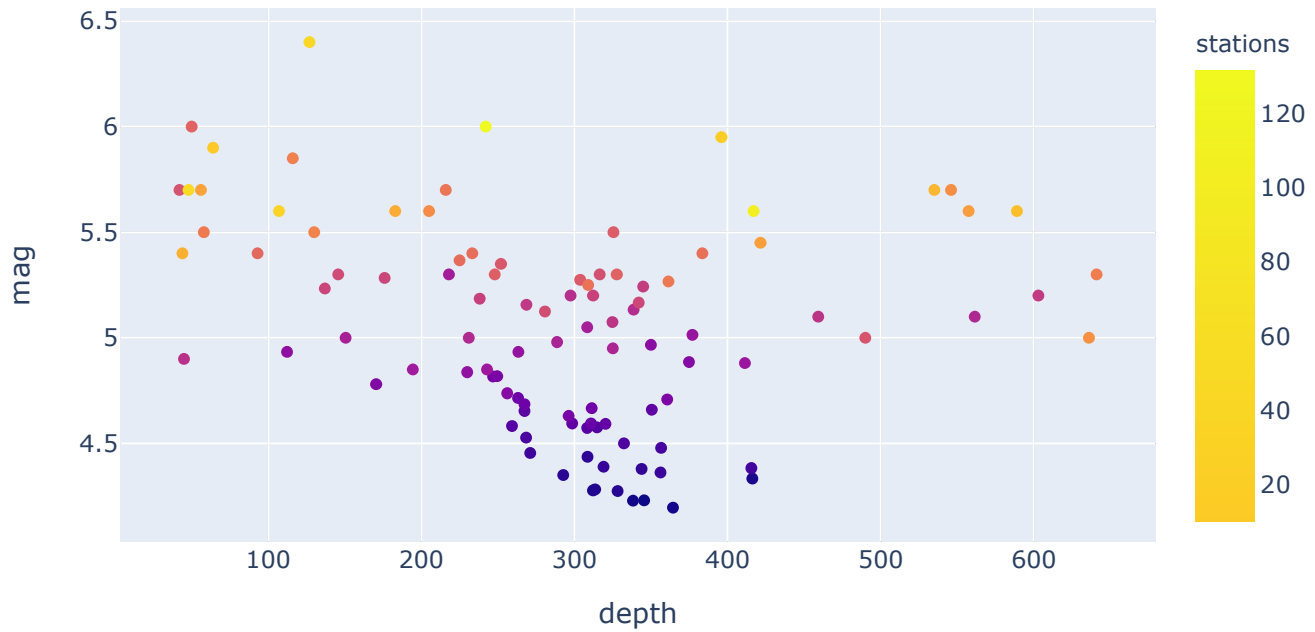


Mean Quakes detected per Station



Scatterplot Chart

Scatterplot of Magnitude vs Depth by Stations



Box Plots

Box Plots for each feature

