



# Briefing Sheet: **Volcano Team**

## Practice Data

### Instructions

Before the Mission Begins, your team should practice analyzing volcano data. You should be able to:

- Receive hourly Rockfall (RF) and Volcano Tectonic (VT) data and predict what the daily rate will be for each (on two separate worksheets).
- Combine the daily predictions for RF and VT and determine whether there is any predicted danger, and the degree of danger.
- Prepare a report form every five minutes to be read to Mission Control by the Communicator
- Graph the predicted daily rate for the total

### Practice with sample data

In the table below we give you some sample data. The first four have been worked into the examples given on the Seismic Events Data Sheets.

#### Rockfall and Volcanic Tectonic Practice Data from Aug 17th

This data is fictitious. However, it represents the types of data that you will be receiving on Mission Day. Follow the instructions for Volcano Monitoring to convert this simulated hourly data into daily estimates.

Observation	GMT Hours	Hourly VT Events	Hourly RF Events
1	0000	12	4
2	0100	6	16
3	0200	21	21
4	0300	13	34
5	0400	11	19
6	0500	9	23
7	0600	30	9
8	0700	42	18
9	0800	49	26
10	0900	7	32
11	1000	13	8
12	1100	16	12
13	1200	8	16
14	1300	29	19
15	1400	34	24
16	1500	25	29
17	1600	52	33
18	1700	12	11
19	1800	39	6
20	1900	51	12
21	2000	9	19
22	2100	14	36
23	2200	19	16
24	2300	36	20



Seismic Events Data Sheet: Rockfall (RF)  
Examples and Practice

A	B	C	D	E	F
GMT Hours	Hourly RF Events (from real-time data)	Cumulative RF Events	Multiply By	Projected Daily RF Events Total	Projected Total Seismic Activity (RF + VT)
0000	4	4 (4 + 0 = 4)	24.0	96	384
0100	16	20 (16 + 4 = 20)	12.0	240	456
0200	21	41 (21 + 20 = 41)	8.0	328	640
0300	34	75 (34 + 41 = 75)	6.0	450	762
0400	19	94	4.8	451	754
0500	23	117	4	468	756
0600	9	126	3.4	428	775
0700	18	144	3	432	864
0800	26	170	2.7	459	980
0900	32	202	2.4	485	965
1000	8	210	2.2	462	931
1100	12	222	2	444	902
1200	16	238	1.8	428	855
1300	19	257	1.7	437	889
1400	24	281	1.6	450	930
1500	29	310	1.5	465	953
1600	33	343	1.5	515	1081
1700	11	354	1.3	460	956
1800	6	360	1.3	468	1024
1900	12	372	1.2	446	1021
2000	19	391	1.1	430	967
2100	36	427	1.1	470	1022



Seismic Events Data Sheet: Volcano Tectonic (VT)  
Examples and Practice

A	B	C	D	E	F
GMT Hours	Hourly VT Events (from real-time data)	Cumulative VT Events	Multiply By	Projected Daily VT Events Total	Projected Total Seismic Activity (RF + VT)
0000	12	12 (12 + 0 = 12)	24.0	288	384
0100	6	18 (12 + 6 = 18)	12.0	216	456
0200	21	39 (18 + 21 = 39)	8.0	312	640
0300	13	52 (39 + 13 = 52)	6.0	312	762
0400	11	63	4.8	302	754
0500	9	72	4	288	756
0600	30	102	3.4	347	775
0700	42	144	3	432	864
0800	49	193	2.7	521	980
0900	7	200	2.4	480	965
1000	13	213	2.2	469	931
1100	16	229	2	458	902
1200	8	237	1.8	427	855
1300	29	266	1.7	452	889
1400	34	300	1.6	480	930
1500	25	325	1.5	488	953
1600	52	377	1.5	566	1081
1700	12	389	1.3	506	956
1800	39	428	1.3	556	1024
1900	51	479	1.2	575	1021
2000	9	488	1.1	537	967
2100	14	502	1.1	552	1022