



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			4.8		
0500			4		
0600			3.4		
0700			3		
0800			2.7		
0900			2.4		
1000			2.2		
1100			2		
1200			1.8		
1300			1.7		
1400			1.6		
1500			1.5		
1600			1.5		
1700			1.3		
1800			1.3		
1900			1.2		
2000			1.1		
2100			1.1		



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			4.8		
0500			4		
0600			3.4		
0700			3		
0800			2.7		
0900			2.4		
1000			2.2		
1100			2		
1200			1.8		
1300			1.7		
1400			1.6		
1500			1.5		
1600			1.5		
1700			1.3		
1800			1.3		
1900			1.2		
2000			1.1		
2100			1.1		