

[7] Mutual Information percentage (MI%) calculated for eruption node.

Node	Mean	MI%		
		5%ile	50%ile	95%ile
0 <i>Magmatic intrusion</i>	18.7	9.55E-2	13.23	54.70
1 <i>Deep source deformation</i>	9.3	2.20E-4	2.45	41.39
2 <i>Hydrothermal (deep magma)</i>	16.2	6.02E-2	10.90	48.96
3 <i>Magma ascent</i>	19.0	3.66E-2	11.48	59.25
4 <i>Hydrothermal (magma ascent)</i>	18.4	3.54E-2	10.81	58.15
5 Recorded VT rate	11.5	2.43E-2	7.59	36.10
6 Felt VT rate	10.4	2.43E-2	6.51	33.06
7 Total seismicity	4.4	0	0.38	23.47
8 Borehole-type tiltmeter	1.0	0	0.04	5.72
9 Dry tilt	2.4	0	0.21	12.65
10 Fumarolic activity	5.5	6.97E-4	1.69	24.53
11 SO2 present	1.2	1.82E-5	0.14	6.13
12 Fresh glass present	5.5	4.07E-4	1.07	26.08
13 Continuous venting tremor	7.9	1.95E-3	2.64	33.66
14 Shallow seismicity (< 5 km)	13.1	1.30E-2	8.92	41.29

Mutual Information is a measure of the strength of influence of each individual node node in the network on the outcome of interest – in this case, the probability of eruption within 3 months. Unobservable nodes are shown in italic. The mean, 5, 50 and 95 percentile estimates were obtained by Monte Carlo sampling of all input distributions, and represent the experts' uncertainty. Shallow seismicity, followed by recorded and felt VT rate were found to be the strongest forms of observational evidence available at the time of the crisis, largely due to the unreliability of other types of monitoring data.