

Ice Core Volcanic Eruptions Data Tables

Team 1 - Volcanic Eruptions (samples 0.0 – 1999.0)

Mark the conductivity anomaly associated with the eruption of the Icelandic volcano Hekla in 1970 (between samples 600.0 and 700.0) on your graph.

year of volcanic event	name	conductivity in ice core $\mu\text{s cm}^{-1} \times 10^2$
1986	Augustine	290
1977	Sakura-Jima	270
1970	Hekla	410
1969	Sheveluch	250
1961	Askja	190
1947	Hekla	380
1924	Raikoke	220
1918	Katla	260

Team 2 - Volcanic Eruptions (samples 2000.0 – 3999.0)

None of the volcanoes in the table below are nearby, Icelandic volcanoes. Instead mark the nitrate and conductivity anomaly corresponding to Carrington's White Flare in 1859 between samples 3100.0 and 3200.0 on your graph. The flare will be discussed further in part 3 of this activity.

year of volcanic event	name	conductivity in ice core $\mu\text{s cm}^{-1} \times 10^2$
1912	Katmai	250
1885	White River Ash	200
1883	Krakatau	240
1854	Sheveluch	220
1853	Chikurachki-Tatarinov	190
1835	Cosigüina	200
1831	Babuyan Claro	210
1815	Tambora	270

Team 3 - Volcanic Eruptions (samples 4000.0 – 5999.0)

Mark the conductivity anomaly associated with the eruption of the Icelandic volcano Laki in 1783 (between samples 4500.0 and 4600.0) on your graph.

year of volcanic event	name	conductivity in ice core $\mu\text{s cm}^{-1} \times 10^{-2}$
1801	Mt. St. Helens	170
1783	Laki	>450
1739	Tarumai	230
1728	Krafla*	210
1727	Oraefajokull	280
1724	Mývatn Fire	220
1721	Katla	190
1693	Hekla	250

Team 4 - Volcanic Eruptions (samples 6000.0 – 7800.0)

Mark the conductivity anomaly associated with the eruption of the Icelandic volcano Tarumai in 1667 (between samples 6300.0 and 6400.0) on your graph.

year of volcanic event	name	conductivity in ice core $\mu\text{s cm}^{-1} \times 10^{-2}$
1667	Tarumai	400
1660	Katla	290
1630	Furnas	290
1625	Katla	260
1597	Helka	260