Phreatic eruptions have occurred intermittently in Hokkaido-Komagatake volcano from September to November, 2000. The eruption of October 28th was largest. Total mass of the eruptions was about 30,000 ton (excluding proximal deposits), which is larger than that of the October 25 1998 eruption. Relatively larger eruptions have also occurred on September 4. We collected volcanic ash from each eruption to determine water-soluble components on the ashes. Cl/S ratios of the ashes from 2000 eruptions range from 0.2 to 0.4, which are much larger than those from 1996 eruption (<0.1). Although a series of the 2000 eruptions were small phreatic, volatile components derived from magma have increased, suggesting that the eruption might be a possible precursor of the following magmatic eruption.