Explosive eruptions of the Japanese islands, which are included in The Large Magnitude Explosive Eruptions database of Volcano Global Risk Identification and Analysis project, are analyzed to understand the preservation potential of eruptions with time. The database attempts to include all known explosive eruptions to 1.8 Ma and VEI and/or Magnitude 4 or greater. The database contains 696 explosive eruptions which percentages by eruption magnitude are: 40 (VEI 4), 42 (VEI 5), 13 (VEI 6) and 5 (VEI 7). Because smaller eruptions must occur more frequently, fewer VEI 4 eruptions than VEI 5 eruptions indicates that small eruptions are missing in this database. Preservation trends of each VEI categories are modeled by functions and detrended. The result suggests 97 percent of VEI 4 events are missing from the record after 100 ka, whereas 40 percent for VEI 5 to 7 are missing after this time period. The change of preserved eruptions with time shows two major trends. The likelihood of an eruption preserved in the last 10 to 100 ka follows exponential trend, suggesting that many young deposits are rapidly eroded and go unidentified in the geologic record. Older deposits have a gentler trend, indicating that once the deposit is initially preserved it is more likely to be identified in the geologic record than suggested by simple exponential decay. These results indicate that eruption probabilities based on long term recurrence rate must account for the potential for even large eruptions to be missing from the geologic record.