Figure 1S: The E-component of seismic signals of the eruptive events recorder at IST3 station, occurred on July 4 (a) and July 11 (b); c) and d) seismic tremor or RMS calculated every minute using a moving time window of 5 minutes, within the volcanic tremor frequency band of Stromboli (1-3 Hz), on July 4 and July 11, respectively; e) and f) spectra content of the E-component for both the same eruptive events.
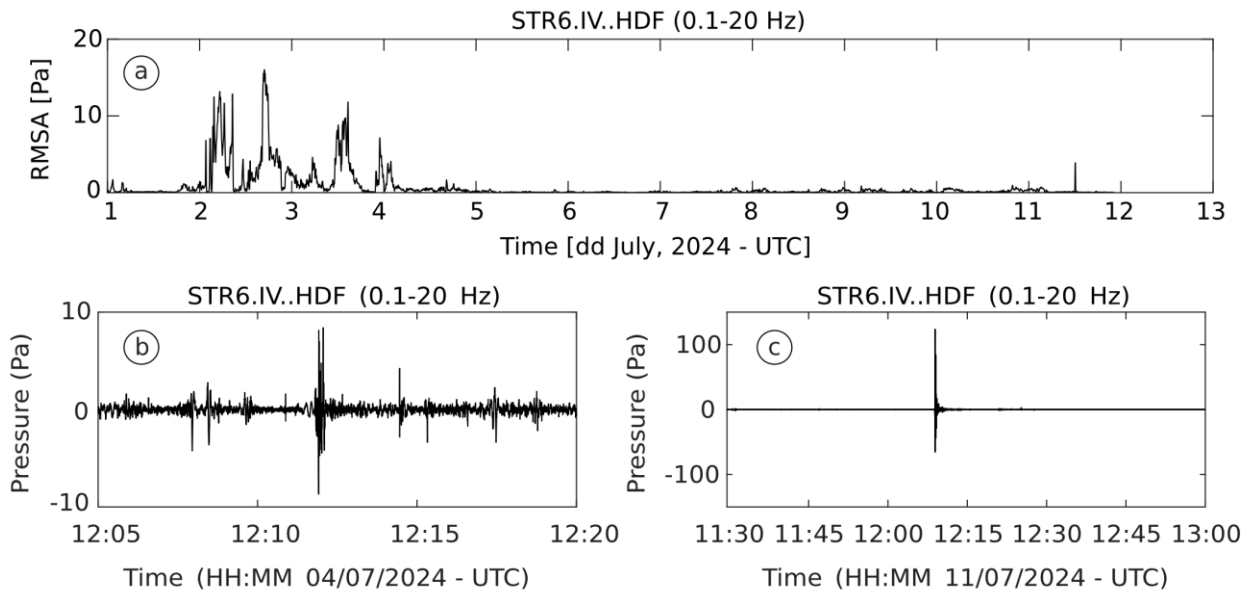
Figure 2S: a) Infrasound RMSA calculated every minute using a moving time window of 5 minutes on data collected by STR6 station, and filtered in the frequency band of 0.1 and 20 Hz, from July 1 to 13. Infrasound waveform of (b) the major explosion event occurred on July 04, and (c) blast wave of the paroxysm episode occurred on July 11.
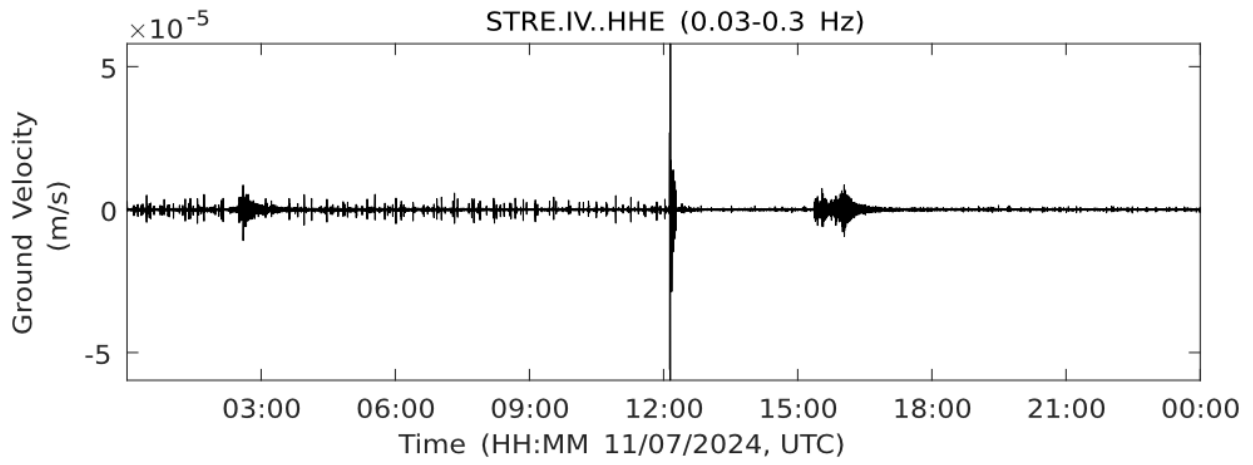
Figure 3S: E-component of the paroxysm event recorded by STRE seismic station, filtered in the VLP frequency (0.03-0.3 Hz).