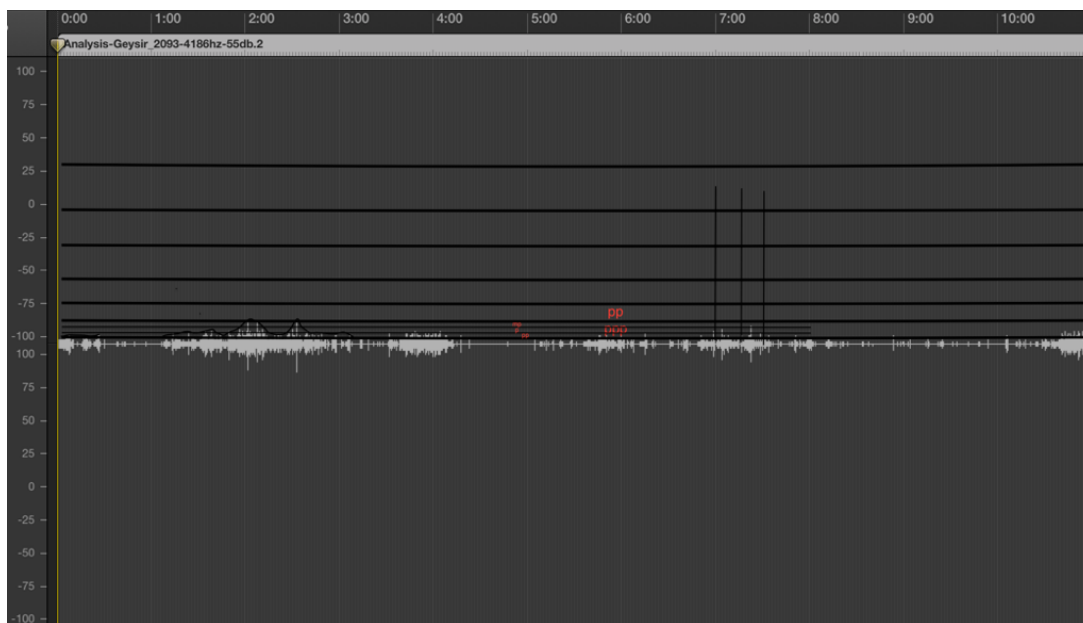


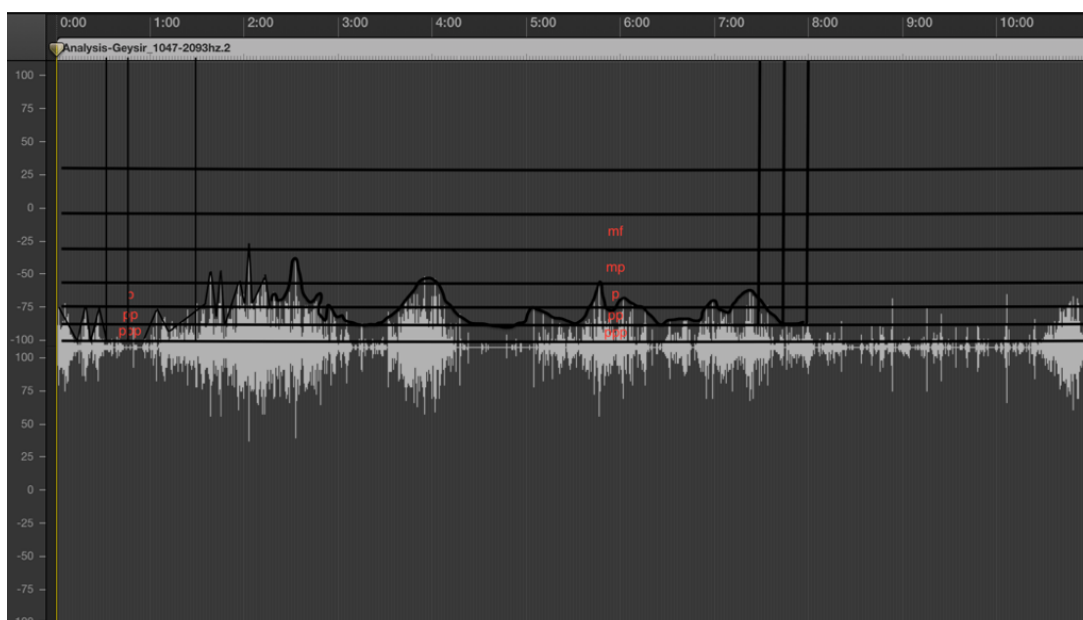
Geysir, amplitude analyses

The seven re-synthesized frequency segments¹ processed in SPEAR were imported individually to Logic. Automatically, a waveform display is generated in which the y-axis represents amplitude in dB (decibels) and the x-axis represents time. A screenshot of each waveform display was segmented into seven dynamics regions: *ppp*, *pp*, *p*, *mp*, *mf*, *f*, *ff*. A drawn contour, shown in various sections of the figures below, was used to track the dynamic evolution of the geyser's frequency regions through time. Each of the frequency regions' contours was transcribed to each of the 7 parts of the score.

The dynamic contours of the frequency regions with lowest amplitudes –staff 1 and staff 7, which present the highest and lowest frequencies– were occasionally altered for balance and intelligibility. For example, staff 1, in the figure below, presents a very brief spike at *pp*, its highest amplitude in the entire 11 minutes of recording. For this reason, a sub-segmentation was made within the *ppp* range, where the highest peak of is re-interpreted as a *mp*. In the comparative amplitude analyses below, note the geyser's loudest frequency regions, from 131 to 1047 Hz –staff 3 to staff 5.

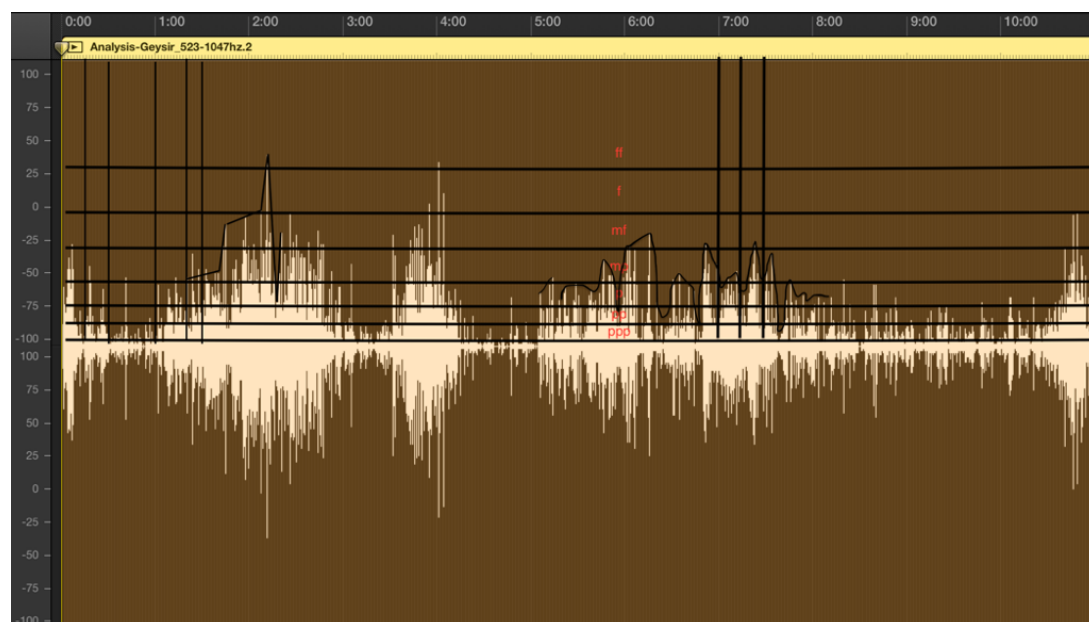


Staff=1 (C7–C8)

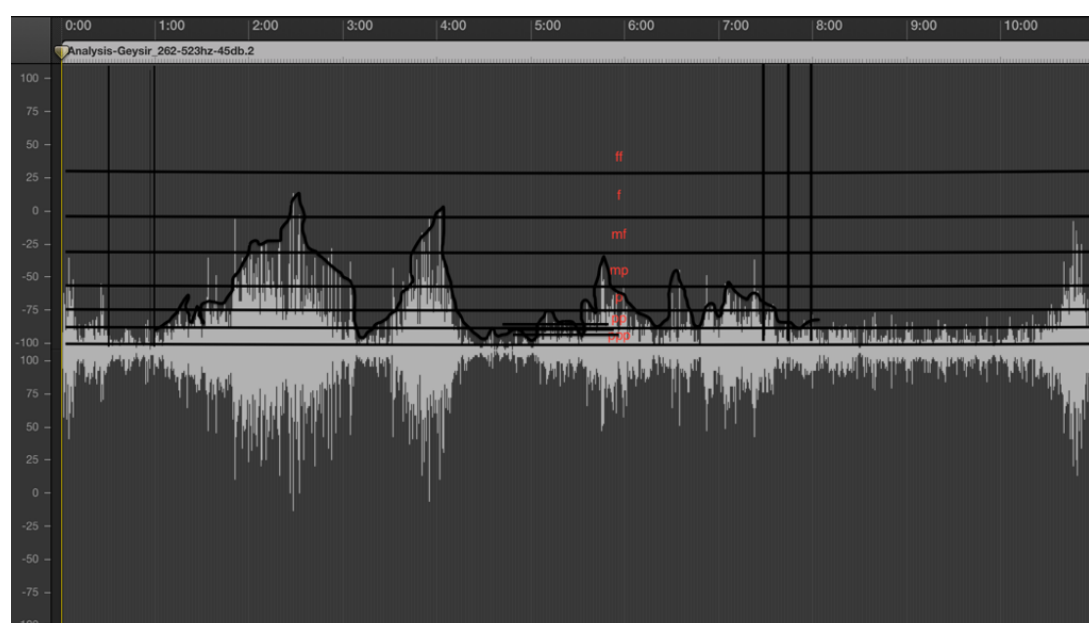


Staff=2 (C6–C7)

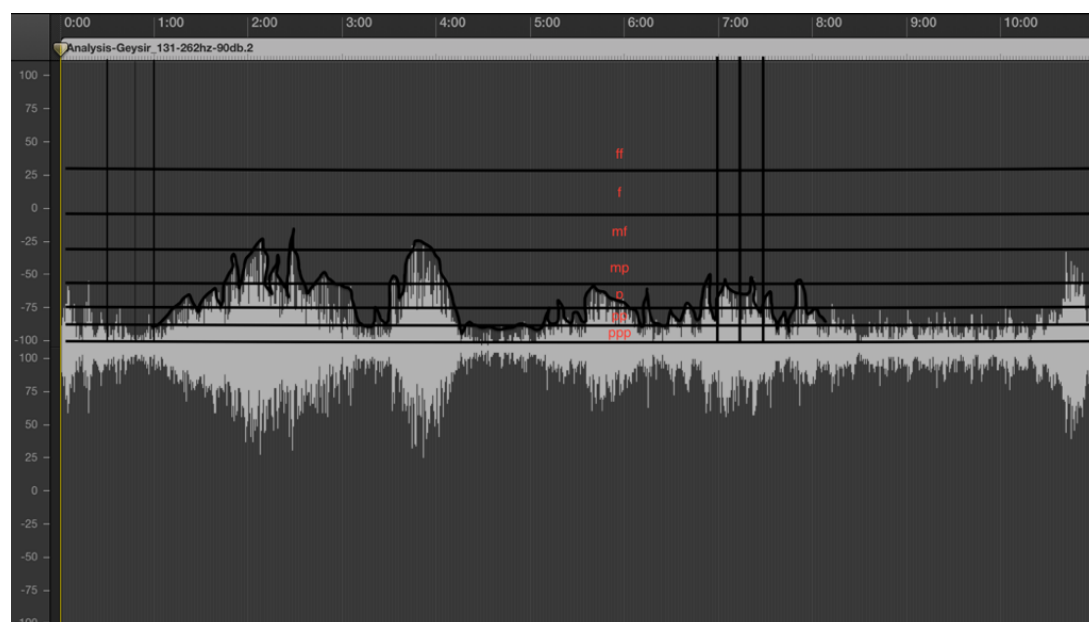
¹ Frequency segments are termed “staff=1, staff=2, etc.” in the Pitch-Class Predominance Analysis)



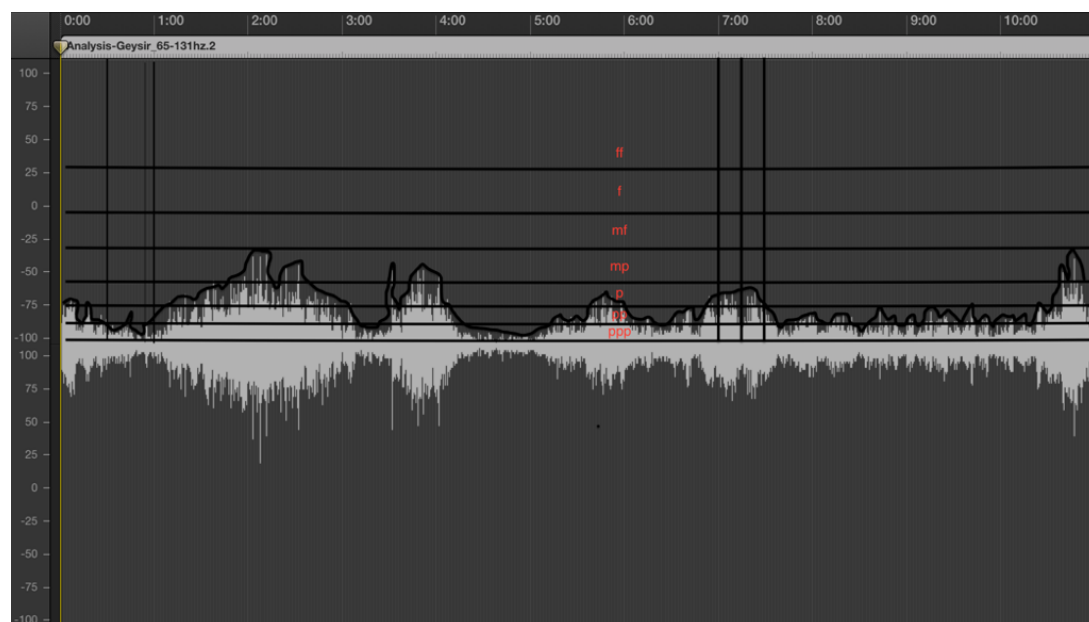
Staff=3 (C5–C6)



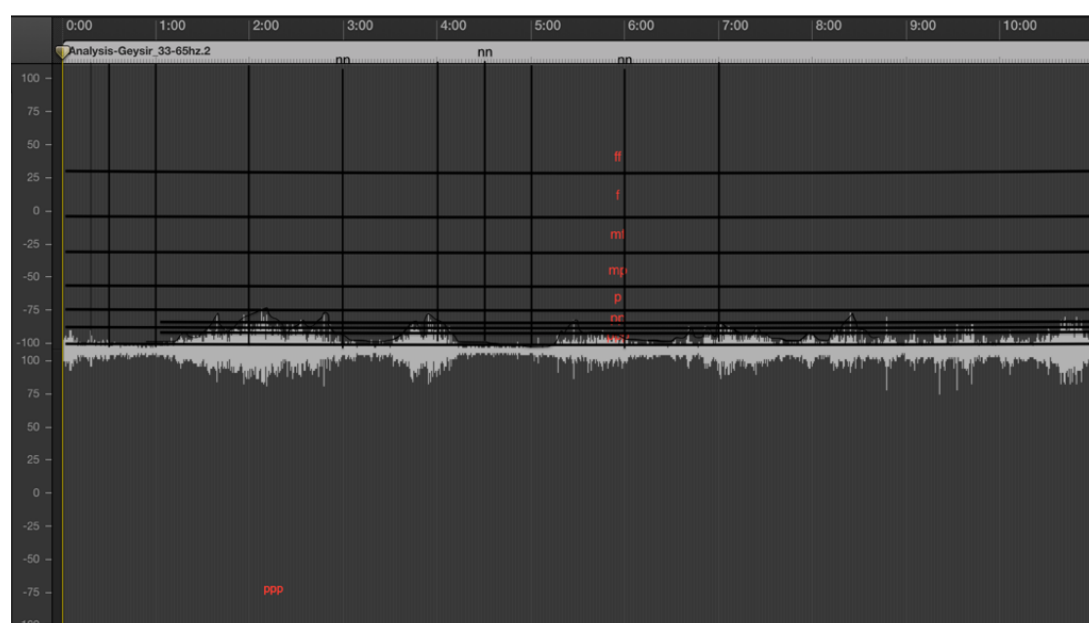
Staff=4 (C4–C5)



Staff=5 (C3–C4)



Staff=6 (C2-C3)



Staff=7 (C1-C2)

In the example below, the full score presents one of the overall peaks in amplitude in the entire 11-minute recording. A close look at the dynamics in each of the instruments will show the correspondences both in the macro-level and micro-level of dynamics: while there is a general increase in amplitude from 1:56 to 2:08, there are sudden dips and spikes in the dynamics within the overall increase in the section. The alterations in the dynamics of Staff 1 and 7 are also evident in the example, in which the *pp* and *p*, respectively, are increased to *mp* and *mf* in order to blend with the dynamics of the rest of the parts.

The image displays a musical score snippet with seven staves, organized into three measures corresponding to time markers 1:56, 2:00, and 2:04. The notation includes various musical symbols such as treble and bass clefs, notes, rests, and dynamic markings. The dynamics are as follows:

- Staff 1:** *mp* at 1:56, *mp* at 2:00, and *mf* at 2:04.
- Staff 2:** *mp* at 1:56, *mf* and *mp* at 2:00, and *p* and *mf* at 2:04.
- Staff 3:** *f* and *p* at 2:00, and *mf* and *p* at 2:04.
- Staff 4:** *crescendo* marking at 1:56.
- Staff 5:** *pp* at 1:56, *mp* at 2:00, and *mf* at 2:04.
- Staff 6:** *mf* at 2:00.
- Staff 7:** *p*, *ppp*, and *pp* at 1:56; *p*, *pp*, *mp*, and *pp* at 2:00; *mp*, *pp*, and *mf* at 2:04.

Full score available at: <https://chlunamega.github.io/public/compositions/geysir-composition/Geysir-score.pdf>