

Repeatedly detected ambient noise at I30JP

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In ITW2022, the Romanian NDC analyzed data at the Romanian infrasound stations by DTK-GPMCC software and presented results of coherent infrasound noise. They found that signals from artificial sources such as refineries and power plants, as well as natural sources such as microbaroms, were regularly detected. They plotted the detected signals by color-coding the trace velocity, with the horizontal axis representing the predominant frequency and the vertical axis representing the direction of arrival, making it easier to grasp the difference between artificial and natural sources.

I wanted to know about ambient noise in I30JP as well, so I created a similar graph. A PMCC analysis was performed on 1/3 octave using I30JP data for one year in 2022. In I30JP, signals from microbaroms and artificial activity were repeatedly detected and concentrated in specific frequency bands and directions of arrival. In addition, despite the ocean stretching from the northeast to southwest of Japan, microbaroms were not detected from the southeast to south of I30JP. In I30JP, we will show what kind of signals are coming from which direction and introduce possible sound sources.

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