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**Possible 'marsquake' detected for first time on red planet. (2019, April 24). Retrieved from https://www.theguardian.com/science/2019/apr/24/possible-marsquake-detected-for-first-time-on-red-planet**

Nasa probe InSight picks up slight tremor that fits profile of similar episodes on the moon.

A Nasa probe has detected and measured what scientists believe to be a “marsquake”, marking the first time a likely seismological tremor has been recorded on another planet, the Jet Propulsion Laboratory in California.

The breakthrough came five months after robotic probe InSight, the first spacecraft designed specifically to study the deep interior of a distant world, touched down on the surface of Mars to begin a two-year seismological mission.

The faint rumble characterised by JPL scientists on Tuesday as a likely marsquake was recorded on 6 April, the lander’s 128th Martian day, or sol.

Scientists were still examining the data to conclusively determine the precise cause of the signal, but the trembling appeared to have originated from inside the planet, as opposed to being caused by forces above the surface, such as wind, the laboratory said.

“We’ve been collecting background noise up until now, but this first event officially kicks off a new field: Martian seismology,” said InSight principal investigator Bruce Banerdt.

The tremor was so faint that a quake of the same magnitude in southern California would be virtually lost among the dozens of seismological crackles that occur there every day, JPL said.

The rumble on Mars stood out because the surface of the red planet is extremely quiet in comparison with Earth.

The size and duration of the marsquake also fit the profile of some of the thousands of moonquakes detected on the lunar surface between 1969 and 1977 by seismometers installed there by Apollo missions, said Lori Glaze, planetary science division director at Nasa headquarters in Washington.

No estimated Earth-magnitude equivalent was immediately given for the apparent marsquake.

Three other apparent seismic signals were picked up by InSight on 14 March, 10 April and 11 April but were even smaller and more ambiguous in origin, leaving scientists less certain they were marsquakes.

# Vocabulary:

* **probe** – device used by scientists to explore different planet;
* **tremor** – slight shake of the ground;
* **ambiguous –** possibly having two meanings; uncertain;

# Questions:

1. How do the scientists name the tremor on the Mars?
2. How did scientists detected the possible tremor?
3. Why doesn’t the detected signal have to be made by marsquake?
4. Why do scientists think it could be a marsquake?
5. How strong was the marsquake?