Geophysical Research Abstracts
Vol. 20, EGU2018-17776-1, 2018
EGU General Assembly 2018

Preparing for InSight: First Results from the Blind Test for Martian Seismicity

Martin van Driel (1), Renee Weber (2), Jeroen Tromp (3), and the InSight Blind Test Team

(1) ETH Zürich, Geophysics, Geosciences, Zürich, Switzerland (vandriel@erdw.ethz.ch), (2) NASA, Marshall Space Flight Center, Planetary Science Division, (3) Princeton University, Department of Geosciences

The InSight (Interior exploration using Seismic Investigations, Geodesy and Heat Transport) lander will deploy a seismic monitoring package on Mars in November 2018. In preparation for the data return, we prepared a blind test in which we invited participants to detect and characterize seismicity included in a synthetic dataset of continuous waveforms from a single station that mimics both the streams of data that will be available from InSight, as well as expected tectonic and impact seismicity and noise conditions on Mars. Inclusion of the seismological community will ultimately improve and extend the current set of methods that the InSight team plan to use in routine analysis of the Martian dataset.

84 individuals from 20 different countries subscribed for test and downloaded the data, 10 of which are from within InSight science team. Approximately 20% of the participants declared interest in the test for educational purposes, while the remaining 80% were interested in either research such as structural inversion methods, or locating seismic events. The results of this tests are due February 1st 2018 and we will present first results.