



InSight / Schools Tuned In to Mars with InSight space mission

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InSight (Interior Exploration using Seismic Investigations, Geodesy and Heat Transport) is a discovery program, lead by NASA, that will place a single lander on Mars and other sensors, such as a seismometer, a heat flow probe, sensors that will provide precise measurements of planetary rotation (nammed RISE).

The main payload will be the seismometer called SEIS, that will be the first seismometer (after Viking fail) to record signal with a very deep precision. The goal of this mission is to investigate the dynamics of martian tectonic activity and understand all the processes that shaped the Red Planet.

In this presentation, we will show all the practical activities done with kids, teens and students in France and other countries, and others ideas we plan to develop.

This work has been done by a French team of teachers, in international cooperation with others teachers (with UK, USA, Switzerland . . .) and can be found on this website: <https://insight.oca.eu>

All activities and software proposed to the schools, are structured according to those topics:

- Topic Telluric: seismology and meteorology activities are provided,
- Topic Data: use of synthetic data from Mars and the 'Blind Test' with students to discover events on Mars,
- Topic Journey: activities on orbitology shows how InSight will join Mars in 2018,
- Topic Sensor: many sensors such as accelerometers, piezoelectric cells, pressure sensors are used with pupils to understand and analyse collected data.
- Topic Signal: pupils can understand with a software how the signal is transferred from Mars to Earth!

These practical activities are shared in a huge international schools' network. The new Erasmus project STIM (Schools Tuned In to Mars / 2018-2021) will federate the teachers community in Europe . . . and more.