

This contribution describes the trigger and PMT readout system that will be used for the High Energy Particle Detector onboard the second China Seismo-Electromagnetic Satellite for CSES-Limadou mission.

The mission foresees the realization of a constellation of satellites which will monitor variations in ionospheric parameters that are supposed to be related to earthquakes. The first satellite is already in orbit and a second one is under development and its launch is scheduled for late 2023.

The contribution presents the ongoing work on the board and the results obtained from the measurements, which consist in the characterization of the ASIC used for PMT readout and the definition of operative parameters such as the threshold and the amplification of signals from PMTs in order to obtain the required energy range for the detector.

Furhter development will consist in the verification of the board functionalities and its compliance with the HEPD design specifications and the implementation of improved trigger algorithms with respect to HEPD-01.