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Observation of solar events using hard X-ray polarimeter POLAR

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The main purpose of the novel polarimeter POLAR is to study polarization of Gamma Ray Bursts in the hard X-rays energy regime. Several analyses have shown that it is also possible to conduct semi-permanent observation of the Sun and complete the long lasting goal of polarization measurements in solar flares in the non-thermal parts of the energy spectra. POLAR was developed by collaboration between Switzerland, China and Poland. The instrument is located onboard of the China Space Laboratory TG2 that was launched in September 2016. Despite of many past attempts, the key energy range of hard X-rays was only rarely explored and results were inconclusive. To large extend it was due to greater instrumental complications. Polarization data from POLAR measurements would shed light about mechanisms and processes leading to electron acceleration and photon production. POLAR was not only designed as a dedicated instrument for polarization studies but also underwent very careful calibration campaigns on-ground supplemented by precise modeling and tests. Orientation of the TG2 space laboratory as well as instrument pointing direction allow for precise measurements of polarization in solar flares. POLAR is currently in the commissioning phase lasting until April 2017. Already in this phase it was possible to detect several weak class flares the data from which is being currently analyzed. We will provide the instrument status and present first information on detected solar events in comparison with other solar observatories such as RHESSI.