FIRST OPTICAL OBSERVATIONS OF SHOCK WAVES INTERACTION WITH THE SOLAR SYSTEM PLANETS. THE PRELIMINARY ANALYSIS.

O. Podladchikova[1]

[1] *Solar-Terrestrial Center of Excellence - SIDC, Royal Observatory of Belgium, Brussels*

The STEREO-twin spacecraft launched at the end of 2006 by NASA has the 6 imagers (per satellite) watching the Sun and the heliosphere. The high resolution optical imagers has the different consecutively increasing fields of view to observe not only the Sun but also the regions far more deep into the solar system. The sensibility of the imagers to the photons is also adapted to the exponential decrease of the light intensity in the outward from the Sun direction. Such telescope system is capable to track visually the shock wave propagation from very origin at the solar disk up to the interaction stage with the solar system planets. At the current stage of the space-mission the images are already calibrated to start the scientific analysis of the different stages of the shock wave propagation throughout the solar system. This presentation is the first attempt to make the interpretation of the observed phenomena and to identify the types of the observed waves.