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The Solar Orbiter Heliospheric Imager (SoloHI) for the Solar Orbiter Mission

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The SoloHI instrument has completed its development effort and has been integrated onto the Solar Orbiter (SolO) spacecraft. The SolO mission, scheduled for launch in February 2020, will undergo gravity assist maneuvers around Venus to change both the perihelion distance as well as the plane of the orbit to ultimately achieve a minimum perihelion of 0.28 AU and an orbital inclination of about 35° relative to the ecliptic plane. The remote sensing instruments will operate for three 10-day periods out of the nominal 6-month orbit. SoloHI will observe sunlight scattered by free electrons in the corona/solar wind from 5° to 45° elongation in visible wavelengths and will observe the solar wind in general, including CMEs, streamers, intensity/density fluctuations and also provide a coupling between solar and solar wind observations. It is very similar to the HI-1 instrument on STEREO/SECCHI except that the FOV is twice the size. In this paper we present our efforts to prepare for the mission including our observing plans, quick-look plans and some results of the calibration activities.

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