SO/PHI data request form (Cruise phase + first science orbit; SO/PHI-Team internal version)

Evolution and stability of magnetic network

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Science case (stay on one slide):

Please also state, why is PHI needed; why is the science unique?

 The larger field of view of SO/PHI and its ability to observe magnetic fields at high spatial resolution for longer duration enables us to better probe the evolution and stability of magnetic network structure of the quiet Sun. With the proposed observations, we will address how network forms and decays by investigating collective behaviour of its magnetic elements on longer timescales of hours.

Requirements/data (use additional slide if needed)

Besides best guess requirements, you may also list minimum requirements on the data

- Type of solar feature: Quiet-Sun magnetic network
- HRT or FDT: HRT
- Physical parameters needed (available: B_LOS, vector B, v_LOS, I_c, raw data): **B_LOS**
- Total length of observation: **24 hours (longer if possible)**
- Cadence (maximum 1 dataset/min): **2 minute**
- Pointing needs (disc centre, limb, active region location, particular μ): disc center
- Orbit needs (spatial resolution/co-rotation/angle to Earth/angle to other spacecraft):
- Total number of datasets: 2
- Full frame 2k x 2k or partial frame 1kx1k, 0.5kx0.5: Full frame
- Full resolution or 2x2, 4x4 binned data: Full resolution
- noise level (default 10⁻³): **Default**
- Co-observations with other instruments: **SO/EUI to study impact on the upper atmosphere**
- Special requests: