

A CORONASCANNER FOR A SUN ORIENTED SPACE MISSION

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The quantitative study of the solar corona between 3 and 20 R_{\odot} is still a challenging task. Inherent difficulties are the proximity of the Sun and the still bright inner corona ($< 3 R_{\odot}$), the low brightness of the outer corona and the low contrast of possible structures. A spinning, externally-occulted coronagraph having its field-of-view limited to a sector of the corona presents several advantages over conventional coronagraphs for this study such as higher rejection of stray light and azimuthal uniformity over the whole field-of-view. Such an instrument could address the following aspects of the F-corona:

- photopolarimetry and colorimetry
- ellipticity, axis of symmetry
- temporal/spatial variations
- equatorial enhancements (rings)
- local component.