PERFORMANCE AND CAPABILITIES OF THE HIGH SPEED PHOTOMETER

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The Hubble Space Telescope's High Speed Photometer has recently finished its Science Verification program. GTO observations of various astronomical targets have demonstrated the unique capabilities of the HSP, as well as illustrating some operational constraints imposed by the HST system.

The following observations will be among those used to quantify these capabilities and constraints:

- high speed (10.7 μs) sampling of the Crab Pulsar in the visual and UV
- 5.6 hour, 82 ms UV time series of the rapidly oscillating Ap star HD60435
- long term (5 month) periodic monitoring of the cataclysmic variable Z Chamaeleontis
- stellar occultation by Saturn's rings