

Title: The WFIRST Interim Design Reference Mission: Capabilities, Constraints, and Open Questions

Abstract:

The Project Office and Science Definition Team for the Wide-Field Infrared Survey Telescope (WFIRST) are in the midst of a pre-Phase A study to establish a Design Reference Mission (DRM). An Interim report was released in June 2011, with a final report due later in 2012. The predicted performance of the Interim DRM Observatory will be described, including optical quality, observing efficiency, and sensitivity for representative observing scenarios. Observing constraints and other limitations on performance will also be presented, with an emphasis on potential Guest Observer programs. Finally, a brief status update will be provided on open trade studies of interest to the scientific community.

The final DRM may differ from the Interim DRM presented here. However, the underlying requirements of the scientific programs are not expected to change, hence the capabilities of the IDRMM are likely to be maintained even if the implementation changes in significant ways.