

Calibration and Standardization of Large Surveys and Missions in Astronomy and Astrophysics



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ACCESS: Status, Calibration Strategy, and Design Performance

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ACCESS, Absolute Color Calibration Experiment for Standard Stars, is a series of rocket-borne sub-orbital missions and ground-based experiments that will enable improvements in the precision of the astrophysical flux scale through the transfer of absolute laboratory detector standards from the National Institute of Standards and Technology (NIST) to a network of stellar standards with a calibration accuracy of 1% and a spectral resolving power of 500 across the 0.35 to 1.7 micron bandpass of the cross dispersed ($m=1-4$) echelle spectrograph fed by a 15.5-inch Dall-Kirkham Cassegrain telescope.

The telescope mirrors have received their flight coatings. Flight detectors have been selected. The detector subsystem has undergone vibration testing. Confirmation of initial detector performance and the detailed ground based characterization of the detector will begin in the next few weeks.

Fabrication, integration, and automation of the ground-based calibration subsystem is in progress.

The ACCESS design, calibration strategy, and ground-based integration and test plans will be presented. Launch is expected within the year.

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