

Establishing a Zero Motion Reference Frame for the FGS

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STRAGGLERS

Total Budget Amount: \$67,000 (see below)

Calibration: Yes

Abstract

We propose to measure the internal proper motions of the stars in M35 that are used to calibrate the HST/FGS. The goal of this effort is to remove the influence these stars have on the FGS distortion map. Employing the approximately 108 orbits of available archival FGS data, these motions can be determined to an accuracy of 0.05 mas/year. By iteratively measuring these motions using successively longer time bases and then accounting for them in the distortion map, their influence on this map can be essentially eliminated.

Investigators:

	Investigator	Institution	Country
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CoI	Mr. Doug Hoffman	New Mexico State University	USA/NM

Number of investigators: 4

Dataset Summary:

Instrument	No. of Datasets	Retrieval Method	Retrieval Plan
FGS	108	FTP	The FGS datasets will be provided to Dr. McNamara by B. McArthur of the FGS Astrometry Team