

Cassegrain ADC

Monthly Report, October, 2005

I. Narrative**A. Summary**

The prisms were MgF₂ coated at Lick and Sol-Gel coated at LLNL. Unfortunately there are several cosmetic problems on one of the prisms due to dust that was not able to be removed before the Sol-Gel coatings, and difficulties in dipping the first prism. This prism has several bands on it caused by ripples in the tank that were caused when it contacted a feature in the tank during the dipping process. The second prism does not have these bands, although it was equally dusty when dipped.

During the difficulties encountered with the Sol-Gel process it was also discovered the the MgF₂ coating was not as hard as it should have been, and that it sleeted very easily.

When the prisms returned to Lick it was also discovered that the band pass of the coatings was red of where it should have been, for reasons that are not well understood.

For all these reasons it was decided that the prisms would need to be recoated. Unfortunately for the schedule, the MgF₂ difficulties are not understood and some research needs to be done before re-coating. During this time it is planned that Lick will establish the capability to coat the prisms with Sol-Gel. A revised schedule is attached.

B. Technical Status

1. Overall Assessment of Scientific and Technical Status
The coating of the prisms is being re-done. All other work is complete to the point of fabricating the shipping containers.
2. Accomplishments of the Past Month: As above
3. Problems: Coatings

C. Schedule and Budget Status

1. Overall Assessment of Progress and Expenditures: Coating of the optics is on the critical path. Delivery has been delayed to mid 2006
2. Problems: Coating

D. Proposed Actions Regarding Problem Areas

1. Scientific or Technical -none
2. Schedule - none
3. Budget -none

E. Anticipated Accomplishments in the Next Month

Research of coating problems

F. Other Issues and Information Deemed Essential to Include

II. Schedule

Current Schedule -attached

III. Confirmation of Amendment of Project Schedule and Milestones

At this time we believe we are on schedule.

IV. Confirmation or Amendment of Project Budget

Will likely ask for a draw on the contingency.

V. Project Financial Summary

Attached. At the end of September we had expended \$379,233 of an approved total of \$375,963 not including contingency for the Full Scale Development/Commissioning Phase. The contingency is \$123,867.