

Preface

This volume presents the proceedings of the workshop on Calibrating the Hubble Space Telescope, held at the Space Telescope Science Institute in Baltimore on November 15-17, 1993. The aims of the Workshop were to disseminate calibration results and techniques to the astronomical community in a forum open to both expert and novice, and to establish and document the definitive instrumental calibration for *HST* data obtained prior to the first servicing mission.

The pre-1994 *HST* archive contains a large body of unique science data obtained over three and half years since the first astronomical observations were taken with the telescope. There is enormous interest in the archive data for research purposes and we anticipate that use of the archive will continue in the years ahead. We have a responsibility to maintain the value of this important resource, by making sure that the astronomical and instrumental calibrations are as good as possible.

The initial calibration of the instruments was established by the Investigation Definition Teams (IDTs) during Science Verification in 1990 and has been maintained subsequently by staff at STScI. Inevitably, the performance of the instruments has changed during this long observing period, and these changes have required frequent re-calibrations. Throughout this period of time, staff scientists at the Institute and the European Coordinating Facility (ST-ECF) as well as members of the IDTs and General Observers have been analyzing *HST* data, wrestling with a variety of calibration problems, and developing techniques for getting around such problems.

During the course of this meeting, we addressed all the major performance and calibration issues, and in these proceedings we have included virtually all the verbal and poster papers that were presented during the three days. In structuring the book we have started each instrument section with an overview of the status of each instrument and a description of the routine calibrations which are applied to the raw data in the Institute's calibration pipeline (PODPS). These overviews are followed by papers which describe instrumental calibration problems as well as techniques and procedures designed to work around such problems. These papers should prove to be very useful to all users of *HST* data.

We would like to thank Bob Fosbury and Michael Rosa from the ST-ECF who provided a great deal of help at all stages of this Workshop. Their advice on the format of the meeting and their support throughout the meeting was much appreciated. A special note of thanks is due the Institute instrument scientists and technical staff who have been working on instrument calibration since launch, often under extreme pressure. Their work was crucial to the success of this meeting. All authors (well, ...almost all) provided us with their papers soon after the close of the meeting and this facilitated our job in producing these proceedings. Finally, we wish to thank Angie Clarke (STScI) and Britt Sjoberg (ST-ECF) who provided skillful help both before and during the meeting and Marjorie Shettle (STScI) who assisted during the meeting.

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