

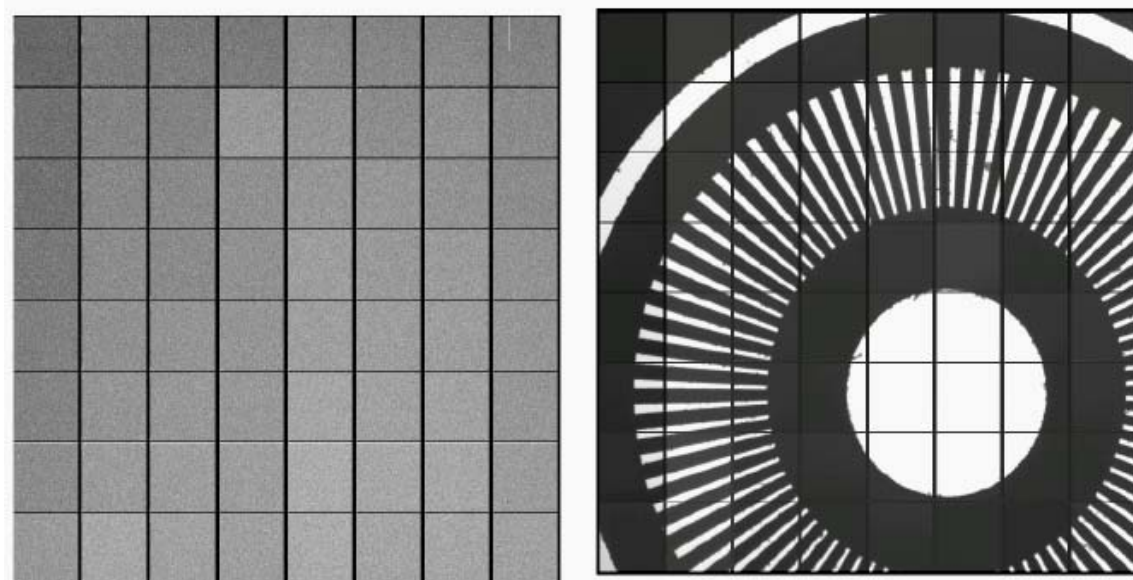
## ODI News

*Daniel Harbeck*

In the last issue of this *Newsletter*, we reported on the completion of the Lot 3 CCD OTA foundry run for the One Degree Imager (ODI). Over the last two months, the new OTA detectors have undergone significant testing. STA packaged three thick devices and we successfully operated them in our lab test dewar. Lot 3 devices show the expected improvements compared to the earlier revision. The readout noise of the MONSOON/OTA system is now below  $7 e^-$  (compared to  $12 e^-$  of Lot 2 devices), and the amplifier glow is virtually gone. The detectors

Progress was also made in other areas of the ODI project, including fabrication of the corrector optics at SESO. We are moving towards the finalization of the ODI CCD controller design. Virtually all parts of the ODI instrument support package have now been released for fabrication to the NOAO machine shop, and the first parts of ODI have been produced.

Dealing with ODI data will be a special challenge. While all images will undergo a basic data reduction at the telescope site (i.e., data will be bias corrected and flat



*Figures above show sample images from one of the Lot 3 OTAs: flat-field is on the left, and test target is on the right.*

image cleanly without the charge injection at the cell boundaries that was seen in earlier devices.

The remaining issue is a “fat zero” problem; i.e., the charge transfer into the serial registers is reduced at background levels below  $30\text{-}50 e^-$  leaving a small tail of charge behind for a few pixels. However, in sky-noise limited observations, this background limit will easily be reached. Overall, we consider the Lot 3 design viable and final for ODI. We anticipate having our first thinned versions of these OTAs in February 2008.

fielded), a science pipeline to stack images and extract object catalogs is beyond the scope of the ODI instrument project. Nevertheless, it was recognized by the Science Working Group (SWG) and the Science Advisory Committee (SAC) that future ODI users will require support to extract science from the basic images. Thus, an effort was started to coordinate activities towards a common ODI science data pipeline architecture. As a first step, the SWG and SAC members will collect typical use cases for a potential science pipeline.~

## PERSONNEL NEWS



**Dave Sawyer** left WIYN in September to accept a position with NOAO.

Dave first joined the WIYN team as the Site Manager, serving in that position from 1993 to 2000. During that time, he was involved with the construction and commissioning of the new WIYN Observatory, and later with the transition to operations.

*Dave Sawyer*

In 2003, Dave rejoined WIYN. As the ODI Project Engineer, he has helped to define the scope and requirements

for the ODI project. Dave has led the engineering team through several design reviews and also assisted with the development of the OTA detectors and MONSOON controllers.

We thank Dave for his many years of excellent service to WIYN, and wish him well in his new position.

**Steve Howell** will transition from WIYN to NOAO/Kitt Peak in October. Fortunately for us, Steve will continue to serve as the WIYN Telescope Scientist.~



*Steve Howell*