

## Maintenance of DK154 during September-November 2016

These works were done by Petr Pravec, Kamil Hornoch, Miroslav Velen, Rodrigo Olivares, Bernardo Ahumada and the ESO staff, with assistance of Tomáš Turek, Daniel Krykorka and Peter Kušnirák.

- 1) We updated the pointing model on 2016 September 2. Parameter TD (Tube/declination non-perpendicularity) was adjusted to +240, to point at the center of the working half of the CCD.
- 2) The vacuum gauge failed on 2016 October 29 and the vacuum was degraded on November 2-3, as CCD temperature raised to between -115 and -109 C. We pumped it on November 5.
- 3) We went through the complete Projectsoft checklist on 2016 November 6 and 7, see the protocol (Attachement 1).
- 4) The Emergency Button (SB1) in the dome at the telescope floor broke and it was replaced on 2016 November 10.
- 5) The parking position tolerance in the TCS was increased to  $\pm 1$  deg on 2016 November 6; the min and max limits of the parking position are 179.0 and 181.0 deg now.
- 6) We changed the password for vnc access to the Win1/2, Lin1/2 servers on 2016 November 7.
- 7) We found that the right support of the right solar panel is partly broken, see pictures at <https://drive.google.com/drive/folders/0B2jCZhpQbvcHaFRBY2FDbHZsWmM?usp=sharing>. The ESO technicians fixed all the solar panel supports on 2016 November 10. We also washed the solar panels from chickweed.
- 8) We found that the dome battery charging contacts are loosened and not always in contact. This will be fixed.
- 9) The human presence sensor SM1 in the dome doesn't work. (SM2 works fine.) We will look into it.
- 10) The DFOSC image data from the 2015-2016 season were copied to an external HDD and we will check them against data downloaded to the dk154-storage server. A sufficient space on the data disks on Lin1/2 will be cleared for our entire 2016-2017 season.
- 11) There occasionally occurs the error SLIT AL 1 (loss of communication with slit). We suspect that it may be because the wifi access point dk154-dome (IP 192.168.132.14) uses channel 1 that could be affected by the APs of the NTT, 3.6m and 2.2m that use channel 2. We consider that it might be good to change the AP dk154-dome to a different channel (e.g., channel 12).
- 12) There is a higher occurrence of mice in the dome this year than before. We installed five electronic pest repellers: in the dome at the telescope floor, in the control room, in the room with the PLC (UPS, FW and SW), in the old kitchen room and behind the entrance door. We will also spray for protection of cables against rodents before we leave on November 14.

13) Following end switches for the dome slit were adjusted: S29 and S30 for the closed position and S47 for the open position.

Petr Pravec, 2016 November 13

Attachments: 1) DK154Checklist\_201611.xls