

Service works at DK154 in September-October 2019

These works were done by Petr Pravec, Petr Fatka, Kamil Hornoch, Bernardo Ahumada, and Andrés González.

Note: There occurred a serious problem with the new DFOSC camera after powercycling on 2019 March 31-April 1. Until there is a plan how to service it, we don't want to touch it. All ongoing works on the camera and its control sw have been suspended until that.

- 1) Two new filters OII (no. 788) and OIII (no. 427) were installed to the Filter Wheel A, replacing the Hbeta and Gunn z filters in the positions 5 and 7, respectively, on 2019 September 26.
- 2) We adjusted the limit end switches for the open position of the dome slit S28 and S47 (to avoid occurrence of the TCS alarm SLIT AL6 (loss of end switches in open state)) on 2019 October 8. Their working distances are about 3 mm now. Also adjusted was the low closing chain (as there was a closing misalignment, "it was closing higher than in the lower part").
- 3) Exchange of one data HDD (sdc) in the Lin1 server was done on 2019 October 18.
- 4) We brought there 2 new spare data HDDs (2 TB) and 3 new spare system HDDs (500 GB). There are currently 3 spare data HDDs (one Constellation ES.2 and two NASware 3.0) and 4 spare system HDDs (one WD5000AAKX and three WD5000AZLX), plus a few older used but OK Constellation ES disks stored at the telescope. We consider this is enough, should an exchange of degraded HDDs be needed in the foreseeable future.
- 5) We went through the complete Projectsoft checklist during 2019 October 18 to 22, see the protocol (Attachement 1).
- 6) We cleaned the tapes with bar codes for the dome azimuth reading from grime and oil on 2019 October 18. The occurrences of the alarms DOME AL 1 and 2 should be reduced now.
- 7) The entrance window of the pyrgometer was washed on 2019 October 18.
- 8) We changed the password for vnc access to Win1/2, Lin1 servers on 2019 October 21. (There remains the old vnc password at Lin2.)
- 9) The fan of the power supply of Win1 is somewhat noisy. We will buy a new power supply for the server (HP Z210 Workstation), HP Spare Part Number 619564-001, to exchange it.
- 10) The DFOSC image data from the 2018-2019 season were copied to an external HDD and we will check them against data downloaded to the dk154-storage1 server. A sufficient space on the data disks of Lin1 will be then cleared for our entire 2019-2020 season.
- 11) We found a few mechanical issues with the dome and the telescope and consulted them with Bernardo Ahumada. The LSO technicians will fix them during following weeks. They are:
 - a) The contacts for recharging the dome slit battery are partially damaged and they need to be fixed.
 - b) The dome rotation wheels and mechanism need to be adjusted. (Scrub the dome.)
 - c) The mirror flaps do not close smoothly, it needs to be fixed/adjusted.

- d) The oil system needs to be maintained (possibly oil exchanged or using additives).
- e) The ventilation window hinges and pivots need to be lubricated.

Petr Pravec, 2019 October 22

Attachments: 1) DK154Checklist_201910.pdf