Maintenance and upgrades of DK154 during September-December 2014

These works were done by Petr Pravec, Miroslav Velen, Peter Kušnirák, Tomáš Zeman, Jiří Novotný, Luděk Řezba, and Peter Sinclaire and colleagues.

1) Exchange of HDDs in computer Lin1 was done on 2014 Oct 16 and 17. Two of the four HDDs were not healthy, there were detected bad sectors. We replaced them with new ones, including the two other HDDs in the raid. Their serial numbers:
   /dev/sdd Z1P07PML (bad sectors) => Z1E5TCL2
   /dev/sdc Z1P099F1 => Z1E8DJTL
   /dev/sdb WD_WMC2E4676691 => WD_WCC2EHWXS0KN
   /dev/sda WD_WCC2EHX42782 (bad sectors) => WD_WCC2EF1PZ9TY

2) We went through the complete Projectsoft checklist on 2014 Oct 18, see the protocol (Attachement 1).

3) The wire to the GSM-UMTS unit antenna (located on the catwalk) was found to be torned out when we came to the telescope on 2014 October 15. A new antenna has to be bought and installed. Warning sms from the TCS cannot be sent in the meantime.

4) The problem of excessive load of the Lin1 server was identified and fixed. It occured when the ARS client run within the local network at the telescope. It inquired the RTS2 server running at Lin1 excessively and it caused that the process rts2-xmlrpcd used one core of Lin1 at about 75%. The usage increased to 100% when the ARS client was run both on Lin1 and Lin2 at the same time. The problem was fixed by limiting the frequency of queries from the ARS client.

5) During our stay at the telescope 2014 October 15 to 22, we have seen occassional "freezing" of Lin1. We found that there were missing the Intel graphics drivers: package mesa-utils. We have put it there and now it is all right. (All on-site observers: Please don't use the Lin1/2 servers for running your programs. Use your own ntb or the Observer PC. Thank you!)

6) A few small changes in the TCS were done. One of them is a feature that now the focus correction with temperature is performed only when no exposure with the DFOSC camera is being taken, to avoid degradation of image quality during the correction. Also, several new ASCOL commands were added; the new ASCOL manual is available at dk154-storage.asu.cas.cz

7) The filter names diplayed in ARS client were corrected (two of them) on 2014 September 13.

8) The password for VNC access to the win1/2, lin1/2 computers for Technologists was changed.

9) Page http://www.asu.cas.cz/~dk154/telstatus.html was established. It's still under development so please be patient if something is not all right for a while.

10) The DFOSC image data from the 2013-2014 season were copied to an external HDD and they were checked against data downloaded to the dk154-storage server. A sufficient space on the data disks on Lin1/2 was cleared for our entire 2014-2015 season.

11) There have been found holes in the Cass Flap (see Attachement 2), apparently a result of someone dismounting some older stuff there. They'll be sealed.

12) The <u>only significant remaining issue is the broken AG focusing</u>. It is considered to be fixed during a planned NBI maintenance mission in September 2015.

Petr Pravec, 2014 December 2

Attachements: 1) DK154Checklist_201410.xls
2) DK154_CassFlap_20141021.jpg