

# Fix bug in tee\_tty of GPS data, new NIDAS code

Gordon, Dec 9 3:15 pm

Since Dec 1 22:50 UTC the DSM log file (/var/log/isfs/adam.log) has error messages that the GPS pseudo-terminal device, /var/tmp/gps\_pty0, does not exist. Apparently the tee\_tty process died at that time.

tee\_tty reads the GPS ASCII messages on /dev/ttyS3, and writes them to two pseudo-terminals /dev/gps0 (read by NTP) and /var/tmp/gps\_pty0 (read by dsm).

I'm not sure why tee\_tty died, but decided that this was an opportunity to upgrade the NIDAS software on this system. The existing version was 5810M, current as of Nov 9, 2010.

Installed the latest and greatest, version 6364.

During this time I noticed that characters were being lost in the ssh session, such that I had to enter characters twice for them to get to the shell if the dsm process was running. I have a faint memory of this happening before. Determined that this is due to tee\_tty exiting, leaving the symbolic links to the pseudo-terminals around. The dsm process re-opens the /var/tmp/gps\_pty0 every 10 seconds after an error, and so if sshd creates a pseudo-terminal and /var/tmp/gps\_pty0 points to it, then the dsm process will be stealing characters from the ssh session. Did a dump of the GPS data and saw my shell commands! Hacked myself 😊

Installed a new version of tee\_tty, which will catch the HUP, INT and TERM signals, and clean up the symbolic links on exit. Tested it and things look good.