```
Mauna Loa Solar Observatory Observer's Log
 ._____
      Mon Oct 28 17:27:12 GMT 2019
Year: 19 Doy: 301
Observer: berkey
WEATHER COMMENT: berkey: Mon Oct 28 17:27:14 GMT 2019
Temp: 46.4f, Humidity: 7%, Pressure: 28.59lin, Wind: 7mph from 164degs, Skies: clear
  end
GENERAL COMMENT BY berkey: Mon Oct 28 17:27:33 GMT 2019
PM Blew off Kcor O1 and opened windows up stairs
end
Mon Oct 28 17:29:20 GMT 2019 SGS Alignment complete
Mon Oct 28 17:30:50 GMT 2019 Kcor Focus/alignment program exited
Mon Oct 28 17:36:16 GMT 2019 KCOR Start Synoptic Patrol
Mon Oct 28 19:32:53 GMT 2019 KCOR End Patrol
Mon Oct 28 19:32:55 GMT 2019 KCOR Start Calibration script: c:\kcor\mlso-calibration22deg-20171025.ini
GENERAL COMMENT BY berkey: Mon Oct 28 19:45:55 GMT 2019
Lost guiding in the cal.
Lots of slop dec. Seems like there is somethign loose on the spar side of the clutch surfacce
 end
Mon Oct 28 19:48:14 GMT 2019 KCOR End Calibration Script
Mon Oct 28 19:48:31 GMT 2019 KCOR Start Synoptic Patrol
Mon Oct 28 19:48:32 GMT 2019 KCOR Start Synoptic Patrol
Mon Oct 28 19:48:43 GMT 2019 KCOR End Patrol
Mon Oct 28 23:33:28 GMT 2019 SGS Alignment complete
Mon Oct 28 23:34:37 GMT 2019 Kcor Focus/alignment program exited
GENERAL COMMENT BY berkey: Mon Oct 28 23:43:06 GMT 2019
Inspected the DEC guider mechanical train. Something is definatly loose, but I dont understand what I am looking at well e
nough to know what to adjust or what might be broken. To address this in the short term I have tried to slightly optiomiz
e the spar balance to work with the kcor calibration optics both in and out of the beam. Histocially the spar was balance
d with ND in and cal pol out. But there is a resoanble big balance moment change when the cal pol is in the beam. Such t
hat we the loose dec train we tended to get quiding issues during the cals.
This probally wont address the issue Greg saw yesterday afternoon where he lost guiding ever 30-40 minutes.
The Dec clutch is also slightly looser now than it had been. Based at looking at how the DEC arm moves relative to the sp
ar I think our drive train damage may have roots in a dec clutch that was too tight; so the dec drive train slipped instea
d of the clutch.
 end
GENERAL COMMENT BY berkey: Tue Oct 29 01:50:02 GMT 2019
Foggy and raining.
Some data today.
end
```

ONSITE STAFF: berkey