Mauna Loa Solar Observatory Observer's Log

Tue Feb 20 17:27:18 GMT 1996
Year: 96 Doy: 051
Observer: koon console Feb 20 17:25

WEATHER COMMENT: Tue Feb 20 17:27:25 GMT 1996
Foggy, rainy, wind=35+ from the SW, temp=33 F. Yesterday (DOY 050) was even worse due to heavier rain, so I didn't walk to the observatory from the parking area and therefore didn't send a log (96050).

LOW-L COMMENT: Tue Feb 20 23:18:15 GMT 1996
Worked on the lowl drives.
The problem is that the drive #0 will eject a tape shortly after trying to write data to it.
1) Switched cables so that drive #0 is at end of chain, without external terminator (in case it has internal termination). Problem still there.

2) Put external terminator on drive #0 in configuration mentioned in #1 above. Problem still there.

3) Same as setup #2 but changed switches on back of drives so old drive #0 become drive #1 and old drive #1 became drive #0. Problem still there.

NOTE: In 1,2 and 3 above, the drive that was originally #1 always worked correctly, only original drive #0 had the same consistent problem.

4) Cleaned drive #0, problem fixed.

While doing the steps above I noticed that the tape in drive #0 was being written to in high density 8500c compressed mode as indicated by the center
LED flashing amber during a write. But that LED flashed green in drive #1 (I'm talking about original drive numbers since I switched their identities back after step #4) indicating a low density mode (8500 or 8200 format).
Switching the tapes confirms that the drives recognize and conform to the format used previously in the recycled tapes. Starting up the drives with the tapes already in them didn't change the way data was written to the drives. After further testing and talking to Exabyte Technical Support it is clear that our EXB8505XL drives will default to writing in 8500c (10 GB/tape) mode on a new tape but will write in the previously used format (e.g., 8500 at 5 GB/tape, or 8200 at about 2.5 GB/tape) on recycled tapes unless we degauss the recycled tapes. So I found two recycled tapes that would allow being written to in 8500c format (we must have loaded them into these drives when they were new) and I loaded them into the drives to avoid the possibility of losing any data and restarted the program. We should probably get a degausser and use the 8500c format from now on, degaussing
any recycled tapes before using them.

Throughout the above troubleshooting I was calling David with questions and information (in fact he suggested cleaning the drive), he will contact Steve and see if using 8500c format is OK. We have probably sent tapes with both types of formats by now, I hope no data was lost on the low density formatted tapes. These drives give another example of why automation without manual overrides can be troublesome.

WEATHER COMMENT: Tue Feb 20 23:55:09 GMT 1996
Weather stayed bad all day, no observing.

Tue Feb 20 23:55:28 GMT 1996: Filemark