

Ethernet work on tower

June 1

Gordon and Tom worked on improving the ethernet connectivity. Gordon opened the low DSM and discovered that the ethernet surge protectors for the connections from the mid and high DSMs were extremely hot.

12:13 Gordon pulled the fuse on the eth1 port in the mid DSM

12:17 Gordon removed the fuse on the eth1 port in the high DSM

(I removed the fuses because I didn't know which jumper controlled the output voltage on these eth ports.)

From the low DSM, Tom pinged, in succession, the high DSM, mid DSM, the router (192.169.0.5), and google.com. In all cases, 50 pings were returned with no missing returns. At the same time the ethernet surge protectors in the low DSM cooled appreciably. Vmote (3,19) at the high DSM now reads a voltage of 12.22 V.

Gordon added an ethernet surge protector to the cable between the ethernet switch and the router now at the top of the tower.

Previously we saw about 10% loss of packets on pings to high. The CBR400 router was also not stable, frequently it would stop responding to http requests. Data samples from the high DSM over the network were being discarded because the TCP connection would not keep up.

The networking to high and to the cbr400 router on the tower now seems to be much improved. It appears that the DSMs were putting a +V on the ethernet cable and the surge protectors were trying to discharge it, getting very hot, and having an adverse effect on the comm signals.