



14/8/07 Currents measured on all motors with shutter open, all stable

15/8/07 Tracking tests, 130-170 degrees (repeated problem at 156), no tripping

Suspicion TASC unit:

The way the dome is controlled at the moment is not optimized. The stopping results in overshooting, ie after the dome has stopped it carries on to move a few degrees in opposite direction. The braking seems somewhat abrupt. This happens both in computer and local control. The fact it happens in local control rules out CAMAC + encoder and points to TASC unit. It is obvious that the control of the dome at this moment is not very good, we have found this during instrument changes using the crane. The starting and stopping should be improved and this is definitely done by tuning the TASC unit.

Whether this should address the dome motor tripping as well remains uncertain, but it is the only thing we got.

Question remains why is only motor no.9 affected? All components in the drive train of 9a have either been replaced or inspected except the right angled gearbox, but if this was the problem both 9a and 9b should suffer the same problem. You would expect that all motors should be affected by a problem caused by the TASC unit. Only exception is that the motors on 9a and 9b and 8a are different motors than the rest in the sense that they run at slightly different currents.

12/7/07 Shaft no.3 was found slipping when stopping dome. Spring plate was properly preloaded to increase friction. Why did this happen suddenly? Could this be caused by a higher braking demand from TASC unit?

Brake is only operated when dome motors are not running. Brake is not involved in stopping the dome after moving to position. Its like a parking brake