5 December 2011

The TCS Periscope 1 mirror was measured using the Zygo interferometer against Flat C in the 2x configuration. The reference data file “O:\aLIGOmet\CAL\Flat\_C\F2x\av\_P01-P14” was subtracted. The mirror is thin and was supported on a v-block. Usually we see the effect of the v-block as a high at the two support locations. However, the wrong wavelength measurement may be misleading us.

The mirror was measured at 1064 nm. The phase response of a coating designed for CO2 may appear different measured at 1064 than it would if measured at the proper wavelength. Contrast was good, the coating appears golden to the eye.

The occlusion at 7 o’clock is part of a clean room wipe, used to cover the v-block.



Figure : Full aperture view



Figure : 50mm aperture



Figure : 50mm aperture, piston and tilt subtracted (power included)