

**SLOAN DIGITAL SKY SURVEY'S TELESCOPE MOTION
CONTROL; COMPARE AND CONTRAST DIFFERENT MOTION
CONTROL IMPLEMENTED FOR THE 2.5M TELESCOPE**

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The 2.5M telescope is situated in Apache Point, New Mexico and is being built for a sky survey beginning the 2000. The telescope has three degrees of motion; azimuth, altitude, and the instrument rotator. These axis are controlled with an intelligent controllerboard through PID algorithm. Other motion consists of four counter-weights on a table, the instrument lift utilizing apneumatic jack, and the umbilical cableattached to a camera. These implementationsare all distinctly different. The systemsare described and compared in detail.

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