Measurements of atmospheric attenuation and sky brightness were performed at the current Whipple 10m site (2300m asl) and at the two proposed VERITAS sites (elevation 1300 asl). Attenuation measurements were made at various zenith angles and wavelengths using an optical telescope and ccd photometer. Cosmic ray spectrum measurements were made using an atmospheric Cherenkov cosmic ray detector consisting of a searchlight mirror of 1.5 m aperture with a 5cm pmt at the focus.