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The Early Successes of PROMPT: Rapid Observations of the Optical Afterglows of GRBs

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Although construction began on PROMPT (Panchromatic Robotic Optical Monitoring and Polarimetry Telescopes) in only December of 2004, it has already produced exciting new data detailing both the temporal and spectral properties of GRB afterglows at early times. Since the beginning of full queue-based observing mode in mid-2005, PROMPT has responded seven times to real-time GRB triggers, producing multicolor lightcurves of the afterglows of four of these beginning only tens of seconds after the burst. PROMPT consists of six robotic 16" telescopes, located at CTIO, which were designed to capture the early optical afterglows of GRBs. Each telescope is optimized for a different pass-band, ranging from the UV through the optical and into the near-infrared. A sixth telescope will consist of an optical polarimeter, whose lightcurves will complement the remaining five telescopes and put important constraints on the physics of the early afterglow. Both the NIR camera and polarimeter are currently being commissioned at UNC and will be installed in late Fall of 2006.