Gemini North Laser Guide Star (LGS) System
Credit: Gemini Observatory

T-ReCS mounted on the uplooking port of Gemini South.
Offered at Gemini South
GEMINI INSTRUMENTS

Instruments currently available at Gemini North

Optical Instruments:
GMOS – Optical Imager, Multi-Object Spectrograph, and IFU

Near-IR Instruments:
NIRI – Near-IR Imager and Low-Resolution Spectrograph
NIFS – Near-infrared Integral Field Spectrograph
GNIRS* – Gemini Near-Infrared Spectrograph

Mid-IR Instruments:
Michelle – Mid-IR Imager and Spectrograph

Other:
ALTAIR – facility natural/laser guide star AO system

Instruments currently available at Gemini South

Optical Instruments:
GMOS – Optical Imager, Multi-Object Spectrograph, and IFU

Near-IR Instruments:
NICI – Near-IR Coronagraphic Imager
FLAMINGOS-2* – Near-IR Imager & Multi-Object Spectrograph
Phoenix – Near-IR High-Resolution Spectrograph

Mid-IR Instruments
T-ReCS – Mid-IR Imager and Spectrograph

*Watch the Gemini Call for Proposals for availability of these instruments (www.gemini.edu/sciops/observing-with-gemini/).

ADAPTIVE OPTICS

ALTAIR, the facility natural guide star (NGS)/laser guide star (LGS) adaptive optics system of the Gemini North telescope is in routine science use and provides near-diffraction-limited images in the near-IR.

ALTAIR can be used to feed either the near-infrared imager NIRI (for imaging or long-slit spectroscopy) or the integral field spectrometer NIFS (for IFU spectroscopy). In LGS mode, ALTAIR may be used for targets with zenith distances up to 50 degrees (elevation > 40 degrees). Good observing conditions are required. Due to scheduling and conditions required, ALTAIR is only available in queue mode. See www.gemini.edu/sciops/instruments/altair/altairIndex.html for details.

At Gemini South, a multi-conjugate adaptive optics (MCAO) system for use with FLAMINGOS-2 and the Gemini South Adaptive Optics Imager (GSAOI) is under construction. When completed, GeMS, the Gemini Multi-Conjugate Adaptive Optics system, will bring uniform, diffraction-limited image quality to arcminute-scale fields of view. The December 2006 special issue of the GeminiFocus newsletter showcases Gemini’s AO program.

Information about all Gemini instruments is available at: www.gemini.edu/sciops/instruments/

NOAO Instrument brochures are available at: www.noao.edu/usgp/instruments.html

NGSC Instrument Scientists & Contacts are available at: www.noao.edu/usgp/noaosupport.html