

Access to TA2 (Gemini target area 2)

Overview

TA2 will be operated in a different mode compared to Gemini TA3. There will be one long slot (9-12 weeks) in this period for running a dedicated campaign. The operational support for experiments will be limited to a level required for safe operations. The long slots are conceived such that considerable science can still be achieved even with a minimal support level.

Radiation shielding in TA2 is local to the target chamber and restricts diagnostic access. To ensure that your experiment is viable, please contact CLF Staff to discuss your requirements before preparing your proposal.

The CLF aims to cover 50% of the T&S costs for this slot (6 people for 6 weeks or 3 people for 12 weeks). If you require more than this, please contact us with details of the proposed team.

Current ATA2 specifications

Main Beam:

- a. Energy: ~ 500-600 mJ on target
- b. Pulse length: 45-50 fs,
- c. Beam diameter: 6 cm diameter
- d. Contrast: $<10^{-10}$ ASE level (ns)
 $<10^{-7}$ prepulse contrast (ps)

Probe options:

- (1) 10-15 fs, 800 nm beam at 500 micro Joule
- (2) Tuneable (450 – 1200nm) TOPAS at 30 fs and 20 micro Joules.

It is possible to operate both probe beams simultaneously and with independent delays. Please contact CLF staff to discuss probe requirements before submitting a proposal.

Mode of operation:

- a. Longer experimental slots
- b. Parallel access with Gemini TA3. However, operations in Gemini TA3 will always get higher priority.
- c. Minimal access during the weekly system tuning days and maintenance weeks.

