

Astra operational statistics 05/06

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A total of 7 experiments were delivered to the user community from the Astra laser facility in the reporting year April 05 - April 06. In total 31 experimental weeks were delivered to Target area 1 and 2, including 6 weeks of set up. To enable front end changes for the Gemini upgrade a total of 26 weeks of system access was available to laser staff during the year. The laser availability in normal working hours for the year was 77%, with overall availability which including downtime made up outside of normal working hours 135%. The laser reliability was 85%.

A number of changes to the laser system has improved the performance of the laser system over the reporting year. Installation of complete environmental screening of the laser benches improved the shot to shot pointing stability and brought about a significant reduction of beam break up in the farfield. Piezo driven automated alignment for amplifier 1 has reduced set up time for the first amplifier and standardized beam nearfield position and pointing. The millenia pump laser for the front end was replaced with a Verdi and femtoalign automated alignment.

4 - 10 Apr	K. Krushelnick	Newell / Williams
11 - 17 Apr	Wavebreaking	
18 - 24 Apr	PF	ICET
25 Apr - 1 May	UK	UK
2 - 8 May	Changeover	Changeover
9 - 15 May		
16 - 22 May	Set-Up Week	Set-Up Week
23 - 29 May		
30 May - 5 Jun	S. Karsch	Newell / Williams
6 - 12 Jun	e Bunch Measurements	Laser Interactions with Ions
13 - 19 Jun	RH & PF	ICET
20 - 26 Jun	EU	UK
27 Jun - 3 Jul		
4 - 10 Jul		
11 - 17 Jul		
18 - 24 Jul		
25 - 31 Jul		
1 - 7 Aug		
8 - 14 Aug	System Development Access	System Development Access
15 - 21 Aug		
22 - 28 Aug		
29 Aug - 4 Sep		
5 - 11 Sep		
12 - 18 Sep		
29 - 25 Sep		
26 Sep - 2 Oct		
3 - 9 Oct		
10 - 16 Oct		
17 - 23 Oct		
24 - 30 Oct		
31 Oct - 6 Nov	Gemini Front End Changes	Gemini Front End Changes
7 - 13 Nov		
14 - 20 Nov		
21 - 27 Nov		
28 Nov - 4 Dec		
5 - 11 Dec		
12 - 18 Dec		
19 - 25 Dec		
26 Dec - 1 Jan	Christmas and New Year	Christmas and New Year
2 - 8 Jan		Changeover
9 - 15 Jan	Changeover	Set-Up Week
16 - 22 Jan		I. Williams
23 - 29 Jan	Set-Up Week	Dynamics of H ₂ ⁺
30 Jan - 5 Feb		PF & (NP)
6 - 12 Feb	D. Riley	UK
13 - 19 Feb	X-ray Scattering	
20 - 26 Feb	PF & (NP)	Changeover
27 Feb - 5 Mar	UK	Set-Up Week
6 - 12 Mar	Changeover	
13 - 19 Mar		J. P. Marangos
20 - 26 Mar	Set-Up Week	Aligned Molecules HHG
27 Mar - 2 Apr		ICET