

ATLAS SCT Testbeam

October 2001 beamtest at CERN H8

Schedule : 15 - 28 October

- Preparation of DAQ, Characterisation of Modules: 15-22/10
- Installation in Beamline: Start 08:00 on Tuesday 23/10
- Beam: Start 08:00 Wednesday 24/10
- Removal of Modules and decommissioning for 2001: Sunday 28/10
- Extension possible if required and if personnel available

Modules

- **7 (?) Modules Under Test**
 - Barrel Irradiated new EPI B044
 - Barrel Irradiated new EPI B047
 - K-B
 - Barrel KEK
 - Barrel KEK
 - Sintef B043 (?)
 - Forward Middle from Munich

- **6 Reference & Tracking Modules**

We request the loan of 5 or 6 barrel modules from the Systemtest or elsewhere (could use also the new KEK barrels for tracking):

- 1 or 2 Reference Modules (included in Threshold Scans as control samples, as usual - specifically request one or two of those used in August, 3T-A chips)
- 4 Tracking Modules (2 X + 2 Y), kept at fixed efficient threshold

Program

- Uncertain as to whether magnet is available - will depend on Tiles
- Standard beam for new modules, plus some 25ns studies:
- **Standard Running (clock not beam-synchronised, low-intensity, using telescope):**

Aim: Standard comparative runs for new modules

- Normal Incidence, Nominal Bias, Threshold Scan - standard comparisons
- Bias Scan at Nominal Incidence
- Bias Scan at Maximum Angle
- Angle Scan ?
- Repeat with Magnet ON *if possible and time permits*

- **25ns Running**

Aim: Are there any surprises ? 25n run gives us:

- LHC-like bunch structure with periodic resets, and
 - narrow timing w.r.t. clock (1-2 ns)
 - Digital performance / event efficiency - different Soft Reset & L1A structures
 - Analogue performance - noise, efficiency with multiple triggers between resets, multiple triggers in buffer etc., and at higher (instantaneous) rates
 - Analogue timing performance without TDC cuts using nanosecond delay adjustments... is it the same as normal running with TDC cuts ?
- **Suggestions and comments to the Program very welcome !**

Participants

	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu
October	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Prepare	*****															
Install									**							
Beam														*****		
Removal															* ?	
Gareth	<-----															
Marcel																
Jose Enrique																
Alan B																>
Peter P																?
Lars																
Peter K																
Pavel																
Monica																>
Mauro	<	----->														
Rainer	<	-----														>

More welcome !

Gareth Moorhead, SCT Week October 2001