

pol2000 meeting on 24/08/04

Fiber Status

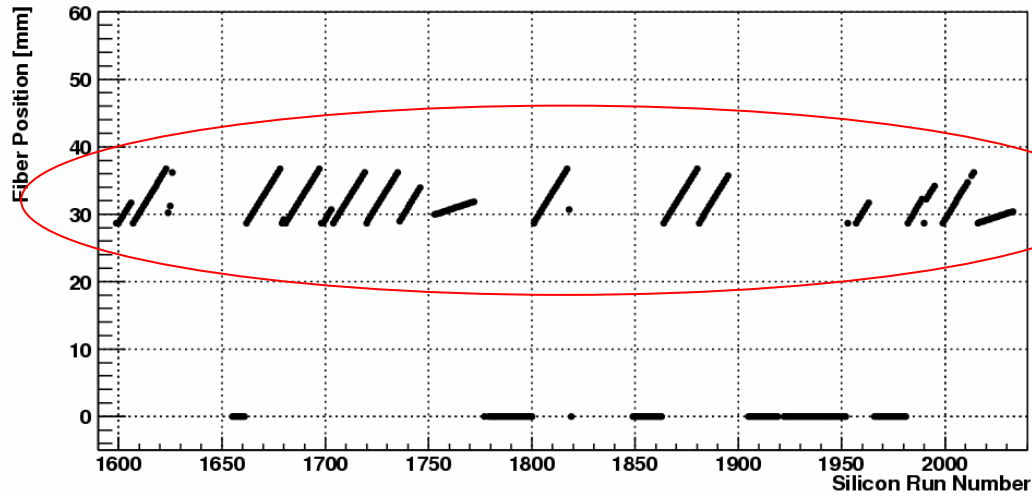
Yongdok Ri @ Tokyo Metropolitan Univ.

Fiber Scan Data on 04 (pre-shutdown)

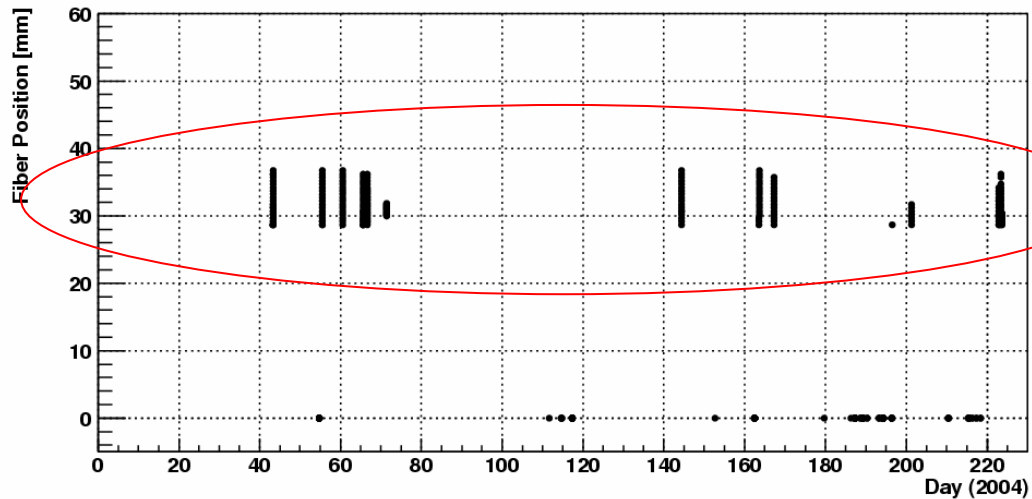
Some plots from fiber (Signal Shapes, Linearity)

Summary and Future plan

Fiber Scan Data on 04 (pre-shutdown)



Fiber Scan Data were taken



Fiber Scan Data on 04 (pre-shutdown)

Run#	Date	Step	Range	note
1600-1626	: 13/Feb	0.5mm	+4 ~ -4 mm	Si seemed to be worth.
✓1662-1680	: 25/Feb	0.5mm	+4 ~ -4 mm	
✓1681-1697	: 01/Mar	0.5mm	+4 ~ -4 mm	
1698-1719	: 06/Mar	0.5mm	+4 ~ -3.5 mm	fiber HV was off.
✓1720-1746	: 07/Mar	0.5mm	+4 ~ -4 mm	(0.25mm +4 ~ -1.5 mm)
1753-1772	: 12/Mar	0.1mm	+2.75 ~ +0.85 mm	
✓1801-1818	: 24/May	0.5mm	+4 ~ -4 mm	
1864-1880	: 12/Jun	0.5mm	+4 ~ -4 mm	Si seemed to be worth.
1881-1895	: 16/Jun	0.5mm	+4 ~ -3 mm	Si seemed to be worth.
1957-1963	: 20/Jul	0.5mm	+4 ~ +1 mm	
1982-1995	: 10/Aug	0.5mm	+4 ~ -1.5 mm	
✓1999-2014	: 11/Aug	0.5mm	+4 ~ -3.5 mm	
2016-2033	: 11/Aug	0.1mm	+4 ~ +1.6 mm	

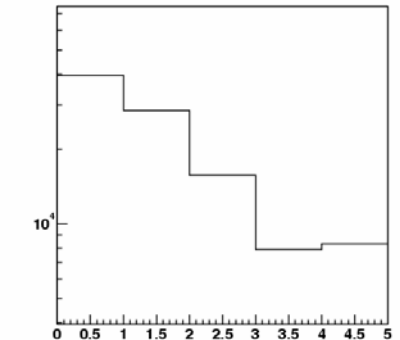
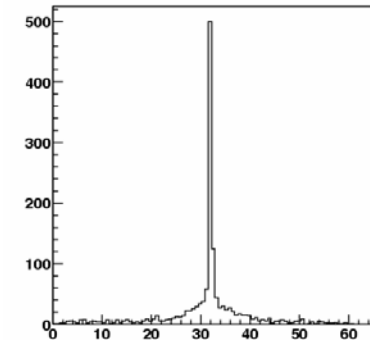
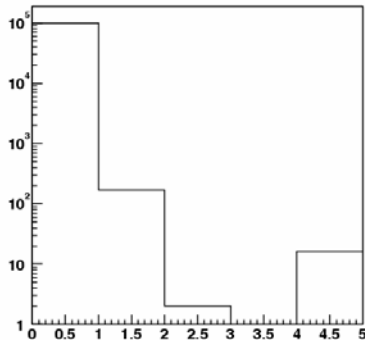
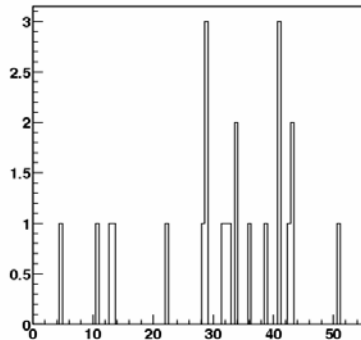
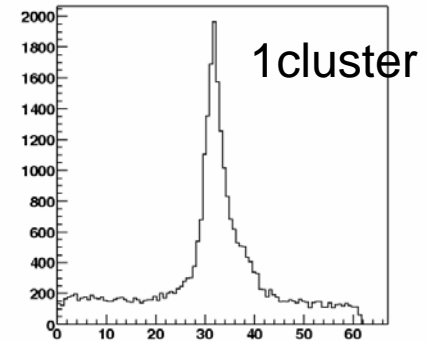
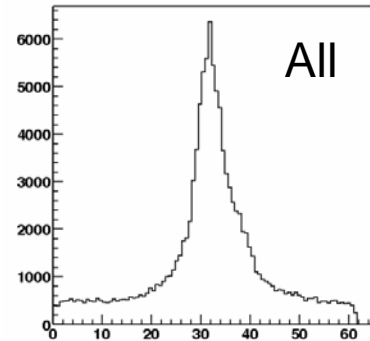
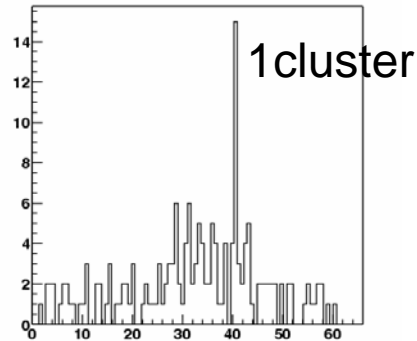
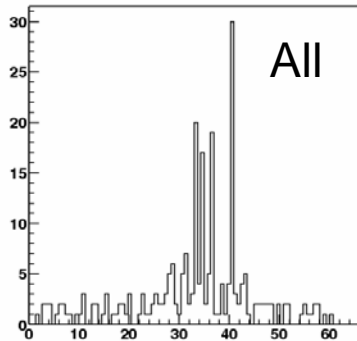
Center position : 261600 motor counts = 32.7mm from home position

5 data sets : for monitoring rad. Damage of Si.

Si distribution on 12/Jun and 11/Aug

12/Jun (Run# 1872)

11/Aug (Run# 2007)



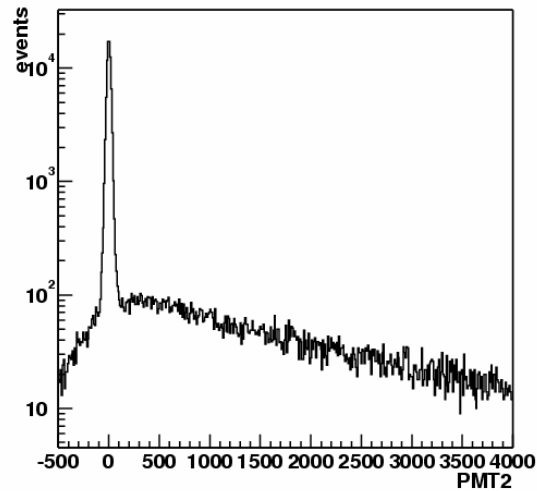
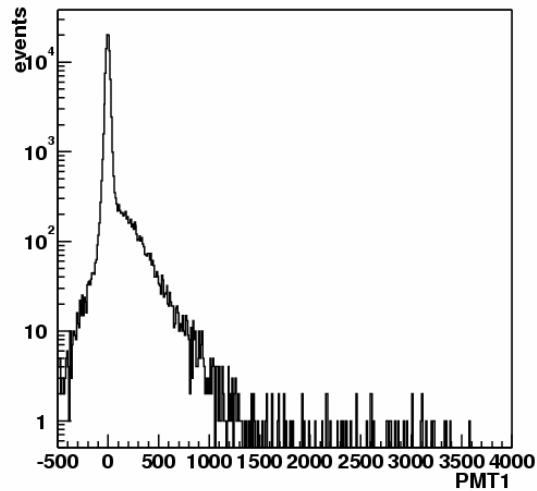
1cluster & fiber

of cluster

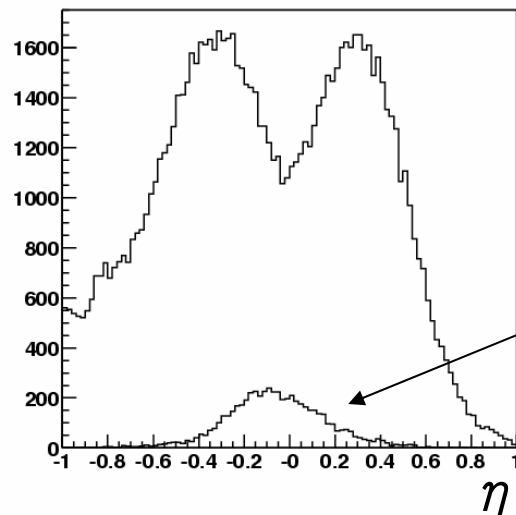
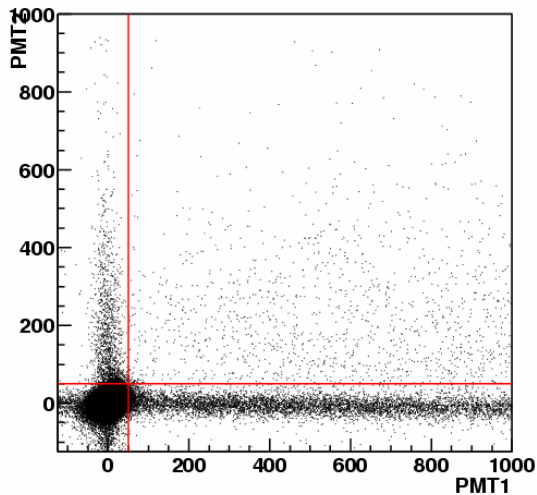
1cluster & fiber

of cluster

Signal Shapes (data taken on 11/08/04)



Fiber events:
PMT1 > 50 ADC
&
PMT2 > 50 ADC

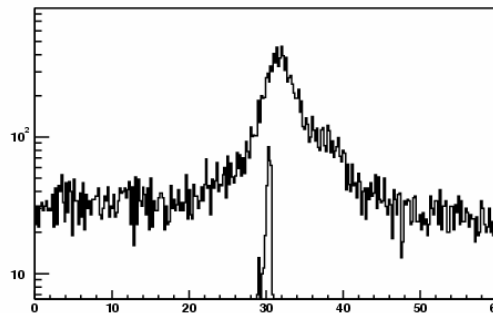
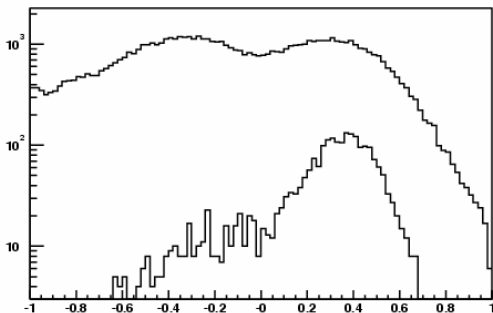


Triggered by fiber

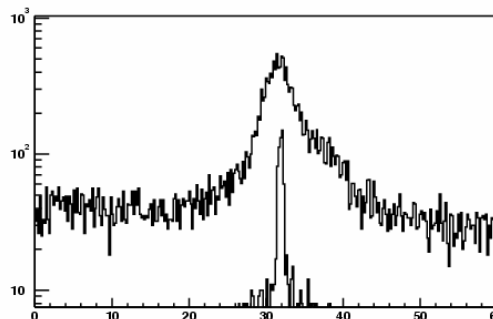
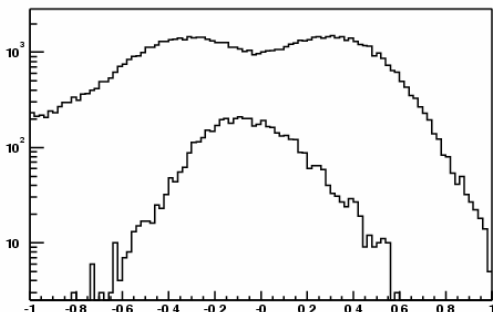
eta and Si with fiber(data on 11/08/04)

Fiber position

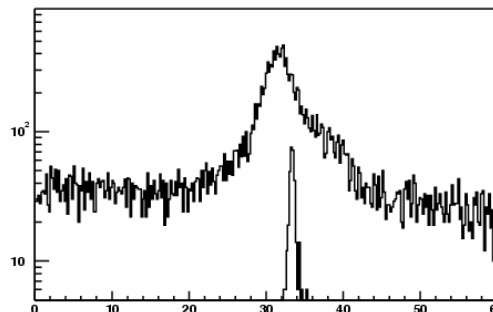
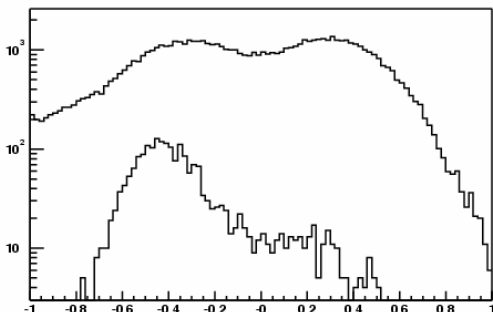
+1.5mm



0.0mm



-1.5mm

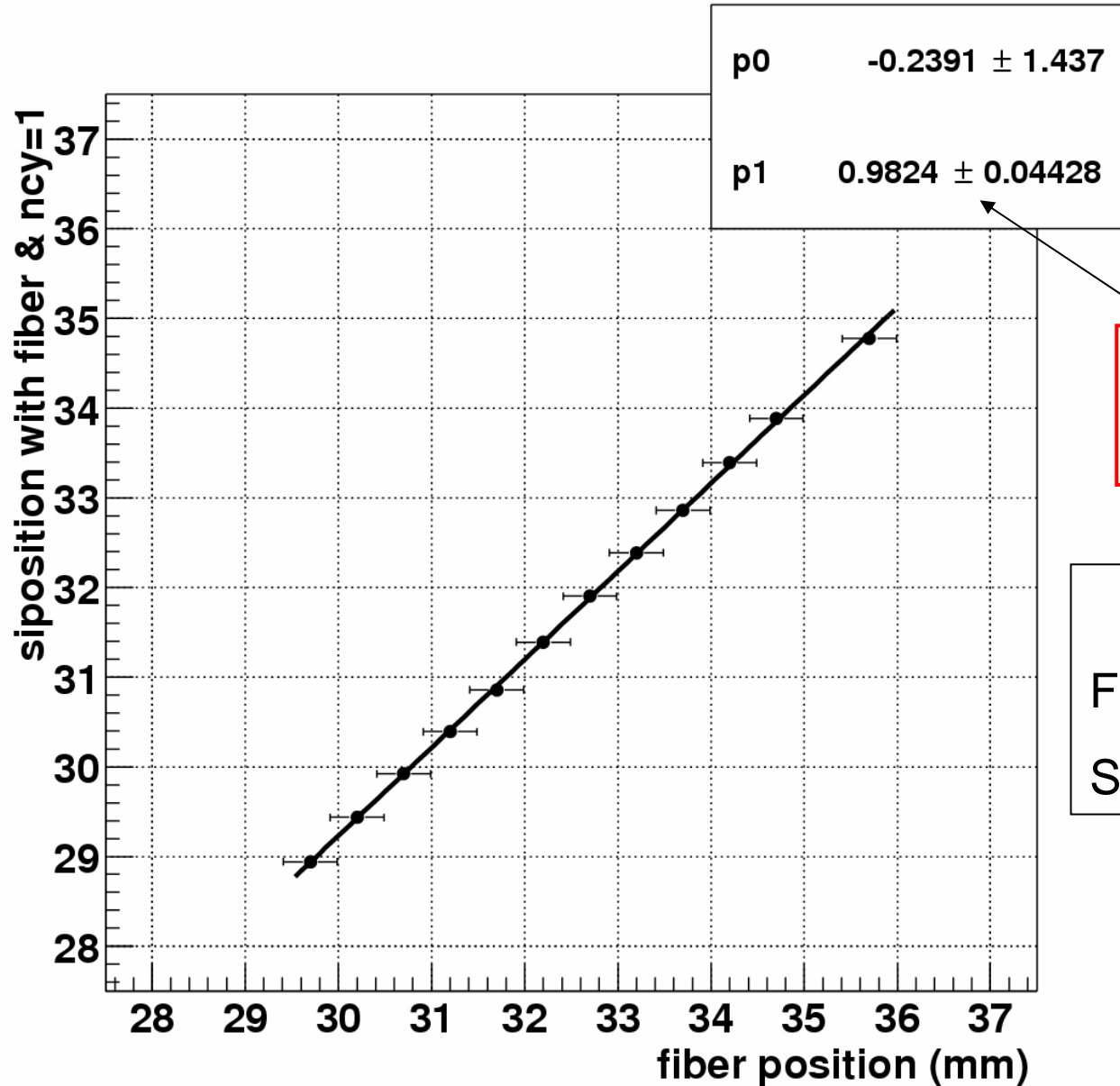


η

Si position [mm]

Fiber detector
is working fine.

Linearity Si and fiber (data on 11/08/04)



Slope is unity within error.

Error
Fiber : $1\text{mm}/\sqrt{12}$
Si : $\text{RMS}/\sqrt{\text{entries}}$

Summary and Future Plan

- Fiber is working fine.
 - Good linearity between Si and Fiber.
 - Fiber Scan Data were taken : 5 data sets.
- ⇒Analysis on monitoring radiation damage of Si.