

Demands of the monitoring system for the FD

Specification of Calibration System for FD-DAQ

- **Responsibility**
- **Short description, Purpose**
- **External trigger signal for FD-DAQ, time window before and after trigger frequency of calibration signals**
- **Signal pattern in FD**
 - Number of mirrors triggered
 - Dynamic range of signals in FD
 - which data should be kept, possible compression of data
- **Additional data for FD-DAQ or possible interface to eye PC**
- **Inhibit of trigger request possible?**
- **Offset from GPS second**
- **Any requirements of additional information/signals from DAQ for synchronization?**

Table of demands from calibration monitors

type	responsible	frequency	time- window	how often applied	ext. Trigger	interface to DAQ	trigger different from experiment
absolute calibration	J.Breck	1-10 Hz	-10, +20	μ s 1 per month	10MHz	RS232 or *	yes
central calibrator	J.Matthews	10 Hz	-10, +20	μ s 2 per night	10MHz	RS232 or *	yes
local LIDAR Horizontal (Mie) scattering	?	1 Hz	-10, +90	μ s every minut	GPS s	RS232 or *	yes
vertical flasher	J.Matthews	1 Hz	?	1 per hour	GPS s	RS232 or *	no
laser scope	P.Sommers	1/300 Hz	?	rarely ?	GPS s	radio link?	no
flying flasher	P.Sommers	< 1 Hz	\leq 100 μ s	rarely ?	GPS s	radio link?	no
	P.Sommers	1 Hz	?	rarely ?	GPS s	?	no

W here are the other facilities from Paul Sommers table?

Interface to slow control is Achim Grindler - Beckhoff automation system

* ftp bechhoff.com or www bechhoff.com ,GPS derived 10 M H z and 1 H z clock