



# MDT Installation and Commissioning Status

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## All BOS/BOF MDT stations installed

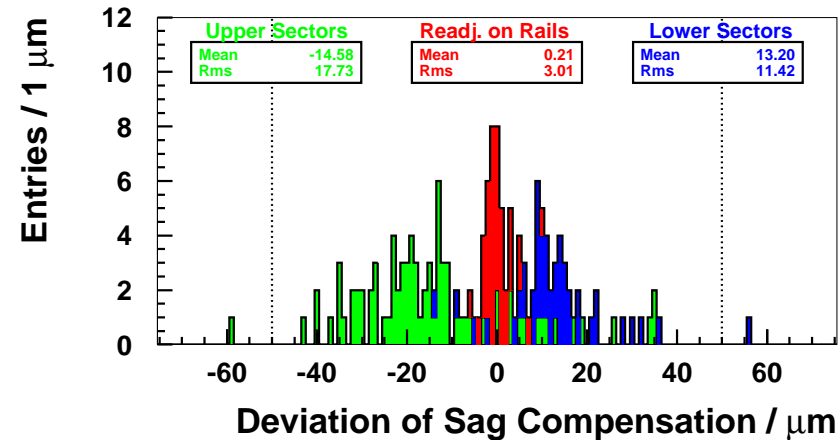
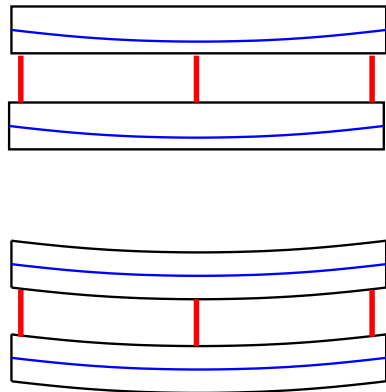
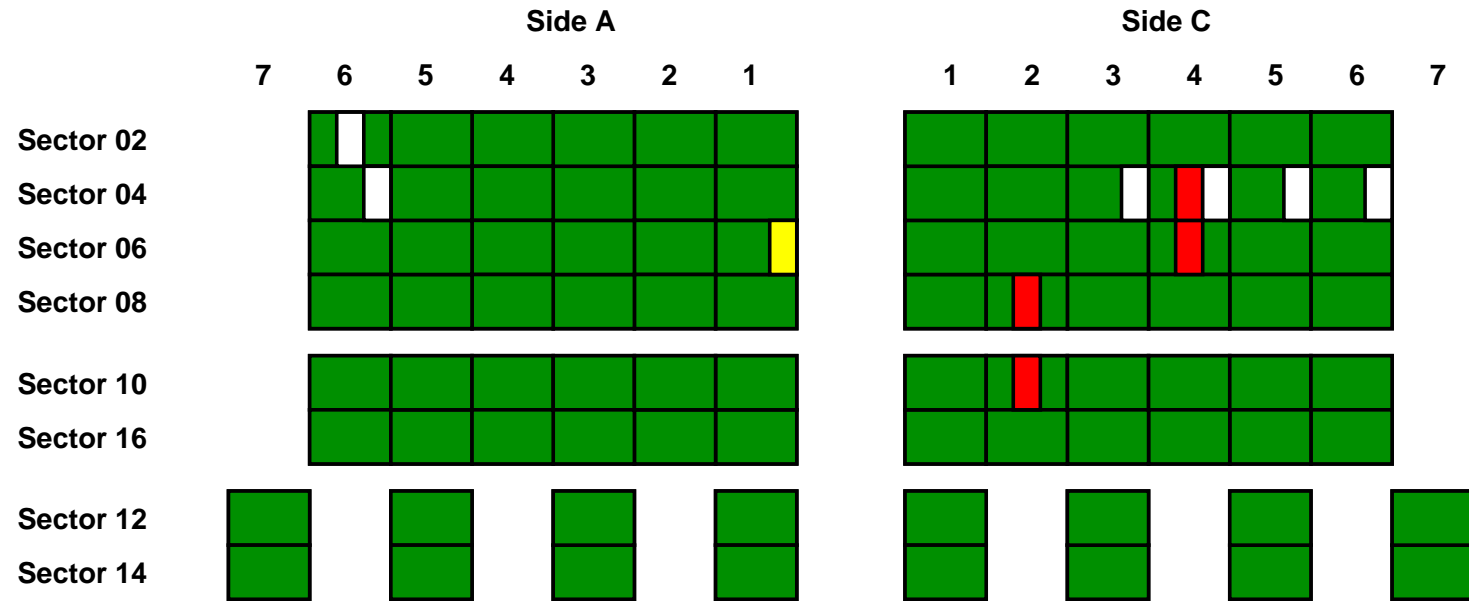
- Pressure test of all chambers
- HV and inplane alignment test of almost all MDTs
- Only very few problematic MDTs found
  - 4 MDT with high dark current
  - 1 MDT with low pressure on one ML

## Current work

- Connections to gas system
- Cabling (Read-Out, DCS, Alignment, HV, and safety ground)



# Status — Tests





# ATLAS Gas System Status

Sector	RPC			MDT			
	Inst.	Leak	Rack	Inst.	Valves	Leak	Rack
02	✓	✓	✓	✓	✓	✓	✓
04	✓	4/5 ✓	✓	✓	4/5 ✓	4/5 ✓	✓
06	6/5 ✓	6/5 ✓	6/5 ✓	6/5 ✓	6/5 ✓	6/5 ✓	6/5 ✓
08	✓	✓	8/9 ✓	✓	8/9 ✓	8/9 ✓	8/9 ✓
10	✓	✓	✗	✓	10/9 ✓	10/9 ✓	✗
12	12/13 ✓	12/13 ✓	12/13 ✓	12/13 ✓	12/13 ✓	✗	12/13 ✓
14	14/13 ✓	14/13 ✓	14/13 ✓	14/13 ✓	14/13 ✓	✗	14/13 ✓
16	✓	✓	✓	✓	✓	✓	✓



# Status — Gas Connections (1)

**To Do: Installation of MDT chamber to manifold valve connections (352)**

## Prerequisites

- Manifolds and valves installed
- Connection to gas distribution rack
- Gas supply

## Work in Progress

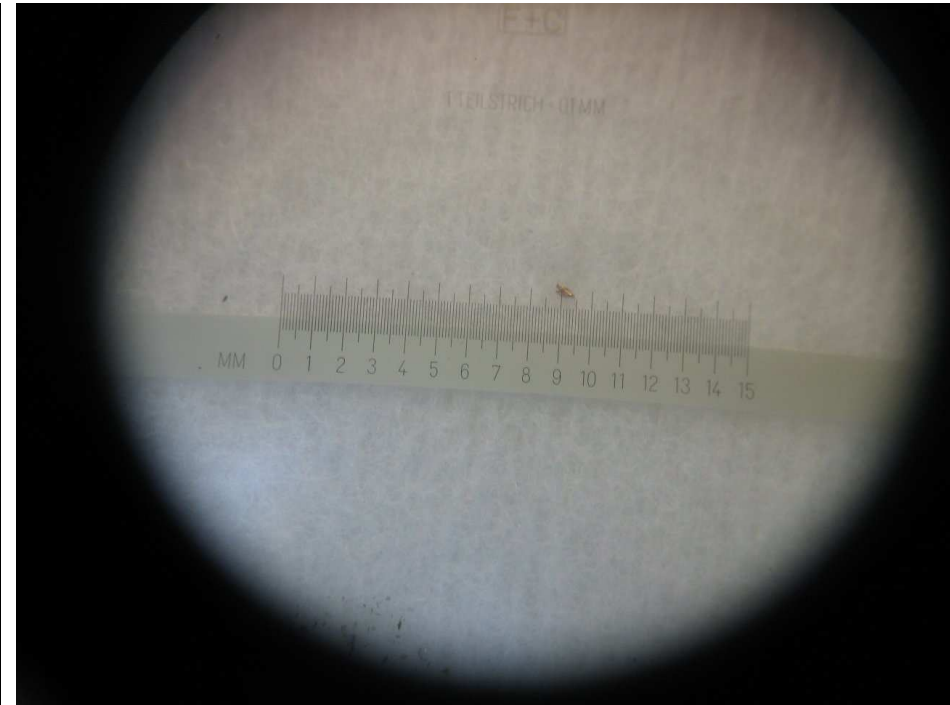
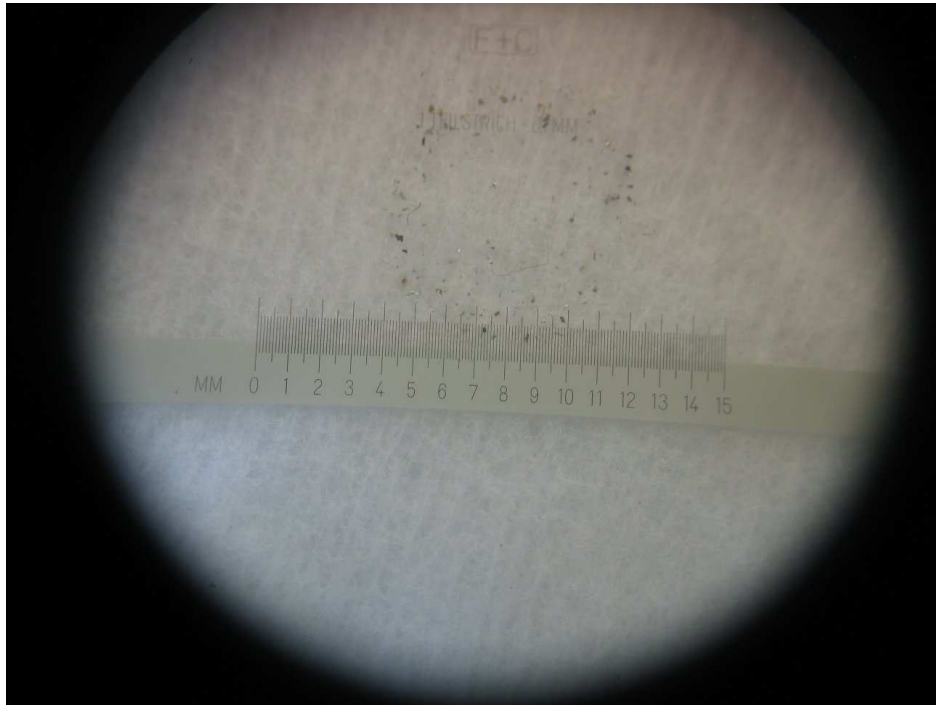
- Started at sector 16 side 15
- 10 MDTs connected so far: BOS6A16–BOS2A16, BOS1C16, BOS3C16–BOS6C16
- Speed: 6–8 connections per day by 2 technicians with good access

## Problems

- Missing access in most places
- Cleanness CERN gas connections

# Status — Gas Connections (2)

Sample taken from BOS6C16 ML1 Out gas line





# Status — Electronics

## To Do: Connecting Read-Out, DCS, Alignment, HV cables and safety ground

- BOS Sector 04 Read-Out, DCS, Alignment connected
- BOL Sector 05 Read-Out, DCS, Alignment connected
- BOS Sector 06 Read-Out, DCS, Alignment connections started
- Speed: 1 week per BOS/BOL sector by 2 technicians (1 MPI, 1 Nikhef)

### Problems

- Missing / difficult access

### Aim

- Sector 01–07 ready for toroid test (Oktober)

## BOF1A12 and BOF1A14 will participate in cosmic ray data taking during toroid test

- Temporary gas system and slow control system installed (also used for BIL1C13, BIL2C13, and BIL3C13 and BOG)
- Gas lines and HV connected
  - ✓ Dark currents of BOF1A12 and BOF1A14 ok (100 nA / ML)
- ✗ Read-out, DCS, alignment cabling missing
- ✗ RPC trigger electronics missing

