

DT/RPC Installation Schedule

CMS Week March 17th 2004

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Barrel Muon Installation Plans (Past)

- YB 0 YB-1, Sectors 8-9 September-December 2003
- YB+2 January-February 2004
- YB-2 Sectors 8-9 March 2004 Alignment/Magnet Test
- YB+1 September 2004 YB-1 November 2004
- YB -1 YB -2 April-June 2005

Installation
Review
Sep.02

- Minicrates are on the critical path => Assume late arrival

- Install chambers without minicrates in accessible sectors:

 - YB 0 Sectors 8 => 12

November 02

 - YB+2 Sectors 8 => 12

But RPC are Sector
(and Wheel) specific

 - YB-1 Sectors 8+9

Barrel Muon Installation Plans (Past)

• Install chambers without minicrates in accessible sectors:

- YB+1 Sectors 8 => 12
- YB+2 Sectors 8 => 12
- YB-1 Sectors 8+9

February 2003

Delays in YB0 Services

Unexpected High Voltage Board failures after 2000 to 3000 hours under test in ready to install chambers prompted a revision of the installation plans and some drastic decisions:

- develop a more robust HVB (HVB_F)
- Install only chambers with an improved HVB version (HVB_I) in YB+2 that, in case of problems, is easier to access

Some consequences:

- Most of the ready to install DT chambers in YB+1 bottom can be used for YB+2 top
- Changing HVB is a time consuming operation since they are inside the gas volume thus the chambers must be tested with cosmics after the intervention (3 months for one wheel)
- Reshuffling the RPC production to meet the new installation scenario is not a simple task and requires the production of new chambers and using some RPCs intended for YB0

Another BMU Installation Scenario

YB2 +

Bottom:

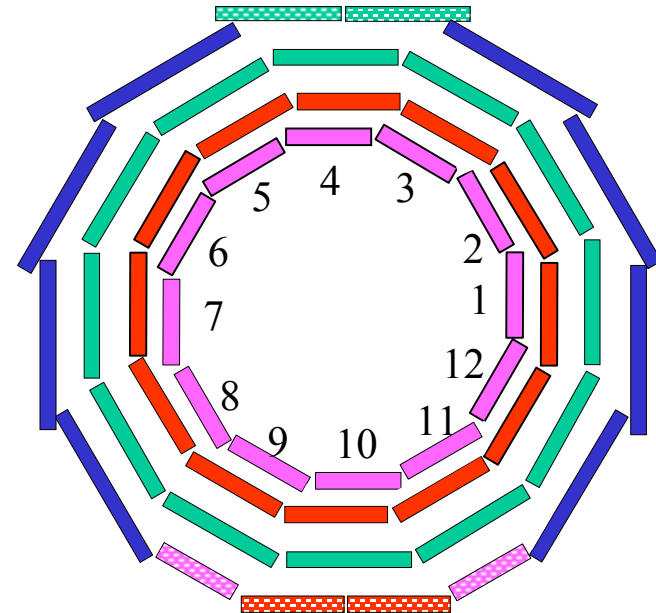
DT+RPC ready in June (driven by HVB_I delivery from IHEP and board substitution)

Top:

RB3, RB1 and RB4 (sector 4) ready May/June, RB2 ready in October.

Minicrates on critical path.

Large MB4 (Torino) in sectors 2, 3, 5, 6, 8, 12, on critical path. They will be equipped with HVB_F



Priority to MB1
Minicrates in order
to install HO

Another BMU Installation Scenario

YB1 +

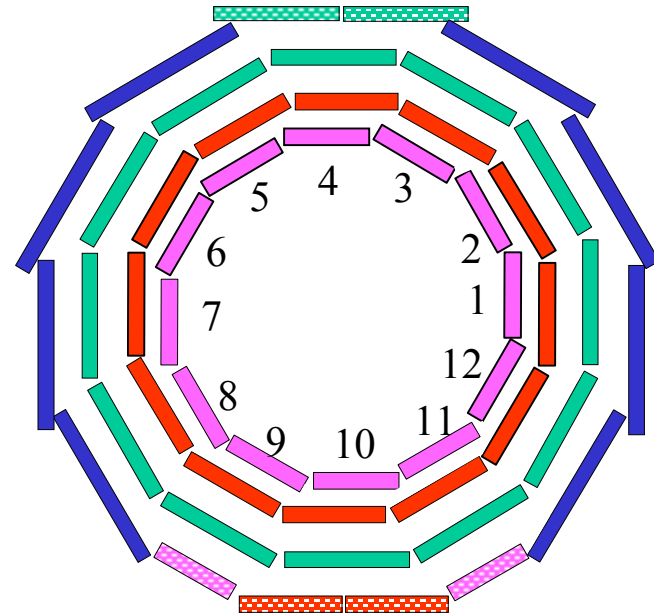
DT: 3 months to get chambers ready once HVB_F are available.

RPC: Bottom Ready,

Top: RB2, RB4 ready; RB1, RB3 in November.

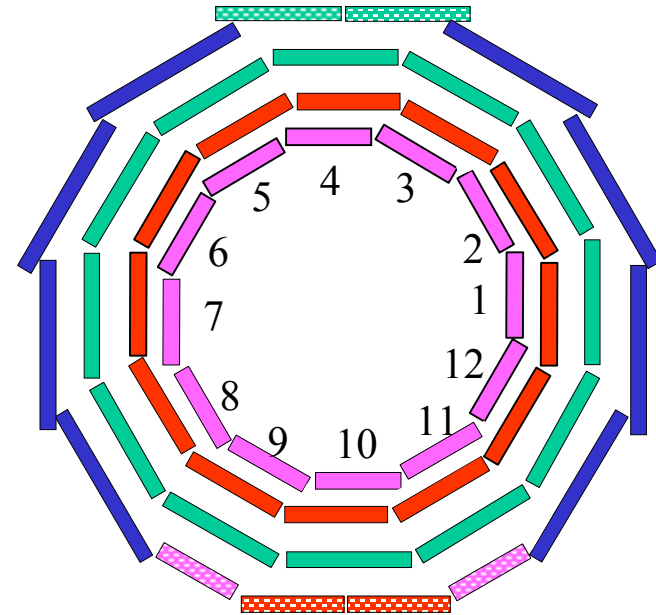
RPC and DT? for Chimney Sector 4 will not be ready this year.

Schedule driven by HVB_F deliveries, ~800 needed by mid September to install this year.



Installation Priority List Proposal

- YB+2
- YB+1
- Sectors **10 and 11** on all wheels (Magnet Test)
- YB0 + (March 05 parasitic installation)
- YB0 - Ready to install in July 05
- YB -1
- YB - 2



Large MB4 priority:

YB0 top + bottom, remaining YB
top sectors: 22 Chambers

	Jul. 10	Jul. 17	Jul. 24	Jul. 31	Aug. 7	Aug. 14	Aug. 21	Aug. 28	Sep. 4	Sep. 11	Sep. 18	Sep. 25	Oct. 2
Week	28	29	30	31	32	33	34	35	36	37	38	39	40
MB3 HVB	5												
MB3 CR	0	5											
MB3 HVTe:	0	0	5	5	5	5	5						
MB3 Ready	0	0	0	0	0	0	0	5					
MB2 HVB	5												
MB2 CR	0	0	5										
MB2 HVTe:	0	0	5	5	5	5	5						
MB2 Ready	0	0	0	0	0	0	0	5					
MB1 HVB	0	5											
MB1 CR	0	0	0	5									
MB1 HVTe:	0	0	0	5	5	5	5	5					
MB1 Ready	0	0	0	0	0	0	0	0	5				
										InstallYB1+ Bottom			
MB3 HVB		5											
MB3 CR		0	0	0	5								
MB3 HVTest		0	0	5	5	5	5	5					
MB3 Ready		0	0	0	0	0	0	0	5				
MB2 HVB			5										
MB2 CR			0	0	0	5							
MB2 HVTest			0	0	5	5	5	5	5				
MB2 Ready			0	0	0	0	0	0		5			
MB1 HVB			5	0	0								
MB1 CR			0	0	0	0	5						
MB1 HVTest			0	5	5	5	5	5	5				
MB1 Ready			0	0	0	0	0	0	0	5			
											InstallYB1+ Top		
HVB Channels			10	15	25	30	30	20	10	0			

Aggressive schedule requires 9 weeks for YB+1 bottom ready
=> 800 HVB_F at ISR by 13/09/04 to install in Mid November

04/10/04 Latest date for 800 HVB_F in order to install YB+1 Bottom this year