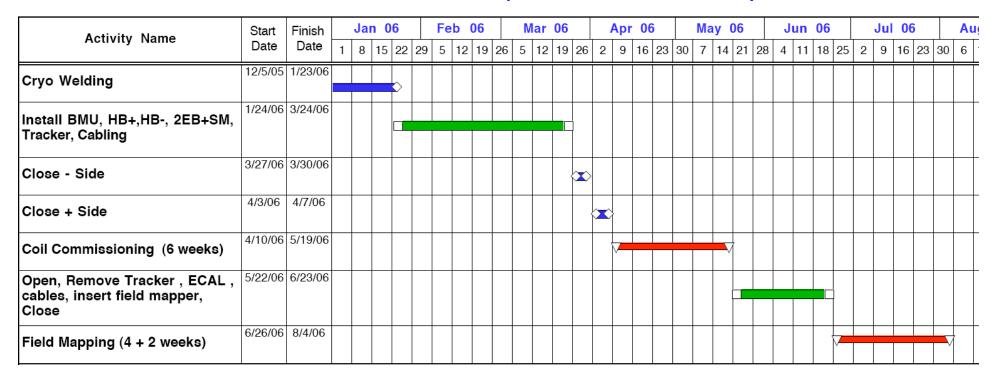
# Installation Plans for 2006

Mu Barrel Technical Board CMS week December 6th 2005

A. Benvenuti INFN Bologna

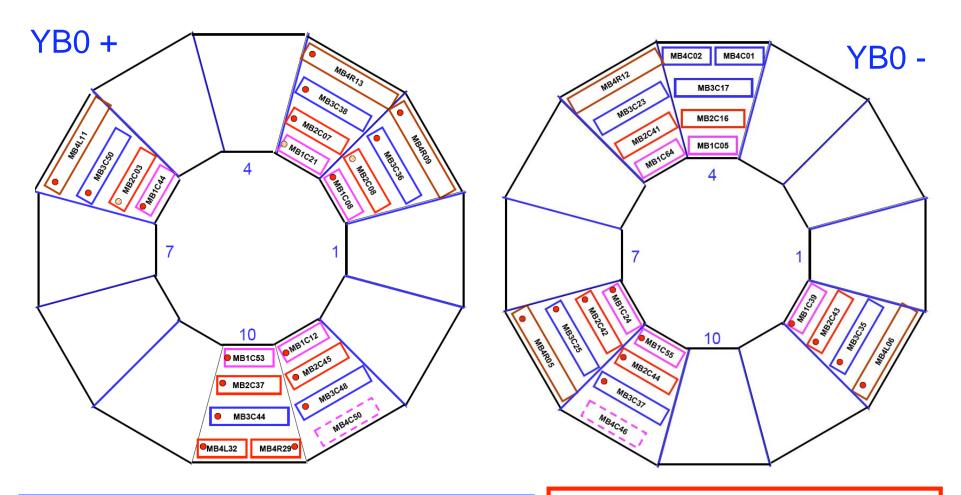
## MT Schedule (Oral Version)



- HB+ moves from alcove 25/01/07
- YB+1 over solenoid after YB0+ installation
- Scaffolding erected between YB+1 and YB0+ (may hinder YB0 work)

- YB-1 over solenoid after YB0installation
- YB0 access for ancillary work possible during opening before field mapping

#### **YB0 Installation Schedule**

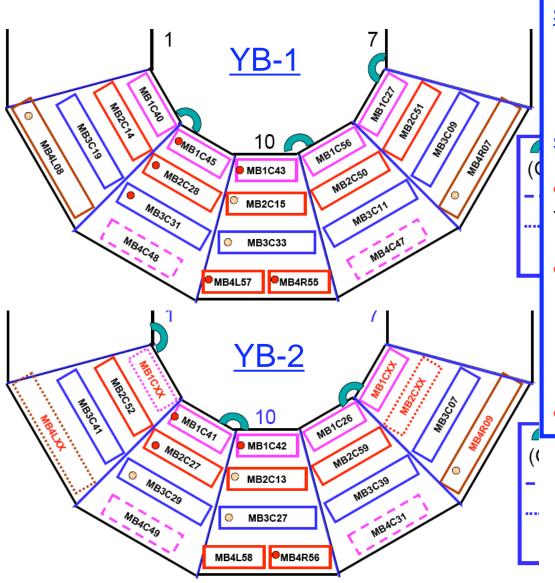


Install all sectors but YB0- S04 and S05:

YB0+ bottom, YB0+ top, YB0- bottom

Position of HO RBX still to be finalized. Holes to be drilled before MB1 Installation

### **YB-Installation**

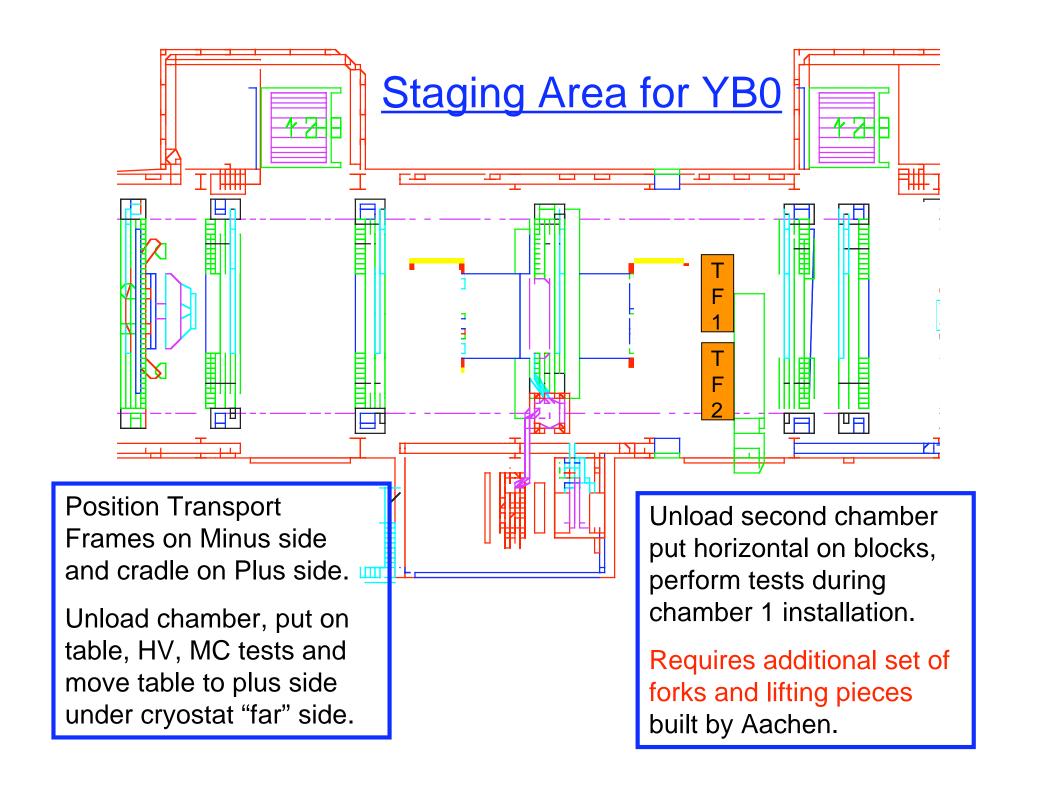


- Installation window= 2 weeks: starts 1 week after YB-0
- > YB-1 moved over cryostat
- ➤ Install YB-1 from front-end side, YB-2 from HV side
- Install S10, S11 in YB-1 and YB-2 (16 chambers)
- Install additional MB4 (5 ch):

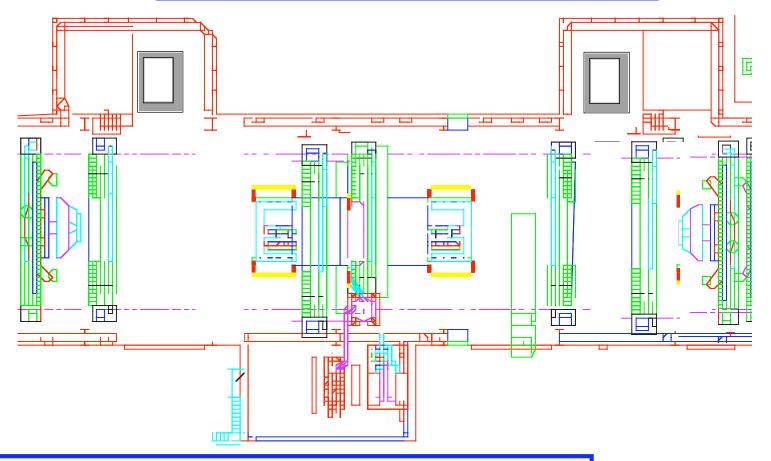
YB-1: S08, S12, S02

YB-2: S03, S08

• 2 RPCs still to be built ???



#### Access to YB+1 and YB+0



Scaffold on Plus side of YB+1 needed for cabling

Scaffold between YB+1 and YB+0 may be an hindrance during chamber connections to gas HV..

# SX5 Main Activities up to MT

	Start	Finish			Dec	05			.lai	n 00	6		F	eb (	06			/lar	06			Apr	<u>~</u> ;
Activity Name	Date	Date	27	4	11	18	25	1	8	15		29	5	12	19	26	5	12	19	26	2	9	Ļ.
YB+2 Cabling	2/13/06	3/24/06												<del>-</del>				<del>                                     </del>		}			Ħ
YB+1 Cabling S07 toS12	1/9/06	3/24/06							<b>—</b>		<u> </u>								$\Rightarrow$	}			T
YB+1 Install YB+1 feet Chambers	2/9/06	2/10/06											$\nabla$										T
YB0 Ancillary work																							T
Drill Ground strap holes	1/9/06	1/20/06									ı												T
Mount LV HV PP support plates	1/9/06	1/27/06								///		l											T
Drill holes for HO RBX, MB1 HV PP	1/9/06	1/27/06										I											T
Mount Radial Trays+rails	1/9/06	1/20/06									ı												T
YB-1 Ancillary work.																							T
Drill holes for HO RBx rails, MB1 HV PP support rails	12/5/05	12/16/05																					Г
Mount MB1 Supports	12/19/05	12/30/05																					Γ
Mount HO RBx rails	1/2/06	1/13/06																					
Drill Ground strap holes	1/2/06	1/12/06												54	Cl	าล	mk	er	s t	o k	эe		
Mount LV, HV JBx	1/13/06	1/26/06											Πı	lns	stal	lle	d ii	n 5	w	ee	ks	<u>,</u>	
Mount Radial Trays+ flexrails	1/13/06	1/26/06																					Г
YB-2 Ancillary work	12/5/05	2/2/06	ı									V											T
YB+0 Installation (20 DT)	1/30/06	2/10/06										V-											Γ
YB-0 Installation (11 DT)	2/13/06	2/17/06												<b>—</b>									Γ
Mount HV PP, LV PC, Connect YB0	2/13/06	3/24/06														///							T
YB-1, YB-2 S10, S11 Installation (21 DT)	2/27/06	3/10/06														V-							

- YB+1 cabling scheduled for January 9<sup>th</sup> with new team from Russia
- At least bottom sectors must be ready for cabling by December 21<sup>st</sup>.
- DT commissioning must be completed by December
  16<sup>th</sup> at latest to leave time for tiding up chambers.
- Connections to final gas system to be started (Gerd) next week.
- RPC commissioning will be completed?
- Request two scissor lifts or set priorities for YB+1 work (DT, RPC, HO?) up to end of year.

## Installation After the Magnet Test

#### Preferred Installation Sequence:

- 1) YB-0 S04, S05: 9 +2 chambers
- 2) YB-1 ~8 Sectors: 29 +2 chambers
- 3) YB+2, YB+1 S01, S07: 16 chambers (UX installation)
- 4) YB-2 ~8 Sectors: 30 +2 chambers
- 5) YB0, YB-1, YB-2 S01,S07: 24 chambers (UX installation

The chambers for the first 3 points (58) must be ready by the end of the Magnet Test.

Access time to YB0 can be minimized by commissioning (and cabling) YB+0 and YB-0 in parallel with two dedicated teams.

# Main SX5 Activities after MT

Activity Name	Start	Finish				Sept	06			Oc	t 06	i		N	lov	06			Dec	06			Ja	n 0	7		F	eb	07
Activity Name	Date	Date	20	27	3	10	17	24	1	8	15	22	29	5	12	19	26	3	10	17	24	31	7	14	21	28	4	11	18
YB0 Installation Sectors - 4,5 (9 Chambers) + 2 MB4/9-11		8/25/06 10/13/06		7						<b>—</b>	7																		
YB0 Connections HV, LV, Cooling	8/21/06	9/8/06																											
YB-0 , YB+0 // Commissioning (40 DT)	8/28/06	9/15/06		0		С																							
YB-0, YB+0 Cabling in parallel	9/11/06	10/16/06				<b>&gt;</b>					$\diamond$																		
UX YB+2, YB+1 Sectors 1,7 (16 Chambers)	9/25/06	10/6/06						V-																					
UX YB+ 2,+1 Connections HV, LV, Cooling	10/2/06	10/13/06									1																		
UX YB+ 2,+1 Functionality Test	10/9/06	10/20/06																											
UX YB+2 , +1 Cabling	10/16/06	10/27/06									\ <u>\</u>																		
YB-1 Installation , 8 sectors (29 +2 chambers)	8/28/06 10/30/06	9/15/06 11/3/06		<u></u>																									
YB-1 Connections HV, LV, Cooling	8/21/06	9/22/06	7/	_				1																					
YB-1 Fast Commissioning	9/25/06	10/13/06						0		С																			
YB-1 Cabling	10/16/06	11/17/06									<b>—</b>																		
UX5 YB0 Installation and Cabling																													
UX YB0 Sectors 1,7 (8 Chambers)	11/20/06	11/24/06																											
UX YB0 Connections HV, LV, Cooling	11/27/06	12/1/06																1											
UX YB0 Functionality Test	12/4/06	12/8/06																OZO											
UX YB0 Cabling	12/11/06	12/22/06																											
YB-2 Installation , 8 sectors (30 +2)		11/10/06 1/12/07										V=																	
YB-2 Connections HV, LV, Cooling	8/21/06	11/17/06		_																									
YB-2 Fast Commissioning	11/20/06	12/8/06																											
YB-2 Cabling	12/11/06	1/19/07																	<u> </u>					$\rightarrow$					
UX5 YB-1,YB-2 Installation and Cabling																													
UX YB-1, YB-2 Sectors 1,7 (16 Chambers)	1/8/07	2/2/07																											
UX YB-1, YB-2 Connections HV, LV, Cooling	1/29/07	2/9/07																											
UX YB-1, YB-2 Functionality Test	2/5/07	2/16/07																											
UX YB-1, YB-2 Cabling	1/22/07	2/23/07																											

### Required Installation Windows (Minimum)

A stinitus Name	Start	Finish		Aug 06			Sept			06	Oct		t (	06		No	v 06		Dec		: (	)6	Jan		0	7	F
Activity Name	Date	Date	30	6	132	0 27	7 3	3 10	17	724	1	8	15	22	29	5	12 1	9 26	3	10	17	24	31	7	142	1 28	3 4
YB0 Installation Sectors - 4,5 (9 Chambers) + 2 MB4/9-11	8/21/06 10/9/06	8/25/06 10/13/06			7						7	<u> </u>	7														Γ
UX YB+2, YB+1 Sectors 1,7 (16 Chambers)	9/25/06	10/6/06								<b>—</b>	_																Γ
YB-1 Installation , 8 sectors (29 +2 chambers)	8/28/06 10/30/06					V			7					1	_	,											
UX5 YB0 Installation and Cabling																											
UX YB0 Sectors 1,7 (8 Chambers)	11/20/06	11/24/06															V	4									
YB-2 Installation , 8 sectors (30 +2)	10/23/06 1/8/07	11/10/06 1/12/07											7	<u> </u>		7							7	<b>A</b>			
UX5 YB-1,YB-2 Installation and Cabling																											
UX YB-1, YB-2 Sectors 1,7 (16 Chambers)	1/8/07	2/2/07																					7	V			7

First Installation Period:

58 Chambers in 6 weeks

Second Installation Period:

56 chambers in 6 weeks

- with priority use of crane and access to wheels (8am to 12pm) and adequate manpower (no experience with UX installation)
- Installation windows are educated guesses not cleared with TC