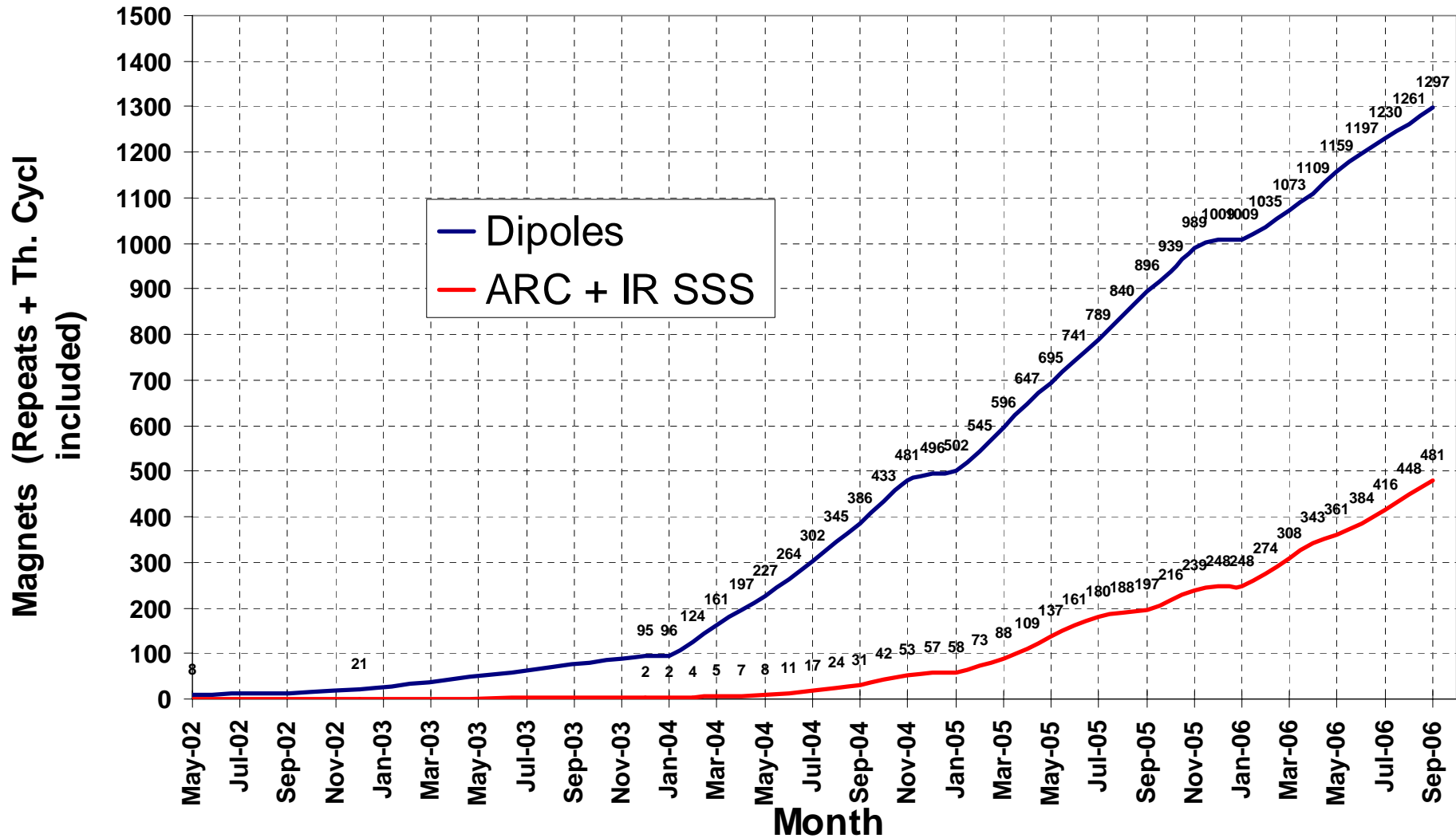


Statistics for end September.06

### Cumulative Cold Tested Magnets

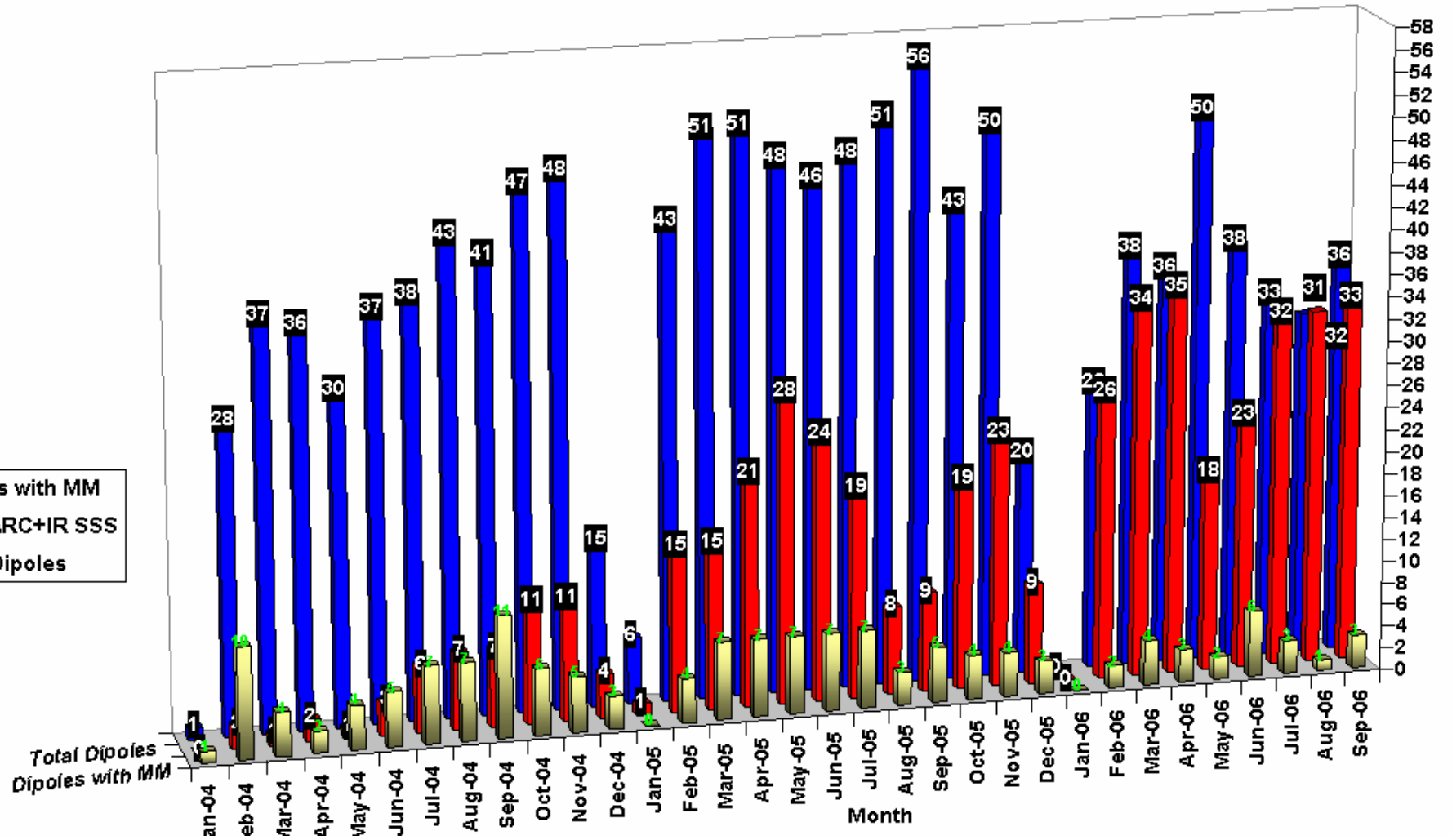


**Statistics for end September.06**

Cold tested SSS, DIPOLES & DIPOLES with Magnetic M'ment

Number Tested

- Dipoles with MM
- Total ARC+IR SSS
- Total Dipoles



## Statistics for end September.06

### Statistics

Period	Dipoles tested ( Reqd. Number = 1232)						ARC-SSS + 500 tested ( Reqd. Number = 392 )						IR-SSS ( Reqd.Number = 82)			
	Fresh	Repeat	Total	MM	% Repeat	% MM	Fresh	Repeat	Total	MM	% Repeat	% MM	Fresh	Repeat	Total	% Repeat
Year 2002-2003	95	0	95	95	0.00	100.00	2	0	2	0	0.00	0.00	0	0	0	0.00
Year 2004	356	45	401	65	11.22	16.21	49	3	52	9	5.77	17.31	3	0	3	0.00
Year 2005	468	45	513	58	8.77	11.31	149	17	166	7	10.24	4.22	20	5	25	20.00
Year 2006	261	27	288	24	9.38	8.33	150	20	170	6	11.76	3.53	55	8	63	12.70
Year 2007	0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00	0	0	0	0.00
<b>Total</b>	<b>1180</b>	<b>117</b>	<b>1297</b>	<b>242</b>	<b>9.02</b>	<b>18.66</b>	<b>350</b>	<b>40</b>	<b>390</b>	<b>22</b>	<b>10.26</b>	<b>5.64</b>	<b>78</b>	<b>13</b>	<b>91</b>	<b>14.29</b>

1232 + 392 + 82 = 1706 Magnets needing Cold Tests in SM18

### Overall LHC Statistics

Total Fresh Magnets Tested	1608	Total Magnets expected to be Tested due to repeats (approx)	1877
Total Repeat Magnets Tested	170	( 1706 + 11 % Repeats )	
Total Magnets Tested	1778	Balance Magnets (~)	99
Total % Retested	9.56	Tests Rate per month required to complete by Dec 2006	32.9

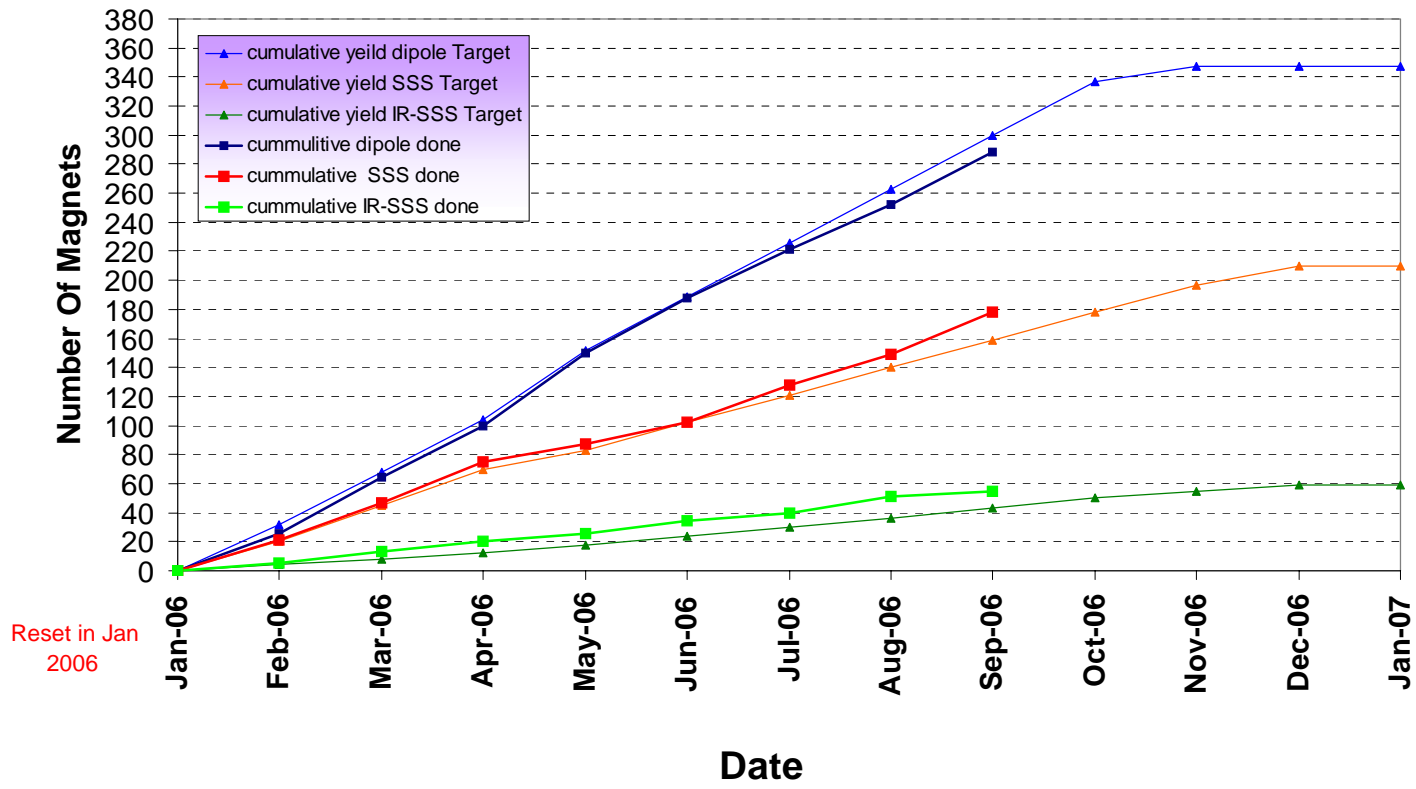
## Statistics for end September.06

### Prediction on 3rd-October 06 For Termination by end 2006 : Desired Magnets & Desired Bench Configurations

Assumption : Testing Time (Upto May 05) : Dipole -131 hrs;SSS- 143 hrs, After Jul-05, Dipole - 120 Hrs, ARCSSS - 115 Hrs, IR SSS - 10 days									
Average Testing Time for 2006 Dipole - 120 Hrs; ARC SSS ( excluding 500 series ) - 105 Hrs, 500 Series - 120 Hrs; IRSSS - 240 Hrs									
Date	Magnets per month DIPOLES	Magnets per Month ARC \$\$\$ + 500 serie	Magnets per Month IR \$\$\$	Cumulative Dipoles	Cumulative ARC \$\$\$	Cumulative IR \$\$\$	Cumulative Total	Magnets per Month	Configuration
Jan-05	6	1	0	502	55	3	560	7	D-9/AS-2/IS-1
Feb-05	43	13	2	545	68	5	618	58	
Mar-05	51	13	2	596	81	7	684	66	
Apr-05	51	21	0	647	102	7	756	72	D-8/AS-4
May-05	48	27	1	695	129	8	832	76	D-8/AS-3/IS-1
Jun-05	46	21	3	741	150	11	902	70	
Jul-05	48	15	4	789	165	15	969	67	D-8/AS-2/IS-1
Aug-05	51	6	2	840	171	17	1028	59	Dipole&SSS Fatigue Tests; ConCrqo; D9/AS-1/IS-1
Sep-05	56	7	2	896	178	19	1093	65	D-10/AS-1/IS-1(to ~ 15Sept)
Oct-05	43	13	6	939	191	25	1155	62	D-8/AS-3/IS-1
Nov-05	50	21	2	989	212	27	1228	73	D-7/AS-2/IS-2 (E2-crqo)
Dec-05	20	8	1	1009	220	28	1257	29	D-8/AS-3/IS-1
Jan-06	0	0	0	1009	220	28	1257	0	ANNUAL SHUTDOWN
Feb-06	26	21	5	1035	241	33	1309	52	D-6/AS-4/IS-2
Mar-06	38	26	8	1073	267	41	1381	72	D-6/AS-3/IS-3
Apr-06	36	28	7	1109	295	48	1452	71	D-6/AS-3/IS-3
May-06	50	12	6	1159	307	54	1520	68	D-8/AS-2/IS-2
Jun-06	38	15	8	1197	322	62	1581	61	D-6/AS-3/IS-3
Jul-06	33	26	6	1230	348	68	1646	65	D-6/AS-3/IS-3
Aug-06	31	21	11	1261	369	79	1709	63	D-6/AS-3/IS-3
Sep-06	36	29	4	1297	398	83	1778	69	D-6/AS-3/IS-3
Oct-06	36	19	6	1333	417	89	1839	61	D-6/AS-3/IS-3
Nov-06	36	13	4	1369	430	93	1892	53	D-6/AS-3/IS-3
Dec-06	10	0	0	1379	430	93	1902	10	D-6/AS-3/IS-3
Jan-07				1379	430	93	1902	0	SPARE MAGNET TESTS +
Feb-07				1379	430	93	1902	0	REMAINING IR \$\$\$
Mar-07				1379	430	93	1902	0	
Apr-07				1379	430	93	1902	0	
May-07				1379	430	93	1902	0	
<b>Basic Targets</b>	<b>1232.0</b>	<b>392.0</b>	<b>82.0</b>	<b>114 (IR \$\$\$)=50 (MS) + 32 (DS) + 32 (DS-MQ Type)</b>					
Re-Target(+/-9.9%)	146.6	38.1	11.3						
<b>Probable Target (+11.9%, +9.70%, +13.79%)</b>	<b>1378.6</b>	<b>430.1</b>	<b>93.3</b>	<b>Bench Throughput Estimator ( updated July -06 )</b>					
Total Magnets	<b>1902.0</b>			<b>Dipoles</b>		<b>ARC-\$\$\$</b>			
				8-Benches	48.0	3-Benches	18.8		
				7-Benches	42.0	4-Benches	25.0		
				6-Benches	36.0	6-Benches	37.6		
				3-Benches	54.0	2-Benches	9.6		

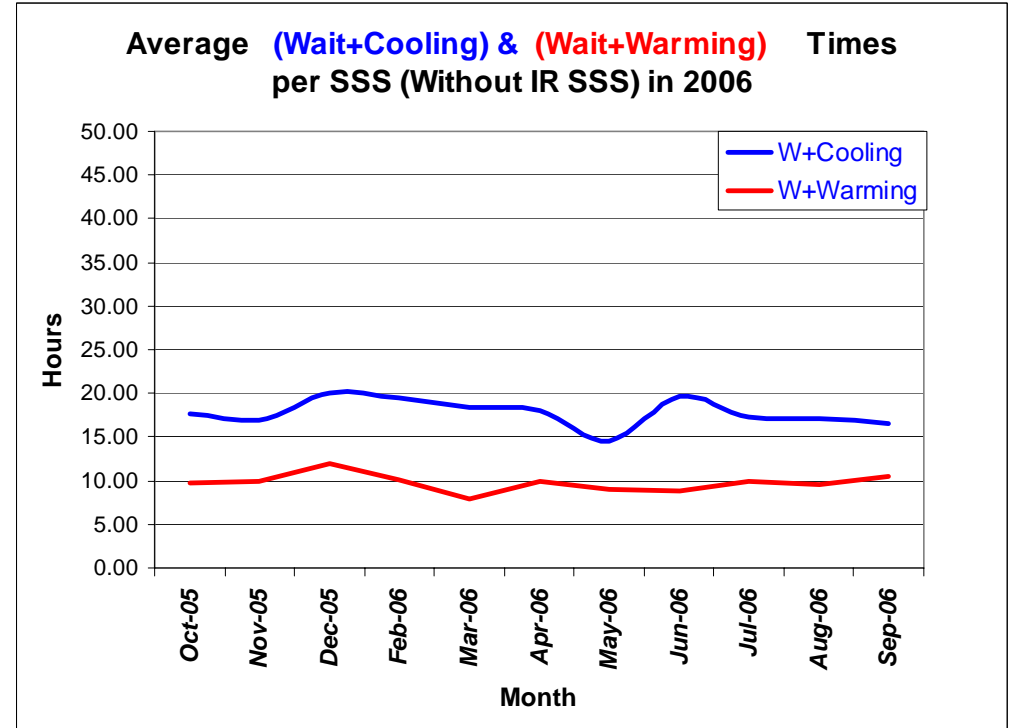
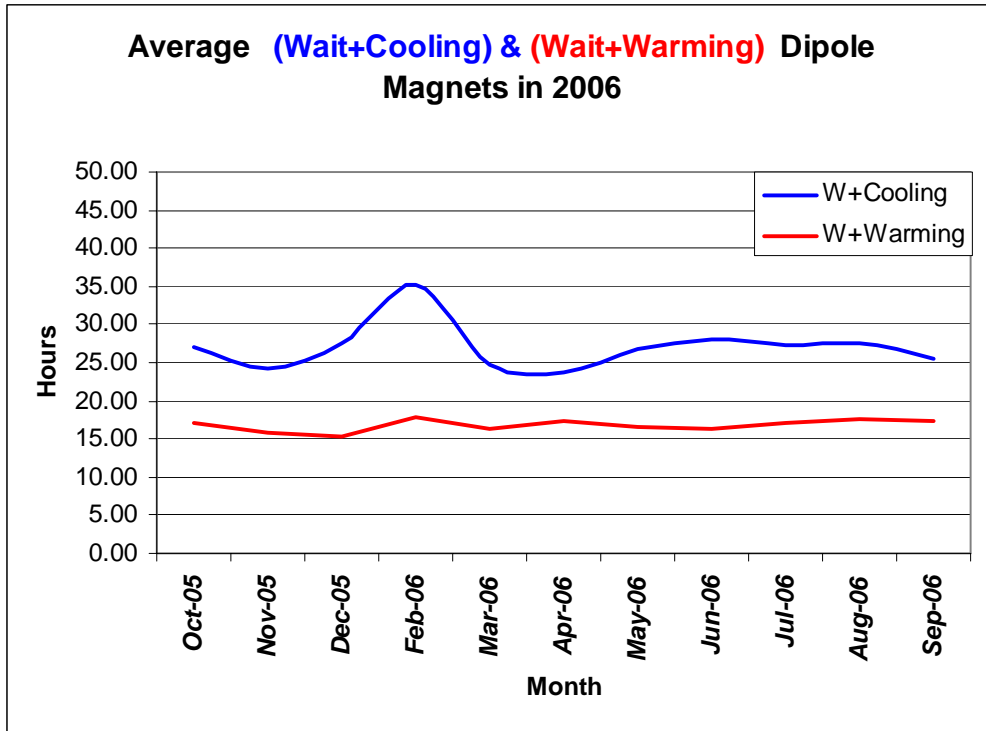
**Statistics for end September.06**

**- Monthly prediction Vs Actual throughput -**  
 (Target for Magnet testing for completing LHC Lattice )  
 Dipoles: 1232, ARC SSS: 392, IR SSS:82



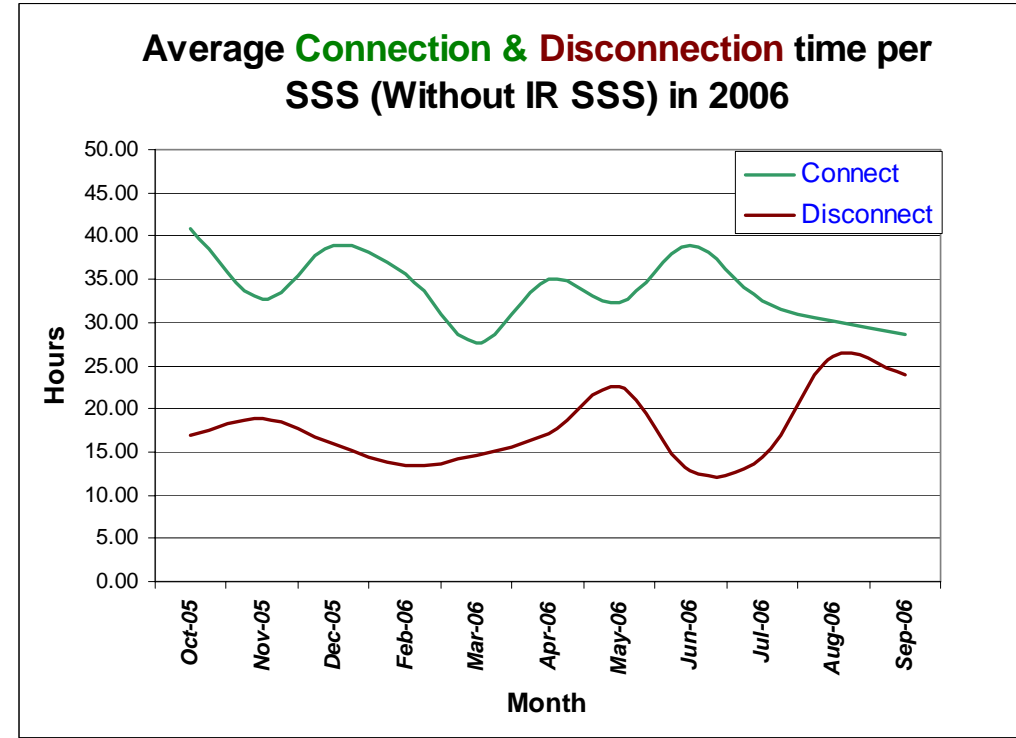
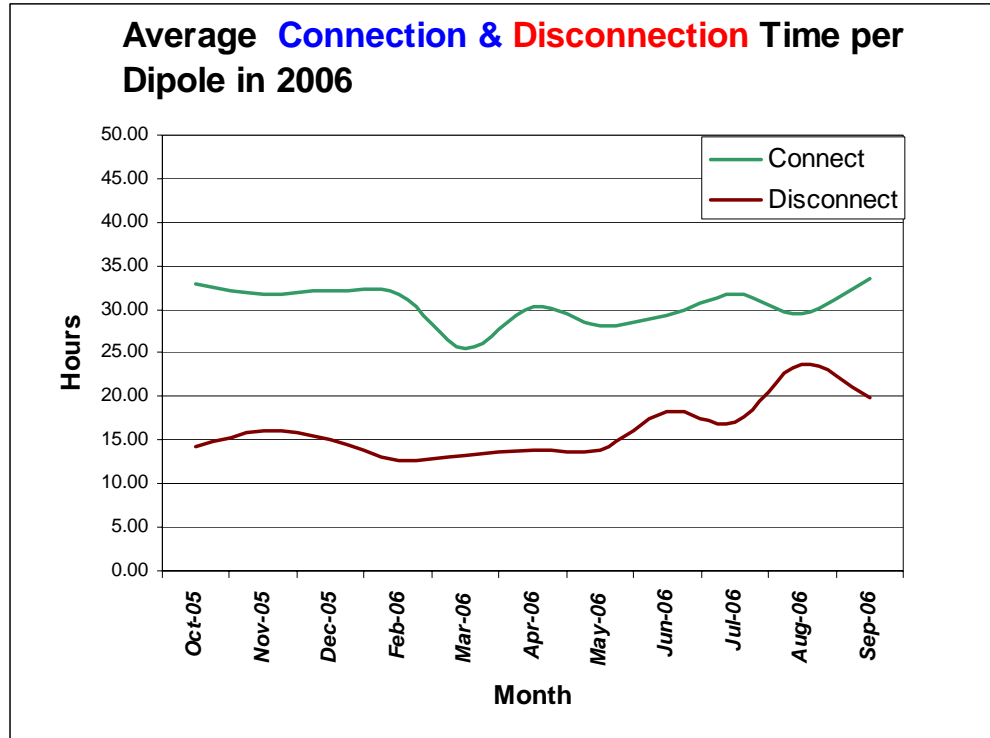
**Statistics for end September.06**

**CRYO TIMES**



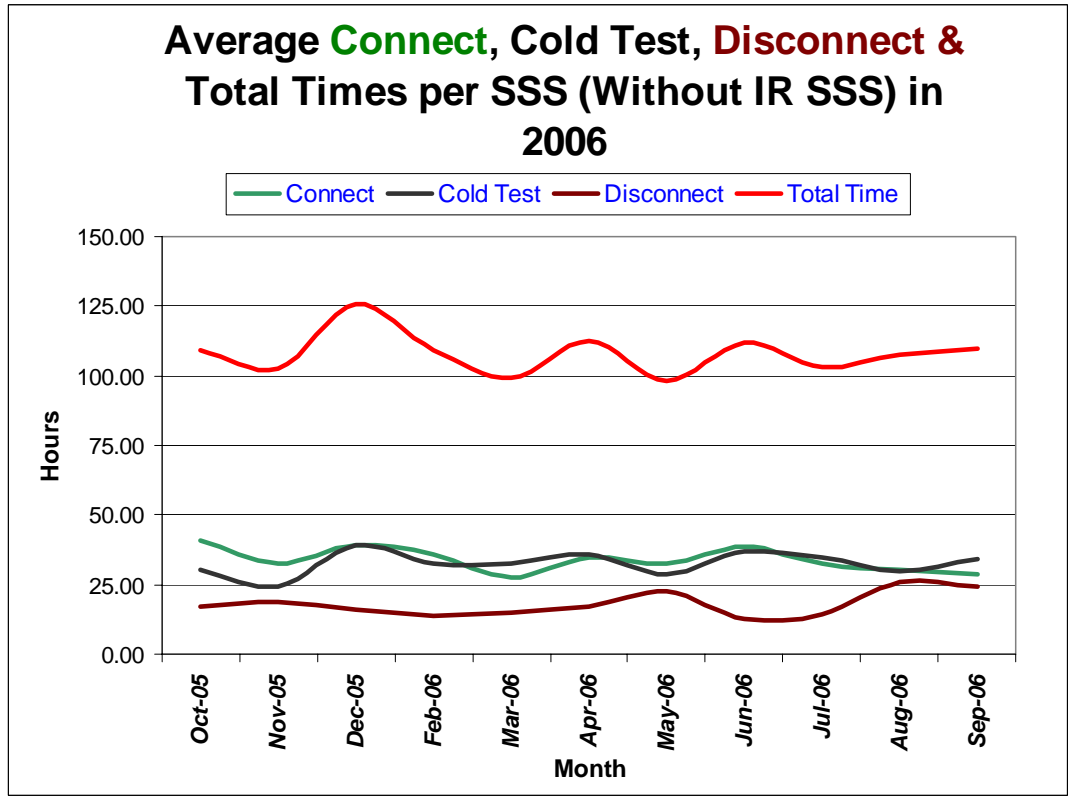
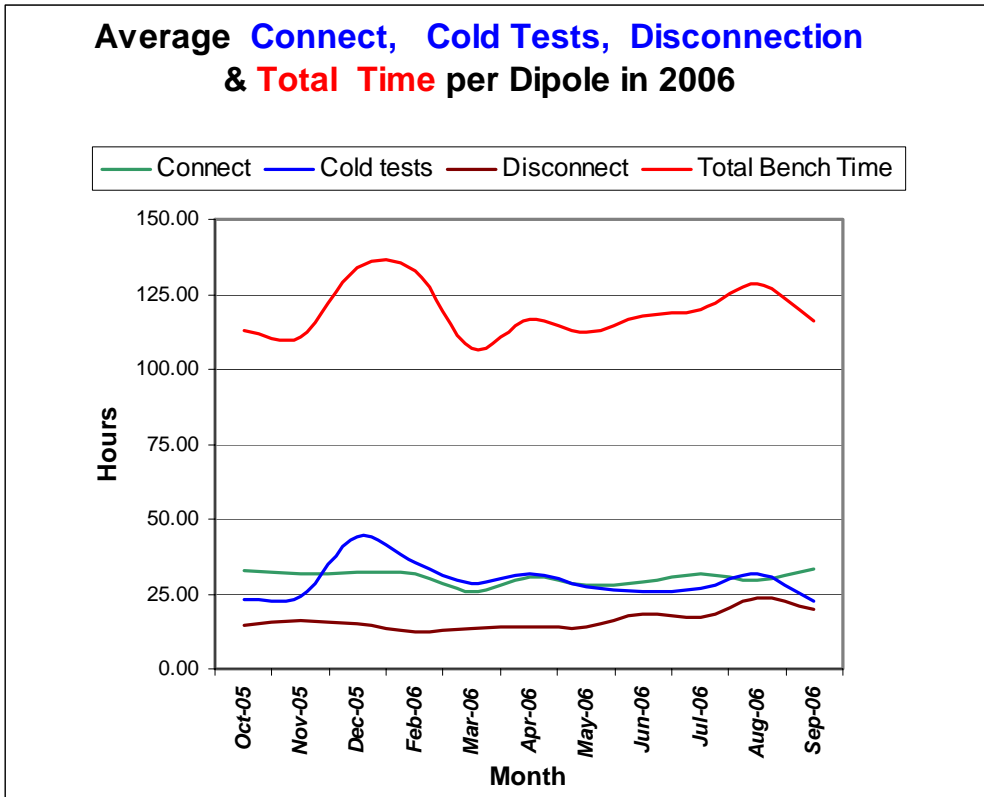
**Statistics for end September.06**

**ICS TIMES**



**Statistics for end September.06**

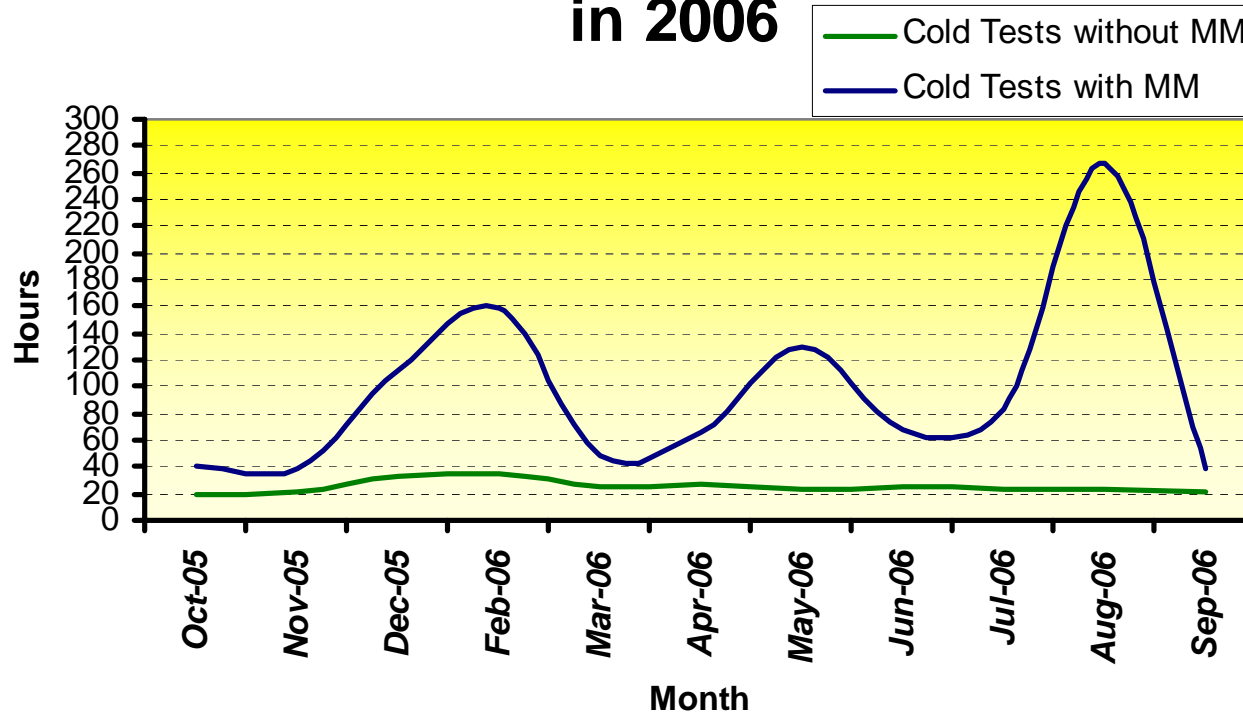
**ICS TIMES**





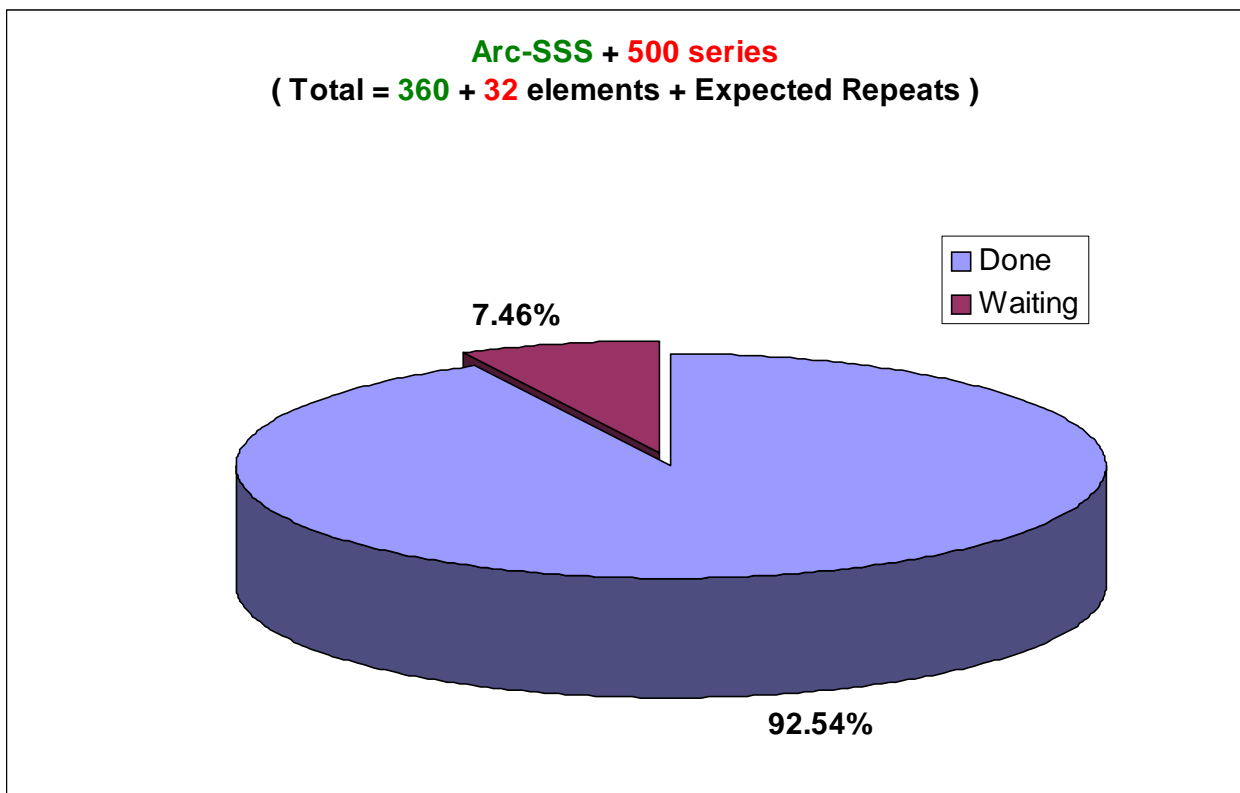
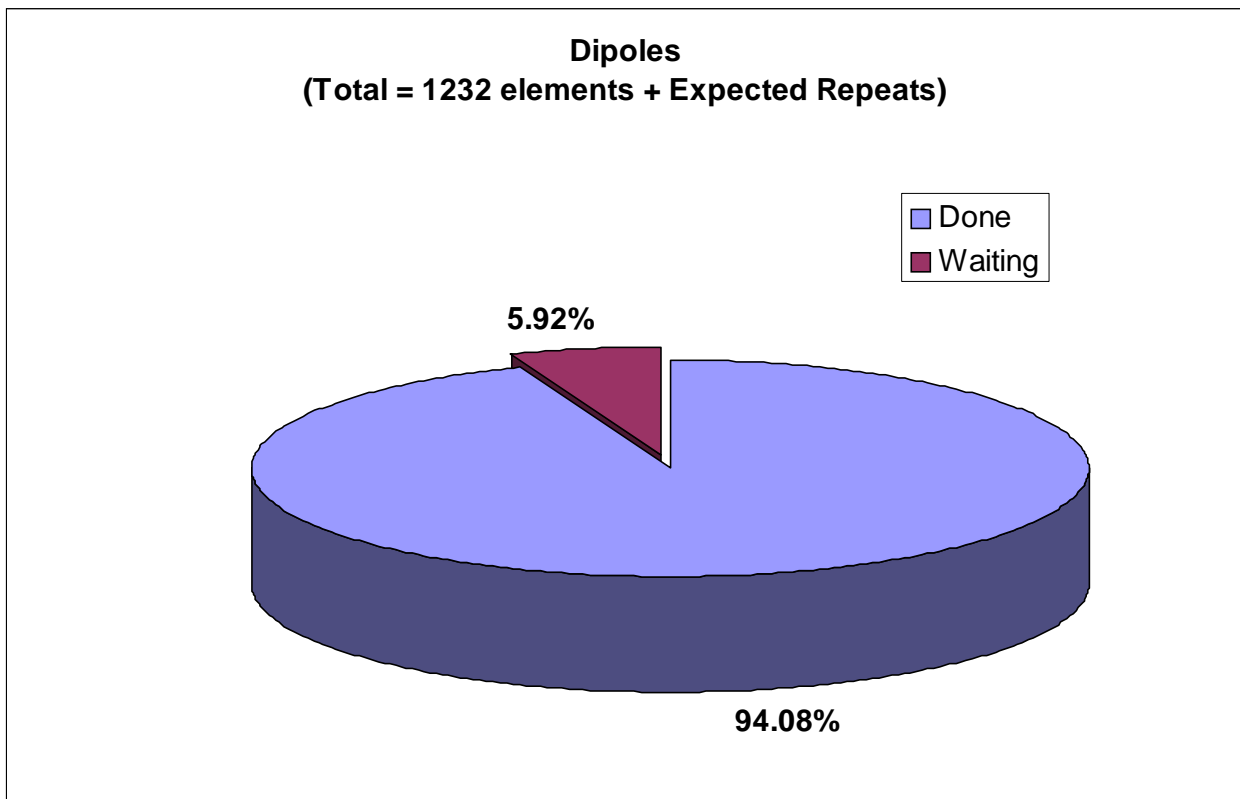
Statistics for end September.06

### Average Cold Tests Times **with** & **without** Magnetic Measurements in 2006



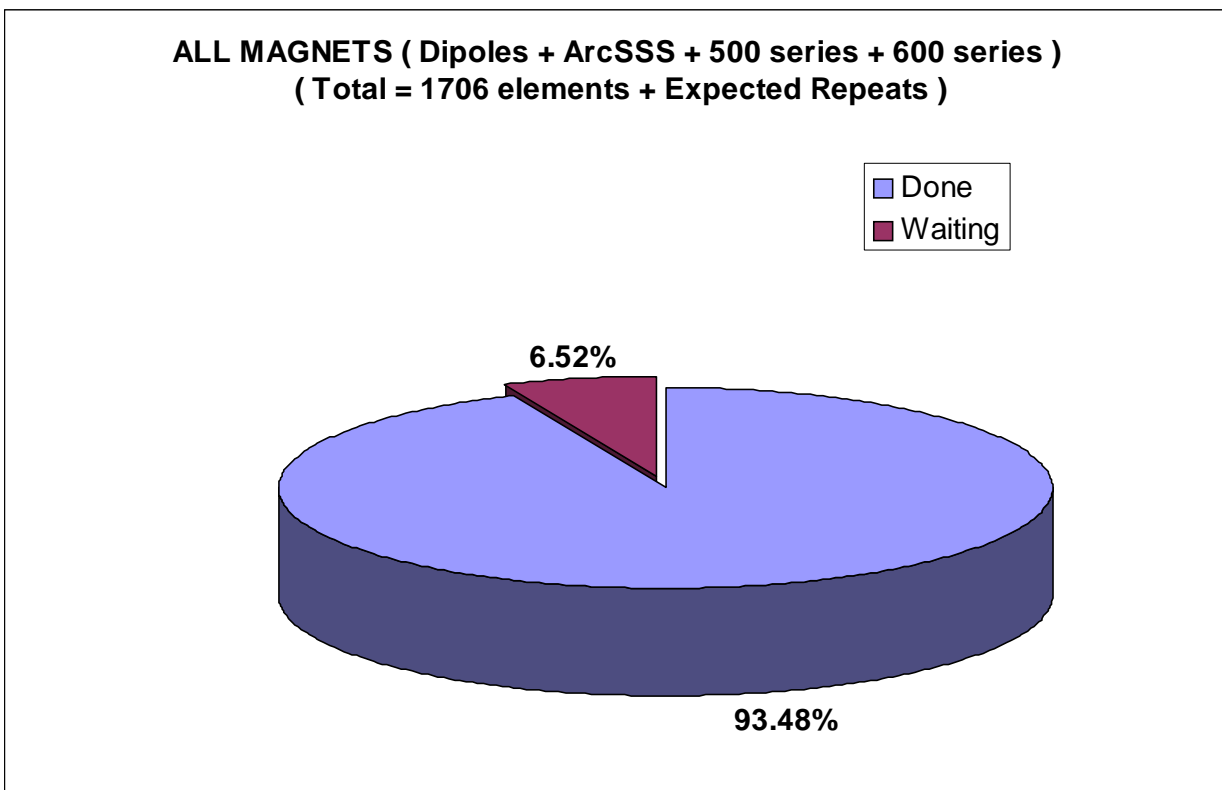
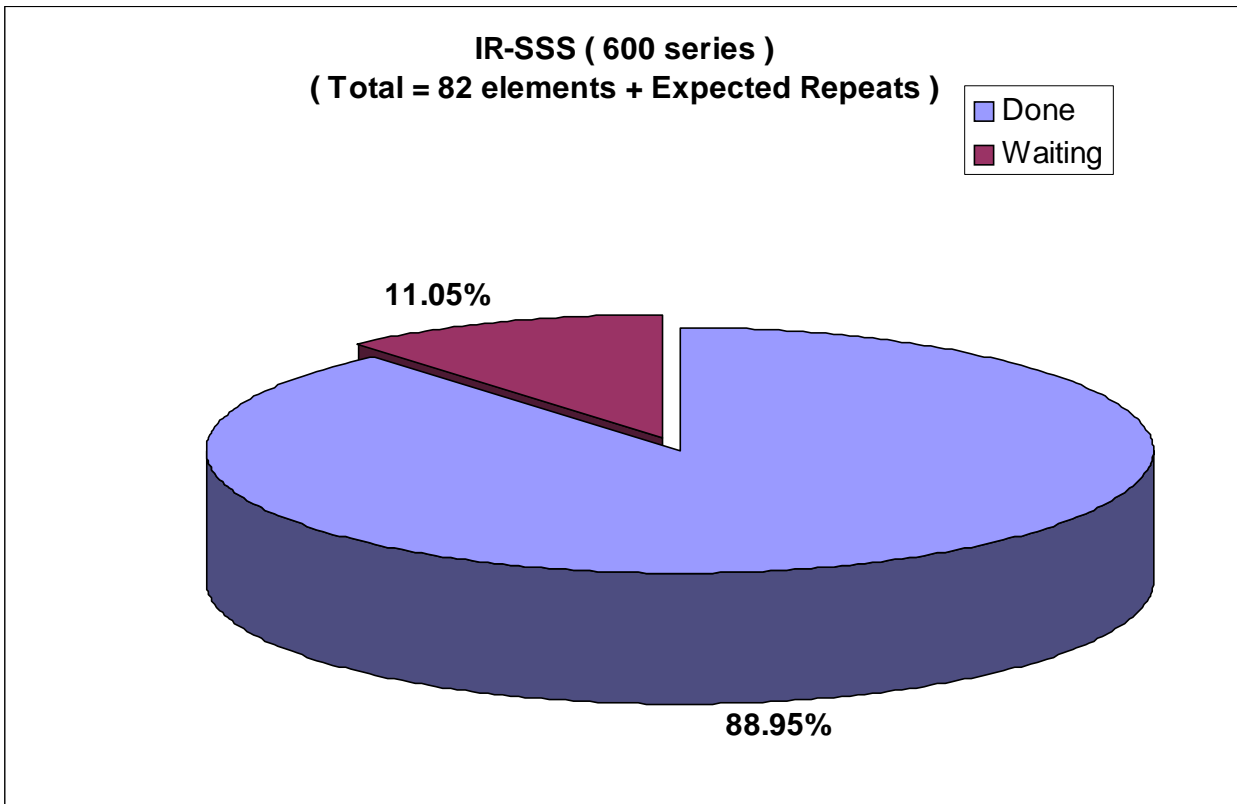
**Statistics for end September.06**

**Percentage of Magnets Tested and Remaining till end Sept 06**



**Statistics for end September.06**

**Percentage of Magnets Tested and Remaining till end Sept 06**



**Statistics for end September.06**

