

# Old Spreadsheet

Date	Run Number	Start Time	Stop Time	Duration (s)	FC4 Start (epA)	FC4 End (epA)	Left Mass Silt Start (epA)	Left Mass Silt End (epA)	FC4/Left Mass Silt Start	FC4/Left Mass Silt End	Left Mass Silt (Integrated) (C)	SB0 Total Scattered Protons	SB0 Trigger/Integrated Left Mass Silt	BSSSD Leaky Beam Events	Comments	
7/10/2005	15072	2:01:02	4:03:33	7351	192	191	303.711	316.895	0.632	0.603	2.16E-06	142432	6.60E+10	834	28.9	3.9E+08
	15073	4:11:57	6:26:28	8071	202	186	313.477	289.551	0.644	0.642	2.30E-06	152544	6.64E+10	1588	39.8	6.9E+08
	15074	6:35:28	8:36:33	7265	188	133	305.664	234.863	0.615	0.566	2.04E-06	137020	6.72E+10	774	27.8	3.8E+08
	15075	9:16:35	11:17:04	7229	145	188	224.609	291.992	0.646	0.644	1.86E-06	123336	6.63E+10	928	30.5	5.0E+08
	15076	11:32:12	13:37:05	7493	183	175	244.629	268.531	0.748	0.649	2.11E-06	138936	6.58E+10	953	30.9	4.8E+08
	15077	13:57:00	16:00:41	7421	180	--	236.816	206.055	0.760	--	1.55E-06	116752	7.56E+10	719	26.8	4.7E+08
	15078	16:16:05	18:20:30	7465	202	160	322.266	258.301	0.627	0.619	1.83E-06	119104	6.30E+10	824	28.7	4.5E+08
	15079	18:26:55	19:17:01	3086	158	--	248.535	0	0.636	--	6.6E-07	43152	6.56E+10	309	17.6	4.7E+08

+-	Average Gas Pressure (T)	+-	R (Ratio of Incident Beam Particles (estimated from FC4 measurements) to # of Scattered Protons - as defined in S. Bishop's thesis, pg. 71)	R (Ratio of Incident beam particles calculated with mass silt data to # scattered protons)	Beam # of Incident Beam Particles (calculated from a Perfect World in which Beam is Actually Steady)	% of Steady Beam Incident Particles Actually Observed	Comments
1E+07	5.997	0.003	1513.1	1445.9	1.47E+12	94.6	
2E+07	6.000	0.001	1572.3	1499.3	1.54E+12	94.4	
1E+07	6.011	0.037	1306.0	1361.9	1.25E+12	103.3	
2E+07	6.004	0.003	1495.9	1505.3	1.25E+12	99.6	
2E+07	6.012	0.002	1481.5	1644.8	1.54E+12	109.9	
2E+07	6.006	0.002	1754.2	1557.6	1.22E+12	87.9	
2E+07	6.000	0.003	1737.5	1483.4	1.19E+12	84.5	
3E+07	6.058	0.010	1736.3	1513.2	4.35E+11	85.3	

Stripper foil needed changing before this run. Now on foil O, p+ beam bouncing around.  
 e-log says: 16:00 Stop run 15076 (15077 ??), next blob into is for 15078... what is going on here?  
 p+ tripped, run stopped, no end FC-readings. ISIS trouble

Raw Runsheet Data

Date	Run Number	Start Time	Stop Time	Duration	FC4 Start (epa)	FC4 End (epa)	FC1 Start (epa)	FCOH Start (epa)	Pressure Start (T)	Pressure End (T)	Comments Related to FC Values
7/10/2005	15072	2:01:02	4:03:33	73:51	192	191	101	47	5.995	6.002	
	15073	4:11:57	6:28:28	80:71	202	186	108	49	6.002	6.002	
	15074	6:35:28	8:36:33	72:65	188	133	100	46	6.002	5.990	
	15075	9:16:35	11:17:04	72:29	145	188	71	35	6.000	6.010	
	15076	11:32:12	13:37:05	74:93	183	175	90	40	6.010	6.010	
	15077	13:57:00	16:00:41	74:21	180	--	74	34	6.010	--	
	15078	16:16:05	18:20:30	74:65	202	160	92	47	6.000	5.988	
	15079	18:25:55	19:17:01	30:66	158	--	82	37	6.090	--	

Raw Histogram Data

Date	Run Number	Start Time	Stop Time	Duration	SB0 Integral	+/-	DSSSD Integral	+/-	SB0 First 300 Seconds Integral	+/-	Acquired/Presented Tail Triggers
7/10/2005	15072	2:01:02	4:03:33	73:51	142432	377	834	29	6232	79	0.912
	15073	4:11:57	6:28:28	80:71	152944	391	1568	40	6488	81	0.913
	15074	6:35:28	8:36:33	72:65	137020	370	774	28	6388	80	0.916
	15075	9:16:35	11:17:04	72:29	123336	351	928	30	4800	69	0.922
	15076	11:32:12	13:37:05	74:93	138936	373	953	31	5940	77	0.925
	15077	13:57:00	16:00:41	74:21	116752	342	719	27	5036	71	0.931
	15078	16:16:05	18:20:30	74:65	119104	345	824	29	5808	76	0.930
	15079	18:25:55	19:17:01	30:66	43152	208	309	18	5192	72	0.933

Raw History Data

Date	Run Number	Start Time	Stop Time	Duration	Average MWPI	Average MDI Set Point	Average EDI Set Point	Average EDI Read Back	Average Cell Pressure	Standard Deviation of Pressure	Integrated Left Mass Silt Current	Start Left Mass Silt Current (epa)	End Left Mass Silt Current (epa)	Mean Left Mass Silt Current (from histogram fit to data)	+/- (Sigma from histogram fit)	+/- (%)
7/10/2005	15072	2:01:02	4:03:33	73:51	4015.72	334.093	58.427	58.164	5.9970	0.0029	2.18E-06	304	317	313.6	12.5	3.97
	15073	4:11:57	6:28:28	80:71	4013.83	334.093	58.427	58.164	6.0003	0.0010	2.30E-06	313	290	302.5	14.9	4.94
	15074	6:35:28	8:36:33	72:65	4015.94	334.093	58.427	58.164	6.0114	0.0039	2.04E-06	306	236	282.2	15.6	5.82
	15075	9:16:35	11:17:04	72:29	4015.63	334.093	58.427	58.164	6.0043	0.0033	1.86E-06	225	292	275.9	16.3	6.63
	15076	11:32:12	13:37:05	74:93	4015.54	334.093	58.427	58.162	6.0116	0.0017	2.11E-06	245	270	265.1	11.38	11.38
	15077	13:57:00	16:00:41	74:21	4015.44	334.093	58.427	58.160	5.9989	0.0024	1.83E-06	237	206	247.9	16.0	6.47
	15078	16:16:05	18:20:30	74:65	4015.38	334.093	58.427	58.160	5.9989	0.0034	1.83E-06	322	258	265.3	24.1	9.07
	15079	18:25:55	19:17:01	30:66	4015.38	334.093	58.427	58.160	6.0085	0.0102	6.58E-07	249	0	254.1	17.5	6.90

Calculated Ratios

Date	Run Number	Start Time	Stop Time	Duration	FC1/FC4	FCOH/FC1	FCAL.EDI/MassSilt	End Ratios FCAL.EDI/MassSilt
7/10/2005	15072	2:01:02	4:03:33	73:51	0.526	0.465	0.632	0.603
	15073	4:11:57	6:28:28	80:71	0.535	0.454	0.644	0.642
	15074	6:35:28	8:36:33	72:65	0.532	0.460	0.615	0.586
	15075	9:16:35	11:17:04	72:29	0.490	0.493	0.646	0.644
	15076	11:32:12	13:37:05	74:93	0.482	0.444	0.748	0.649
	15077	13:57:00	16:00:41	74:21	0.411	0.439	0.760	--
	15078	16:16:05	18:20:30	74:65	0.490	0.627	0.619	--
	15079	18:25:55	19:17:01	30:66	0.519	0.451	0.636	--

Calculated Normalization Factors

Date	Run Number	Start Time	Stop Time	Duration	Average FCAL.EDI/MassSilt	R (calculated as In S. Bishop's thesis, for first 300s data)
7/10/2005	15072	2:01:02	4:03:33	73:51	0.617	1410.47
	15073	4:11:57	6:28:28	80:71	0.643	1430.73
	15074	6:35:28	8:36:33	72:65	0.591	1354.83
	15075	9:16:35	11:17:04	72:29	0.645	1389.11
	15076	11:32:12	13:37:05	74:93	0.699	1416.41

Normalized Beam Values

15077	13:57:00	16:00:41	7421	0.780	1644.05
15078	16:16:05	18:20:30	7465	0.623	1599.08
15079	18:26:35	19:17:01	3066	0.636	1412.00

Date	Run Number	Start Time	Stop Time	Duration	26Al on Target (from LeftMassSlip)	26Al on Target (from Elastics)	(LeftMassSlip/Elastics) 26Al on Target
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7/10/2005							
	15072	2:01:02	4:03:33	7351	1.39E+12	1.37E+12	1.02
	15073	4:11:57	6:26:28	8071	1.34E+12	1.48E+12	1.04
	15074	6:36:28	8:36:33	7265	1.25E+12	1.26E+12	1.00
	15075	9:16:35	11:17:04	7229	1.25E+12	1.16E+12	1.07
	15076	11:32:12	13:37:05	7493	1.54E+12	1.34E+12	1.15
	15077	13:57:00	16:00:41	7421	1.22E+12	1.30E+12	0.94
	15078	16:16:05	18:20:30	7465	1.19E+12	1.29E+12	0.92
	15079	18:26:55	19:17:01	3066	4.36E+11	4.10E+11	1.06