

FY 2018 Machine Studies Breakdown

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2017-3.1	Downtime DIN#106701	9/26/2017 8:00	9/26/2017 14:47	6.78			Water leak repair at the manifold on S33B:Q4 (MOM)
2017-3.1	Machine Intervention	9/27/2017 11:35	9/27/2017 13:25		1.83		Access SR Zone D to exchange rad badge at sector 27
2017-3.1	Downtime DIN#106702	9/30/2017 16:43	9/30/2017 20:57	4.23			B:QF trip (PS)
2017-3.1	Training	10/1/2017 4:57	10/1/2017 6:21			1.40	Booster operator training
2017-3.1	Training	10/1/2017 23:12	10/2/2017 1:19			2.12	Booster operator training
TOTAL				11.02	1.83	3.52	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2017-3.2	Machine Intervention	10/9/2017 8:41	10/9/2017 20:05		11.40		Access SR Zone B to replace 9-BM PS2 shutter
TOTAL				0.00	11.40	0.00	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2017-3.3	Machine Intervention	10/16/2017 9:57	10/16/2017 11:52		1.92		Access SR Zone D to exchange rad badge at sector 27
2017-3.3	Training	10/16/2017 9:35	10/16/2017 10:35			1.00	Booster operator qualification
TOTAL				0.00	1.92	1.00	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2017-3.4	Machine Intervention	10/23/2017 9:16	10/23/2017 11:47		2.52		Maintenance activities
TOTAL				0.00	2.52	0.00	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2017-3.5	Machine Intervention	10/30/2017 9:18	10/30/2017 13:14		3.93		Maintenance activities
2017-3.5	Downtime DIN#106713	10/30/2017 13:14	10/30/2017 17:23	4.15			Booster RF-5 issue (RF)
2017-3.5	Training	10/30/2017 21:28	10/30/2017 22:55			1.45	SR operator training
2017-3.5	Downtime DIN#106714	10/31/2017 13:30	10/31/2017 15:00	1.50			Linac process water pump caused L1-L5 trip (MOM)
TOTAL				5.65	3.93	1.45	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2017-3.6	Machine Intervention	11/6/2017 9:11	11/6/2017 12:22		3.18		Maintenance activities
2017-3.6	Training	11/7/2017 2:18	11/7/2017 4:05			1.78	SR operator training
TOTAL				0.00	3.18	1.78	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2017-3.7	Machine Intervention	11/13/2017 9:00	11/13/2017 15:00		6.00		Maintenance activities, access Zone C&D
2017-3.7	Downtime DIN#106724	11/13/2017 15:00	11/13/2017 16:07	1.12			Accelerator switch uplink repair (IT)

TOTAL						1.12	6.00	0.00	
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Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2017-3.8	Machine Intervention		11/22/2017 9:23	11/22/2017 13:43		4.33		Maintenance activities
2017-3.8	Downtime DIN#106728		11/22/2017 19:41	11/22/2017 20:56	1.25			1-ID rad monitor issue (OTH)
TOTAL					1.25	4.33	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2017-3.9	Machine Intervention		12/4/2017 9:22	12/4/2017 14:40		5.30		Maintenance, access zone A to repair 5-ID SS1 shutter
TOTAL					0.00	5.30	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2017-3.10	Machine Intervention		12/11/2017 8:50	12/11/2017 11:45		2.92		Maintenance activities
2017-3.10	Downtime DIN#106734		12/11/2017 11:45	12/11/2017 19:42	7.95			IT & PS issues
2017-3.10	Training		12/12/2017 5:00	12/12/2017 6:50			1.83	SR operator training
TOTAL					7.95	0.00	1.83	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2017-3.11	Training		12/18/2017 7:01	12/18/2017 8:31			1.50	SR operator training
TOTAL					0.00	0.00	1.50	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-1.1	Downtime DIN#106737		1/24/2018 16:39	1/24/2018 17:35	0.93			S26 water pump trip (MOM)
2018-1.1	Downtime DIN#106738		1/29/2018 6:12	1/29/2018 6:29	0.28			S9 VAT chassis issue (SI)
2018-1.1	Machine Intervention		1/29/2018 7:22	1/29/2018 14:35		7.22		Maintenance activities, access SR zone F & A
2018-1.1	Downtime DIN#106739		1/30/2018 3:10	1/30/2018 3:30	0.33			RF2 trip (RF)
2018-1.1	Downtime DIN#106740		1/30/2018 4:53	1/30/2018 5:03	0.17			RF2 trip (RF)
2018-1.1	Downtime DIN#106741		1/30/2018 5:48	1/30/2018 6:29	0.68			RF2 trip (RF)
TOTAL					2.40	7.22	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-1.2	Machine Intervention		2/5/2018 9:33	2/5/2018 13:00		3.45		Maintenance activities, access SR zone F
2018-1.2	Training		2/5/2018 19:48	2/5/2018 21:52			2.07	SR operator training
TOTAL					0.00	3.45	2.07	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-1.3	Downtime DIN#106756		2/12/2018 8:34	2/12/2018 9:30	0.93			RF2 trip (RF)

2018-1.3	Machine Intervention		2/12/2018 9:30	2/12/2018 14:13		4.72		Maintenance activities, access SR zone E
2018-1.3	Downtime DIN#106757		2/12/2018 16:00	2/12/2018 17:07	1.12			L2 turned itself on after ACIS trip (SI)
2018-1.3	Downtime DIN#106758		2/12/2018 21:42	2/13/2018 1:19	3.62			BTS BPMs not triggering (CTL)
TOTAL					5.67	4.72	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-1.4	Downtime DIN#106766		2/19/2018 9:06	2/19/2018 9:30	0.40			RF2 trip (RF)
2018-1.4	Machine Intervention		2/19/2018 9:30	2/19/2018 13:17		3.78		Maintenance activities
2018-1.4	Downtime DIN#106767		2/19/2018 13:17	2/19/2018 14:29	1.20			All SR RF tripped due to an RF interlock (RF)
2018-1.4	Downtime DIN#106768		2/19/2018 14:53	2/19/2018 15:56	1.05			S39B:Q3 PS trip (PS)
TOTAL					2.65	3.78	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-1.5	Machine Intervention		2/26/2018 9:19	2/26/2018 10:55		1.60		Maintenance activities
2018-1.5	Downtime DIN#106774		2/26/2018 10:55	2/26/2018 16:38	5.72			Water leak on PTB:Q5 in the Booster tunnel (MOM)
2018-1.5	Machine Intervention		2/27/2018 7:08	2/27/2018 9:02		1.90		Maintenance activities, access SR zone A
TOTAL					5.72	3.50	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-1.6	Machine Intervention		3/5/2018 8:57	3/5/2018 11:44		2.78		Maintenance activities
TOTAL					0.00	2.78	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-1.7	Machine Intervention		3/12/2018 8:00	3/12/2018 19:57		11.95		Maintenance activities, access Linac & Booster
TOTAL					0.00	11.95	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-1.8	Downtime DIN#106788		3/19/2018 8:00	3/19/2018 9:30	1.50			PSS trip at 16-BM (SI)
2018-1.8	Machine Intervention		3/19/2018 9:30	3/19/2018 12:00		2.50		Maintenance activities, access SR zone F
2018-1.8	Downtime DIN#106789		3/20/2018 5:57	3/20/2018 7:16	1.32			S:IK4 PS trip (PS)
TOTAL					2.82	2.50	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-1.9	Machine Intervention		3/26/2018 9:15	3/26/2018 11:50		2.58		Maintenance activities
TOTAL					0.00	2.58	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-1.10	Machine Intervention		4/2/2018 9:45	4/2/2018 13:34		3.82		Maintenance activities, access SR zone F
2018-1.10	Training		4/2/2018 12:55	4/2/2018 14:32			1.62	SR operator training
TOTAL					0.00	3.82	1.62	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-1.11	Machine Intervention	4/9/2018 9:15	4/9/2018 10:36		1.35		Maintenance activities
2018-1.11	Training	4/9/2018 10:36	4/9/2018 12:53			2.28	SR operator testing
TOTAL				0.00	1.35	2.28	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-1.12	Machine Intervention	4/16/2018 9:12	4/16/2018 12:38		3.43		Maintenance activities, access SR zone F
TOTAL				0.00	3.43	0.00	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-1.13	Training	4/25/2018 0:19	4/25/2018 4:29			4.17	Linac operator testing
TOTAL				0.00	0.00	4.17	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-2.1	Downtime DIN#106813	5/22/2018 15:50	5/22/2018 16:39	0.82			Network issue (IT)
2018-2.1	Downtime DIN#106814	5/23/2018 13:50	5/23/2018 15:06	1.27			L4 RF modulator trip (RF)
2018-2.1	Downtime DIN#106815	5/23/2018 15:30	5/23/2018 16:01	0.52			L2 RF trip (RF)
2018-2.1	Training	5/25/2018 4:10	5/25/2018 6:35			2.42	Linac operator training
2018-2.1	Downtime DIN#106816	5/25/2018 7:57	5/25/2018 9:18	1.35			L2 RF trip (RF)
TOTAL				3.95	0.00	2.42	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-2.2	Machine Intervention	6/4/2018 9:02	6/4/2018 13:24		4.37		Maintenance activities, access Booster
TOTAL				0.00	4.37	0.00	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-2.3	Downtime DIN#106830	6/11/2018 17:40	6/12/2018 0:54	7.23			SR injection issue (AOP)
2018-2.3	Machine Intervention	6/11/2018 9:13	6/11/2018 14:02		4.82		Maintenance activities, access SR zone F
TOTAL				7.23	4.82	0.00	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-2.4	Machine Intervention	6/18/2018 8:57	6/18/2018 13:18		4.35		Maintenance activities, access PAR
TOTAL				0.00	4.35	0.00	

Studies Period		Start Time	Stop Time	Downtime	Machine Intervention	Training	
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2018-2.5	Machine Intervention		6/25/2018 8:44	6/25/2018 14:09		5.42		Maintenance activities
2018-2.5	Downtime DIN#106841		6/25/2018 16:00	6/25/2018 17:45	1.75			S22 A BSP 100 issue (DIA)
2018-2.5	Training		6/25/2018 4:36	6/25/2018 6:30			1.90	Linac operator training
2018-2.5	Downtime DIN#106842		6/26/2018 2:32	6/26/2018 2:51	0.32			IOCS40FB issue (CTL)
2018-2.5	Downtime DIN#106843		6/26/2018 3:49	6/26/2018 4:01	0.20			S22 A BSP 100 issue (DIA)
2018-2.5	Training		6/27/2018 6:04	6/27/2018 6:47			0.72	Linac operator console test
TOTAL					2.27	5.42	2.62	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-2.6	Machine Intervention							
TOTAL						0.00		

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-2.7	Machine Intervention		7/9/2018 8:48	7/9/2018 12:22		3.57		Maintenance activities
TOTAL					0.00	3.57	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-2.8	Machine Intervention		7/16/2018 8:33	7/16/2018 12:40		4.12		Maintenance activities
2018-2.8	Downtime DIN#106858		7/16/2018 12:40	7/16/2018 15:30	2.83			S14:15 T4 (PS)
2018-2.8	Downtime		7/16/2018 15:42	7/16/2018 18:26	2.73			PAR beam jumping buckets (CTL)
TOTAL					5.57	4.12	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-2.9	Machine Intervention		7/23/2018 8:26	7/23/2018 13:40		5.23		Maintenance activities
TOTAL					0.00	5.23	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-2.10	Machine Intervention		7/30/2018 8:55	7/30/2018 13:30		4.58		Maintenance activities, access SR zone F
2018-2.10	Downtime DIN#106864		7/30/2018 9:30	7/30/2018 12:50	3.33			Blower replacement (MOM)
2018-2.10	Downtime DIN#106866		7/30/2018 14:30	7/30/2018 16:04	1.57			PAR beam jumping buckets (CTL)
2018-2.10	Downtime DIN#106865		7/30/2018 16:04	7/30/2018 16:59	0.92			SR dipole trip (PS)
TOTAL					5.82	4.58	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-2.11	Machine Intervention		8/6/2018 8:50	8/6/2018 12:30		3.67		Maintenance activities
TOTAL					0.00	3.67	0.00	

Studies Period			Start Time	Stop Time	Downtime	Machine Intervention	Training	
2018-2.13	Downtime DIN#106881		8/21/2018 9:20	8/21/2018 9:58	0.63			L5 trip (RF)
TOTAL					0.63	0.00	0.00	