

Log Sheet

run_number	wavelength	experiment_identifier	start_time	end_time	duration	temperature	regulation_temperature	detsum	detrate	monsum	monrate	elasticpeak	SRot
123400	5	MBP+H2O 297K	22-Jun-15 12:12:21	22-Jun-15 12:42:41	1800.01	296.421	296.999	1.22701E+07	6816.7	1.43123E+06	795.122	295	-1443
123401	5	MBP+H2O 297K	22-Jun-15 12:42:45	22-Jun-15 13:13:05	1800.01	296.155	296.998	1.22666E+07	6814.74	1.43116E+06	795.083	295	-1443
123402	5	MBP+H2O cooling to 150 K	22-Jun-15 13:13:09	22-Jun-15 13:23:30	600.012	287.788	242.367	4.0668E+06	6777.86	478003	796.655	295	-1443
123403	5	MBP+H2O cooling to 150 K	22-Jun-15 13:23:32	22-Jun-15 13:33:52	600.012	270.38	220.933	4.03079E+06	6717.84	478211	797.002	295	-1443
123404	5	MBP+H2O cooling to 150 K	22-Jun-15 13:33:55	22-Jun-15 13:44:15	600.012	250.362	198.931	4.02418E+06	6706.82	477546	795.894	295	-1443
123405	5	MBP+H2O cooling to 150 K	22-Jun-15 13:44:18	22-Jun-15 13:54:38	600.012	229.96	179.435	4.0055E+06	6675.7	477752	796.237	295	-1443
123406	5	MBP+H2O cooling to 150 K	22-Jun-15 13:54:41	22-Jun-15 14:05:01	600.012	209.91	162.057	3.96168E+06	6602.66	479482	799.121	295	-1443
123407	5	MBP+H2O cooling to 150 K	22-Jun-15 14:05:03	22-Jun-15 14:15:24	600.012	190.925	146.264	3.92853E+06	6547.41	479558	799.247	295	-1443
123408	5	MBP+H2O cooling to 150 K	22-Jun-15 14:15:26	22-Jun-15 14:25:46	600.012	173.276	131.821	3.90616E+06	6510.14	477304	795.491	295	-1443
123409	5	MBP+H2O cooling to 150 K	22-Jun-15 14:25:49	22-Jun-15 14:36:09	600.012	159.209	141.685	3.89056E+06	6484.13	476898	794.814	295	-1443
123410	5	MBP+H2O cooling to 150 K	22-Jun-15 14:36:11	22-Jun-15 14:46:32	600.012	152.061	147.19	3.87881E+06	6464.55	474891	791.469	295	-1443
123411	5	MBP+H2O cooling to 150 K	22-Jun-15 14:46:34	22-Jun-15 14:56:54	600.012	149.847	150.002	3.86419E+06	6440.19	478892	798.137	295	-1443
123412	5	MBP+H2O cooling to 150 K	22-Jun-15 14:56:57	22-Jun-15 15:07:17	600.012	149.443	150	3.85989E+06	6433.01	479527	799.196	295	-1443
123413	5	MBP+H2O cooling to 150 K	22-Jun-15 15:07:19	22-Jun-15 15:17:40	600.012	149.521	149.999	3.86682E+06	6444.57	478856	798.077	295	-1443
123414	5	MBP+H2O cooling to 150 K	22-Jun-15 15:17:42	22-Jun-15 15:28:02	600.012	149.675	150.001	3.87025E+06	6450.29	479494	799.141	295	-1443
123415	5	MBP+H2O cooling to 150 K	22-Jun-15 15:28:05	22-Jun-15 15:38:25	600.012	149.804	149.998	3.86775E+06	6446.12	479003	798.323	295	-1443
123416	5	MBP+H2O cooling to 150 K	22-Jun-15 15:38:27	22-Jun-15 15:41:30	162.026	149.835	149.998	1.04337E+06	6439.54	128667	794.116	295	-1443
123417	5	MBP+H2O 150 K	22-Jun-15 15:41:38	22-Jun-15 16:11:58	1800.01	149.99	149.998	1.16068E+07	6448.17	1.43488E+06	797.152	295	-1443
123418	5	MBP+H2O 150 K	22-Jun-15 16:12:01	22-Jun-15 16:42:21	1800.01	150.033	150.004	1.16177E+07	6454.26	1.43703E+06	798.347	295	-1443
123419	5	MBP+H2O 150 K	22-Jun-15 16:42:24	22-Jun-15 17:12:44	1800.01	150.049	150	1.16122E+07	6451.17	1.43223E+06	795.681	295	-1443
123420	5	MBP+H2O 150 K	22-Jun-15 17:12:47	22-Jun-15 17:43:07	1800.01	150.057	150.001	1.16181E+07	6454.46	1.43552E+06	797.509	295	-1443
123421	5	MBP+H2O 150 K	22-Jun-15 17:43:10	22-Jun-15 18:13:30	1800.01	150.067	150.002	1.16206E+07	6455.86	1.43351E+06	796.389	295	-1443
123422	5	MBP+H2O 150 K	22-Jun-15 18:13:32	22-Jun-15 18:34:53	1259.84	150.072	150.002	8.13397E+06	6456.35	1.00472E+06	797.494	295	-1443
123423	5	MBP+Mal+D2O 297K	22-Jun-15 19:56:37	22-Jun-15 20:26:58	1800.01	295.956	296.998	4.07311E+06	2262.82	1.43319E+06	796.214	295	-1443
123424	5	MBP+Mal+D2O 297K	22-Jun-15 20:27:00	22-Jun-15 20:57:21	1800.01	295.984	297.001	4.07609E+06	2264.48	1.43207E+06	795.591	295	-1443
123425	5	MBP+Mal+D2O 297K	22-Jun-15 20:57:23	22-Jun-15 21:27:44	1800.01	295.988	296.996	4.08622E+06	2270.11	1.43261E+06	795.89	295	-1443
123426	5	MBP+Mal+D2O 297K	22-Jun-15 21:27:46	22-Jun-15 21:58:07	1800.01	295.976	296.998	4.08669E+06	2270.37	1.43776E+06	798.752	295	-1443
123427	5	MBP+Mal+D2O 297K	22-Jun-15 21:58:09	22-Jun-15 22:28:29	1800.01	295.975	297.001	4.09066E+06	2272.58	1.43204E+06	795.574	295	-1443
123428	5	MBP+Mal+D2O 297K	22-Jun-15 22:28:32	22-Jun-15 22:58:52	1800.01	295.965	296.998	4.09766E+06	2276.47	1.43874E+06	799.293	295	-1443
123429	5	MBP+Mal+D2O cooling to 150 K	22-Jun-15 22:58:55	22-Jun-15 23:09:15	600.012	286.694	238.208	1.36574E+06	2276.18	479689	799.466	295	-1443
123430	5	MBP+Mal+D2O cooling to 150 K	22-Jun-15 23:09:18	22-Jun-15 23:19:38	600.012	267.179	215.089	1.3519E+06	2253.11	478541	797.553	295	-1443
123431	5	MBP+Mal+D2O cooling to 150 K	22-Jun-15 23:19:40	22-Jun-15 23:30:01	600.012	245.475	194.779	1.344E+06	2239.95	477247	795.396	295	-1443
123432	5	MBP+Mal+D2O cooling to 150 K	22-Jun-15 23:30:03	22-Jun-15 23:40:23	600.012	224.397	176.264	1.33579E+06	2226.28	477778	796.281	295	-1443
123433	5	MBP+Mal+D2O cooling to 150 K	22-Jun-15 23:40:25	22-Jun-15 23:50:46	600.012	204.175	159.056	1.31806E+06	2196.71	478986	798.294	295	-1443
123434	5	MBP+Mal+D2O cooling to 150 K	22-Jun-15 23:50:48	23-Jun-15 00:01:08	600.012	185.396	143.548	1.30872E+06	2181.16	478253	797.073	295	-1443
123435	5	MBP+Mal+D2O cooling to 150 K	23-Jun-15 00:01:10	23-Jun-15 00:11:31	600.012	167.774	138.032	1.30016E+06	2166.9	480390	800.634	295	-1443
123436	5	MBP+Mal+D2O cooling to 150 K	23-Jun-15 00:11:33	23-Jun-15 00:21:53	600.012	156.1	143.433	1.29278E+06	2154.59	475120	791.851	295	-1443
123437	5	MBP+Mal+D2O cooling to 150 K	23-Jun-15 00:21:56	23-Jun-15 00:32:16	600.012	150.801	150.013	1.29268E+06	2154.43	479798	799.648	295	-1443
123438	5	MBP+Mal+D2O cooling to 150 K	23-Jun-15 00:32:18	23-Jun-15 00:42:38	600.012	149.581	150.002	1.29001E+06	2149.97	475266	792.094	295	-1443
123439	5	MBP+Mal+D2O 150 K	23-Jun-15 00:42:41	23-Jun-15 01:13:01	1800.01	149.766	150	3.87643E+06	2153.56	1.43498E+06	797.209	295	-1443
123440	5	MBP+Mal+D2O 150 K	23-Jun-15 01:13:03	23-Jun-15 01:43:24	1800.01	149.98	150.004	3.87588E+06	2153.25	1.43522E+06	797.338	295	-1443
123441	5	MBP+Mal+D2O 150 K	23-Jun-15 01:43:26	23-Jun-15 02:13:46	1800.01	150.037	150	3.8775E+06	2154.15	1.43527E+06	797.368	295	-1443
123442	5	MBP+Mal+D2O 150 K	23-Jun-15 02:13:49	23-Jun-15 02:44:09	1800.01	150.054	149.996	3.65688E+06	2031.59	1.35543E+06	753.013	295	-1443
123443	5	MBP+Mal+D2O 150 K	23-Jun-15 02:44:11	23-Jun-15 03:14:32	1800.01	150.058	149.999	3.87655E+06	2153.63	1.43829E+06	799.045	295	-1443
123444	5	MBP+Mal+D2O 150 K	23-Jun-15 03:14:34	23-Jun-15 03:44:54	1800.01	150.066	150	3.87915E+06	2155.07	1.435E+06	797.216	295	-1443
123445	5	MBP+Mal+D2O 150 K	23-Jun-15 03:44:57	23-Jun-15 04:15:17	1800.01	150.068	150	3.87645E+06	2153.57	1.43708E+06	798.375	295	-1443
123446	5	MBP+Mal+D2O 150 K	23-Jun-15 04:15:19	23-Jun-15 04:45:40	1800.01	150.072	149.997	3.87686E+06	2153.8	1.43867E+06	799.259	295	-1443
123447	5	MBP+Mal+D2O 150 K	23-Jun-15 04:45:42	23-Jun-15 05:16:02	1800.01	150.073	150.001	3.87918E+06	2155.09	1.4364E+06	797.993	295	-1443
123448	5	MBP+Mal+D2O 150 K	23-Jun-15 05:16:05	23-Jun-15 05:46:25	1800.01	150.076	150	3.87676E+06	2153.74	1.43424E+06	796.798	295	-1443
123449	5	MBP+Mal+D2O 150 K	23-Jun-15 05:46:27	23-Jun-15 06:16:48	1800.01	150.077	150.001	3.88068E+06	2155.92	1.43946E+06	799.693	295	-1443
123450	5	MBP+Mal+D2O 150 K	23-Jun-15 06:16:50	23-Jun-15 06:47:10	1800.01	150.075	150.001	3.88182E+06	2156.55	1.43339E+06	796.324	295	-1443
123451	5	MBP+Mal+D2O 150 K	23-Jun-15 06:47:13	23-Jun-15 07:17:33	1800.01	150.078	150	3.8825E+06	2156.93	1.4382E+06	798.998	295	-1443
123452	5	MBP+Mal+D2O 150 K	23-Jun-15 07:17:35	23-Jun-15 07:47:56	1800.01	150.078	149.999	3.87913E+06	2155.06	1.44015E+06	800.078	295	-1443
123453	5	MBP+Mal+D2O 150 K	23-Jun-15 07:47:58	23-Jun-15 08:18:18	1800.01	150.081	149.999	3.88066E+06	2155.91	1.43358E+06	796.428	295	-1443
123454	5	MBP+Mal+D2O 150 K	23-Jun-15 08:18:21	23-Jun-15 08:48:41	1800.01	150.078	150	3.88077E+06	2155.97	1.43927E+06	799.589	295	-1443
123455	5	MBP+Mal+D2O 150 K	23-Jun-15 08:48:43	23-Jun-15 09:19:04	1800.01	150.076	150.001	3.8815E+06	2156.37	1.43828E+06	799.041	295	-1443
123456	5	MBP+Mal+D2O 150 K	23-Jun-15 09:19:06	23-Jun-15 09:49:26	1800.01	150.078	150.001	3.8815E+06	2156.38	1.43329E+06	796.269	295	-1443
123457	5	Empty 1 - cooling to 150 K	23-Jun-15 10:14:21	23-Jun-15 10:24:41	600.012	170.446	131.416	97584	162.637	481662	802.754	295	-1443
123458	5	Empty 1 - cooling to 150 K	23-Jun-15 10:24:43	23-Jun-15 10:35:04	600.012	155.671	143.815	95729	159.545	477438	795.714	295	-1443
123459	5	Empty 1 - cooling to 150 K	23-Jun-15 10:35:06	23-Jun-15 10:45:26	600.012	150.196	150.004	94520	157.53	481164	801.924	295	-1443
123460	5	Empty 1 - cooling to 150 K	23-Jun-15 10:45:28	23-Jun-15 10:46:54	65.982	149.924	150.004	10394	157.528	52941	802.355	295	-1443
123461	5	Empty 1 - 150 K	23-Jun-15 10:47:16	23-Jun-15 11:17:36	1800.01	149.62	150	282721	157.066	1.43927E+06	799.587	295	-1443
123462	5	Empty 1 - 150 K	23-Jun-15 11:17:39	23-Jun-15 11:47:59	1800.01	149.993	149.999	280921	156.066	1.237E+06	799.164	295	-1443
123463	5	Empty 1 - 150 K	23-Jun-15 11:48:01	23-Jun-15 12:11:07	1366.02	150.365	150	212832	155.805	1.09201E+06	799.415	295	-1443
123464	5	Empty 4 - cooling to 150 K	23-Jun-15 12:30:55	23-Jun-15 12:41:16	600.012	173.14	129.159	83439	139.062	479851	799.735	295	-1443
123465	5	Empty 4 - cooling to 150 K	23-Jun-15 12:41:18	23-Jun-15 12:51:38	600.012	156.396	142.933	80726	134.541	480226	800.36	295	-1443
123466	5	Empty 4 - cooling to 150 K	23-Jun-15 12:51:40	23-Jun-15 13:02:01	600.012	150.215	150.007	80204</					

123477	5	MBP+Mal+H2O 300 K	23-Jun-15 16:18:21	23-Jun-15 16:38:42	1200.01	295.504	297.001	7.54416E+06	6286.74	955174	795.971	295	-1443
123478	5	MBP+Mal+H2O 300 K	23-Jun-15 16:38:45	23-Jun-15 16:59:05	1200.01	295.888	297.001	7.54915E+06	6290.89	960710	800.584	295	-1443
123479	5	MBP+Mal+H2O cooling to 150 K	23-Jun-15 16:59:08	23-Jun-15 17:09:28	600.012	286.936	238.684	3.75533E+06	6258.76	479007	798.329	295	-1443
123480	5	MBP+Mal+H2O cooling to 150 K	23-Jun-15 17:09:31	23-Jun-15 17:19:51	600.012	267.68	214.84	3.67333E+06	6122.1	477428	795.697	295	-1443
123481	5	MBP+Mal+H2O cooling to 150 K	23-Jun-15 17:19:54	23-Jun-15 17:30:14	600.012	246.343	194.697	3.64814E+06	6080.11	480725	801.192	295	-1443
123482	5	MBP+Mal+H2O cooling to 150 K	23-Jun-15 17:30:17	23-Jun-15 17:40:37	600.012	225.094	176.013	3.63921E+06	6065.23	475844	793.057	295	-1443
123483	5	MBP+Mal+H2O cooling to 150 K	23-Jun-15 17:40:39	23-Jun-15 17:51:00	600.012	205.056	158.963	3.61645E+06	6027.29	479701	799.486	295	-1443
123484	5	MBP+Mal+H2O cooling to 150 K	23-Jun-15 17:51:02	23-Jun-15 18:01:22	600.012	186.057	143.289	3.59727E+06	5995.34	478367	797.262	295	-1443
123485	5	MBP+Mal+H2O cooling to 150 K	23-Jun-15 18:01:25	23-Jun-15 18:11:45	600.012	168.45	137.177	3.57905E+06	5964.96	478997	798.312	295	-1443
123486	5	MBP+Mal+H2O cooling to 150 K	23-Jun-15 18:11:47	23-Jun-15 18:22:08	600.012	156.406	143.072	3.59183E+06	5986.26	480081	800.119	295	-1443
123487	5	MBP+Mal+H2O cooling to 150 K	23-Jun-15 18:22:10	23-Jun-15 18:32:31	600.012	150.954	150.013	3.58661E+06	5977.56	477276	795.444	295	-1443
123488	5	MBP+Mal+H2O cooling to 150 K	23-Jun-15 18:32:33	23-Jun-15 18:38:31	337.673	149.899	150.005	2.01612E+06	5970.64	269818	799.051	295	-1443
123489	5	MBP+Mal+H2O 150 K	23-Jun-15 18:38:40	23-Jun-15 19:09:00	1800.01	149.768	150	1.07425E+07	5968.01	1.43832E+06	799.063	295	-1443
123490	5	MBP+Mal+H2O 150 K	23-Jun-15 19:09:03	23-Jun-15 19:39:23	1800.01	150.03	150.002	1.07335E+07	5963.05	1.43926E+06	799.583	295	-1443
123491	5	MBP+Mal+H2O 150 K	23-Jun-15 19:39:26	23-Jun-15 20:09:46	1800.01	150.097	150.001	1.07357E+07	5964.24	1.43545E+06	797.468	295	-1443
123492	5	MBP+Mal+H2O 150 K	23-Jun-15 20:09:49	23-Jun-15 20:40:09	1800.01	150.091	150	1.07382E+07	5965.61	1.43376E+06	796.527	295	-1443
123493	5	MBP+Mal+H2O 150 K	23-Jun-15 20:40:12	23-Jun-15 21:10:32	1800.01	150.122	149.998	1.07265E+07	5959.11	1.43886E+06	799.362	295	-1443
123494	5	MBP+Mal+H2O 150 K	23-Jun-15 21:10:34	23-Jun-15 21:40:55	1800.01	150.112	150.004	1.07248E+07	5958.16	1.43765E+06	798.687	295	-1443
123495	5	MBP+Mal+H2O 300 K	23-Jun-15 22:10:45	23-Jun-15 22:11:32	14.1444	301.087	296.594	343	24.25	12	0.848395	295	-1443
123496	5	MBP+D2O 300 K	23-Jun-15 22:25:18	23-Jun-15 22:25:51	0.000601C	291.66	302.155	0	102.348	0	0	295	-1443
123497	5	MBP+D2O 300 K	23-Jun-15 22:40:41	23-Jun-15 23:11:01	1800.01	296.058	297	6.61354E+06	3674.16	1.43574E+06	797.626	295	-1443
123498	5	MBP+D2O 300 K	23-Jun-15 23:11:04	23-Jun-15 23:41:24	1800.01	295.995	297	6.61843E+06	3676.88	1.44047E+06	800.258	295	-1443
123499	5	MBP+D2O 300 K	23-Jun-15 23:41:27	24-Jun-15 00:11:47	1800.01	296.01	297	6.61531E+06	3675.15	1.43081E+06	794.889	295	-1443
123500	5	MBP+D2O 300 K	24-Jun-15 00:11:50	24-Jun-15 00:42:11	1800.01	295.971	297	6.62265E+06	3679.23	1.43658E+06	798.092	295	-1443
123501	5	MBP+D2O cooling to 150 K	24-Jun-15 00:42:13	24-Jun-15 00:52:34	600.012	287.071	238.541	2.20583E+06	3676.31	478064	796.757	295	-1443
123502	5	MBP+D2O cooling to 150 K	24-Jun-15 00:52:36	24-Jun-15 01:02:56	600.012	268.047	214.847	2.18618E+06	3643.56	477975	796.609	295	-1443
123503	5	MBP+D2O cooling to 150 K	24-Jun-15 01:02:59	24-Jun-15 01:13:19	600.012	246.497	194.417	2.17148E+06	3619.06	476892	794.804	295	-1443
123504	5	MBP+D2O cooling to 150 K	24-Jun-15 01:13:21	24-Jun-15 01:23:42	600.012	225.42	176.365	2.15817E+06	3596.88	476122	793.52	295	-1443
123505	5	MBP+D2O cooling to 150 K	24-Jun-15 01:23:44	24-Jun-15 01:34:04	600.012	205.191	158.905	2.14726E+06	3578.7	477053	795.072	295	-1443
123506	5	MBP+D2O cooling to 150 K	24-Jun-15 01:34:06	24-Jun-15 01:44:27	600.012	186.222	143.068	2.13366E+06	3556.03	478787	797.962	295	-1443
123507	5	MBP+D2O cooling to 150 K	24-Jun-15 01:44:29	24-Jun-15 01:54:59	600.012	168.38	137.511	2.12183E+06	3536.32	476622	794.353	295	-1443
123508	5	MBP+D2O cooling to 150 K	24-Jun-15 01:55:01	24-Jun-15 02:05:22	600.013	156.38	142.922	2.11466E+06	3524.35	479170	798.6	295	-1443
123509	5	MBP+D2O cooling to 150 K	24-Jun-15 02:05:24	24-Jun-15 02:15:44	600.013	150.902	150.012	2.11173E+06	3519.48	478711	797.835	295	-1443
123510	5	MBP+D2O cooling to 150 K	24-Jun-15 02:15:47	24-Jun-15 02:26:07	600.013	149.571	149.999	2.10901E+06	3514.95	478549	797.565	295	-1443
123511	5	MBP+D2O 150 K	24-Jun-15 02:26:09	24-Jun-15 02:56:30	1800.01	149.735	149.999	6.3291E+06	3516.14	1.43665E+06	798.133	295	-1443
123512	5	MBP+D2O 150 K	24-Jun-15 02:56:32	24-Jun-15 03:26:52	1800.01	149.972	149.999	6.31996E+06	3511.06	1.43384E+06	796.574	295	-1443
123513	5	MBP+D2O 150 K	24-Jun-15 03:26:55	24-Jun-15 03:57:15	1800.01	150.032	150.004	6.30493E+06	3502.73	1.43408E+06	796.706	295	-1443
123514	5	MBP+D2O 150 K	24-Jun-15 03:57:17	24-Jun-15 04:27:38	1800.01	150.047	150	6.30872E+06	3504.83	1.43615E+06	797.858	295	-1443
123515	5	MBP+D2O 150 K	24-Jun-15 04:27:40	24-Jun-15 04:58:00	1800.01	150.058	150	6.30258E+06	3501.42	1.43767E+06	798.705	295	-1443
123516	5	MBP+D2O 150 K	24-Jun-15 04:58:03	24-Jun-15 05:28:23	1800.01	150.058	150	6.30383E+06	3502.12	1.43589E+06	797.712	295	-1443
123517	5	MBP+D2O 150 K	24-Jun-15 05:28:26	24-Jun-15 05:58:46	1800.01	150.063	149.998	6.30806E+06	3504.47	1.43534E+06	797.409	295	-1443
123518	5	MBP+D2O 150 K	24-Jun-15 05:58:48	24-Jun-15 06:29:09	1800.01	150.065	149.998	6.30786E+06	3504.36	1.43544E+06	797.464	295	-1443
123519	5	MBP+D2O 150 K	24-Jun-15 06:29:11	24-Jun-15 06:59:31	1800.01	150.066	150	6.30453E+06	3502.51	1.43148E+06	795.266	295	-1443
123520	5	MBP+D2O 150 K	24-Jun-15 06:59:34	24-Jun-15 07:29:54	1800.01	150.073	150.001	6.30601E+06	3503.33	1.43691E+06	798.28	295	-1443
123521	5	MBP+D2O 150 K	24-Jun-15 07:29:56	24-Jun-15 08:00:17	1800.01	150.072	149.999	6.3062E+06	3503.43	1.43606E+06	797.806	295	-1443
123522	5	MBP+D2O 150 K	24-Jun-15 08:00:19	24-Jun-15 08:30:39	1800.01	150.071	150	6.31223E+06	3506.78	1.43133E+06	795.181	295	-1443
123523	5	Empty 3 - cooling to 150 K	24-Jun-15 09:01:11	24-Jun-15 09:03:06	94.1179	195.065	153.281	2374	25.2237	110	1.16875	295	-1443
123524	5	Empty 3 - cooling to 150 K	24-Jun-15 09:04:08	24-Jun-15 09:14:28	600.013	167.707	136.576	89927	149.875	476022	793.353	295	-1443
123525	5	Empty 3 - cooling to 150 K	24-Jun-15 09:14:30	24-Jun-15 09:24:51	600.013	154.313	145.174	88639	147.729	477311	795.502	295	-1443
123526	5	Empty 3 - cooling to 150 K	24-Jun-15 09:24:53	24-Jun-15 09:35:13	600.013	149.721	150.006	87447	145.742	478827	798.028	295	-1443
123527	5	Empty 3 - cooling to 150 K	24-Jun-15 09:35:15	24-Jun-15 09:36:20	45.0914	149.549	150.005	6432	142.644	36643	812.639	295	-1443
123528	5	Empty 3 - 150 K	24-Jun-15 09:36:24	24-Jun-15 10:07:19	1800.01	149.542	149.998	261622	145.345	1.43366E+06	796.47	295	-1443
123529	5	Empty 3 - 150 K	24-Jun-15 10:07:22	24-Jun-15 10:27:36	1193.92	149.9	150.001	174341	146.024	952552	797.836	295	-1443
123530	5	Empty 2 - cooling to 150 K	24-Jun-15 10:55:04	24-Jun-15 11:05:24	600.012	153.403	146.319	92238	153.727	475924	793.19	295	-1443
123531	5	Empty 2 - cooling to 150 K	24-Jun-15 11:05:26	24-Jun-15 11:15:37	590.849	148.845	150.003	90355	152.924	467376	791.024	295	-1443
123532	5	Empty 2 - 150 K	24-Jun-15 11:15:41	24-Jun-15 11:46:01	1800.01	149.242	150.002	274553	152.528	1.43369E+06	796.491	295	-1443
123533	5	Empty 2 - 150 K	24-Jun-15 11:46:03	24-Jun-15 12:16:23	1800.01	149.912	150	275797	153.22	1.43612E+06	797.839	295	-1443
123534	5	Empty 2 - 150 K	24-Jun-15 12:16:26	24-Jun-15 12:20:20	214.558	149.945	150	33026	153.926	171355	798.642	295	-1443
123535	5	Vanadium 0.5mm	24-Jun-15 12:34:49	24-Jun-15 13:05:09	1800.01	164.226	155.736	1.81368E+06	1007.59	1.43279E+06	795.988	295	-1443
123536	5	Vanadium 0.5mm	24-Jun-15 13:05:11	24-Jun-15 13:14:53	561.5	160.242	154.75	565145	1006.49	448995	799.635	295	-1443

Utilized Data

run_number	wavelength	experiment_identifier	start_time	end_time	duration	temperature	regulation_temperature	detsum	detrate	monsum	monrate	elasticpeak	SRot
123400	5	MBP+H2O 297K	22-Jun-15 12:12:21	22-Jun-15 12:42:41	1800.01	296.421	296.999	1.22701E+07	6816.7	1.43123E+06	795.122	295	-1443
123401	5	MBP+H2O 297K	22-Jun-15 12:42:45	22-Jun-15 13:13:05	1800.01	296.155	296.998	1.22666E+07	6814.74	1.43116E+06	795.083	295	-1443
123411	5	MBP+H2O cooling to 150 K	22-Jun-15 14:46:34	22-Jun-15 14:56:54	600.012	149.847	150.002	3.86419E+06	6440.19	478892	798.137	295	-1443
123412	5	MBP+H2O cooling to 150 K	22-Jun-15 14:56:57	22-Jun-15 15:07:17	600.012	149.443	150	3.85989E+06	6433.01	479527	799.196	295	-1443
123413	5	MBP+H2O cooling to 150 K	22-Jun-15 15:07:19	22-Jun-15 15:17:40	600.012	149.521	149.999	3.86682E+06	6444.57	478856	798.077	295	-1443
123414	5	MBP+H2O cooling to 150 K	22-Jun-15 15:17:42	22-Jun-15 15:28:02	600.012	149.675	150.001	3.87025E+06	6450.29	479494	799.141	295	-1443
123415	5	MBP+H2O cooling to 150 K	22-Jun-15 15:28:05	22-Jun-15 15:38:25	600.012	149.804	149.998	3.86775E+06	6446.12	479003	798.323	295	-1443
123416	5	MBP+H2O cooling to 150 K	22-Jun-15 15:38:27	22-Jun-15 15:41:30	162.026	149.835	149.998	1.04337E+06	6439.54	128667	794.116	295	-1443
123417	5	MBP+H2O 150 K	22-Jun-15 15:41:38	22-Jun-15 16:11:58	1800.01	149.99	149.998	1.16068E+07	6448.17	1.43488E+06	797.152	295	-1443
123418	5	MBP+H2O 150 K	22-Jun-15 16:12:01	22-Jun-15 16:42:21	1800.01	150.033	150.004	1.16177E+07	6454.26	1.43703E+06	798.347	295	-1443
123419	5	MBP+H2O 150 K	22-Jun-15 16:42:24	22-Jun-15 17:12:44	1800.01	150.049	150	1.16122E+07	6451.17	1.43223E+06	795.681	295	-1443
123420	5	MBP+H2O 150 K	22-Jun-15 17:12:47	22-Jun-15 17:43:07	1800.01	150.057	150.001	1.16181E+07	6454.46	1.43552E+06	797.509	295	-1443
123421	5	MBP+H2O 150 K	22-Jun-15 17:43:10	22-Jun-15 18:13:30	1800.01	150.067	150.002	1.16206E+07	6455.86	1.43351E+06	796.389	295	-1443
123422	5	MBP+H2O 150 K	22-Jun-15 18:13:32	22-Jun-15 18:34:53	1259.84	150.072	150.002	8.13397E+06	6456.35	1.00472E+06	797.494	295	-1443
123438	5	MBP+Mal+D2O cooling to 150 K	23-Jun-15 00:32:18	23-Jun-15 00:42:38	600.012	149.581	150.002	1.29001E+06	2149.97	475266	792.094	295	-1443
123439	5	MBP+Mal+D2O 150 K	23-Jun-15 00:42:41	23-Jun-15 01:13:01	1800.01	149.766	150	3.87643E+06	2153.56	1.43498E+06	797.209	295	-1443
123440	5	MBP+Mal+D2O 150 K	23-Jun-15 01:13:03	23-Jun-15 01:43:24	1800.01	149.98	150.004	3.87588E+06	2153.25	1.43522E+06	797.338	295	-1443
123441	5	MBP+Mal+D2O 150 K	23-Jun-15 01:43:26	23-Jun-15 02:13:46	1800.01	150.037	150	3.8775E+06	2154.15	1.43527E+06	797.368	295	-1443
123442	5	MBP+Mal+D2O 150 K	23-Jun-15 02:13:49	23-Jun-15 02:44:09	1800.01	150.054	149.996	3.65688E+06	2031.59	1.35543E+06	753.013	295	-1443
123443	5	MBP+Mal+D2O 150 K	23-Jun-15 02:44:11	23-Jun-15 03:14:32	1800.01	150.058	149.999	3.87655E+06	2153.63	1.43829E+06	799.045	295	-1443
123444	5	MBP+Mal+D2O 150 K	23-Jun-15 03:14:34	23-Jun-15 03:44:54	1800.01	150.066	150	3.87915E+06	2155.07	1.435E+06	797.216	295	-1443
123445	5	MBP+Mal+D2O 150 K	23-Jun-15 03:44:57	23-Jun-15 04:15:17	1800.01	150.068	150	3.87645E+06	2153.57	1.43708E+06	798.375	295	-1443
123446	5	MBP+Mal+D2O 150 K	23-Jun-15 04:15:19	23-Jun-15 04:45:40	1800.01	150.072	149.997	3.87686E+06	2153.8	1.43867E+06	799.259	295	-1443
123447	5	MBP+Mal+D2O 150 K	23-Jun-15 04:45:42	23-Jun-15 05:16:02	1800.01	150.073	150.001	3.87918E+06	2155.09	1.4364E+06	797.993	295	-1443
123448	5	MBP+Mal+D2O 150 K	23-Jun-15 05:16:05	23-Jun-15 05:46:25	1800.01	150.076	150	3.87676E+06	2153.74	1.43424E+06	796.798	295	-1443
123449	5	MBP+Mal+D2O 150 K	23-Jun-15 05:46:27	23-Jun-15 06:16:48	1800.01	150.077	150.001	3.88068E+06	2155.92	1.43946E+06	799.693	295	-1443
123450	5	MBP+Mal+D2O 150 K	23-Jun-15 06:16:50	23-Jun-15 06:47:10	1800.01	150.075	150.001	3.88182E+06	2156.55	1.43339E+06	796.324	295	-1443
123451	5	MBP+Mal+D2O 150 K	23-Jun-15 06:47:13	23-Jun-15 07:17:33	1800.01	150.078	150	3.8825E+06	2156.93	1.4382E+06	798.998	295	-1443
123452	5	MBP+Mal+D2O 150 K	23-Jun-15 07:17:35	23-Jun-15 07:47:56	1800.01	150.078	149.999	3.87913E+06	2155.06	1.44015E+06	800.078	295	-1443
123453	5	MBP+Mal+D2O 150 K	23-Jun-15 07:47:58	23-Jun-15 08:18:18	1800.01	150.081	149.999	3.88066E+06	2155.91	1.43358E+06	796.428	295	-1443
123454	5	MBP+Mal+D2O 150 K	23-Jun-15 08:18:21	23-Jun-15 08:48:41	1800.01	150.078	150	3.88077E+06	2155.97	1.43927E+06	799.589	295	-1443
123455	5	MBP+Mal+D2O 150 K	23-Jun-15 08:48:43	23-Jun-15 09:19:04	1800.01	150.076	150.001	3.8815E+06	2156.37	1.43828E+06	799.041	295	-1443
123456	5	MBP+Mal+D2O 150 K	23-Jun-15 09:19:06	23-Jun-15 09:49:26	1800.01	150.078	150.001	3.8815E+06	2156.38	1.43329E+06	796.269	295	-1443
123459	5	Empty 1 - cooling to 150 K	23-Jun-15 10:35:06	23-Jun-15 10:45:26	600.012	150.196	150.004	94520	157.53	481164	801.924	295	-1443
123460	5	Empty 1 - cooling to 150 K	23-Jun-15 10:45:28	23-Jun-15 10:46:54	65.982	149.924	150.004	10394	157.528	52941	802.355	295	-1443
123461	5	Empty 1 - 150 K	23-Jun-15 10:47:16	23-Jun-15 11:17:36	1800.01	149.62	150	282721	157.066	1.43927E+06	799.587	295	-1443
123462	5	Empty 1 - 150 K	23-Jun-15 11:17:39	23-Jun-15 11:47:59	1800.01	149.993	149.999	280921	156.066	1.237E+06	799.164	295	-1443
123463	5	Empty 1 - 150 K	23-Jun-15 11:48:01	23-Jun-15 12:11:07	1366.02	150.365	150	212832	155.805	1.09201E+06	799.415	295	-1443
123467	5	Empty 4 - cooling to 150 K	23-Jun-15 13:02:03	23-Jun-15 13:03:10	47.1919	149.933	150.005	6379	135.172	37625	797.277	295	-1443
123468	5	Empty 4 - 150 K	23-Jun-15 13:03:27	23-Jun-15 13:33:47	1800.01	149.508	150.003	240371	133.539	1.4343E+06	796.827	295	-1443
123469	5	Empty 4 - 150 K	23-Jun-15 13:33:50	23-Jun-15 14:04:10	1800.01	149.976	149.998	239265	132.924	1.4353E+06	797.384	295	-1443
123470	5	Empty 4 - 150 K	23-Jun-15 14:05:12	23-Jun-15 14:06:00	27.0687	149.989	150.002	3724	137.576	20506	757.554	295	-1443
123471	5	Empty 4 - 300 K	23-Jun-15 14:48:45	23-Jun-15 15:19:05	1800.01	297.505	296.999	320016	177.786	1.44281E+06	801.556	295	-1443
123472	5	Empty 4 - 300 K	23-Jun-15 15:19:07	23-Jun-15 15:35:36	968.446	296.435	297.002	171684	177.278	773367	798.565	295	-1443
123487	5	MBP+Mal+H2O cooling to 150 K	23-Jun-15 18:22:10	23-Jun-15 18:32:31	600.012	150.954	150.013	3.58661E+06	5977.56	477276	795.444	295	-1443
123488	5	MBP+Mal+H2O cooling to 150 K	23-Jun-15 18:32:33	23-Jun-15 18:38:31	337.673	149.899	150.005	2.01612E+06	5970.64	269818	799.051	295	-1443
123489	5	MBP+Mal+H2O 150 K	23-Jun-15 18:38:40	23-Jun-15 19:09:00	1800.01	149.768	150	1.07425E+07	5968.01	1.43832E+06	799.063	295	-1443
123490	5	MBP+Mal+H2O 150 K	23-Jun-15 19:09:03	23-Jun-15 19:39:23	1800.01	150.03	150.002	1.07335E+07	5963.05	1.43926E+06	799.583	295	-1443
123491	5	MBP+Mal+H2O 150 K	23-Jun-15 19:39:26	23-Jun-15 20:09:46	1800.01	150.097	150.001	1.07357E+07	5964.24	1.43545E+06	797.468	295	-1443
123492	5	MBP+Mal+H2O 150 K	23-Jun-15 20:09:49	23-Jun-15 20:40:09	1800.01	150.091	150	1.07382E+07	5965.61	1.43376E+06	796.527	295	-1443
123493	5	MBP+Mal+H2O 150 K	23-Jun-15 20:40:12	23-Jun-15 21:10:32	1800.01	150.122	149.998	1.07265E+07	5959.11	1.43886E+06	799.362	295	-1443
123494	5	MBP+Mal+H2O 150 K	23-Jun-15 21:10:34	23-Jun-15 21:40:55	1800.01	150.112	150.004	1.07248E+07	5958.16	1.43765E+06	798.687	295	-1443
123497	5	MBP+D2O 300 K	23-Jun-15 22:40:41	23-Jun-15 23:11:01	1800.01	296.058	297	6.61354E+06	3674.16	1.43574E+06	797.626	295	-1443
123498	5	MBP+D2O 300 K	23-Jun-15 23:11:04	23-Jun-15 23:41:24	1800.01	295.995	297	6.61843E+06	3676.88	1.44047E+06	800.258	295	-1443
123499	5	MBP+D2O 300 K	23-Jun-15 23:41:27	24-Jun-15 00:11:47	1800.01	296.01	297	6.61531E+06	3675.15	1.43081E+06	794.889	295	-1443
123500	5	MBP+D2O 300 K	24-Jun-15 00:11:50	24-Jun-15 00:42:11	1800.01	295.971	297	6.62265E+06	3679.23	1.43658E+06	798.092	295	-1443
123509	5	MBP+D2O cooling to 150 K	24-Jun-15 02:05:24	24-Jun-15 02:15:44	600.013	150.902	150.012	2.11173E+06	3519.48	478711	797.835	295	-1443
123510	5	MBP+D2O cooling to 150 K	24-Jun-15 02:15:47	24-Jun-15 02:26:07	600.013	149.571	149.999	2.10901E+06	3514.95	478549	797.565	295	-1443
123511	5	MBP+D2O 150 K	24-Jun-15 02:26:09	24-Jun-15 02:56:30	1800.01	149.735	149.999	6.3291E+06	3516.14	1.43665E+06	798.133	295	-1443
123512	5	MBP+D2O 150 K	24-Jun-15 02:56:32	24-Jun-15 03:26:52	1800.01	149.972	149.999	6.31996E+06	3511.06	1.43384E+06	796.574	295	-1443
123513	5	MBP+D2O 150 K	24-Jun-15 03:26:55	24-Jun-15 03:57:15	1800.01	150.032	150.004	6.30493E+06	3502.73	1.43408E+06	796.706	295	-1443
123514	5	MBP+D2O 150 K	24-Jun-15 03:57:17	24-Jun-15 04:27:38	1800.01	150.047	150	6.30872E+06	3504.83	1.43615E+06	797.858	295	-1443
123515	5	MBP+D2O 150 K	24-Jun-15 04:27:40	24-Jun-15 04:58:00	1800.01	150.058	150	6.30258E+06	3501.42	1.43767E+06	798.705	295	-1443
123516	5	MBP+D2O 150 K	24-Jun-15 04:58:03	24-Jun-15 05:28:23	1800.01	150.058	150	6.30383E+06	3502.12	1.43589E+06	797.712	295	-1443
123517	5	MBP+D2O 150 K	24-Jun-15 05:28:26	24-Jun-15 05:58:46	1800.01	150.063	149.998	6.30806E+06	3504.47	1.43534E+06	797.409	295	-1443
123518	5	MBP+D2O 150 K	24-Jun-15 05:58:48	24-Jun-15 06:29:09	1800.01	150.065	149.998	6.30786E+06	3504.36	1.43544E+06	797.464	295	-1443
123519	5	MBP+D2O 150 K	24-Jun-15 06:29:11	24-Jun-15 06:59:31	1800.01	150.066	150	6.30453E+06	3502.51</				

General Information

Transmission						Total rate of monitor		
Sample (calcolated)		Cell (considered negligible)	Vanadium			Average	Dev. Stand.	Percent. err.
MBP + H2O	MBP + D2O					3533	2431	68.8
0.91	0.93	1	0.89			Note: all datas are already normalized to monitor		
Note: the transmission error is considered negligible								
Cell's size					Sample			
Length [cm]	Heigh [cm]	Thickness [cm]	Volume [cm³]		Density [g/cm³]	Mass [g]	Effective Volume [cm³]	Effective Thickness [cm]
3	5	0.02	0.3		1.4	0.05	0.0357	0.0024
Solution	Cross section		Hydratation [%]	N. of Inch. Scatterer Center (N. of H or V atoms)		Molar Mass of the System (Protein + Hydration Water)		Molar Mass of the Dry System [g/mol]
	Scattering [barn]	Absorption [barn]						
MBP + H2O	351774.63	6202.05	0.4	4039.67		56296.64		40212
MBP + D2O	217852.32	4567.22	0.4	2254		56296.64		40212
MBP + Malt + H2O	354958.26	6236.27	0.4	4076.87		56775.86		40554
MBP + Malt + D2O	219895.94	4587.52	0.4	2276		56775.86		40554
Vanadium	5.2054	14.1389	0	1		50.942		50.942
Note: hydratation is equal to the ratio of the weight of solvent over the weight of solute (e.g. h = 0.4 g of water / 1 g of MBP)					Molar Mass of the solvent [g / mol]			
					H2O	18.01534	D2O	19.9994
Boltzmann constant [meV / K]	Temperature [K]	Thermal Energy [meV]		Maltose				
0.0861673324	150	12.92509986		Chemical composition		Molar Mass [g / mol]		
Thermal Energy at room temperature (300 K)				H	22	342.30		
25.85019972				C	12			
				O	11			

MBP + H2O at ≈ 297 K

[File: 123400_123401.hdf]																				
Wavelength [Å]	Start time				End time				Duration [sec]		Temperature	Regulation	DetSum		DetRate	MonSum		MonRate	Elastic peak	SRot
of incident neutron	Day	Time			Day	Time			measured	calculated	[K]	Temp. [K]	Total num. of neutron		Neutron rate	Total neutron num. of MONITOR		Neutron rate of MONITOR	[ToF]	
		h	min	sec		h	min	sec					measured	calculated		measured	calculated			
	5	22/06/2015	12	12	21	22/06/2015	12	42	41	1800.01			1820	296.421	296.999	1.22701E+07	1.22684E+07	6816.7		
5	22/06/2015	12	42	45	22/06/2015	13	13	5	1800.01	1820	296.155	296.998	1.22666E+07	1.22684E+07	6814.74	1.43116E+06	1.43119E+06	795.083	295	-1443
											Average				Average			Average		
											296.29				6815.72			795.10		
											Dev. Stand.				Dev. Stand.			Dev. Stand.		
											0.19				1.4			0.03		
											Percent. err.				Percent. err.			Percent. err.		
											0.06				0.02			0.003		

MBP + H2O at ≈ 150 K

[File: 123412_123422.hdf]																					
Wavelength [Å]	Start time				End time				Duration [sec]		Temperature [K]	Regulation Temp. [K]	DetSum		DetRate	MonSum		MonRate	Elastic peak [ToF]	SRot	
of incident neutron	Day	Time			Day	Time			measured	calculated			Total num. of neutron		Neutron rate	Total neutron num. of MONITOR		Neutron rate of MONITOR			
		h	min	sec		h	min	sec					measured	calculated		measured	calculated				
COOLING to 150K																					
5	22/06/2015	14	56	57	22/06/2015	15	7	17	600.012	620	149.443	150	3859890	3865701	6433.01	479527	478672	799.196	295	-1443	
5	22/06/2015	15	7	19	22/06/2015	15	17	40	600.012	621	149.521	149.999	3866820	3865701	6444.57	478856	478672	798.077	295	-1443	
5	22/06/2015	15	17	42	22/06/2015	15	28	2	600.012	620	149.675	150.001	3870250	3865701	6450.29	479494	478672	799.141	295	-1443	
5	22/06/2015	15	28	5	22/06/2015	15	38	25	600.012	620	149.804	149.998	3867750	3865701	6446.12	479003	478672	798.323	295	-1443	
5	22/06/2015	15	38	27	22/06/2015	15	41	30	162.026	183	149.835	149.998	1043370	1043886	6439.54	128667	129260	794.116	295	-1443	
											Average				Average			Average			
											149.66				6443			798			
											Dev. Stand.				Dev. Stand.			Dev. Stand.			
											0.17				7			2			
											Percent. err.				Percent. err.						
											0.11				0.10						
COOLED at = 150 K																					
5	22/06/2015	15	41	38	22/06/2015	16	11	58	1800.01	1820	149.99	149.998	11606800	11616146	6448.17	1434880	1434780	797.152	295	-1443	
5	22/06/2015	16	12	1	22/06/2015	16	42	21	1800.01	1820	150.033	150.004	11617700	11616146	6454.26	1437030	1434780	798.347	295	-1443	
5	22/06/2015	16	42	24	22/06/2015	17	12	44	1800.01	1820	150.049	150	11612200	11616146	6451.17	1432230	1434780	795.681	295	-1443	
5	22/06/2015	17	12	47	22/06/2015	17	43	7	1800.01	1820	150.057	150.001	11618100	11616146	6454.46	1435520	1434780	797.509	295	-1443	
5	22/06/2015	17	43	10	22/06/2015	18	13	30	1800.01	1820	150.067	150.002	11620600	11616146	6455.86	1433510	1434780	796.389	295	-1443	
5	22/06/2015	18	13	32	22/06/2015	18	34	53	1259.84	1281	150.072	150.002	8133970	8130224	6456.35	1004720	1004213	797.494	295	-1443	
											Average				Average			Average			
											150.04				6453.38			797.10			
											Dev. Stand.				Dev. Stand.			Dev. Stand.			
											0.03				3			0.9			
											Percent. err.				Percent. err.			Percent. err.			
											0.02				0.05			0.12			

MBP + D2O at ≈ 297 K

[File: 123497_123500.hdf]																					
Wavelength [Å]	Start time				End time				Duration [sec]		Temperature [K]	Regulation Temp. [K]	DetSum		DetRate	MonSum		MonRate	Elastic peak [ToF]	SRot	
of incident neutron	Day	Time			Day	Time			measured	calculated			Total num. of neutron		Neutron rate	Total neutron num. of MONITOR		Neutron rate of MONITOR			
		h	min	sec		h	min	sec					measured	calculated		measured	calculated				
5	23/06/2015	22	40	41	23/06/2015	23	11	1	1800.01	1820	296.058	297	6613540	6617476	3674.16	1435740	1435897	797.626	295	-1443	
5	23/06/2015	23	11	4	23/06/2015	23	41	24	1800.01	1820	295.995	297	6618430	6617476	3676.88	1440470	1435897	800.258	295	-1443	
5	23/06/2015	23	41	27	24/06/2015	24	11	47	1800.01	1820	296.01	297	6615310	6617476	3675.15	1430810	1435897	794.889	295	-1443	
5	24/06/2015	0	11	50	24/06/2015		42	11	1800.01	1821	295.971	297	6622650	6617476	3679.23	1436580	1435897	798.092	295	-1443	
											Average				Average			Average			
											296.01				3676			798			
											Dev. Stand.				Dev. Stand.			Dev. Stand.			
											0.04				2			2			
											Percent. err.				Percent. err.			Percent. err.			
											0.01				0.06			0.277			

MBP + D2O at ≈ 150 K

[File: 123510_123522.hdf]																					
Wavelength [Å]	Start time				End time				Duration [sec]		Temperature [K]	Regulation Temp. [K]	DetSum		DetRate	MonSum		MonRate	Elastic peak [ToF]	SRot	
of incident neutron	Day	Time			Day	Time			measured	calculated			Total num. of neutron		Neutron rate	Total neutron num. of MONITOR		Neutron rate of MONITOR			
		h	min	sec		h	min	sec					measured	calculated		measured	calculated				
COOLING to 150K																					
5	24/06/2015	2	15	47	24/06/2015	2	26	7	600.013	620	149.571	149.999	2.10901E+06		3514.95	478549		797.565	295	-1443	
COOLED at ≈ 150 K																					
5	24/06/2015	2	26	9	24/06/2015	2	56	30	1800.01	1821	149.735	149.999	6.3291E+06	6309512	3516.14	1.43665E+06	1435072	798.133	295	-1443	
5	24/06/2015	2	56	32	24/06/2015	3	26	52	1800.01	1820	149.972	149.999	6.31996E+06	6309512	3511.06	1.43384E+06	1435072	796.574	295	-1443	
5	24/06/2015	3	26	55	24/06/2015	3	57	15	1800.01	1820	150.032	150.004	6.30493E+06	6309512	3502.73	1.43408E+06	1435072	796.706	295	-1443	
5	24/06/2015	3	57	17	24/06/2015	4	27	38	1800.01	1821	150.047	150	6.30872E+06	6309512	3504.83	1.43615E+06	1435072	797.858	295	-1443	
5	24/06/2015	4	27	40	24/06/2015	4	58	0	1800.01	1820	150.058	150	6.30258E+06	6309512	3501.42	1.43767E+06	1435072	798.705	295	-1443	
5	24/06/2015	4	58	3	24/06/2015	5	28	23	1800.01	1820	150.058	150	6.30383E+06	6309512	3502.12	1.43589E+06	1435072	797.712	295	-1443	
5	24/06/2015	5	28	26	24/06/2015	5	58	46	1800.01	1820	150.063	149.998	6.30806E+06	6309512	3504.47	1.43534E+06	1435072	797.409	295	-1443	
5	24/06/2015	5	58	48	24/06/2015	6	29	9	1800.01	1821	150.065	149.998	6.30786E+06	6309512	3504.36	1.43544E+06	1435072	797.464	295	-1443	
5	24/06/2015	6	29	11	24/06/2015	6	59	31	1800.01	1820	150.066	150	6.30453E+06	6309512	3502.51	1.43148E+06	1435072	795.266	295	-1443	
5	24/06/2015	6	59	34	24/06/2015	7	29	54	1800.01	1820	150.073	150.001	6.30601E+06	6309512	3503.33	1.43691E+06	1435072	798.28	295	-1443	
5	24/06/2015	7	29	56	24/06/2015	8	0	17	1800.01	1821	150.072	149.999	6.3062E+06	6309512	3503.43	1.43606E+06	1435072	797.806	295	-1443	
5	24/06/2015	8	0	19	24/06/2015	8	30	39	1800.01	1820	150.071	150	6.31223E+06	6309512	3506.78	1.43133E+06	1435072	795.181	295	-1443	
											Average				Average			Average			
											150.03				3505			797.3			
											Dev. Stand.				Dev. Stand.			Dev. Stand.			
											0.10				4			1.1			
											Percent. err.				Percent. err.			Percent. err.			
											0.06				0.12			0.14			

MBP + Malt + D2O at ≈ 150 K

[File: 123438_123456.hdf]																						
Wavelength [Å]	Start time				End time				Duration [sec]		Temperature [K]	Regulation Temp. [K]	DetSum		DetRate	MonSum		MonRate	Elastic peak [ToF]	SRot		
of incident neutron	Day	Time			Day	Time			measured	calculated			Total num. of neutron			Neutron rate	Total neutron num. of MONITOR				Neutron rate of MONITOR	
		h	min	sec		h	min	sec					measured	calculated	measured		calculated					
COOLING to 150K																						
5	23/06/2015	0	32	18	23/06/2015	0	42	38	600.012	620	149.581	150.002	1.29001E+06		2149.97	475266		792.094	295	-1443		
COOLED at ≈ 150 K																						
5	23/06/2015	0	42	41	23/06/2015	1	13	1	1800.01	1820	149.766	150	3.87643E+06	3866675	2153.56	1.43498E+06	1432011	797.209	295	-1443		
5	23/06/2015	1	13	3	23/06/2015	1	43	24	1800.01	1821	149.98	150.004	3.87588E+06	3866675	2153.25	1.43522E+06	1432011	797.338	295	-1443		
5	23/06/2015	1	43	26	23/06/2015	2	13	46	1800.01	1820	150.037	150	3.8775E+06	3866675	2154.15	1.43527E+06	1432011	797.368	295	-1443		
5	23/06/2015	2	13	49	23/06/2015	2	44	9	1800.01	1820	150.054	149.996	3.65688E+06	3866675	2031.59	1.35543E+06	1432011	753.013	295	-1443		
5	23/06/2015	2	44	11	23/06/2015	3	14	32	1800.01	1821	150.058	149.999	3.87655E+06	3866675	2153.63	1.43829E+06	1432011	799.045	295	-1443		
5	23/06/2015	3	14	34	23/06/2015	3	44	54	1800.01	1820	150.066	150	3.87915E+06	3866675	2155.07	1.435E+06	1432011	797.216	295	-1443		
5	23/06/2015	3	44	57	23/06/2015	4	15	17	1800.01	1820	150.068	150	3.87645E+06	3866675	2153.57	1.43708E+06	1432011	798.375	295	-1443		
5	23/06/2015	4	15	19	23/06/2015	4	45	40	1800.01	1821	150.072	149.997	3.87686E+06	3866675	2153.8	1.43867E+06	1432011	799.259	295	-1443		
5	23/06/2015	4	45	42	23/06/2015	5	16	2	1800.01	1820	150.073	150.001	3.87918E+06	3866675	2155.09	1.4364E+06	1432011	797.993	295	-1443		
5	23/06/2015	5	16	5	23/06/2015	5	46	25	1800.01	1820	150.076	150	3.87676E+06	3866675	2153.74	1.43424E+06	1432011	796.798	295	-1443		
5	23/06/2015	5	46	27	23/06/2015	6	16	48	1800.01	1821	150.077	150.001	3.88068E+06	3866675	2155.92	1.43946E+06	1432011	799.693	295	-1443		
5	23/06/2015	6	16	50	23/06/2015	6	47	10	1800.01	1820	150.075	150.001	3.88182E+06	3866675	2156.55	1.43339E+06	1432011	796.324	295	-1443		
5	23/06/2015	6	47	13	23/06/2015	7	17	33	1800.01	1820	150.078	150	3.8825E+06	3866675	2156.93	1.4382E+06	1432011	798.998	295	-1443		
5	23/06/2015	7	17	35	23/06/2015	7	47	56	1800.01	1821	150.078	149.999	3.87913E+06	3866675	2155.06	1.44015E+06	1432011	800.078	295	-1443		
5	23/06/2015	7	47	58	23/06/2015	8	18	18	1800.01	1820	150.081	149.999	3.88066E+06	3866675	2155.91	1.43358E+06	1432011	796.428	295	-1443		
5	23/06/2015	8	18	21	23/06/2015	8	48	41	1800.01	1820	150.078	150	3.88077E+06	3866675	2155.97	1.43927E+06	1432011	799.589	295	-1443		
5	23/06/2015	8	48	43	23/06/2015	9	19	4	1800.01	1821	150.076	150.001	3.8815E+06	3866675	2156.37	1.43828E+06	1432011	799.041	295	-1443		
5	23/06/2015	9	19	6	23/06/2015	9	49	26	1800.01	1820	150.078	150.001	3.8815E+06	3866675	2156.38	1.43329E+06	1432011	796.269	295	-1443		
											Average				Average			Average				
											150.05				2148			795.6				
											Dev. Stand.				Dev. Stand.			Dev. Stand.				
											0.07				29			10.7				
											Percent. err.				Percent. err.			Percent. err.				
											0.05				1.36			1.34				

MBP + Malt + H2O at ≈ 150 K

[File: 123488_123494.hdf]

Wavelength [Å]	Start time				End time				Duration [sec]		Temperature [K]	Regulation Temp. [K]	DetSum		DetRate	MonSum		MonRate	Elastic peak [ToF]	SRot	
of incident neutron	Day	Time			Day	Time			measured	calculated			Total num. of neutron		Neutron rate	Total neutron num. of MONITOR		Neutron rate of MONITOR			
		h	min	sec		h	min	sec					measured	calculated		measured	calculated				
COOLING to 150K																					
5	23/06/2015	18	32	23	23/06/2015	18	38	31	337.673	368	149.899	150.005	2.01612E+06		5970.64	269818		799.051	295	-1443	
COOLED at ≈ 150 K																					
5	23/06/2015	18	38	40	23/06/2015	19	9	0	1800.01	1820	149.768	150	1.07425E+07	10733514	5968.01	1.43832E+06	1437215	799.063	295	-1443	
5	23/06/2015	19	9	3	23/06/2015	19	39	23	1800.01	1820	150.03	150.002	1.07335E+07	10733514	5963.05	1.43926E+06	1437215	799.583	295	-1443	
5	23/06/2015	19	39	26	23/06/2015	20	9	46	1800.01	1820	150.097	150.001	1.07357E+07	10733514	5964.24	1.43545E+06	1437215	797.468	295	-1443	
5	23/06/2015	20	9	49	23/06/2015	20	40	9	1800.01	1820	150.091	150	1.07382E+07	10733514	5965.61	1.43376E+06	1437215	796.527	295	-1443	
5	23/06/2015	20	40	12	23/06/2015	21	10	32	1800.01	1820	150.122	149.998	1.07265E+07	10733514	5959.11	1.43886E+06	1437215	799.362	295	-1443	
5	23/06/2015	21	10	34	23/06/2015	21	40	55	1800.01	1821	150.112	150.004	1.07248E+07	10733514	5958.16	1.43765E+06	1437215	798.687	295	-1443	
											Average				Average			Average			
											150.04				5963			798.4			
											Dev. Stand.				Dev. Stand.			Dev. Stand.			
											0.14				4			1.2			
											Percent. err.				Percent. err.			Percent. err.			
											0.09				0.06			0.15			

Cell 4 at ≈ 297 K

[File: 123471_123472.hdf]																				
Wavelength [Å]	Start time				End time				Duration [sec]		Temperature	Regulation	DetSum		DetRate	MonSum		MonRate	Elastic	SRot
of incident neutron	Day	Time			Day	Time			measured	calculated	[K]	Temp. [K]	Total num. of neutron		Neutron rate	Total neutron num. of MONITOR		Neutron rate of MONITOR	peak [ToF]	
		h	min	sec		h	min	sec					measured	calculated		measured	calculated			
5	23/06/2015	14	48	45	23/06/2015	15	19	5	1800.01	1820	297.505	296.999	320016	319559	177.786	1442810	1440117	801.556	295	-1443
5	23/06/2015	15	19	7	23/06/2015	15	35	36	968.446	989	296.435	297.002	171684	171930	177.278	773367	774815	798.565	295	-1443
											Average				Average			Average		
											296.97				177.53			800.06		
											Dev. Stand.				Dev. Stand.			Dev. Stand.		
											0.76				0.4			2.11		
											Percent. err.				Percent. err.			Percent. err.		
											0.25				0.20			0.264		

Cell 1 at ≈ 150 K

[File: 123460_123463.hdf]																				
Wavelength [Å]	Start time				End time				Duration [sec]		Temperature [K]	Regulation Temp. [K]	DetSum		DetRate	MonSum		MonRate	Elastic peak [ToF]	SRot
of incident neutron	Day	Time			Day	Time			measured	calculated			Total num. of neutron		Neutron rate	Total neutron num. of MONITOR		Neutron rate of MONITOR		
		h	min	sec		h	min	sec					measured	calculated		measured	calculated			
COOLING to 150K																				
5	23/06/2015	10	45	28	23/06/2015	10	46	54	65.982	86	149.924	150.004	10394		157.528	52941		802.355	295	-1443
COOLED at ≈ 150 K																				
5	23/06/2015	10	47	16	23/06/2015	11	17	36	1800.01	1820	149.62	150	282721	281364	157.066	1.43927E+06	1438908	799.587	295	-1443
5	23/06/2015	11	17	39	23/06/2015	11	47	59	1800.01	1820	149.993	149.999	280921	281364	156.066	1.237E+06	1438908	799.164	295	-1443
5	23/06/2015	11	48	1	23/06/2015	12	11	7	1366.02	1386	150.365	150	212832	213526	155.805	1.09201E+06	1091981	799.415	295	-1443
											Average				Average			Average		
											150.0				156.3			799.4		
											Dev. Stand.				Dev. Stand.			Dev. Stand.		
											0.4				0.7			0.2		
											Percent. err.				Percent. err.			Percent. err.		
											0.2				0.4			0.03		

Cell 4 at ≈ 150 K

[File: 123467_123470.hdf]																						
Wavelength [Å]	Start time					End time				Duration [sec]		Temperature [K]	Regulation Temp. [K]	DetSum		DetRate	MonSum		MonRate	Elastic peak [ToF]	SROt	
of incident neutron	Day		Time			Day		Time			measured			calculated	Total num. of neutron		Neutron rate	Total neutron num. of MONITOR				Neutron rate of MONITOR
			h	min	sec			h	min	sec					measured	calculated		measured	calculated			
COOLING to 150K																						
5	23/06/2015	13	2	3	23/06/2015	13	3	10	47.1919	67	149.933	150.005	6379		135.172	37625		797.277	295	-1443		
COOLED at ≈ 150 K																						
5	23/06/2015	13	3	27	23/06/2015	13	33	47	1800.01	1820	149.508	150.003	240371	242425	133.539	1.4343E+06	1411067	796.827	295	-1443		
5	23/06/2015	13	33	50	23/06/2015	14	4	10	1800.01	1820	149.976	149.998	239265	242425	132.924	1.4353E+06	1411067	797.384	295	-1443		
5	23/06/2015	14	5	12	23/06/2015	14	6	0	27.0687	48	149.989	150.002	3724	3646	137.576	20506	21220	757.554	295	-1443		
											Average				Average			Average				
											149.8				135			784				
											Dev. Stand.				Dev. Stand.			Dev. Stand.				
											0.3				3			23				
											Percent. err.				Percent. err.			Percent. err.				
											0.2				1.9			3				

Vanadium 0.5 mm

[File: 123535_123536.hdf]																					
Wavelength [Å]	Start time				End time				Duration [sec]		Temperature [K]	Regulation Temp. [K]	DetSum		DetRate	MonSum		MonRate	Elastic peak [ToF]	SRot	
of incident neutron	Day	Time			Day	Time			measured	calculated			Total num. of neutron		Neutron rate	Total neutron num. of MONITOR		Neutron rate of MONITOR			
		h	min	sec		h	min	sec					measured	calculated		measured	calculated				
5	24/06/2015	12	34	49	24/06/2015	13	5	9	1800.01	1820	164.226	155.736	1.81368E+06	1.81268E+06	1007.59	1.43279E+06	1.43607E+06	795.988	295	-1443	
5	24/06/2015	13	5	11	24/06/2015	13	14	53	561.5	582	160.242	154.75	565145	5.65453E+05	1006.49	448995	4.47971E+05	799.635	295	-1443	
											Average				Average			Average			
											162				1007.0			798			
											Dev. Stand.				Dev. Stand.			Dev. Stand.			
											3				0.8			3			
											Percent. err.				Percent. err.			Percent. err.			
											2				0.08			0.3			