file name(s)	Obj.	Array Pattern	DB Filepath	Fig. No	Figure Description	p (mbar)	u (um/s)	Deborah number	Comment
								1.43	relax time [s]
								11.2	length scale quadratic
					2D FFT refers to two-dimensional spatial Fourier transforms			**10.9**	length scale hexagonal
					1 D FFT refers to temporal Fourier transforms			**11.5**	length scale disordered
					Note that movie S1 is composed of raw data from three different files			**100**	length scale sparse
2x_25mbar_027.nd2	2x	Quadratic	Figs 1 2 3 4 5	S6, 1, 2, 3, 4, 5	Fig 1 Macro still imgs, Fig 2 Kymographs, Fig 3 2D FFT, Figs 4 5 1D FFT graphs, Fig S6	25	46	5.9	
2x_200mbar_028.nd2	2x	Quadratic	Figs 1 2 3 4 5	S6, 1, 2, 3, 4, 5	Fig 1 Macro still imgs, Fig 2 Kymographs, Fig 3 2D FFT, Figs 4 5 1D FFT graphs, Fig S6	200	560	72	
2x_500mbar_026.nd2	2x	Quadratic	Figs 1 2 3 4 5	S6, 1, 2, 3, 4, 5	Fig 1 Macro still imgs, Fig 2 Kymographs, Fig 3 2D FFT, Figs 4 5 1D FFT graphs, Fig S6	500	1700	217	
2x_1000mbar_030.nd2	2x	Quadratic	Figs 1 2 3 4 5	S5, S6, 1, 2, 3, 4, 5, MOV1	Fig 1 Macro still imgs, Fig 2 Kymographs, Fig 3 2D FFT, Figs 4 5 1D FFT graphs, Fig S5, S6, MOV1	1000	3700	472	MOVIE S1
2x_59mbar_023.nd2	2x	Hexagonal	Figs 1 2 3 4 5	S6, 1, 2, 3, 4, 5	Fig 1 Macro still imgs, Fig 2 Kymographs, Fig 3 2D FFT, Figs 4 5 1D FFT graphs, Fig S6	59	160	21	
2x_235mbar_027.nd2	2x	Hexagonal	Figs 1 2 3 4 5	S6, 1, 2, 3, 4, 5	Fig 1 Macro still imgs, Fig 2 Kymographs, Fig 3 2D FFT, Figs 4 5 1D FFT graphs, Fig S6	235	720	94	
2x_471mbar_028.nd2	2x	Hexagonal	Figs 1 2 3 4 5	S6, 1, 2, 3, 4, 5	Fig 1 Macro still imgs, Fig 2 Kymographs, Fig 3 2D FFT, Figs 4 5 1D FFT graphs, Fig S6	471	1400	184	
2x_2000mbar_031.nd2	2x	Hexagonal	Figs 1 2 3 4 5	S6, 1, 2, 3, 4, 5, MOV1	Fig 1 Macro still imgs, Fig 2 Kymographs, Fig 3 2D FFT, Figs 4 5 1D FFT graphs, Fig S6, MOV1	2000	5200	682	MOVIE S1
2x_25mbar_098.nd2	2x	Disordered	Figs 1 2 3 4 5	S6, 1, 2, 3, 4, 5	Fig 1 Macro still imgs, Fig 2 Kymographs, Fig 3 2D FFT, Figs 4 5 1D FFT graphs, Fig S6	25	120	15	
2x_50mbar_097.nd2	2x	Disordered	Figs 1 2 3 4 5	S6, 1, 2, 3, 4, 5	Fig 1 Macro still imgs, Fig 2 Kymographs, Fig 3 2D FFT, Figs 4 5 1D FFT graphs, Fig S6	50	370	46	
2x_100mbar_099.nd2	2x	Disordered	Figs 1 2 3 4 5	S6, 1, 2, 3, 4, 5	Fig 1 Macro still imgs, Fig 2 Kymographs, Fig 3 2D FFT, Figs 4 5 1D FFT graphs, Fig S6	100	920	114	
2x_200mbar_100.nd2	2x	Disordered	Figs 1 2 3 4 5	S6, 1, 2, 3, 4, 5	Fig 1 Macro still imgs, Fig 2 Kymographs, Fig 3 2D FFT, Figs 4 5 1D FFT graphs, Fig S6	200	2000	249	
2x_500mbar_101.nd2	2x	Disordered	MOV S1	MOVIE S1	Raw data for ESI Movie S1	500	6700	833	MOVIE S1
4x_50mbar_011.nd2	4x	Quadratic	Figs 6 S3	6, S3	Fig 6 Long time avg, Fig S3 Mean vs Std	50	110	14	
4x_200mbar_021.nd2	4x	Quadratic	Figs 6 S3	6, S3	Fig 6 Long time avg, Fig S3 Mean vs Std	200	560	72	
4x_500mbar_024.nd2	4x	Quadratic	Figs 6 S3	6, S3	Fig 6 Long time avg, Fig S3 Mean vs Std	500	1700	217	
4x_1000mbar_003.nd2	4x	Quadratic	Figs 6 S3	6, S3	Fig 6 Long time avg, Fig S3 Mean vs Std	1000	3700	472	
4x_59mbar_006.nd2	4x	Hexagonal	Figs 6 S3	6, S3	Fig 6 Long time avg, Fig S3 Mean vs Std	59	160	21	
4x_118mbar_003.nd2	4x	Hexagonal	Fig S3	S3	Fig S3 Mean vs Std figure	118	420	55	
4x_235mbar_001.nd2	4x	Hexagonal	Fig 6	6	Fig 6 Long time avg	235	720	94	
4x_471mbar_004.nd2	4x	Hexagonal	Figs 6 S3	6, S3	Fig 6 Long time avg, Fig S3 Mean vs Std	471	1400	184	
4x_1176mbar_010.nd2	4x	Hexagonal	Fig 6	6	Fig 6 Long time avg	1176	2600	341	
4x_2000mbar_012.nd2	4x	Hexagonal	Fig S3	S3	Fig S3 Mean vs Std figure	2000	5200	682	
4x_25mbar_094.nd2	4x	Disordered	Figs 6 S3	6, S3	Fig 6 Long time avg, Fig S3 Mean vs Std	25	120	15	
4x_50mbar_092.nd2	4x	Disordered	Figs 6 S3	6, S3	Fig 6 Long time avg, Fig S3 Mean vs Std	50	370	46	
4x_100mbar_081.nd2	4x	Disordered	Figs 6 S3	6, S3	Fig 6 Long time avg, Fig S3 Mean vs Std	100	920	114	
4x_200mbar_079.nd2	4x	Disordered	Figs 6 S3	6, S3	Fig 6 Long time avg, Fig S3 Mean vs Std	200	2000	249	
10x_1000mbar_mid_sola20_010.nd2	10x	Sparse	MOV S4	MOVIE S4	Raw data for ESI Movie S4	1000	11000	157.3	MOVIE S4
20x_10-100-200-500-1000-3000mbar_pos5_sola100_008.nd2	20x	Disordered	Fig 7 MOV S3	7	Fig 7 Random flow var. figure, ESI movie S3	overall 10 -3000	260, 36468	32, 4535	MOVIE S3
100x_0-10-20-1500mbar_pos3_sola20_009.nd2	100x	Quadratic	Fig 8	Fig 8(E-H)	Fig 8 Polarization figure	100, 1000	130, 5800	17, 740	
100x_0to2250mbar_mid_sola20_022.nd2	100x	Hexagonal	Fig 8	Fig 8(I-L)	Fig 8 Polarization figure	118, 2250	6500	853	
100x_20-7-21-425-830mbar_sola5_010.nd2	100x	Sparse	Fig 8	Figf 8(A-D)	Fig 8 Polarization figure	21, 830	6100	87	
100x_500mbar_sola10_007.nd2	100x	Sparse	MOV S2	MOVIE S2	Raw data for ESI Movie S2 (polarization)	500	6100	87	MOVIE S2
10x_3,8mbar_400ngul_lambda_y1-1-200_sola100_002.nd2	10x	Sparse	Fig 9	Fig 9(A, B)	Fig 9 Sparse Kymographs figures	3.8	190	2.7	
10x_31mbar_ET19ms_2min_sola50_012.nd2	10x	Sparse	Fig 9	Fig 9(A, B)	Fig 9 Sparse Kymographs figures	31	310	4.4	
10x_77mbar_ET19ms_2min_sola50_013.nd2	10x	Sparse	Fig 9	Fig 9(A, B)	Fig 9 Sparse Kymographs figures	77	550	7.9	
10x_154mbar_ET19ms_2min_sola50_016.nd2	10x	Sparse	Fig 9	Fig 9(A, B)	Fig 9 Sparse Kymographs figures	154	1000	14	
10x_308mbar_ET11ms_sola100_021.nd2	10x	Sparse	Fig 9	Fig 9(A, B, C, D)	Fig 9 Sparse Kymographs figures	308	1800	26	
10x_1000mbar_ET11ms_10s_sola100_022.nd2	10x	Sparse	Fig 9	Fig 9(A, B)	Fig 9 Sparse Kymographs figures	1000	11000	157	