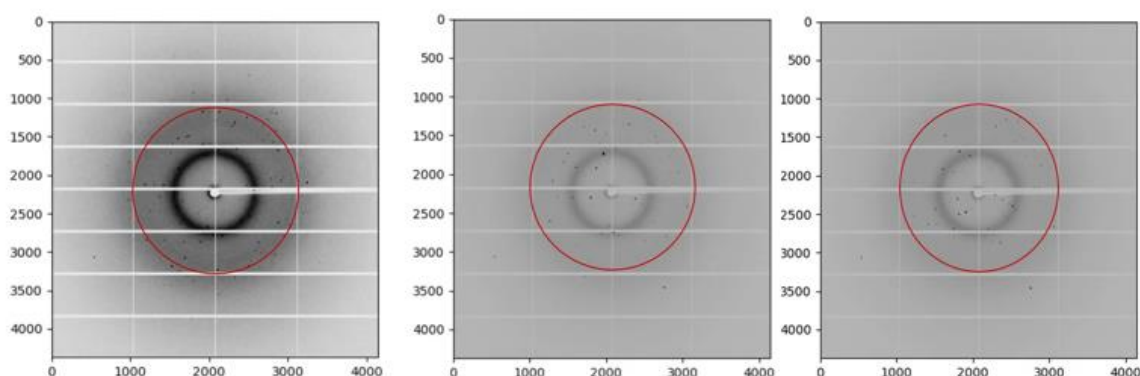
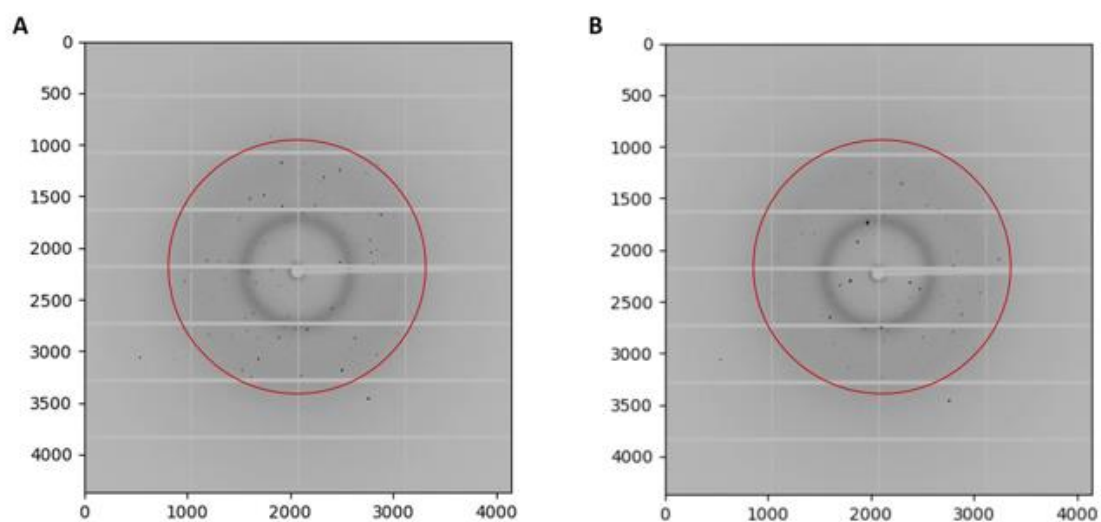


**Table S1.** Tracking the number of a Bragg peaks in the higher resolution shells for 3 different crystals. The average intensity of the peaks with in the highest resolution shell are compared between different frames within the time series of each crystal.

	Frame No.	Resolution range, Å	No. peaks	Average Intensity
<b>Crystal 1</b>	1	2.1 - 1.8	12	1210.47
	6	2.1 - 1.8	11	603.68
	10	2.1 - 1.8	7	548.02
	15	2.1 - 1.8	7	480.26
	18	2.1 - 1.8	7	450.7
<b>Crystal 2</b>	1	2.1 - 1.8	9	2020.12
	6	2.1 - 1.8	9	1837.31
	10	2.1 - 1.8	7	1490.68
	15	2.1 - 1.8	7	886.17
	20	2.1 - 1.8	6	867.03
	30	2.1 - 1.8	5	725.46
	42	2.1 - 1.8	4	671.75
<b>Crystal 3</b>	1	2.1 - 1.8	6	918.23
	6	2.1 - 1.8	5	855.098
	10	2.1 - 1.8	5	560.06
	15	2.1 - 1.8	5	555.04
	19	2.1 - 1.8	3	307.54



**Figure S1.** Diffraction images collected from Crystal 2 over a duration of 42 consecutive images. Three images are isolated from this series: A. Image 1, first image, B. Image 20, middle image and C. Image 42, last image in the series. The red ring indicates the diffraction limit of the data.



**Figure S2.** Diffraction images collected from Crystal 3 over a duration of 18 consecutive images. Two images were isolated from this series: A. Image 1, first image and B. Image 18, last image in the series. The red ring indicates the outer resolution limit of diffraction pattern.