

# On average structures of the disordered $\beta$ -phase of Pigment Red 170: A single crystal X-ray diffraction study

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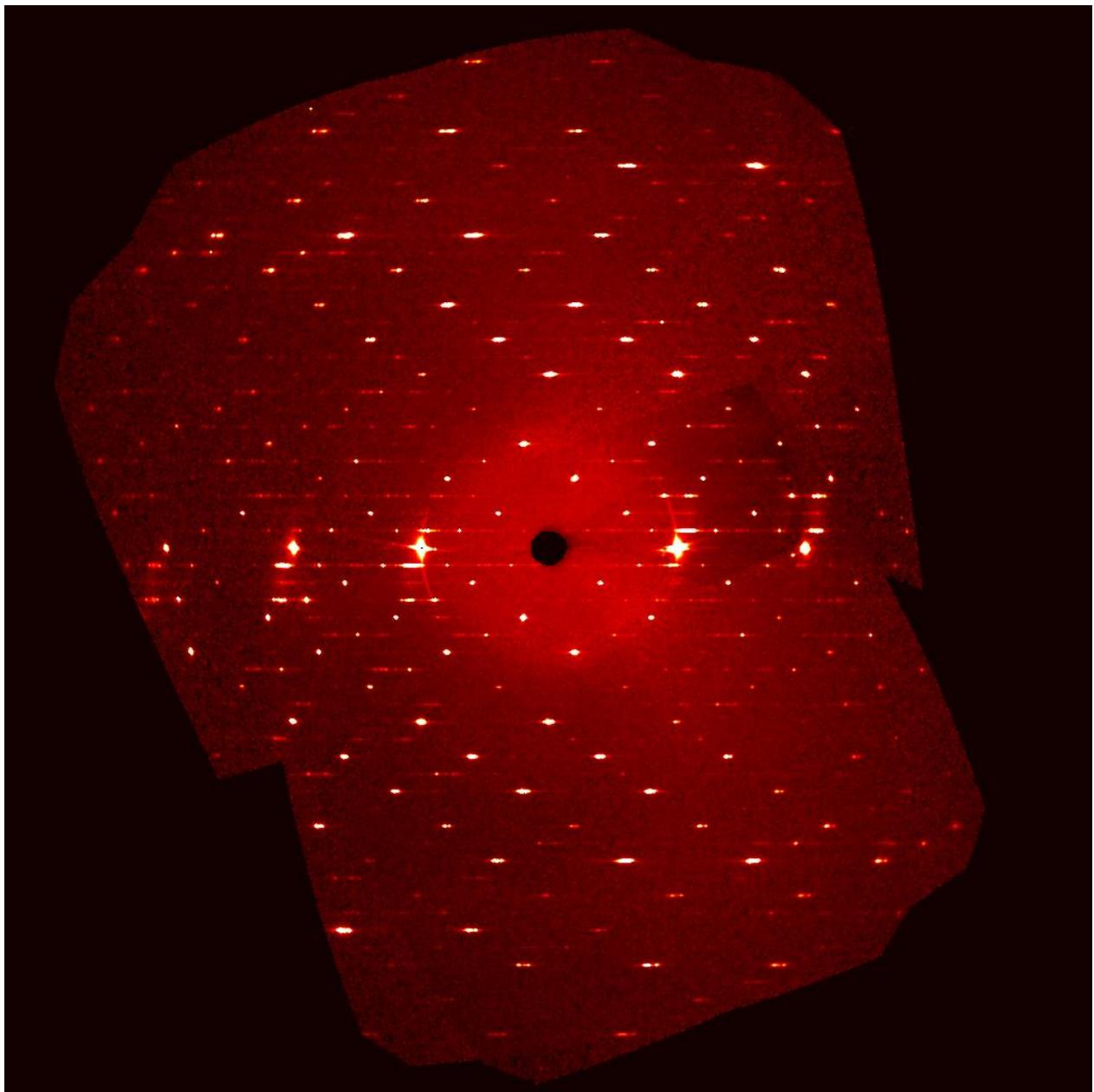
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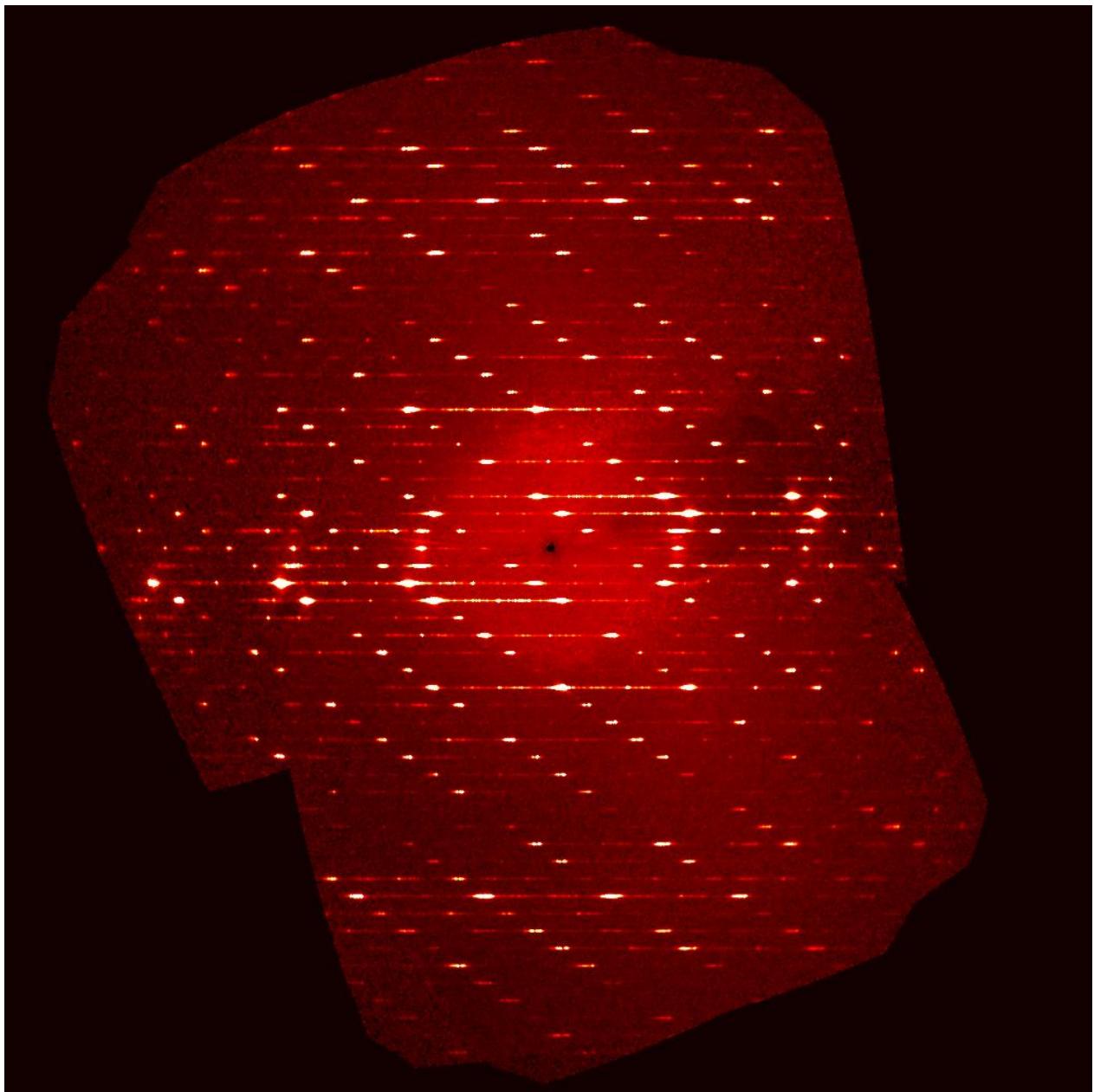
## SUPPLEMENTARY MATERIALS

Fig. S1. Reciprocal lattice layer reconstructions ( $h0l$  to  $h20l$ ) for  $\beta$ -Pigment Red 170

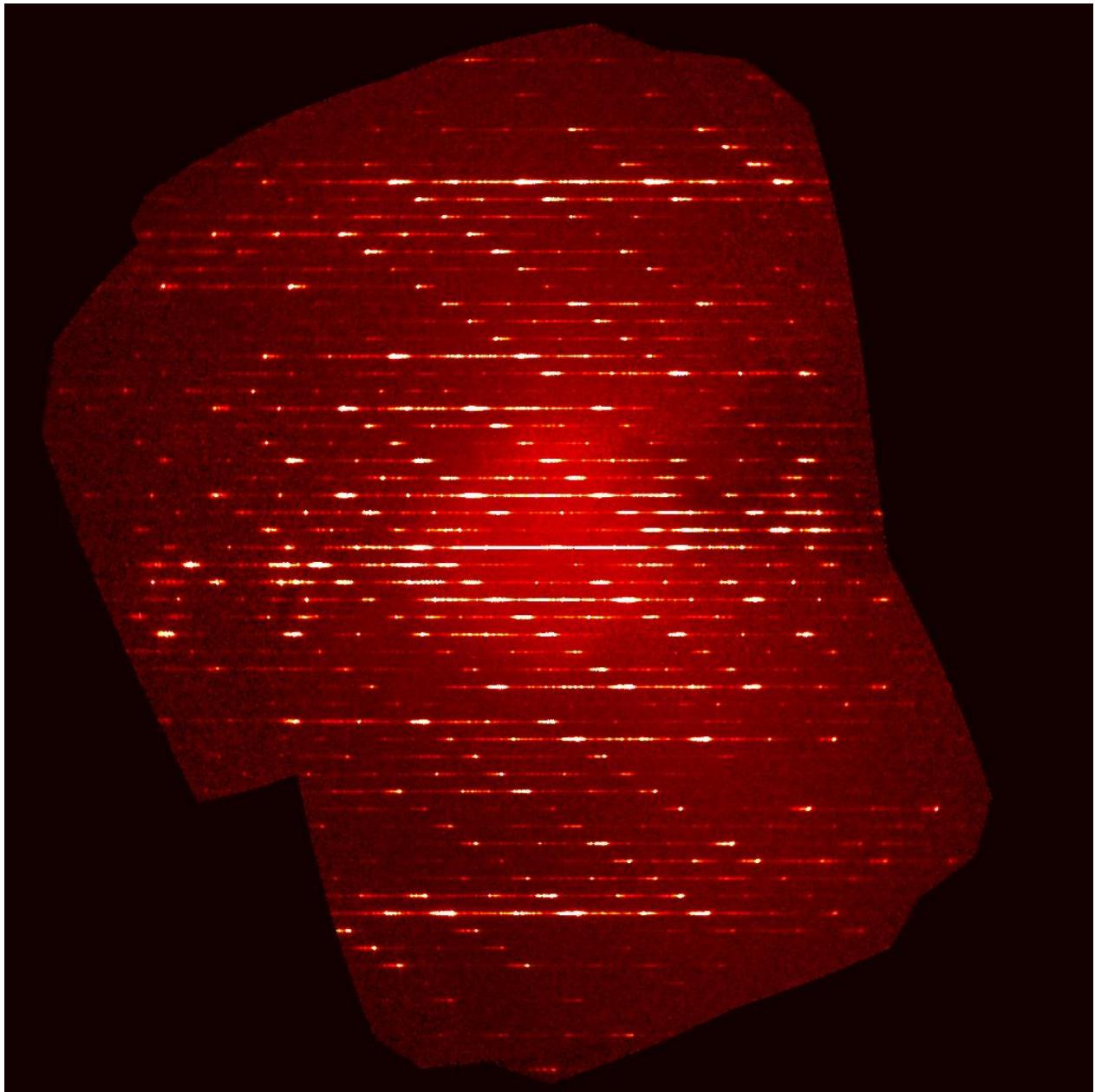
$h0l$  layer:



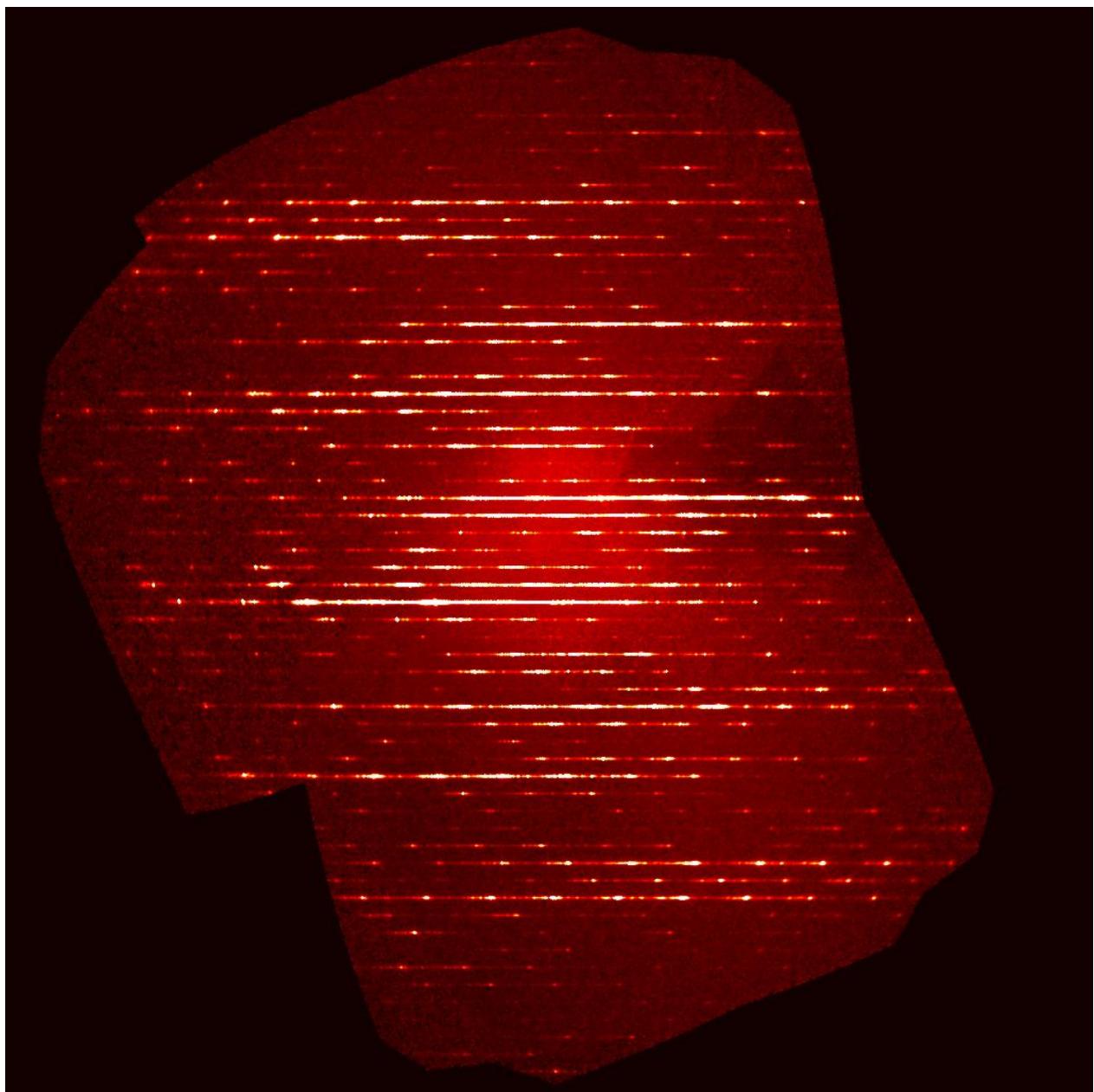
*h1l* layer:



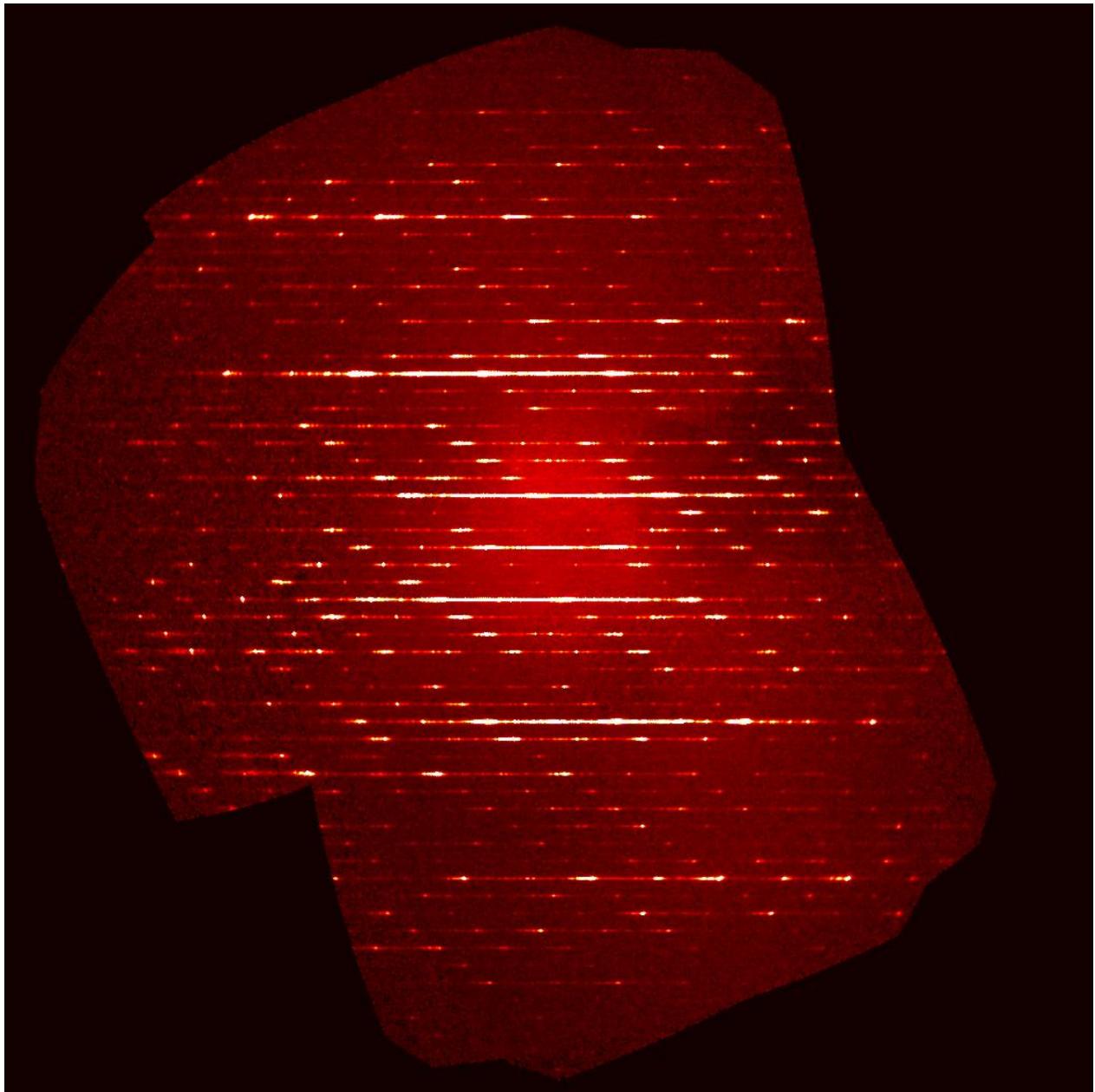
$h2l$  layer:



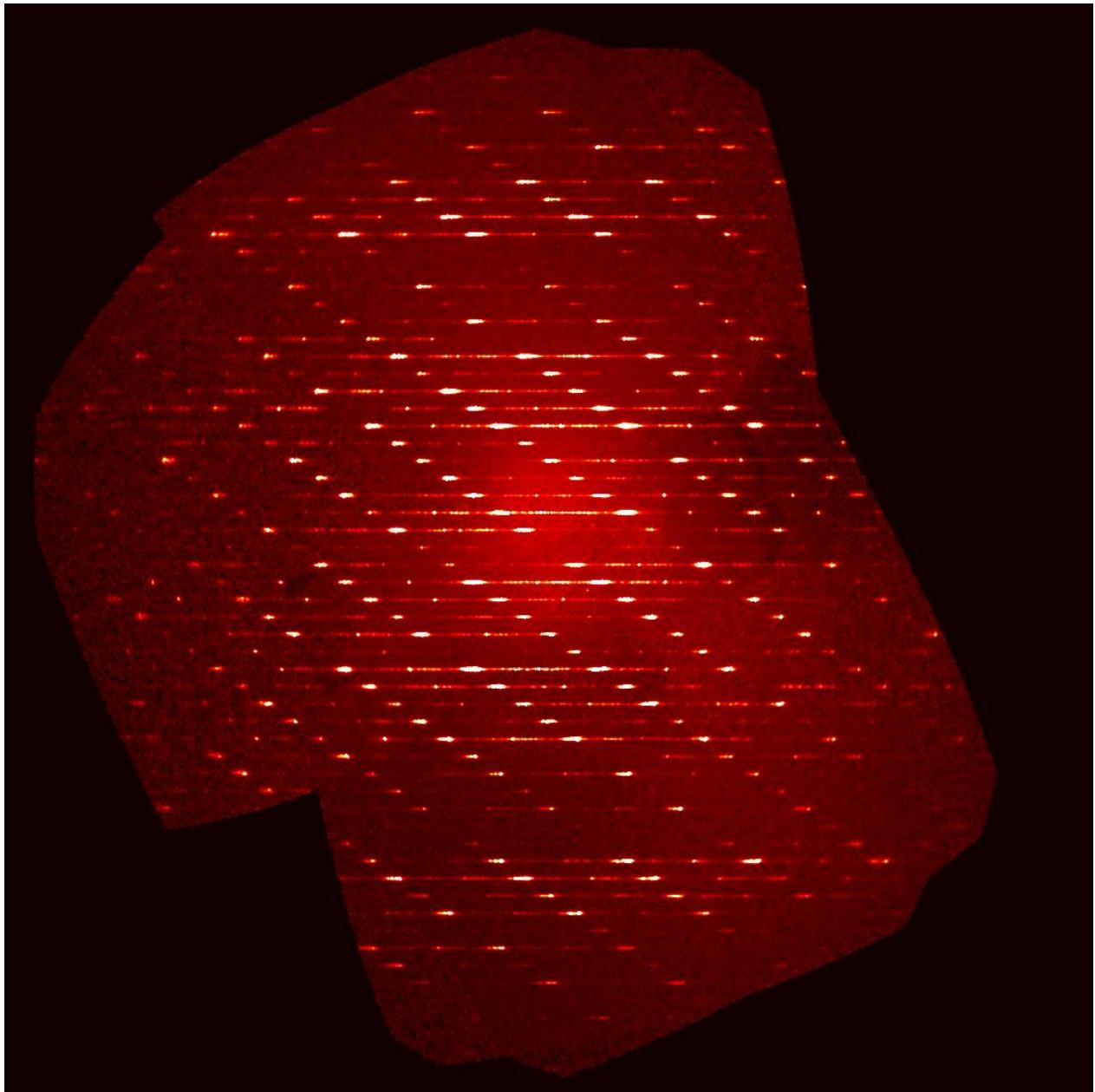
*h3l* layer:



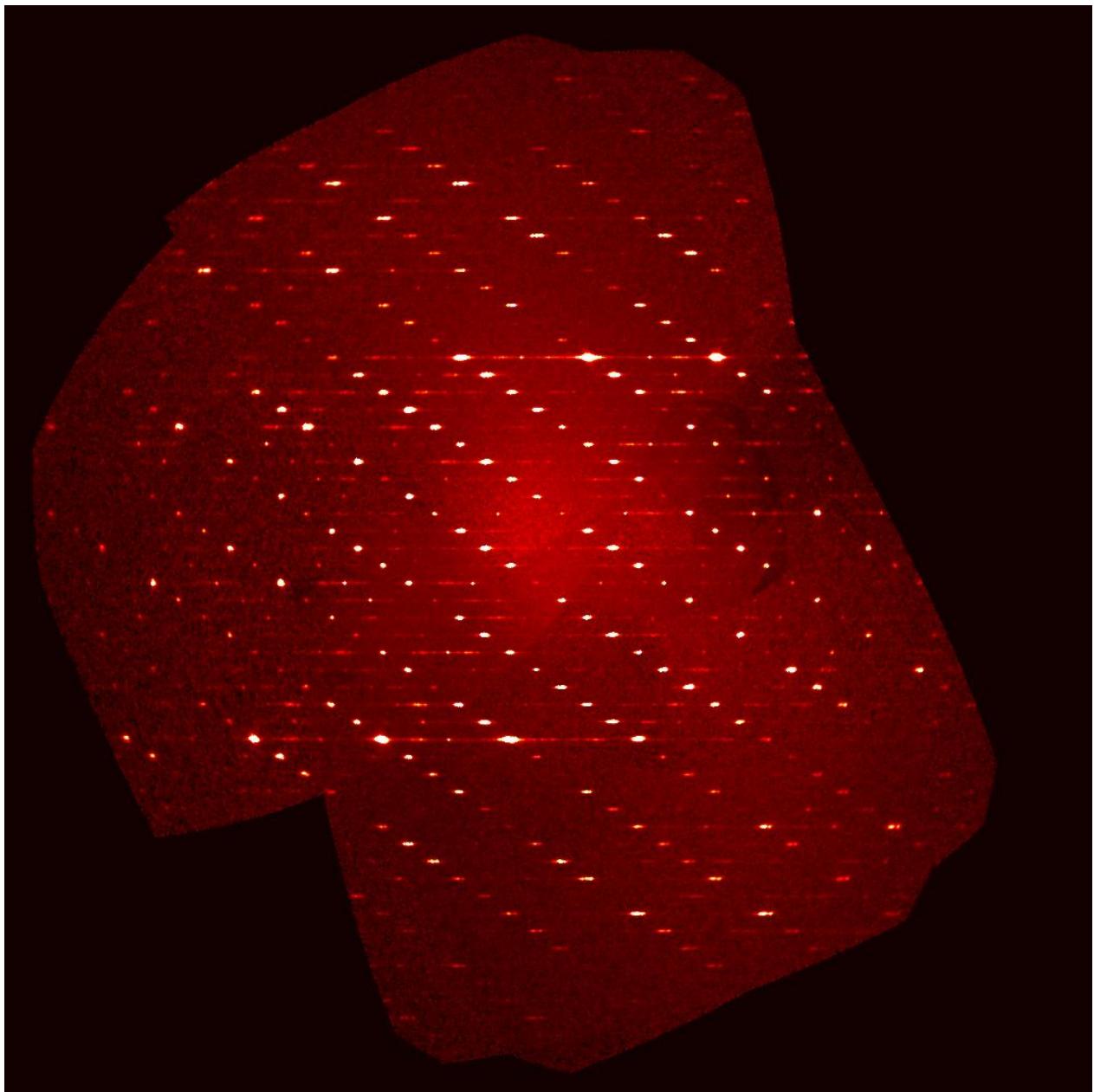
*h4l* layer:



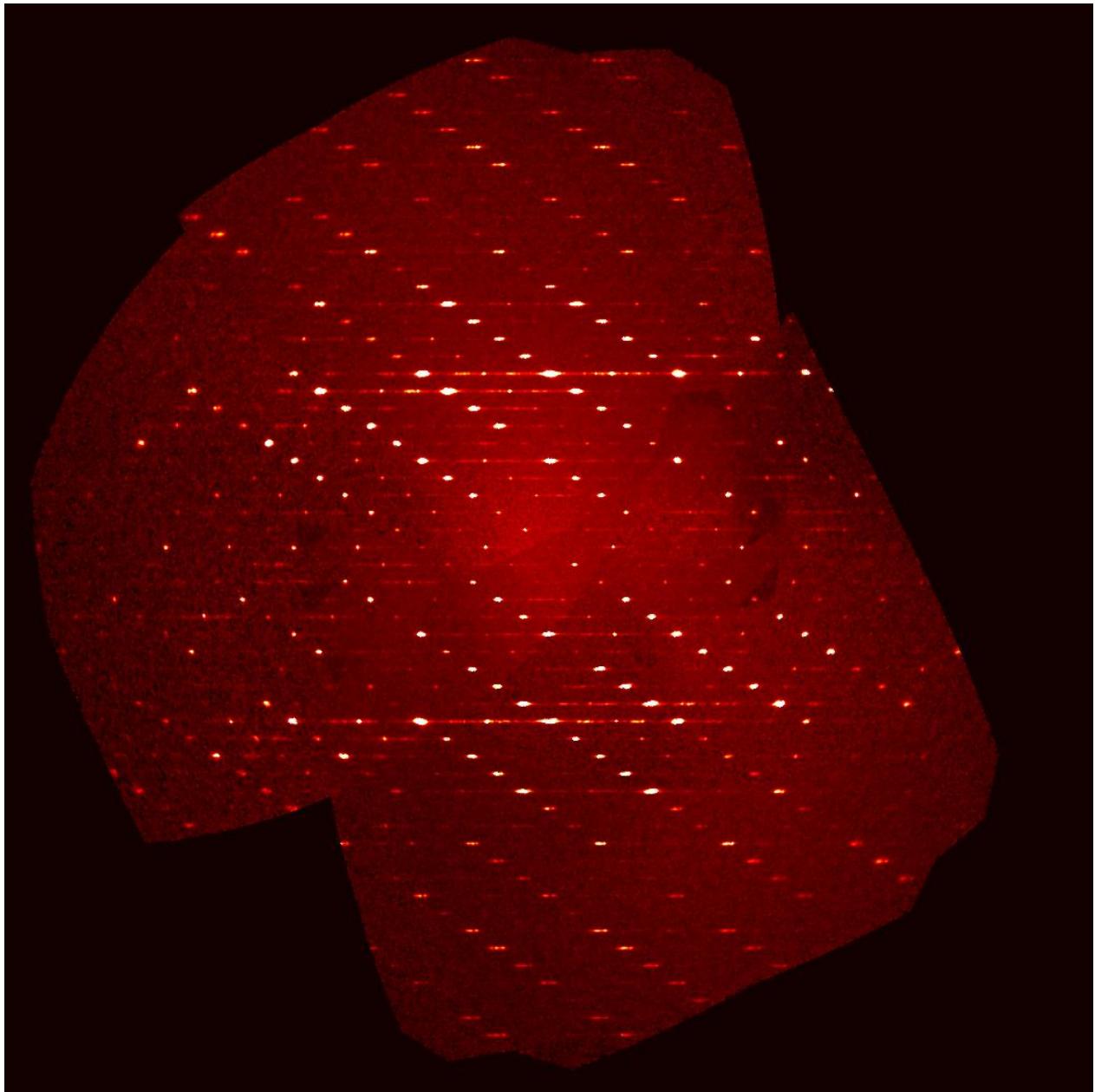
*h5l* layer:



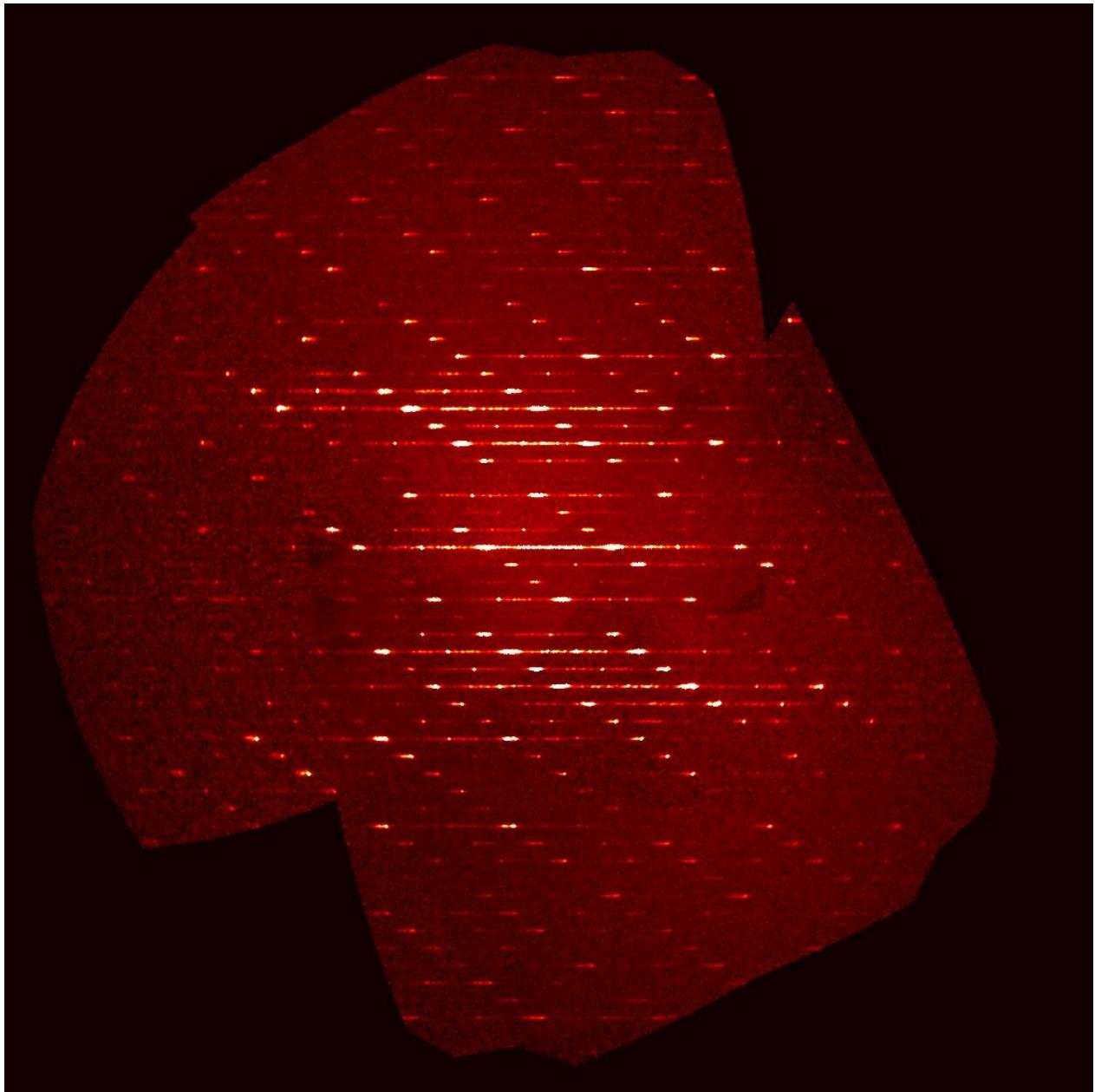
*h6l* layer:



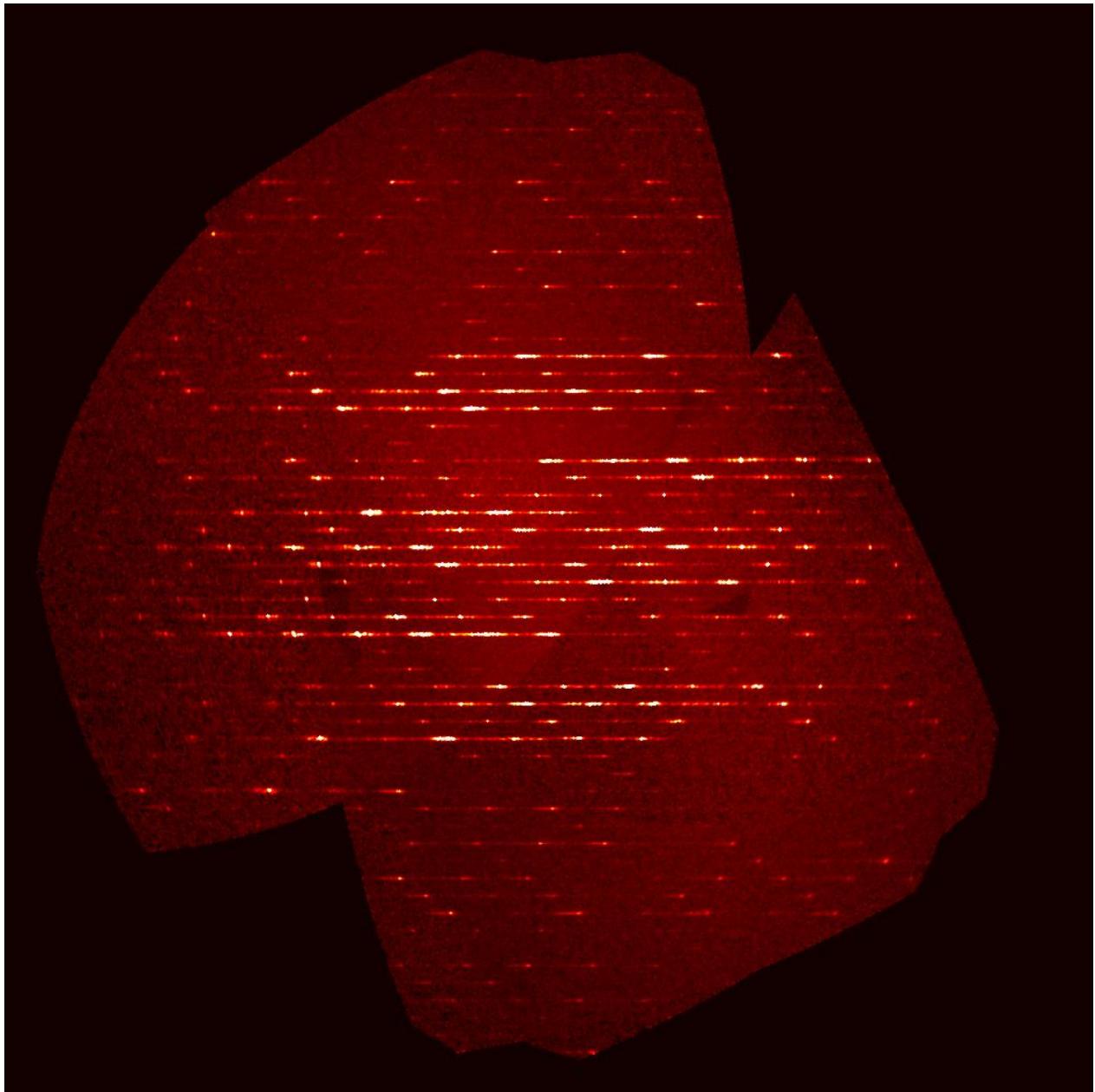
*h7l* layer:



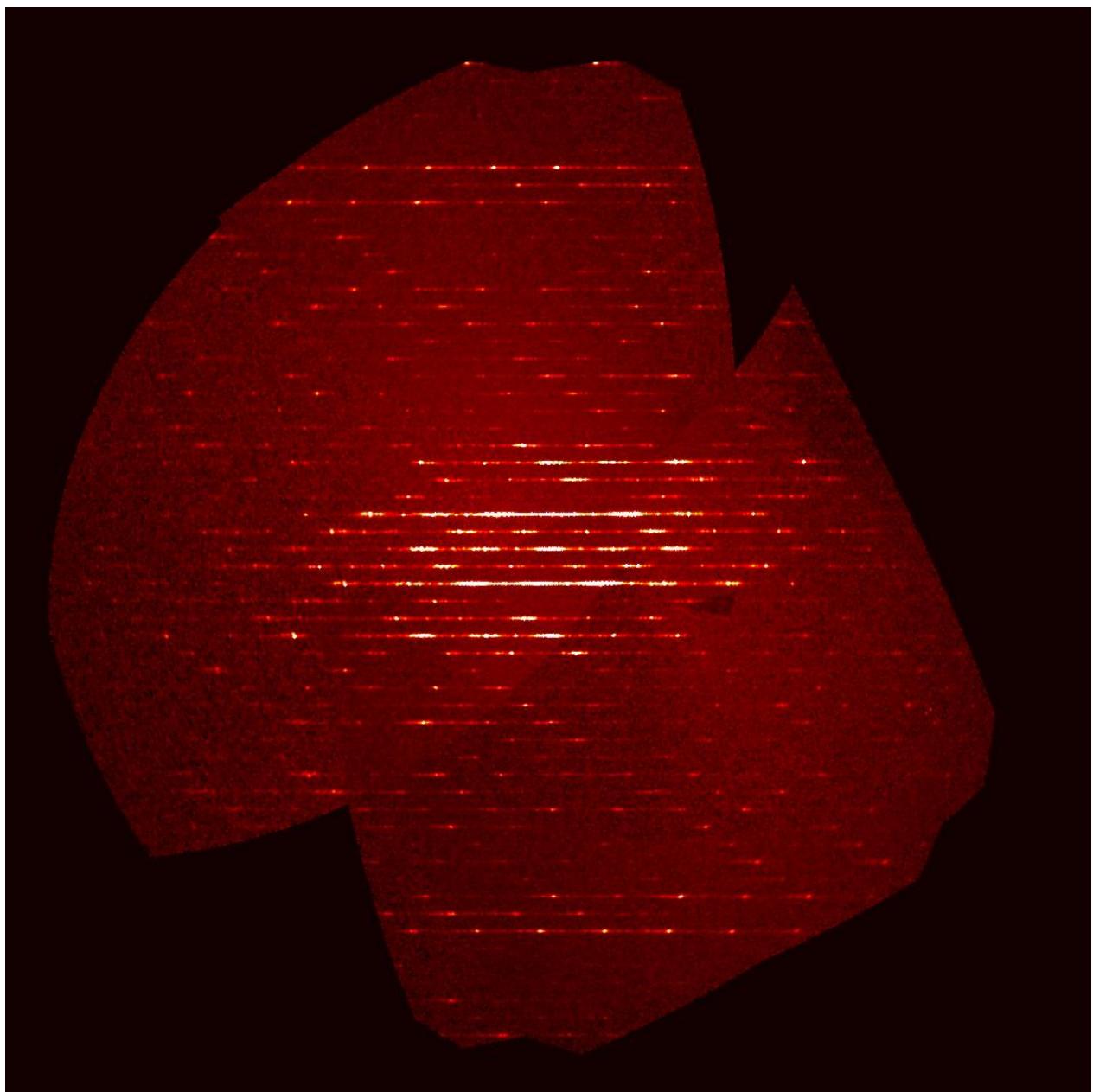
*h8l* layer:



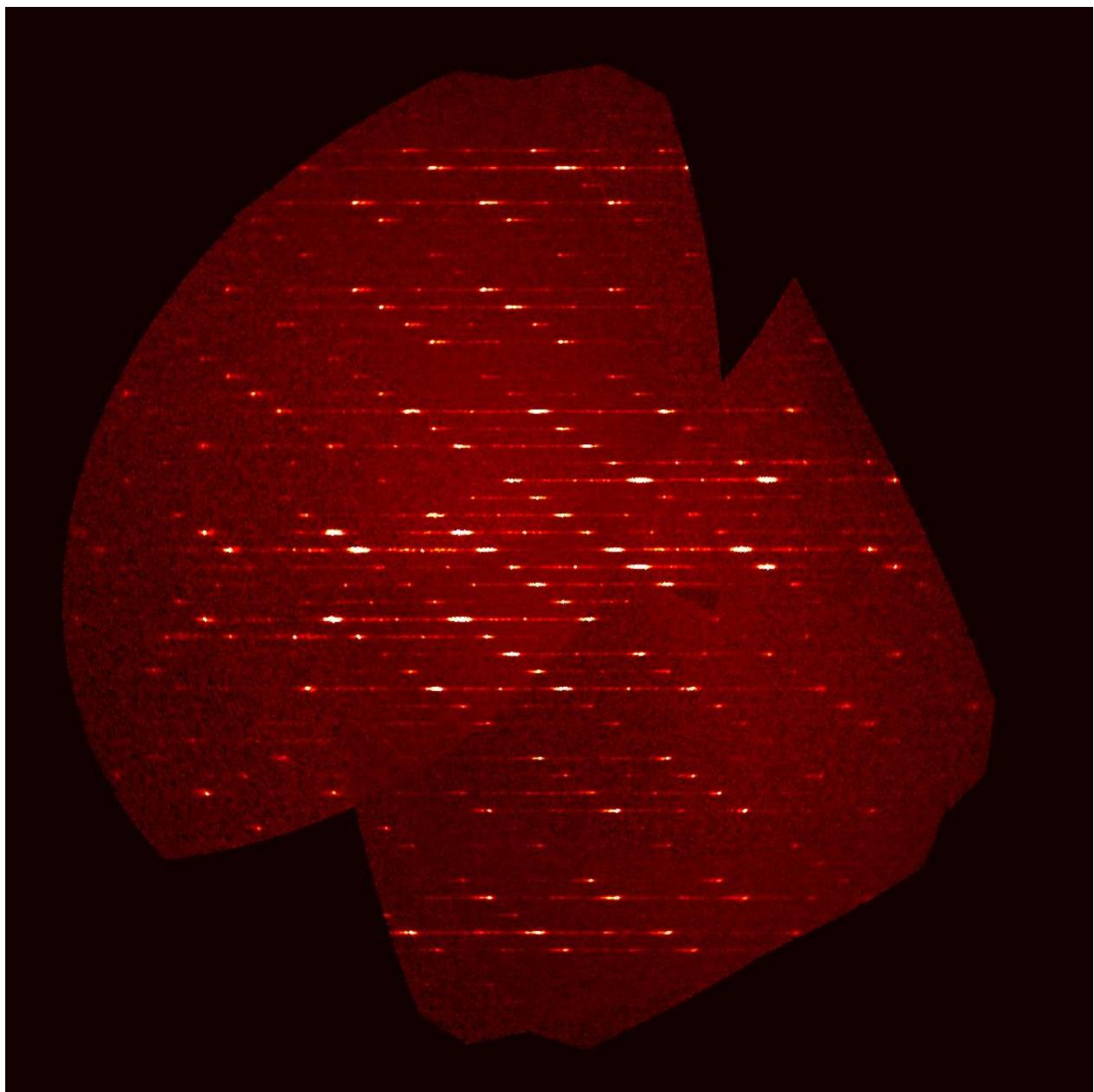
*h9l* layer:



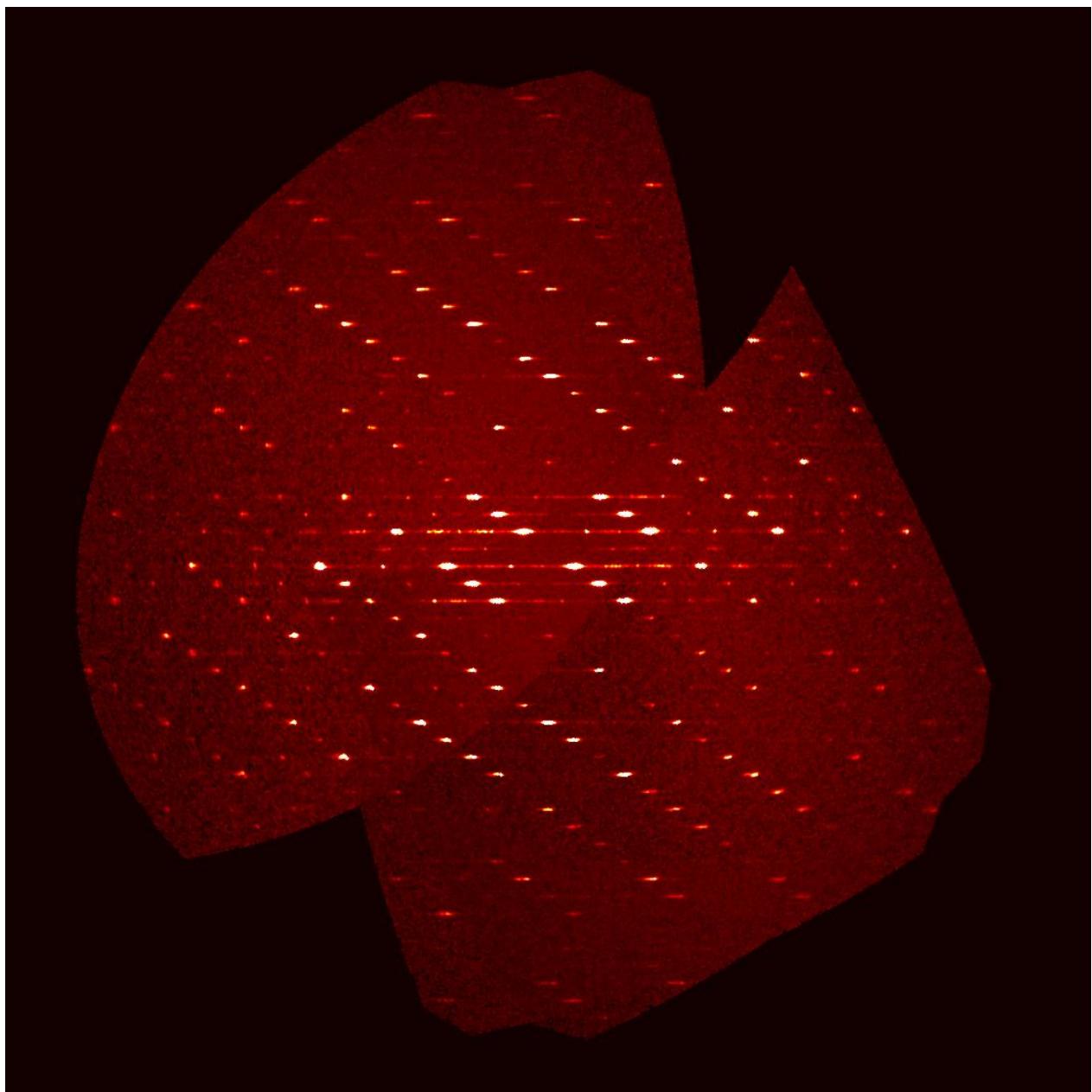
$h10l$  layer:



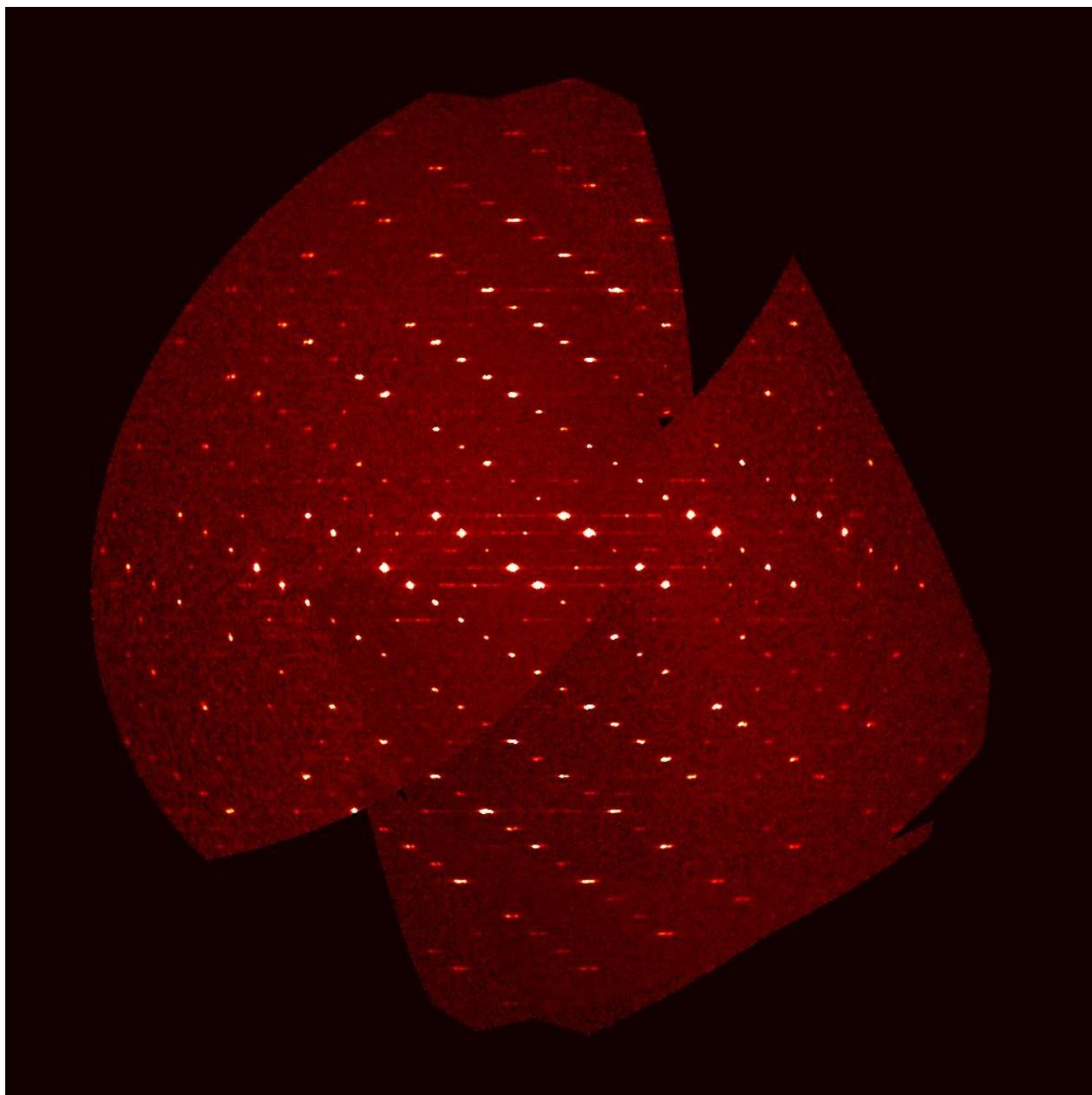
$h11l$  layer:



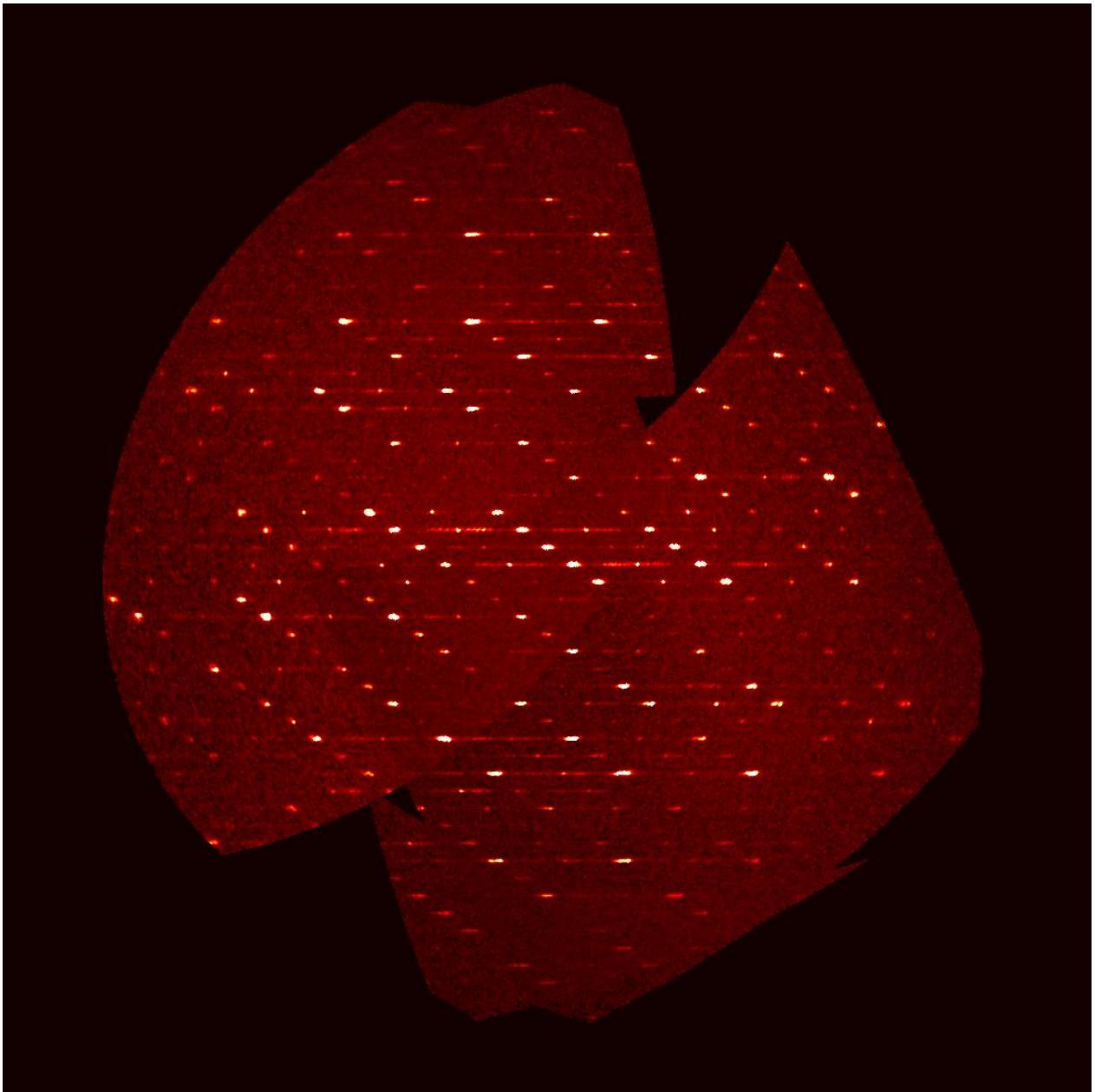
*h12l* layer:



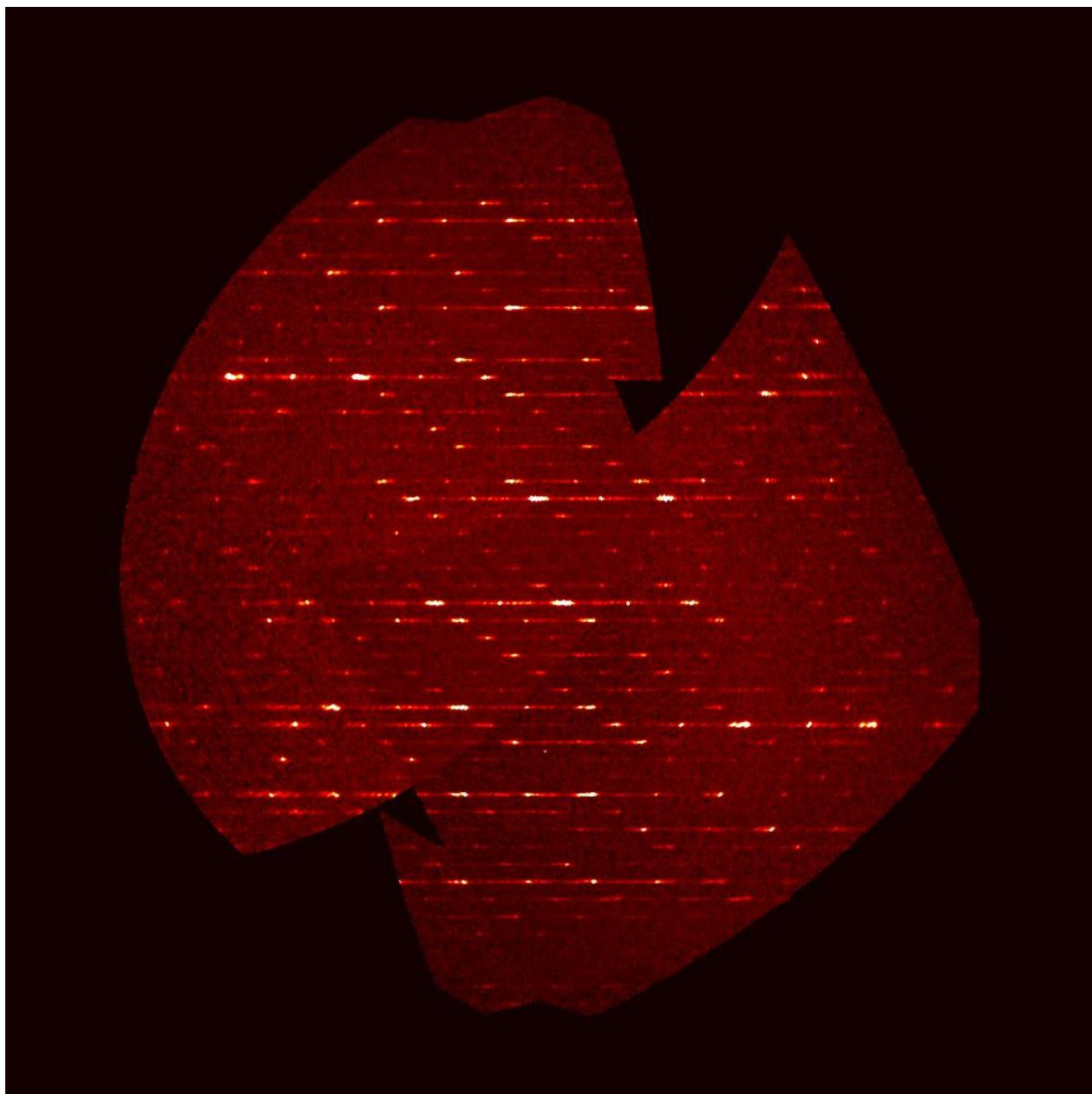
*h13l* layer:



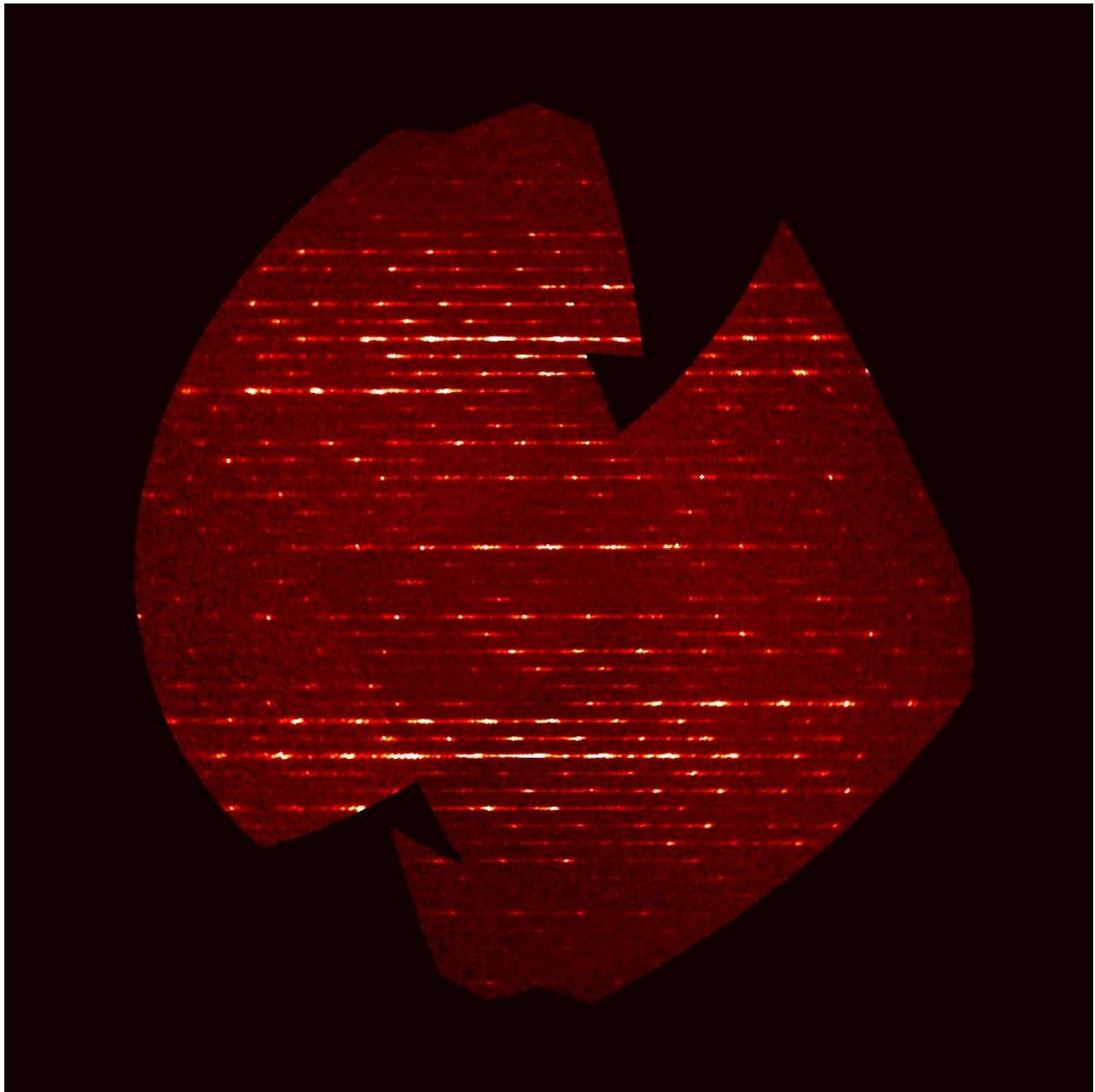
*h14l* layer:



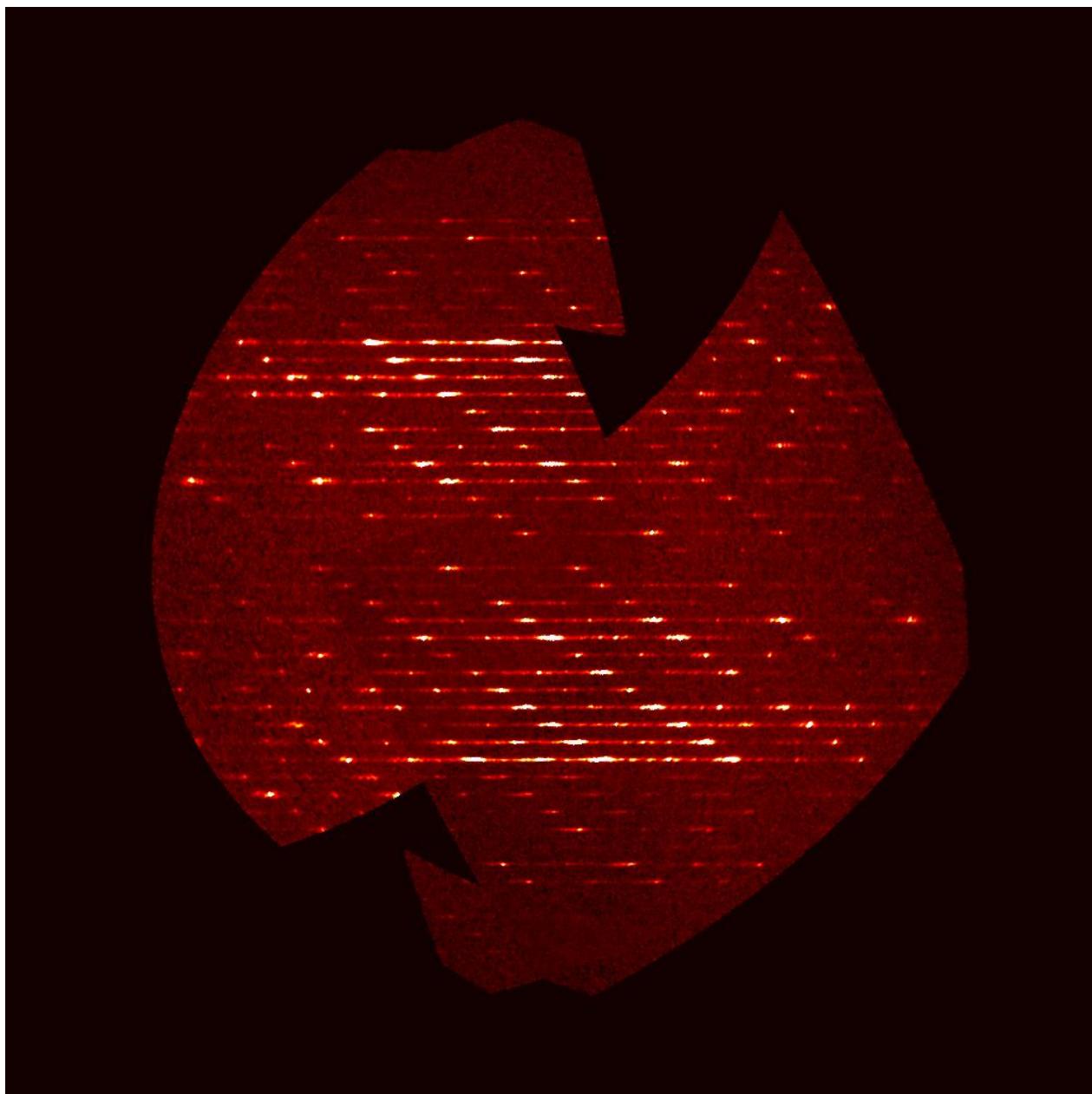
*h15l* layer:



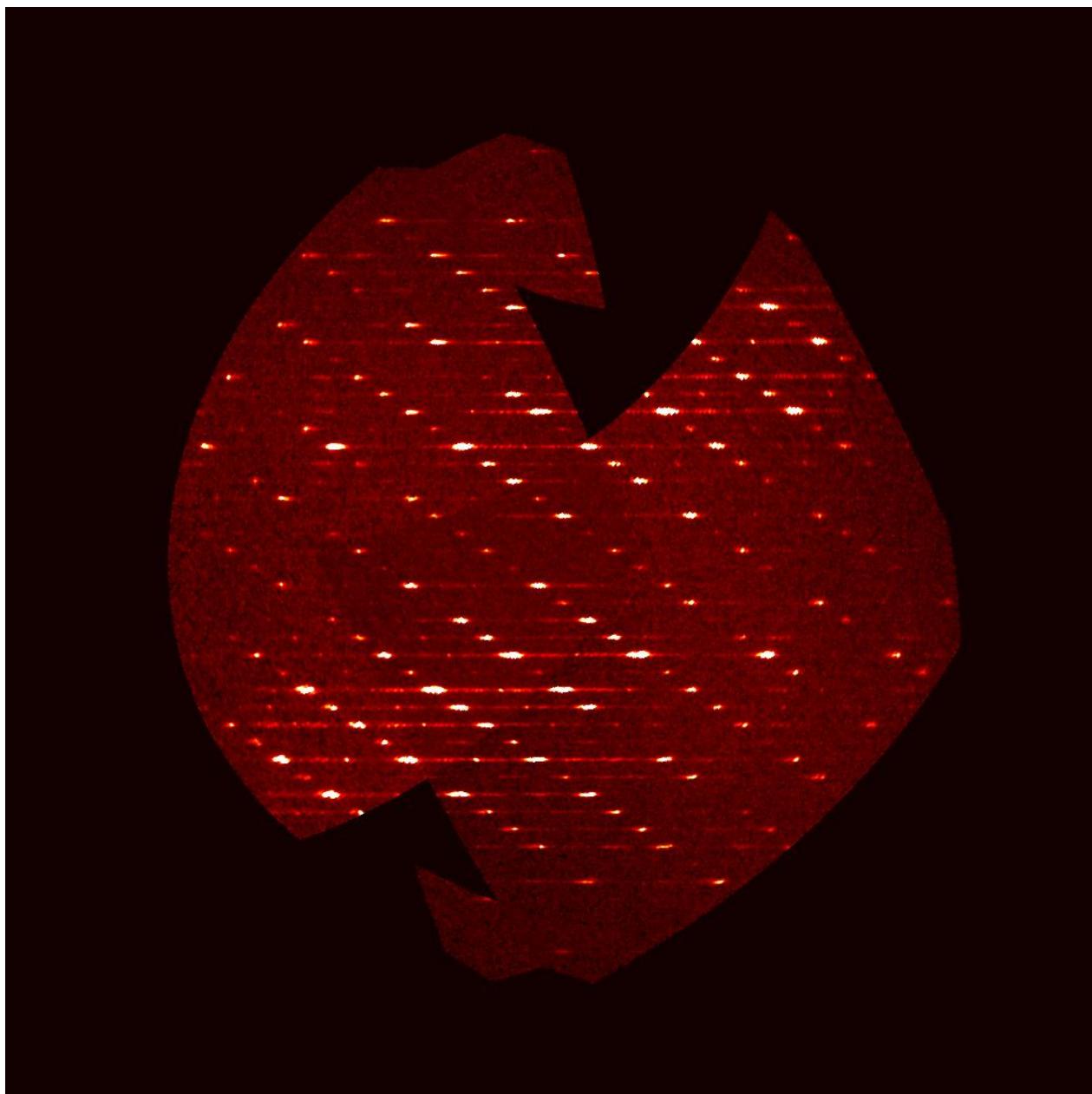
*h16l* layer:



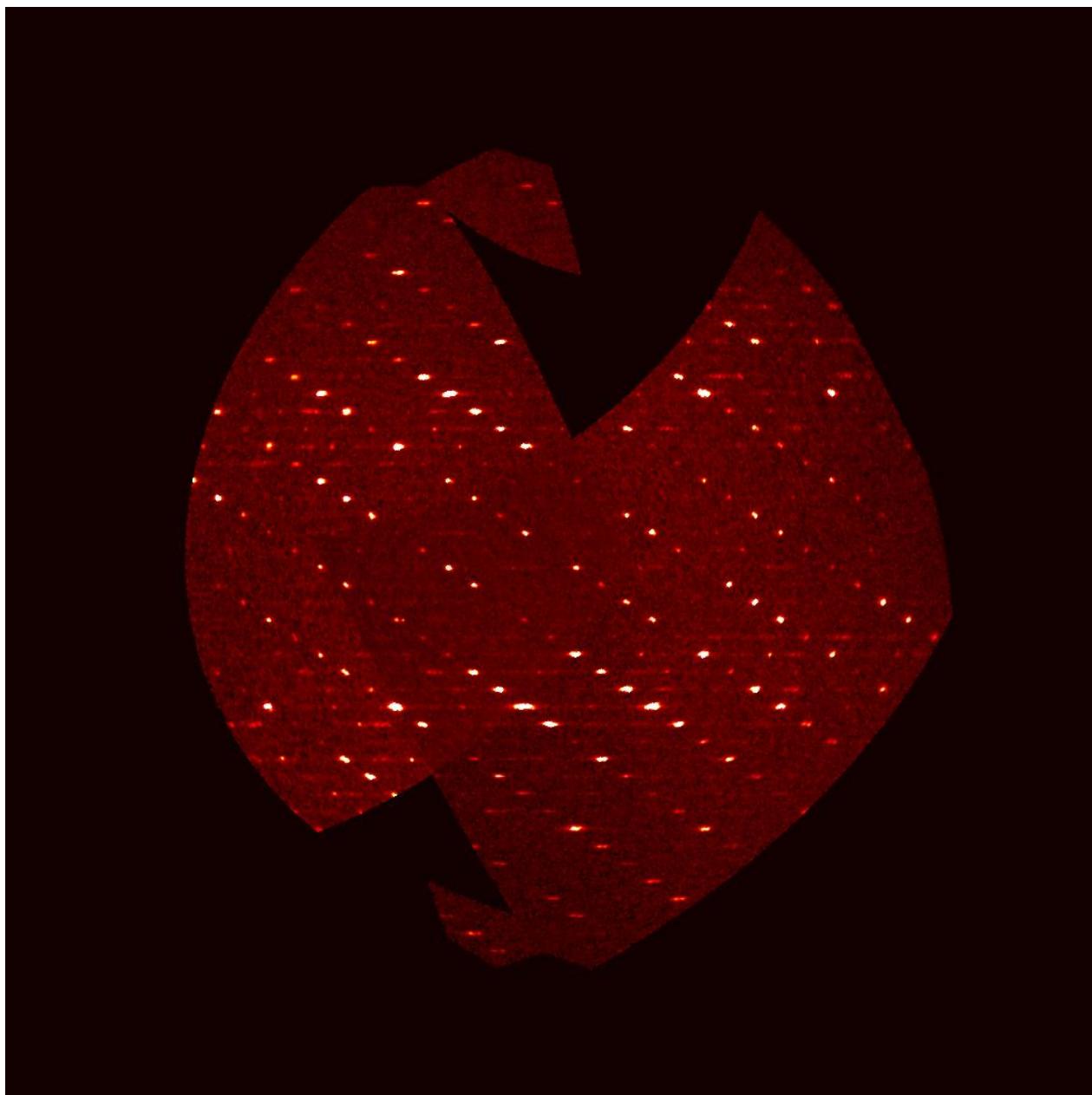
*h17l* layer:



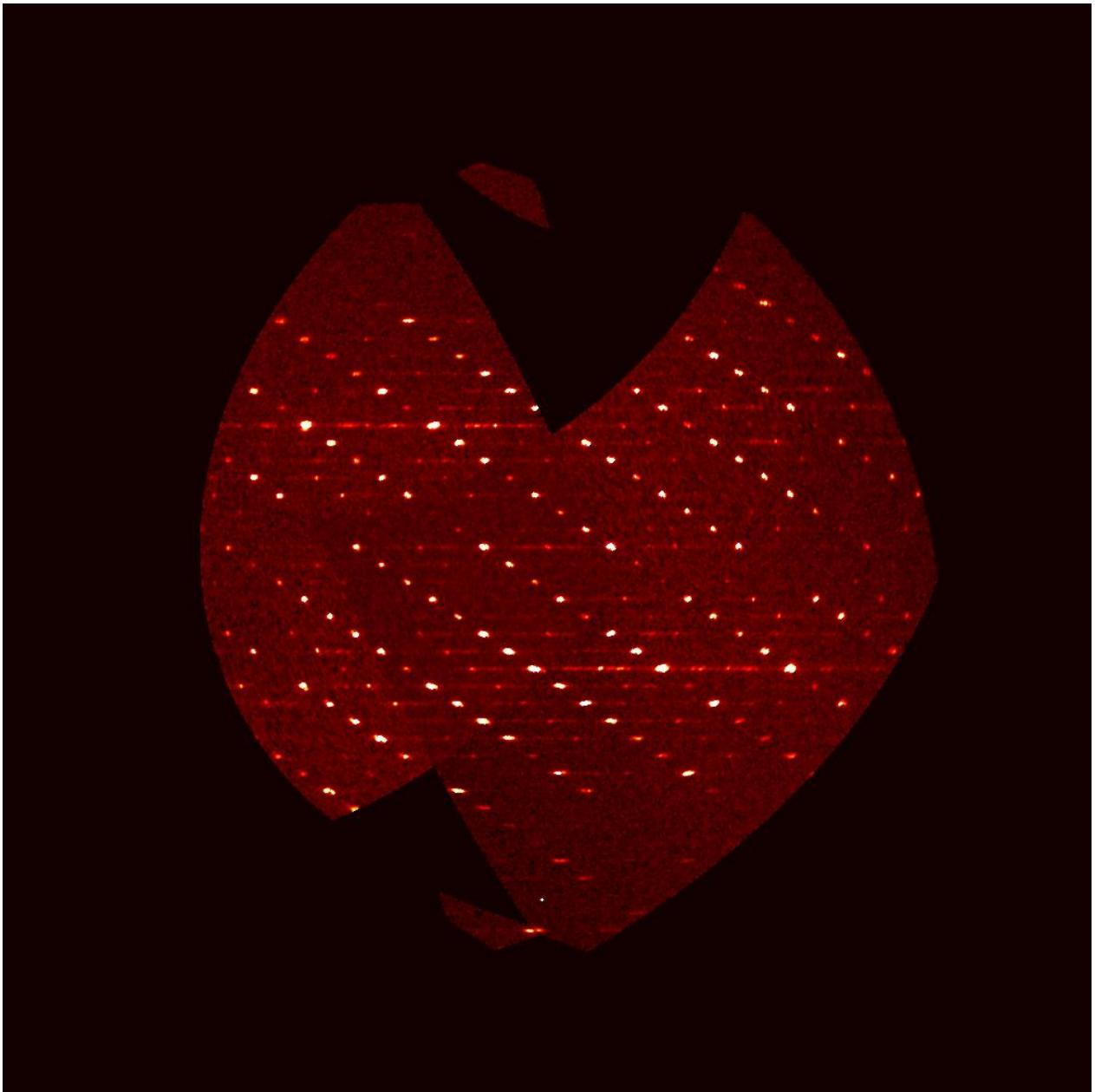
*h18l* layer:



*h19l* layer:



$h20l$  layer:



**Table S1: Important parameters from the subgroup analysis of the two models.**

Subgroup	Origin shift	Unique ref.	R(int)	R1 (Fo >4σ)	R1 (all)
Model 1 subgroups					
P1	¼, 0, ¼	101466	0.081	0.1268 (47470)	0.1947 (101466)
P̄1	¼, 0, ¼	101466	0.081	0.1525 (47470)	0.2191 (101466)
P̄1	0, 0, 0	101466	0.081	0.1504 (47470)	0.2174 (101466)
P2 <sub>1</sub>	¾, 0, ½	56141	0.085	0.1291 (28583)	0.1875 (56141)
P2 <sub>1</sub>	½, 0, -½	56141	0.085	0.1266 (28583)	0.1854 (56141)
B1	¼, 0, ¼	50680	0.066	0.1188 (33855)	0.1479 (50680)
B̄1	¼, 0, ¼	50680	0.066	0.1333 (33855)	0.1609 (50680)
B2 <sub>1</sub>	¾, 0, ½	28066	0.070	0.1197 (19769)	0.1445 (28066)
Bg	¼, -½, ¾	27639	0.070	0.1203 (19696)	0.1445 (27639)
B2 <sub>1</sub> /g	0, 0, 0	27617	0.070	0.1319 (19694)	0.1543 (27617)
Model 2 subgroups (a and c interchanged in TC2)					
P1	0, 0, 0	101466	0.081	0.1252 (47470)	0.1929 (101466)
P̄1	0, 0, 0	101466	0.081	0.1938 (47470)	0.2600 (101466)
P2 <sub>1</sub>	¼, 0, 0	56141	0.085	0.1259 (28583)	0.1844 (56141)
Pc	0, ¼, 0	55271	0.085	0.1719 (28316)	0.2319 (55271)
P2 <sub>1</sub> /c	0, 0, 0	55249	0.085	0.1948 (28314)	0.2504 (55249)

