

Supplementary material for:

Three-dimensional reconstruction of planar deformation features from single electron micrographs

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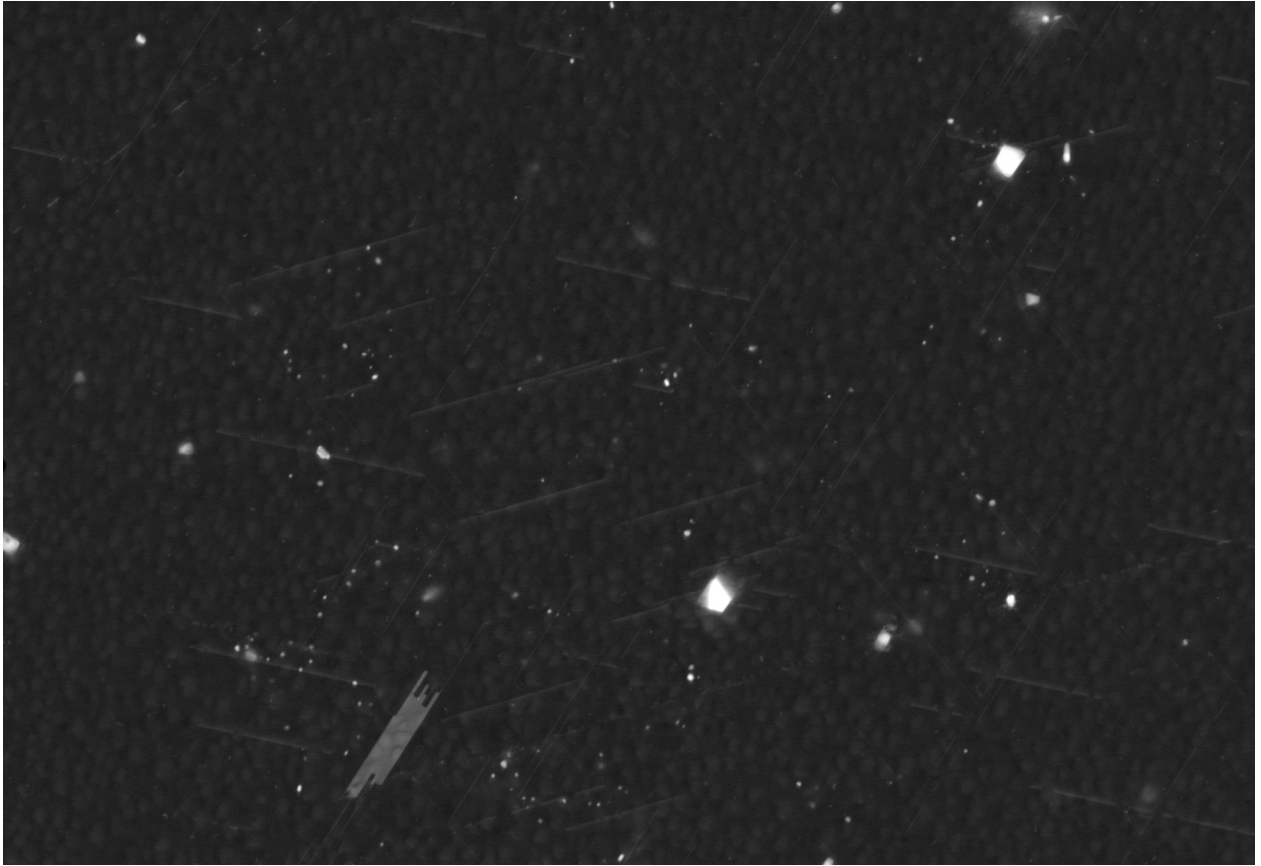
Steps:

1. 11 grains with planar deformation features in 4 slip systems were identified.
2. The angles of the projections of those features onto the view plane were measured ($\theta_1 - \theta_4$).
3. Three of those angles ($\theta_1 - \theta_3$) were used as inputs to calculate possible values of θ_4 .
4. The closest value to the measured θ_4 was selected as the calculated θ_4 .
5. The difference was recorded and the mean error, std. deviation and max error were calculated.

Table S1: Angles measured and calculated to determine the orientation of the SEM samples. The labels of each grain correspond to the subfigures in Figure S1.

Grain	Angles [°]					$\Delta\theta$ [°]
	θ_1	θ_2	θ_3	θ_4 measured	θ_4 calculated	
a	-12.16	16.4	57.82	-50.94	-50.85	0.09
b	-0.7	7.73	-85.66	-88.93	-87.98	0.95
c	43.67	-68.17	23.98	-21.67	-21.33	0.34
d	19.6	11.36	-71.9	-75.42	-75.97	0.55
e	45.11	24	-22.13	86.9	87.192	0.29
f	47.45	-87.75	-35	-20.95	-21.17	0.22
g	-48.87	-5.08	47.24	61.12	61.9839	0.86
h	42.8	23.8	-24.3	-67.67	-67.49	0.18
i	42.24	-24.96	24.09	-68.1	-68.07	0.03
j	9.63	80.7	41.8	-28	-27.65	0.35
k	42.5	-51.92	0.85	-67.01	-67.39	0.38

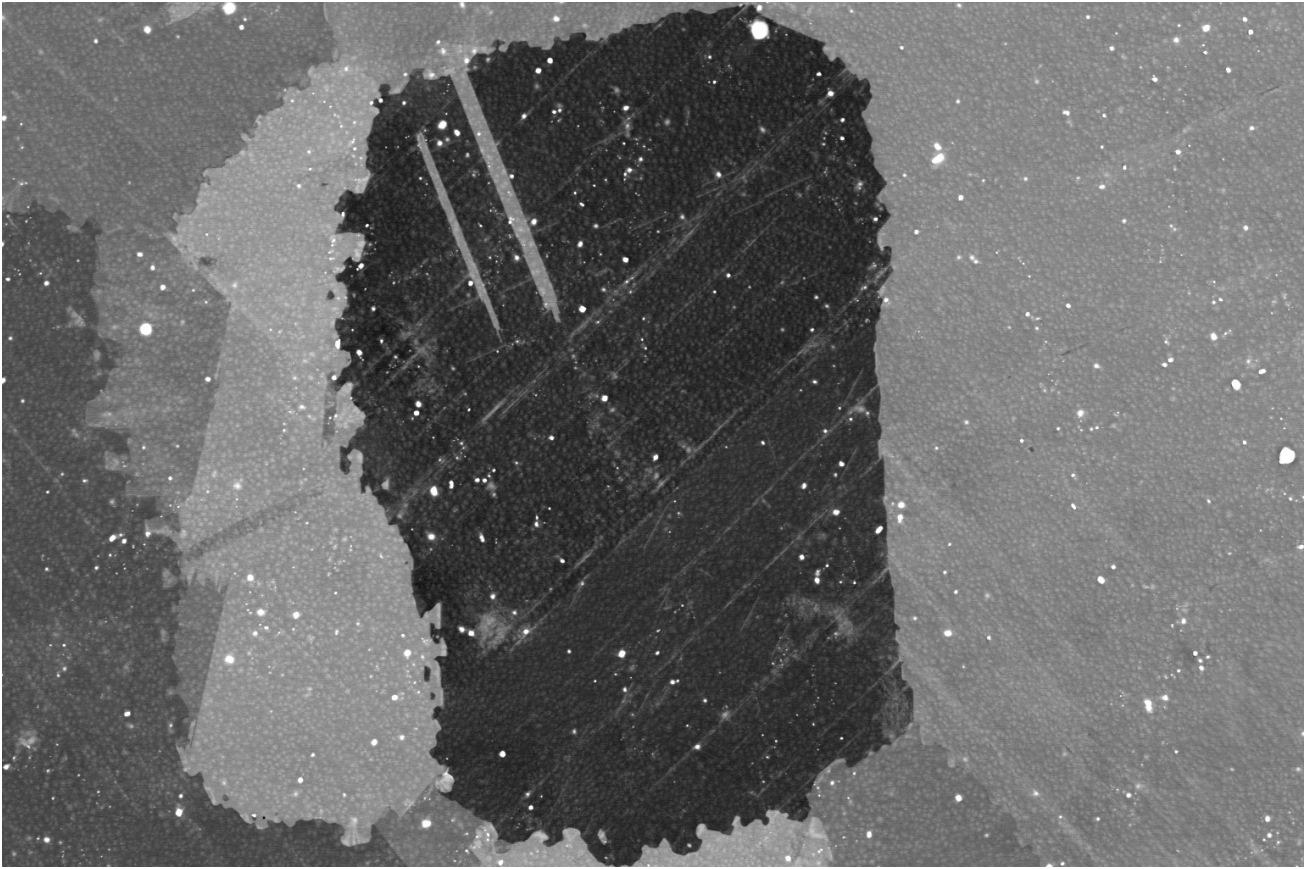
Mean error 0.4°
Std deviation 0.3°
Max error 0.1



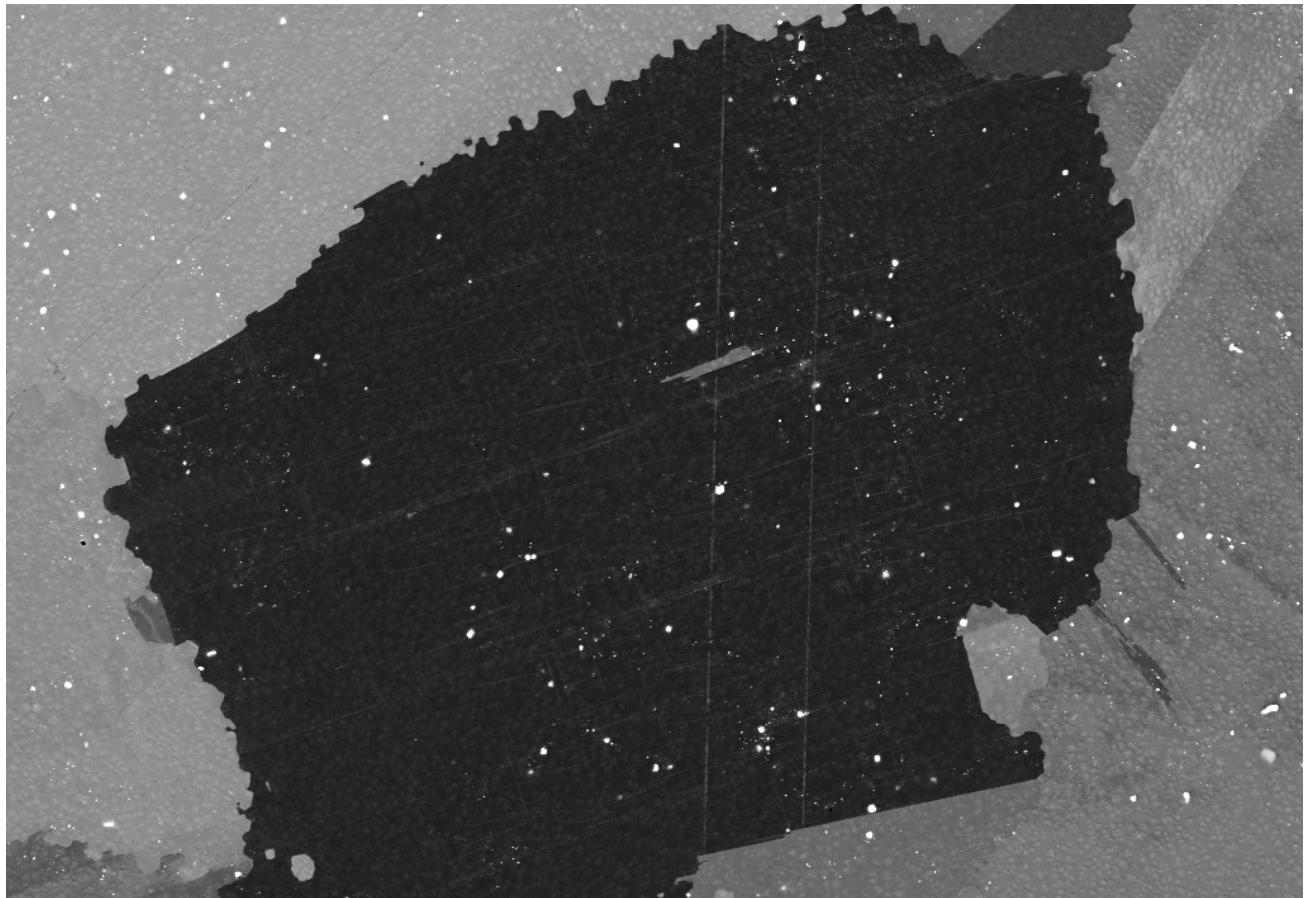
(a)



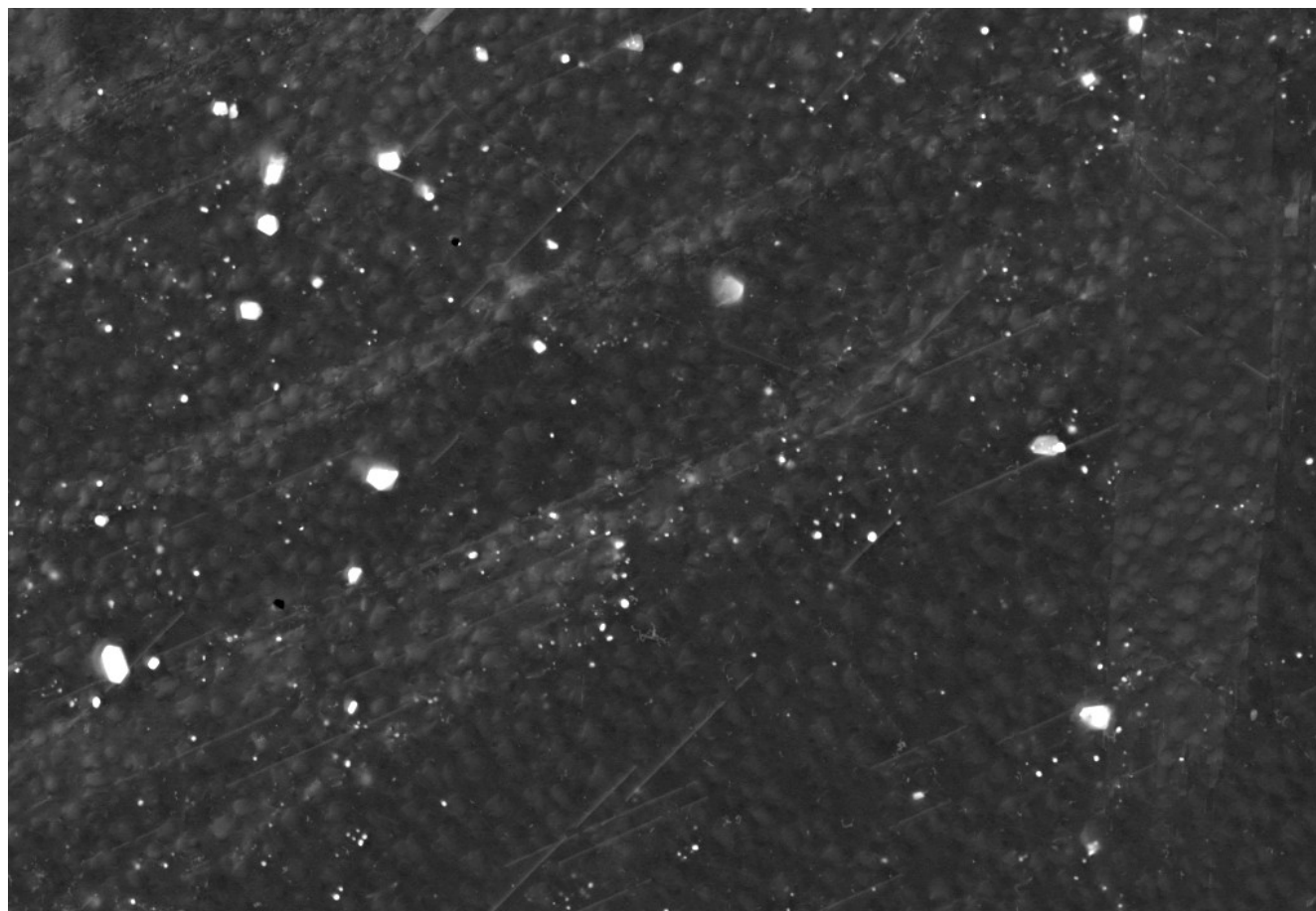
(b)



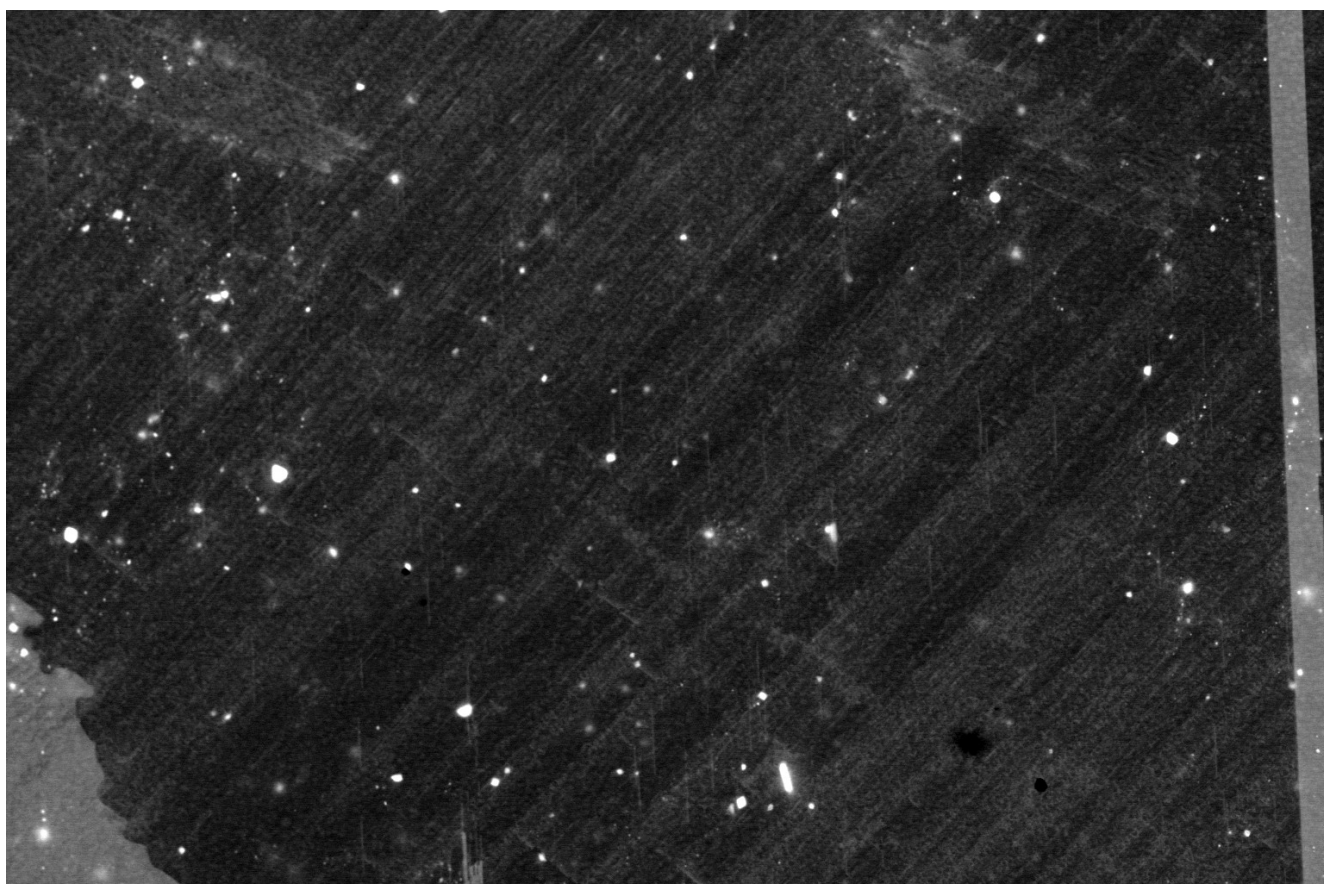
(c)



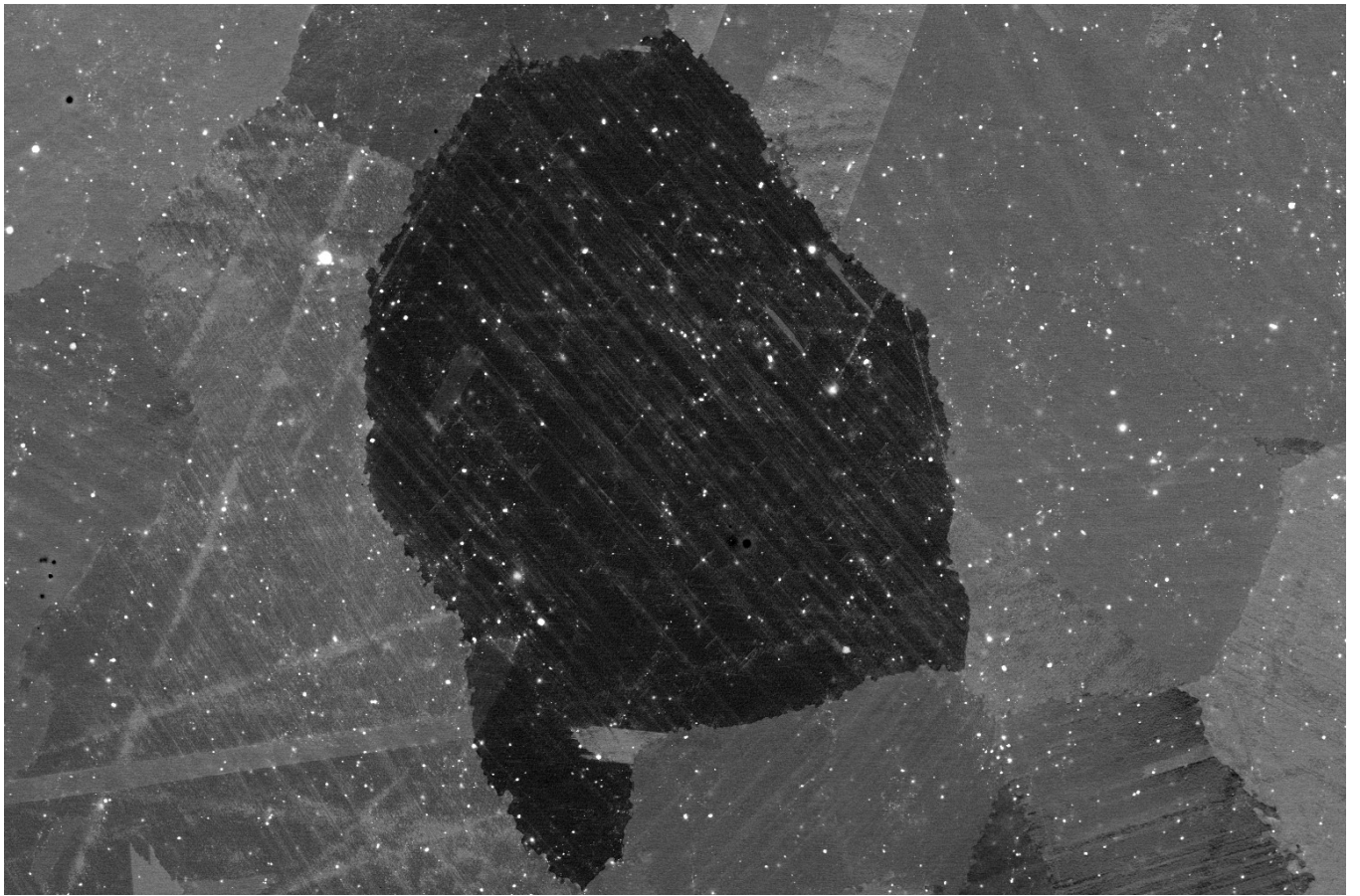
(d)



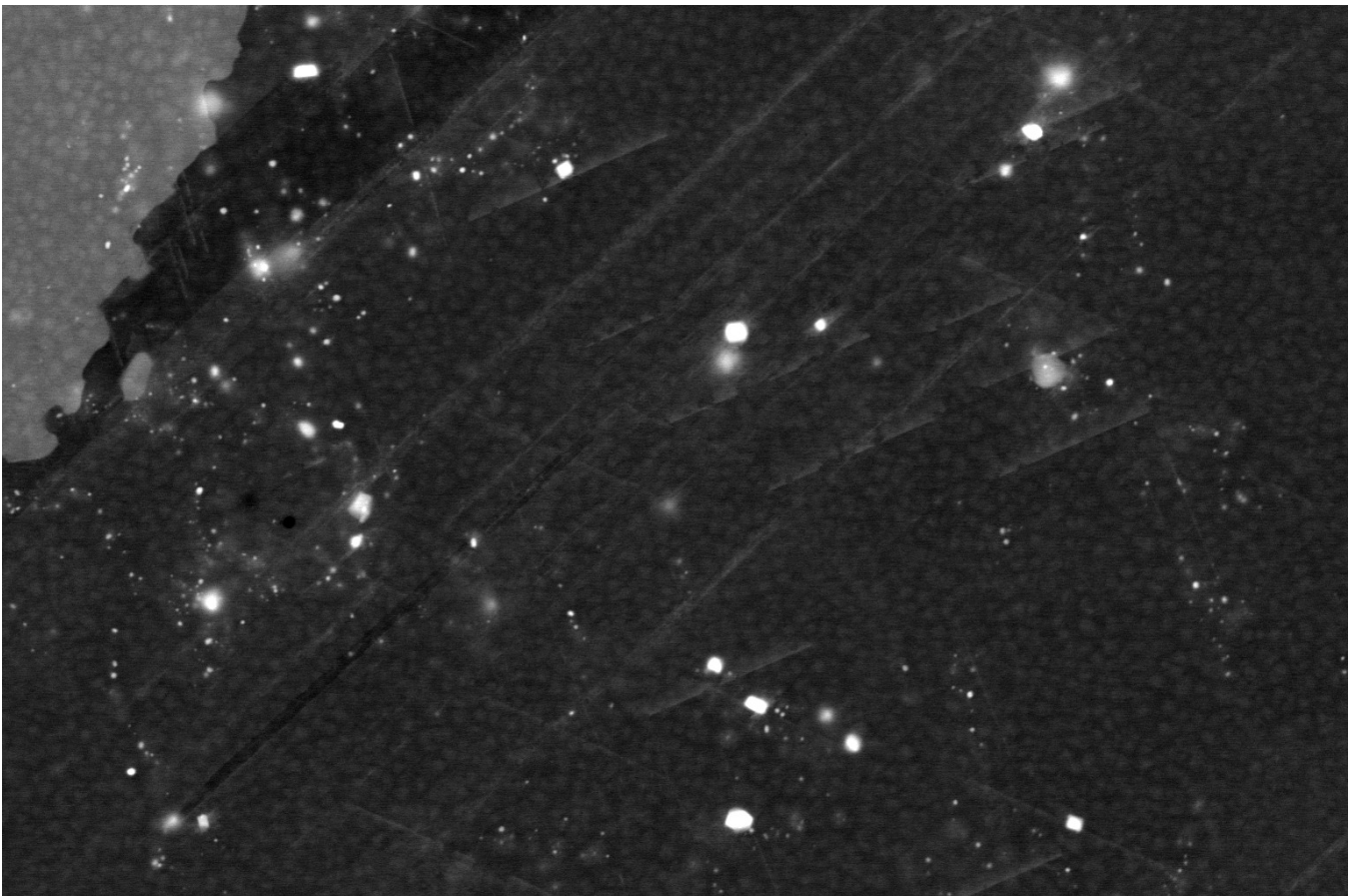
(e)



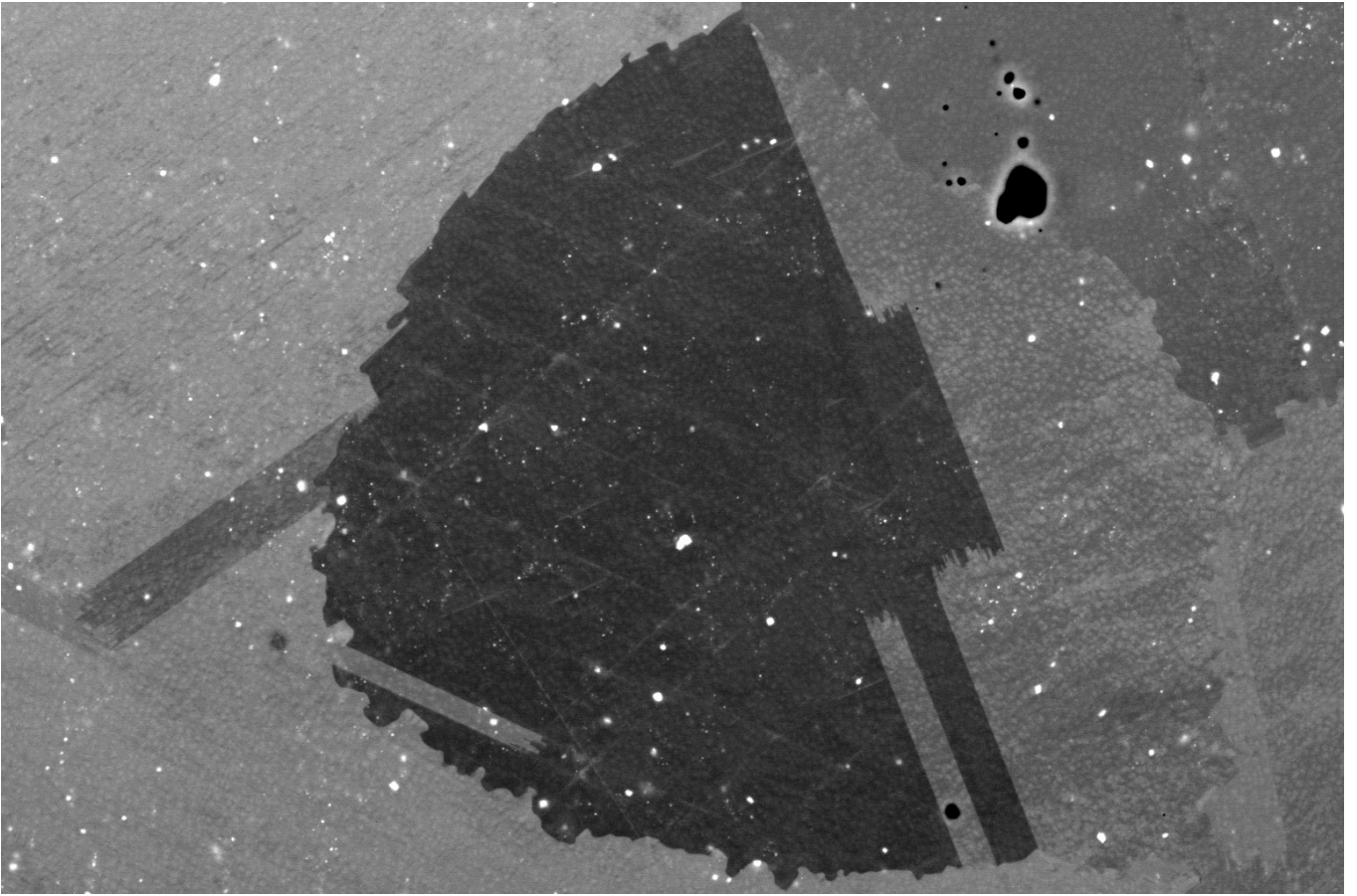
(f)



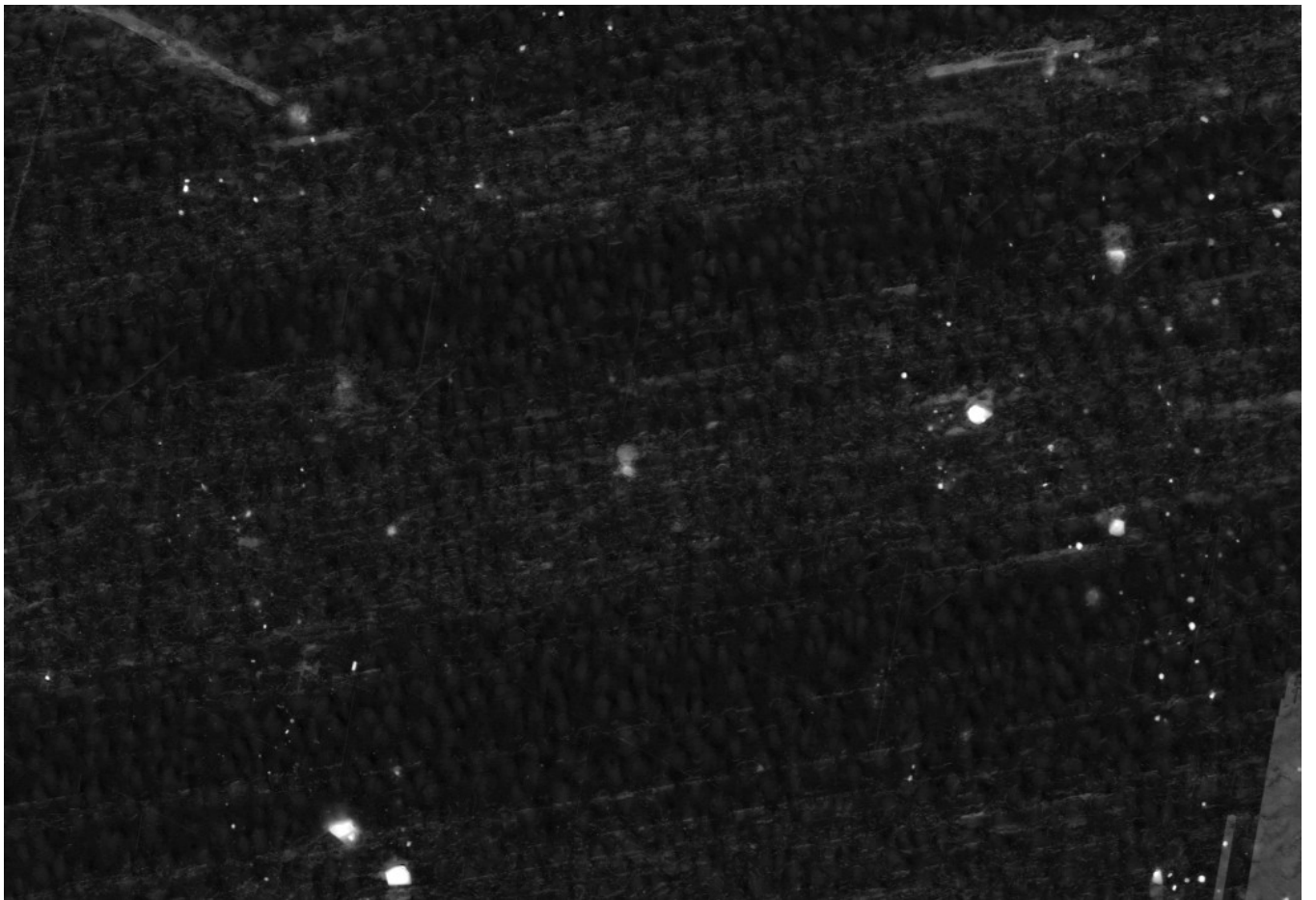
(g)



(h)



(i)



(j)

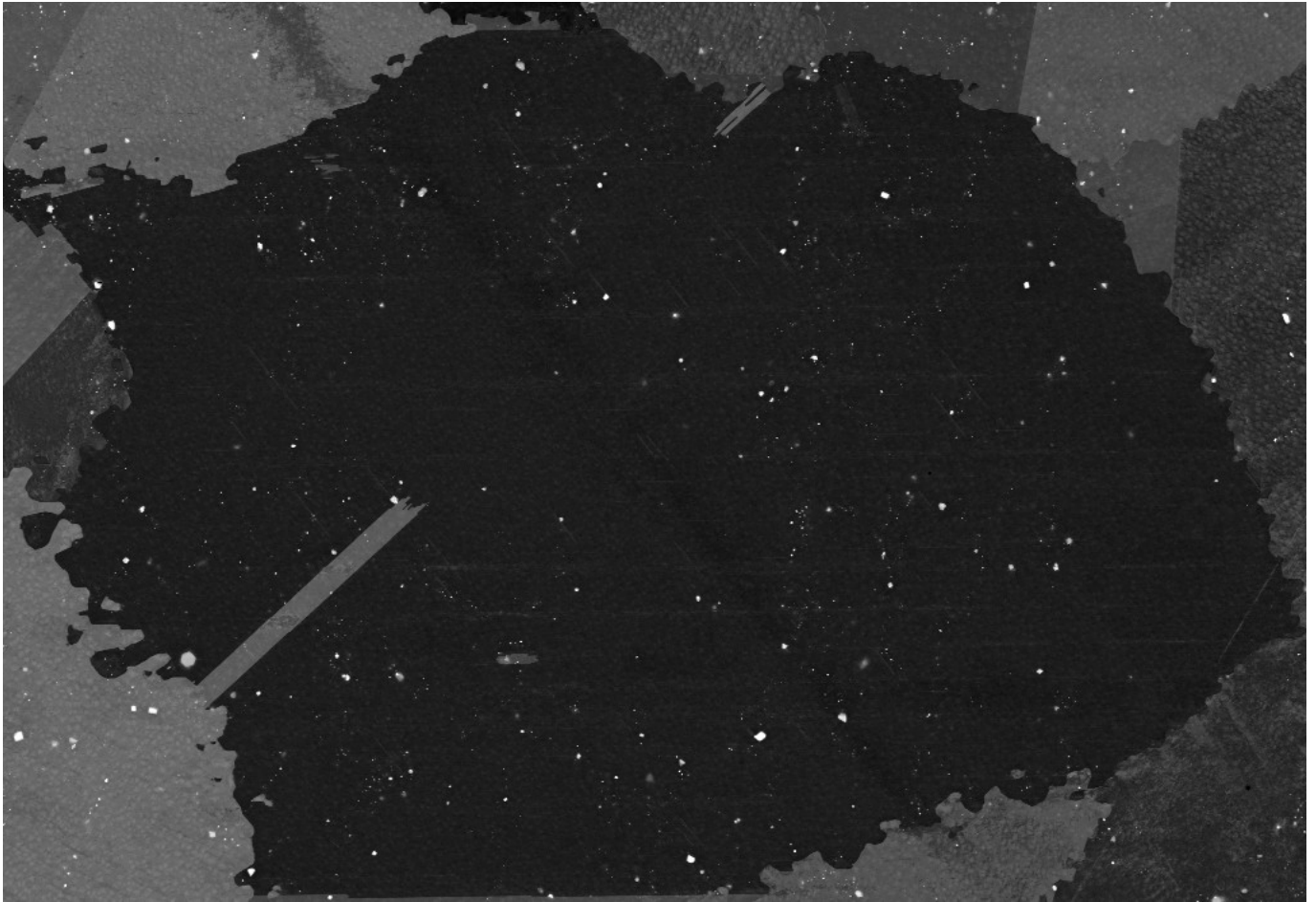


Fig. S1 – ECCI micrographs used to test the model to determine the orientation of different grains within an SEM sample. Deformation features in the four octahedral planes are observed in all the grains.