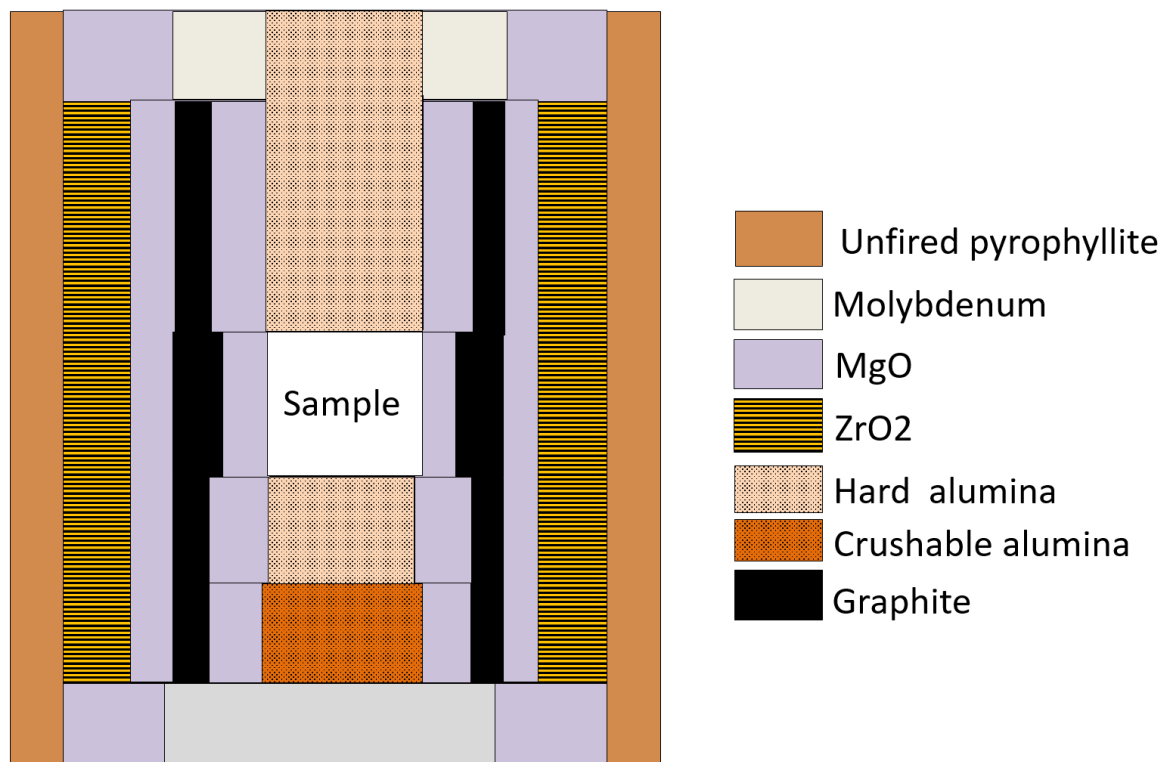
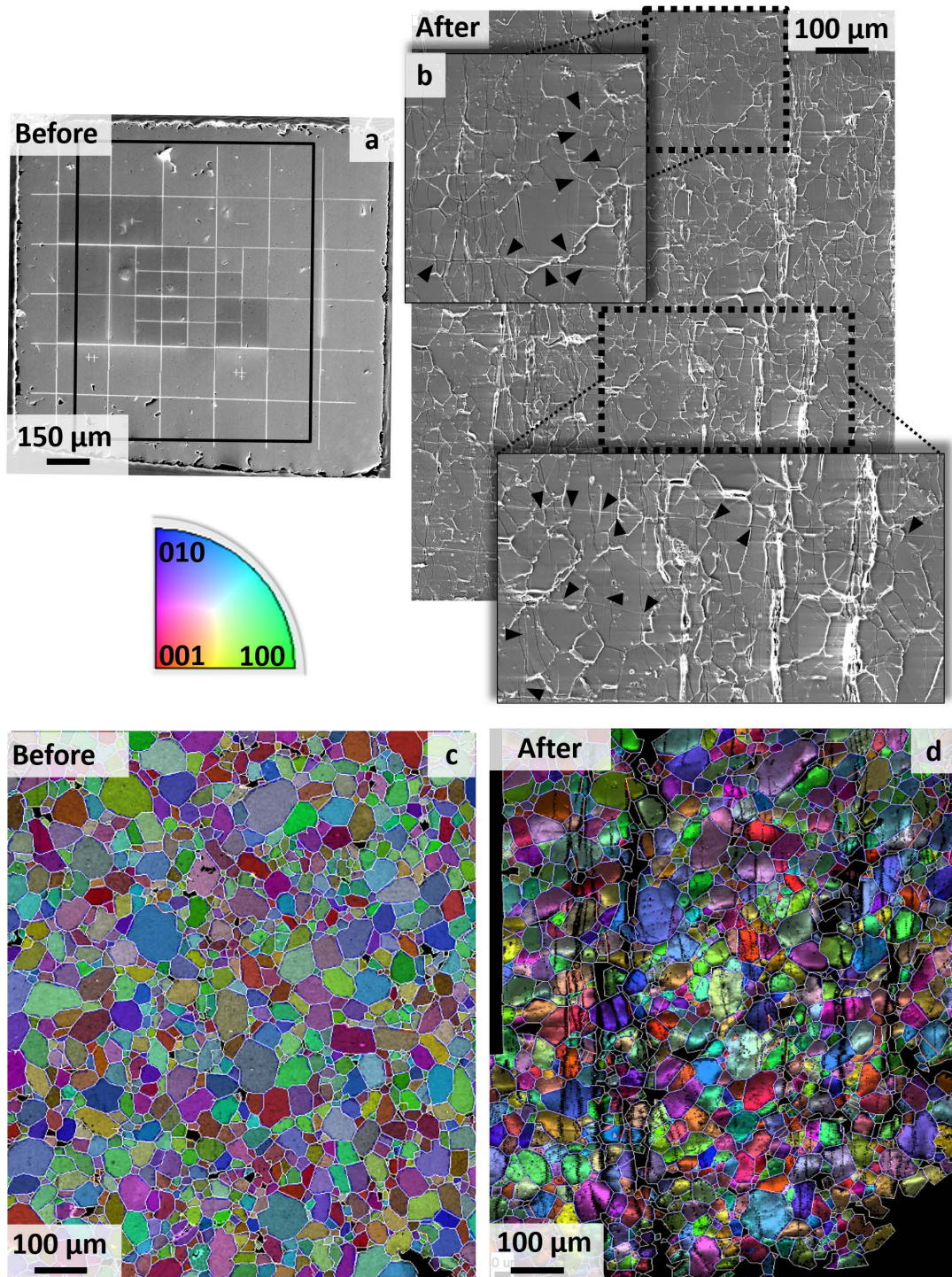


Figure A



SUPPLEMENTAL FIGURE A. The 8 mm unfired pyrophyllite cell assembly.

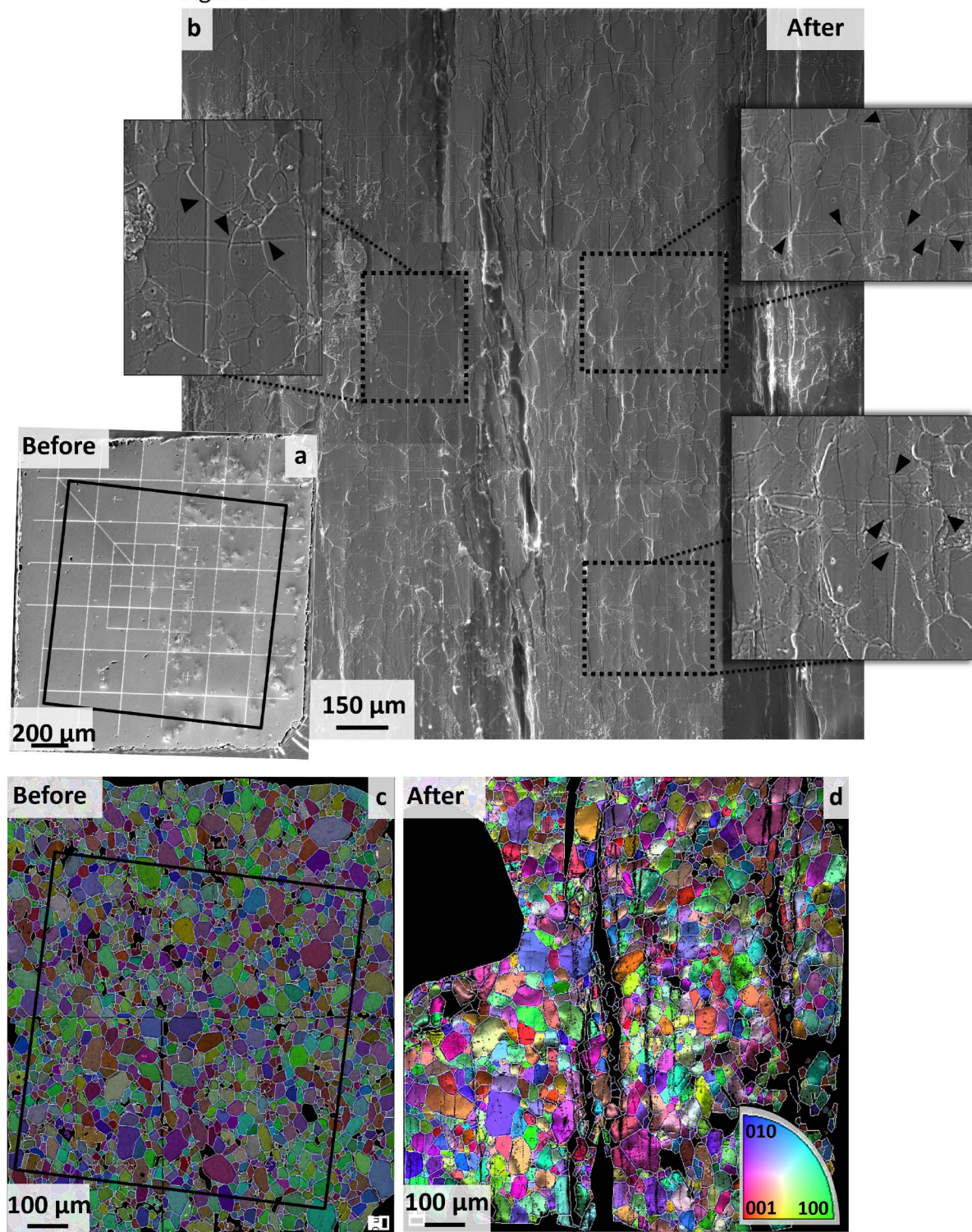
Figure B



**SUPPLEMENTAL FIGURE B.** M582 (GBiF1-15-8mm) - 5.0 GPa; 1000 °C;  $\dot{\epsilon}=2.0 \times 10^{-5} \text{ s}^{-1}$ ;  $\epsilon_p=30\%$ . (a) SE picture before deformation showing the grid. (b) SE picture after deformation. (c) Inverse pole orientation before deformation with the colored insert (*Pnma*) as reference. (d) Inverse pole orientation after deformation.

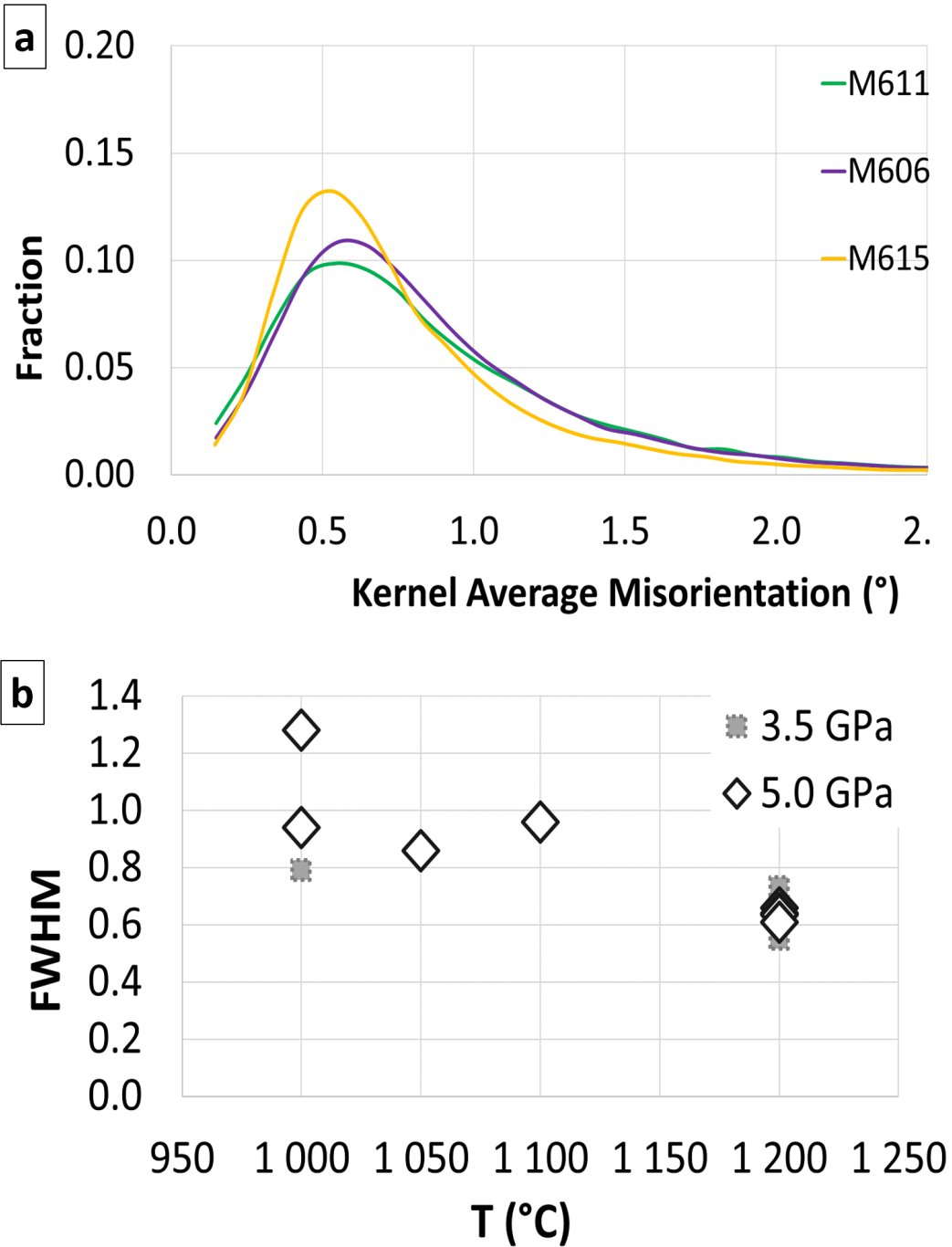


Figure C



SUPPLEMENTAL FIGURE C. M585 (GBiF1-16-8mm) - 5.5 GPa; 1050 °C;  $\dot{\epsilon} = 1.1 \times 10^{-5} \text{ s}^{-1}$ ;  $\epsilon_p = 17\%$ . (a) SE picture before deformation showing the grid. (b) SE picture after deformation. (c) Inverse pole orientation before deformation with the colored insert (*Pnma*) as reference. (d) Inverse pole orientation after deformation.

Figure D



**SUPPLEMENTAL FIGURE D. (a)** KAM distribution for all the samples deformed at 3.5 GPa. **(b)** The full width at half-maximum (FWHM) as a function of the temperature, in gray for experiments at 3.5 GPa, superposed to experiments at 5.0 GPa in white diamonds.