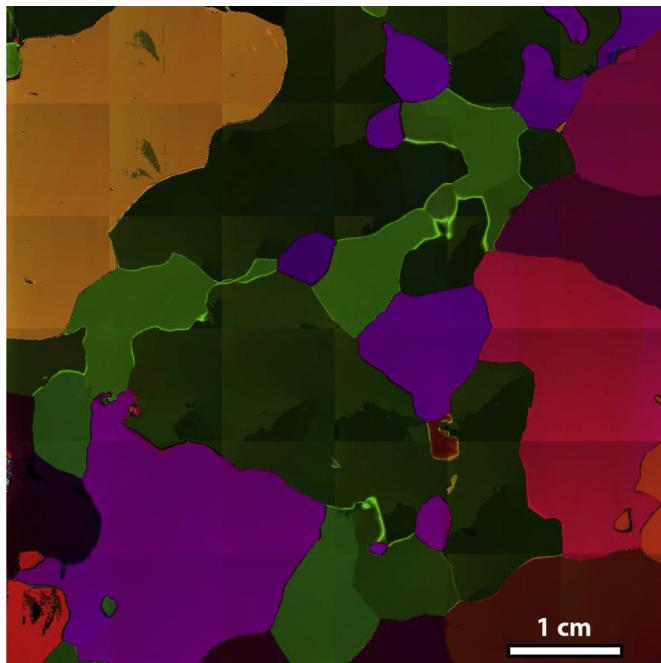


Photograph of the month



Microstructure of deep polar ice. The image shows ice from the lower, warm part of the EPICA-Dronning Maud Land (EDML) core in the Antarctic ice sheet. At a depth of 2375 m, the ca. 130.000 years old ice is at -13°C (Ruth et al., 2007; Wilhelms et al., 2007), i.e. a homologous temperature of 0.952. Polar ice is thus a "hot material" with microstructural behaviour close to that of silicate minerals at high metamorphic grades. The image shows the c-axes distribution map (AVA) measured with the automatic fabric analyzer (G50) by Russell-Head Instruments (www.russellheadinstruments.com) (see also Wilson et al. 2014; Peternell et al. 2014; Faria et al., 2014a). Colour coding is according to c-axis orientation. Strong dynamic recrystallization is indicated by interlocking grains and orientation families: the bright purple grains may belong to a single grain with a highly irregular shape, making it appear as multiple grains due to sectioning effects (Urai et al., 1986). The important role of dynamic recrystallization in all depths of the polar ice sheets (homologous temperatures at the cold surface ca. 0.8) lead to the development of the new recrystallization diagram presented in this issue (Faria et al. 2014b). The image is a collage of 36 individual orientation maps. Photograph: Ilka Weikusat & Sepp Kipfstuhl, Glaciology, Tübingen University & Alfred-Wegener-Institut Helmholtzzentrum für Polar- und Meeresforschung, Am Alten Hafen 26, 27568 Bremerhaven, Germany. ilka.weikusat@uni-tuebingen.de.

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