Geophysical Research Abstracts
Vol. 21, EGU2019-5054, 2019
EGU General Assembly 2019

A support to discovery of subglacial impact crater in northwest Greenland by gravity aspects from Earth gravity model EIGEN 6C4 and other data

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We support the very recent discovery of a large impact crater beneath Hiawatha Glacier in northwest Greenland (Kjaer et al 2018). We use a wholly independent way – mainly the gravity aspects (not only the traditional gravity anomalies, but also the second derivatives of the Marussi tensor, the gravity invariants and their specific ratio, known also as 2D indicator, the strike angles and the virtual deformations) which were derived from the recent global static Earth gravity field model EIGEN 6C4 and from the digital magnetic field database EMAG v.2 with the ground resolutions of around 10 and 5 km, respectively.