Subterrane

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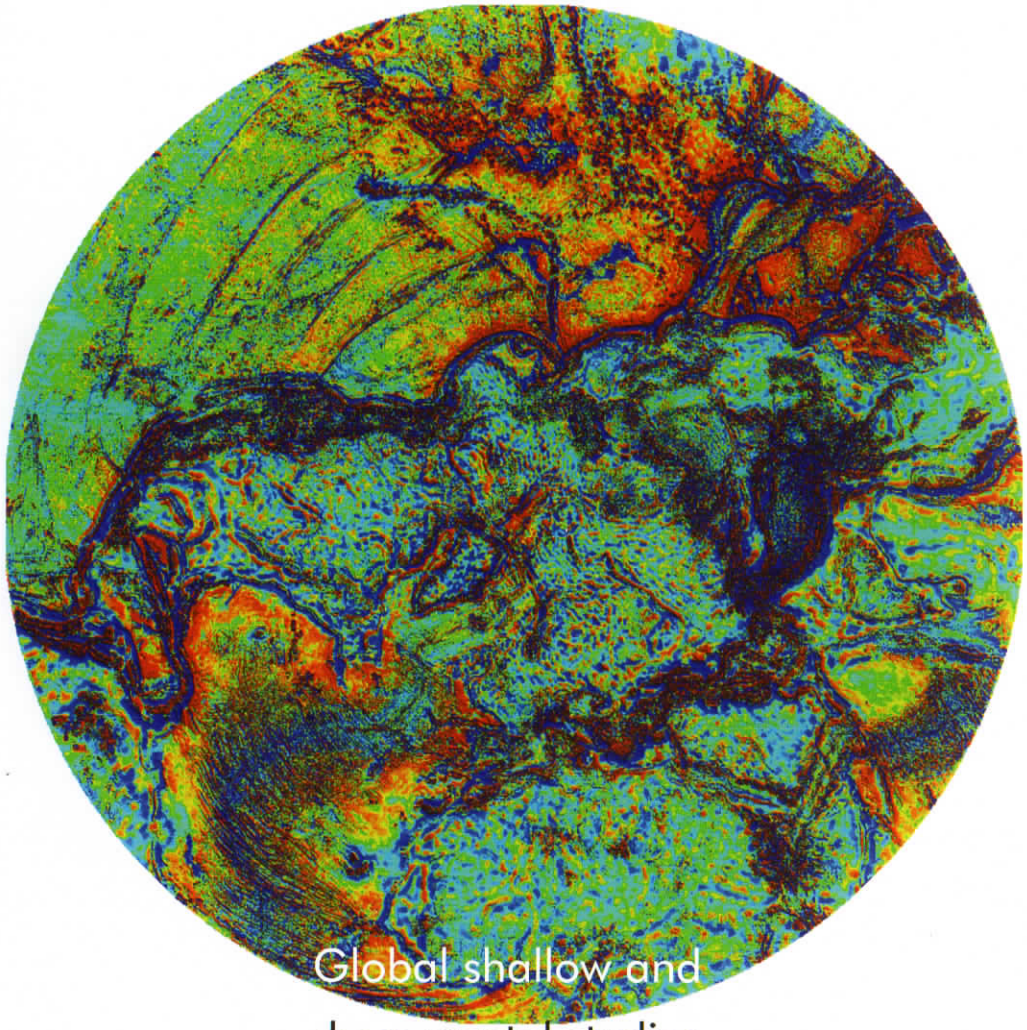

Global shallow and deep crustal studies

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Our Products

Shallow crustal residual gravity

Seamless global coverage, derived from public sources, 1minute offshore, 5/ 15 minute onshore resolution. Onshore and polar data source from Grace gravity. Alternatively onshore processed Sandwell.

Unique shallow crustal residual gravity utilized in Subterrane's presentations, with proven application to furthering understanding of the Earth's linkage between shallow and deep crustal structure, and unifying plate tectonics and plume theory. Full corrections applied including, but not limited to, Bouguer, Earth curvature and terrain. Consistency between independent satellite, air and ground readings.

The global dataset (minimum areal coverage 5 x 5 degrees) is available as a product delivered under a single company use digital license agreement. Provided in ascii xyz format under WGS84 datum in geographic coordinates. Alternatively supplied in grid format.

Also available at 15 minute resolution utilizing solely Grace Gravity mission data.

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Product source	Resolution	Extent	Coordinate system
Sandwell+Grace	0.6/15 minute	-180W to 180E -90S to 90N	WGS84 LL
Sandwell	0.6/5 minute	-180W to 180E -80S to 80N	WGS84 LL
	5 minute	-180W to 180E -80S to 80N	WGS84 LL
	2km	-180W to 180E -80S to 80N	WGS84 World Mercator
Grace	15 minute	-180W to 180E -90S to 90N	WGS84 LL

Data sources used in construction of shallow crustal residual gravity:
GEBCO 2014: The GEBCO_2014 Grid, version 20150318, http://www.gebco.net

GGM02: Tapley, B., J. Ries, S. Bettadpur, D. Chambers, M.Cheng, F. Condi, B. Gunter, Z. Kang, P.Nagel, R. Pastor, T. Pekker, S.Poole, F.Wang, 2005 "GGM02 - An improved Earth gravity field model from GRACE", Journal of Geodesy, doi: 10.1007/s00190-005-0480-z, http://www2.csr.utexas.edu/grace/gravity/ggm02/

Sandwell et al gravity: Data: SIO, NOAA. Sandwell, D. T., Müller, R. D.,Smith, W. H. F., Garcia, E. and Francis, R., 2014, New global marine gravity model from CryoSat-2 and Jason-1 reveals buried tectonic structure. Science,Vol. 346, 6205, pp. 65-67, doi: 10.1126/science.1258213

Crust 2.0 ice thickness: Bassin, C., Laske, G. and Masters,G., 2000, The Current Limits of Resolution for Surface Wave Tomography in North America, EOS Trans AGU, 81, F897

Coming soon

Crust mantle structure

Seamless global Moho model, and regional Moho models available utilizing Subterrane's method. Refer presentations for examples of use.

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