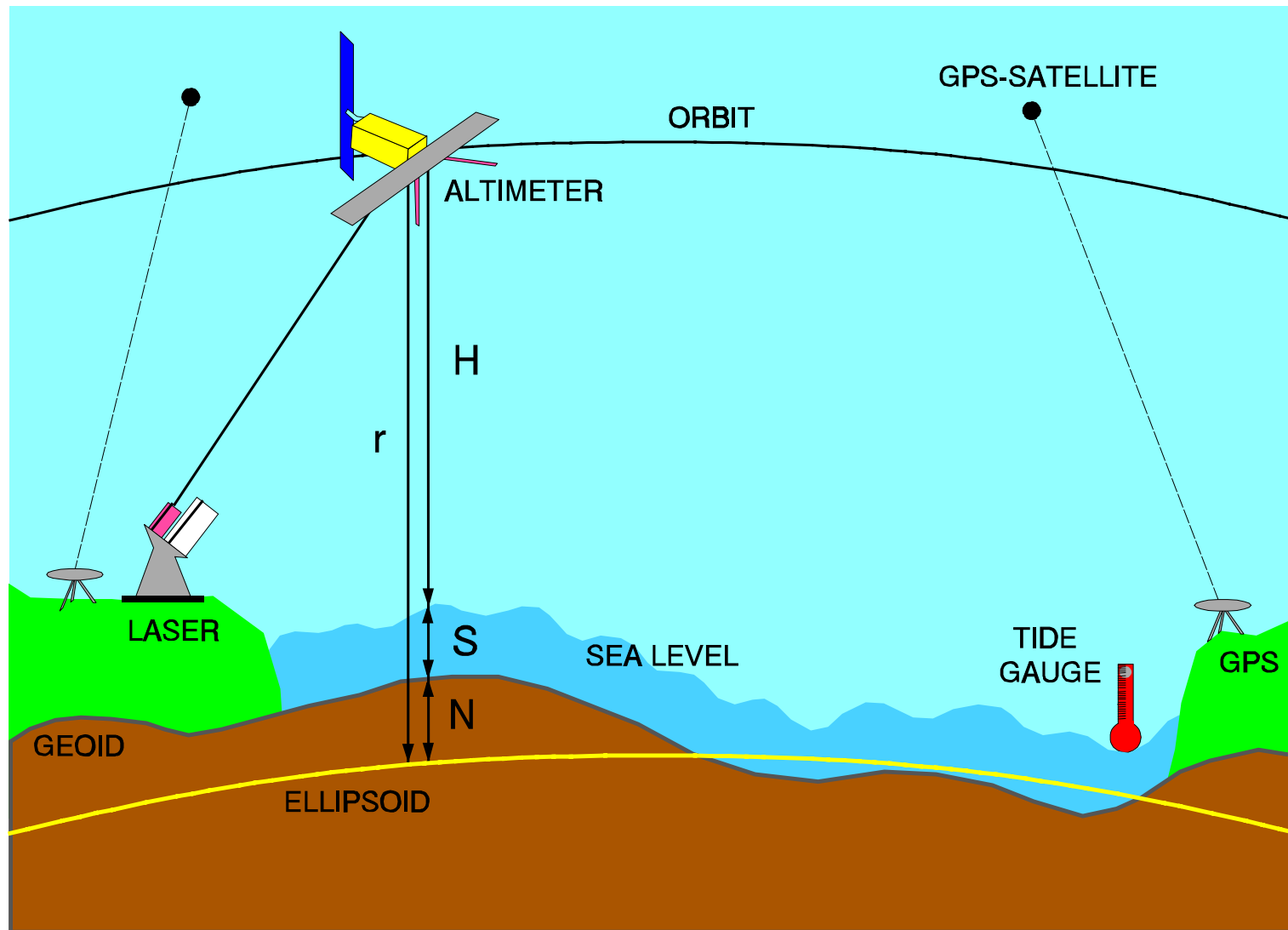


Gravity field modeling and altimetry: perspectives

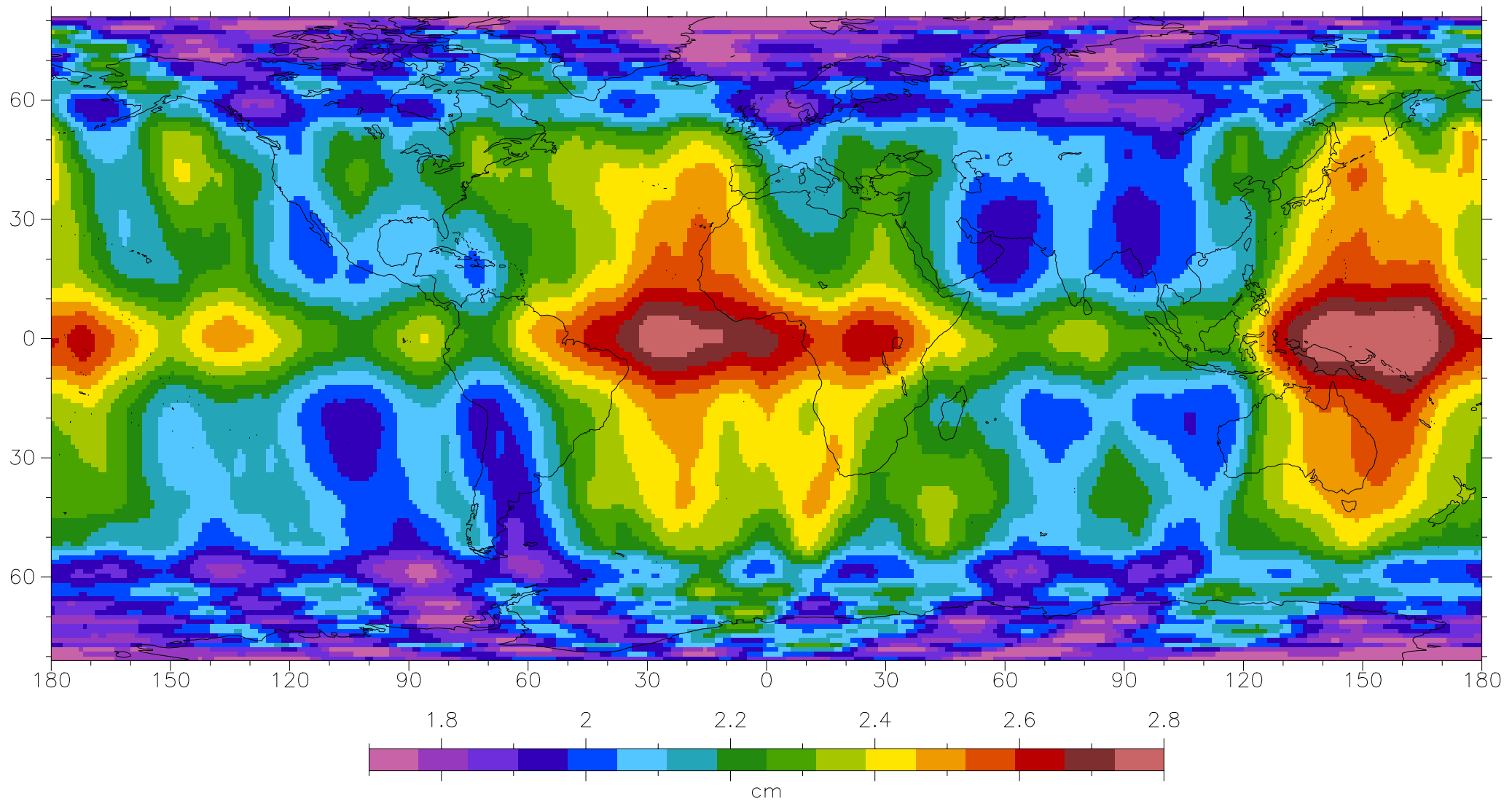
Pieter Visser

GAMBLE Workshop for Themes 1 and 3, 7-8 November 2002

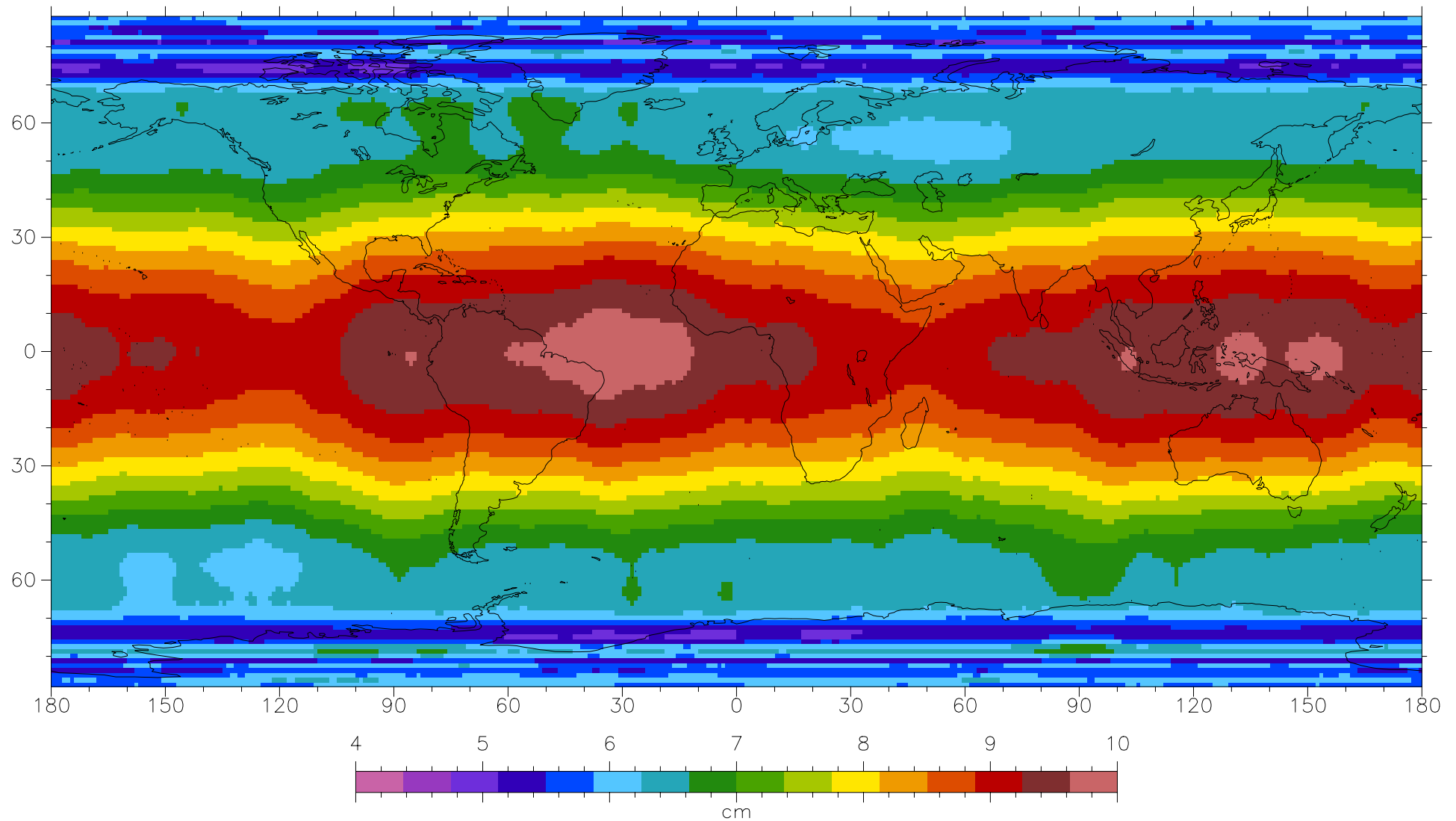
Altimeter principle



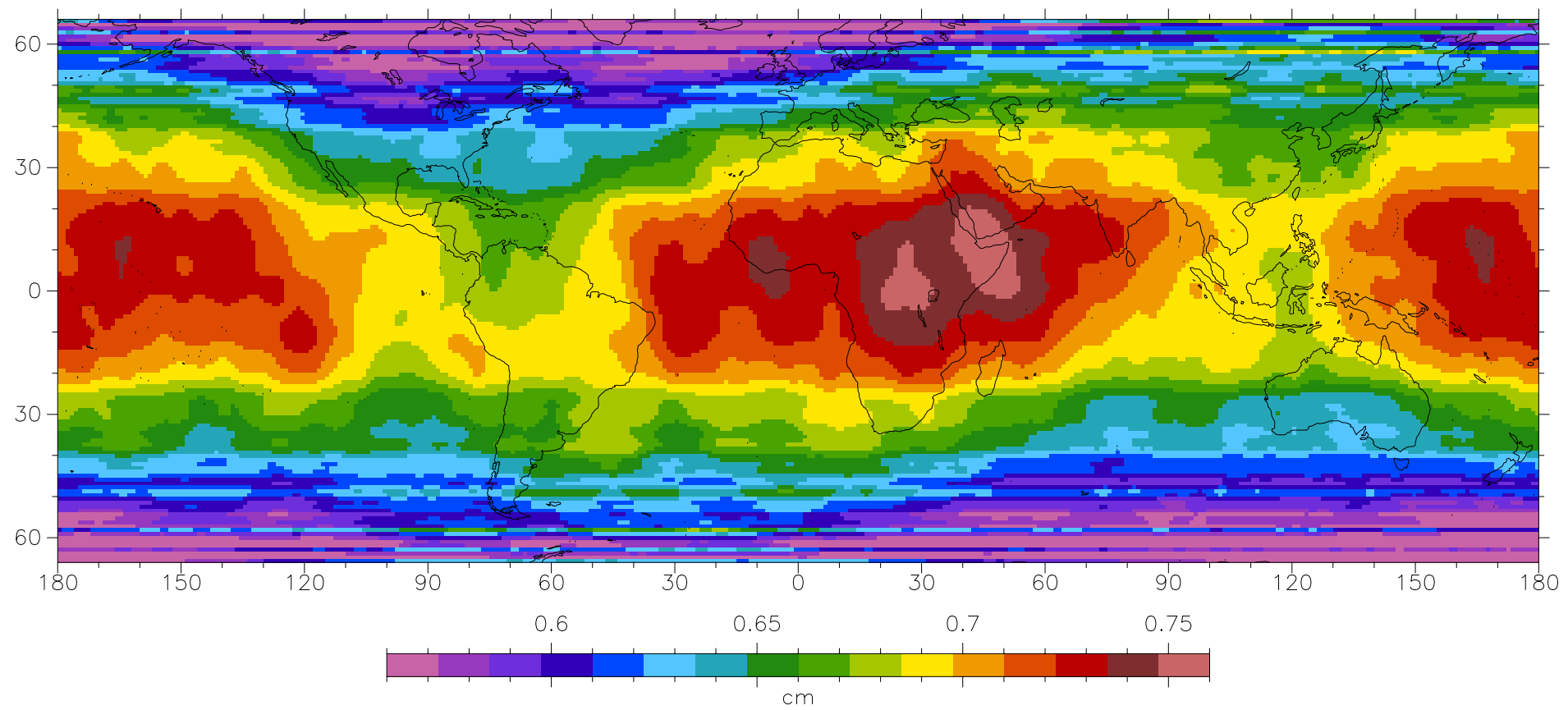
ERS/ENVISAT EGM-96 geographically correlated orbit error



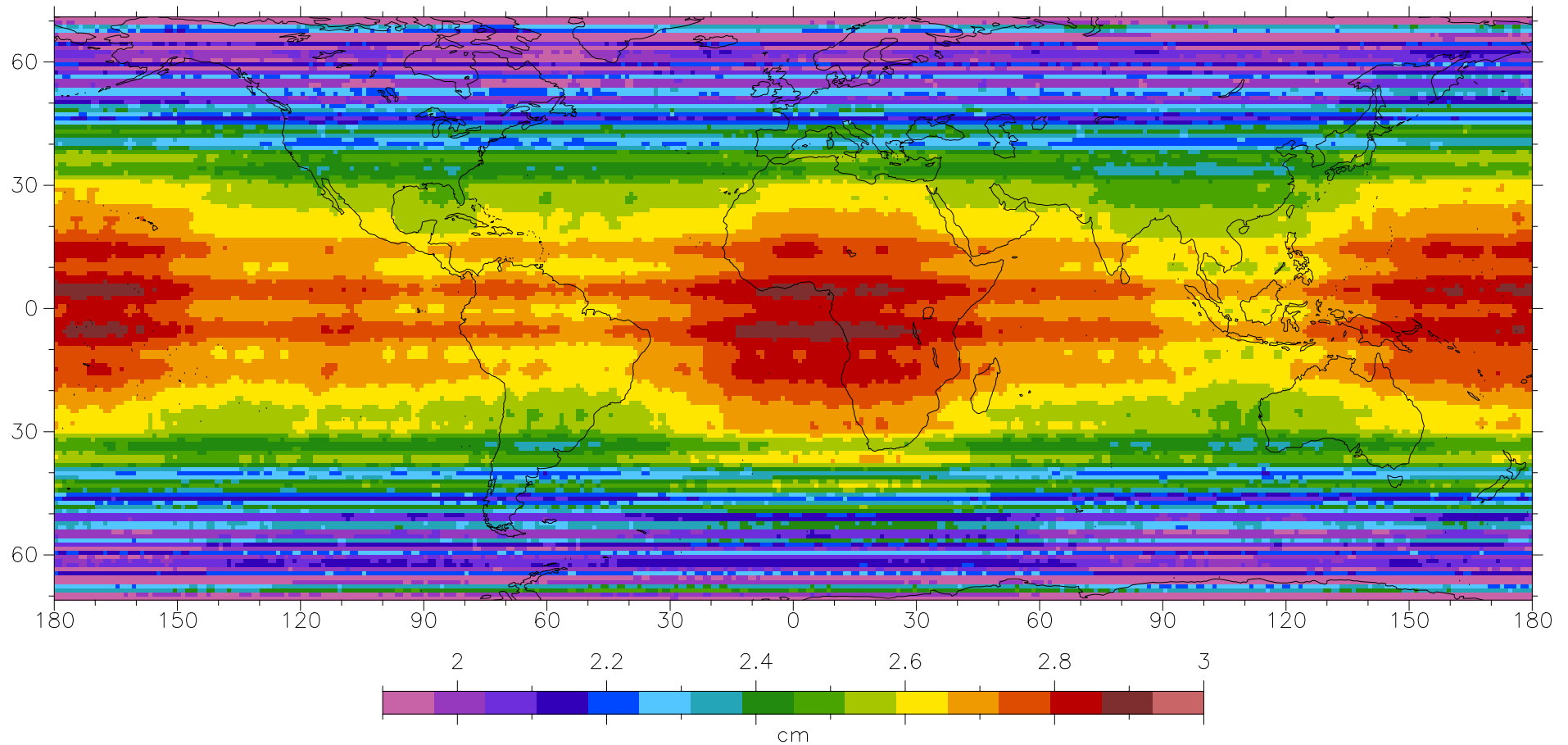
CRYOSAT EGM-96 geographically correlated orbit error



TOPEX EGM-96 geographically correlated orbit error



GEOSAT/GFO geographically correlated radial orbit error



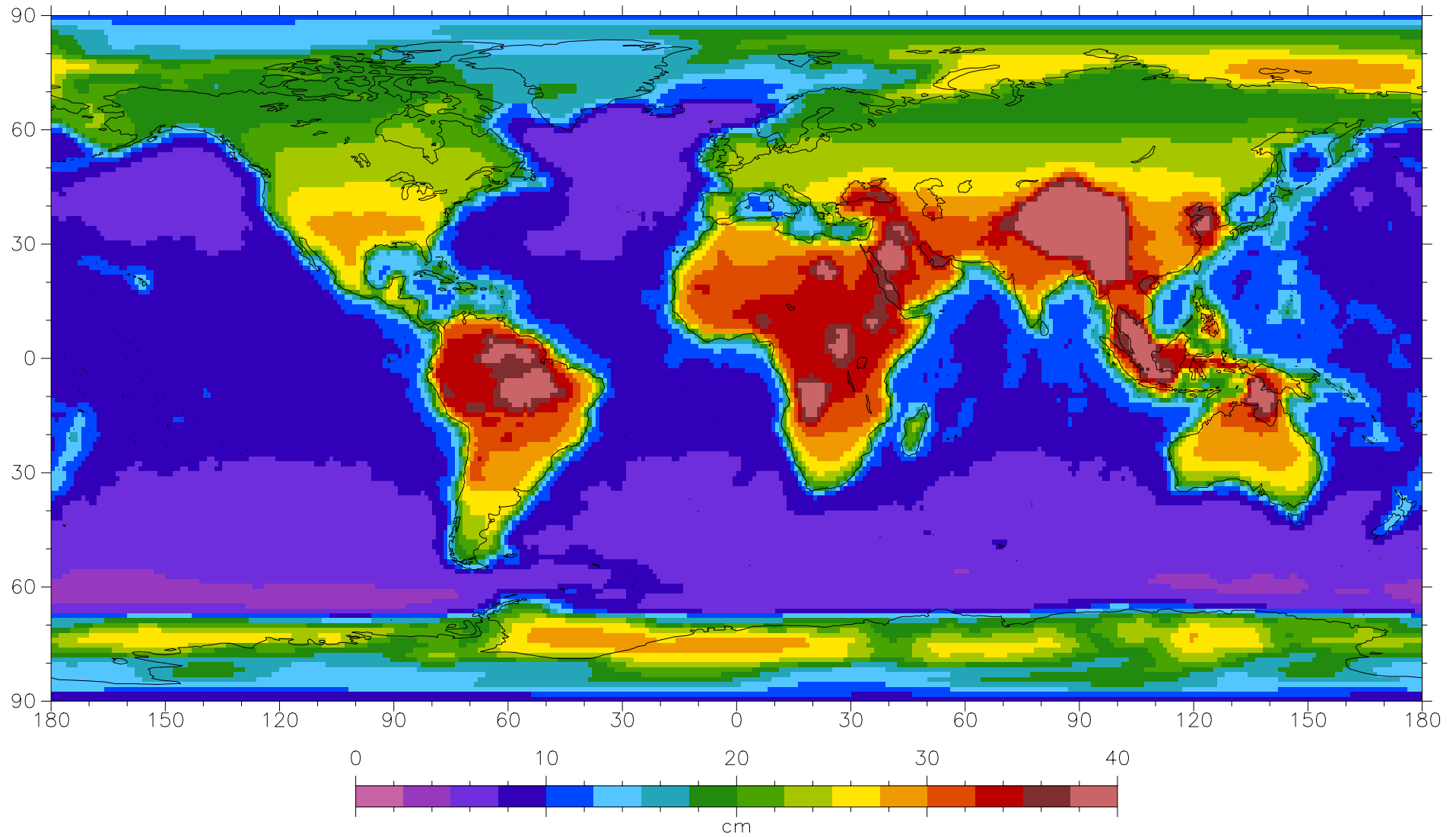
New gravity missions: geogr. corr. radial orbit error



Satellites	EGM-96	GOCE prediction
ERS-1/2 and Envisat	2.24 cm	0.02 cm
GEOSAT and GFO	2.51 cm	0.04 cm
TOPEX/POSEIDON and Jason	0.67 cm	0.02 cm
CRYOSAT	8.00 cm	0.02 cm

GRACE: even better expected performance at long wavelengths

EGM96 70x70 geoid error



New gravity missions: predicted cumulative geoid error

