

## Vening Meinesz Research School of Geodynamics

### Programme A:

### Earth structure, planetary dynamics, and geopotential fields

#### Research output 2002 of Programme A

#### Dissertations 2002

- Godey, S.S. (2002) Structure of the uppermost mantle beneath North America: Regional surface wave tomography and thermo-chemical interpretation. *Geologica Ultraiectina*, **222**, 122 pp.
- Scharroo, R. (2002) A decade of ERS satellite orbits and altimetry, *Delft University Press*, 195 pp.

#### Journal articles 2002

- Baker, T.F., Bos, M.S. & Williams, S.D.P. (2002) Confronting superconducting and absolute gravity measurements with models. *Marées Terrestres Bulletin d'Informations*, **136**, 10743-10744.
- Beghein, C.D.M.L., Resovsky, J. & Trampert, J. (2002) P and S tomography using normal mode and surface wave data. *Geophys. J. Int.*, **149**(3), 646-658.
- Bos, M.S., Baker, T.F., Røthing, K. & Plag, H.-P. (2002) Testing ocean tide models in the Nordic Seas with tidal gravity observations. *Geophys. J. Int.*, **150** (3), 687-694.
- Burgers, G., Malmaseda, M.A., Vossepoel, F.C., Van Oldenborgh, G.J. & Van Leeuwen P.J. (2002) Balanced ocean-data assimilation near the equator. *J. Phys. Oceanogr.*, **32** (9), 2509-2519.
- Cizkova, H., Van Hunen, J., Van den Berg, A.P. & Vlaar, N.J. (2002) The influence of rheological weakening and yield stress on the interaction of slabs with the 670 km discontinuity. *Earth Planet Sci. Lett.*, **199**(3-4), 447-457.
- Desai, S.D., Ray, R.D. & Schrama, E.J.O. (2002) Report of subgroup 6 on Satellite Altimetry of the IAG/ETC working group 6 'Solid Earth Tides in Space Geodetic Techniques', *Marées Terrestres Bulletin d'Informations*, **134**, 10569 - 10585.
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- Kok, Y.S. & Ynsen, I. (2002) Reply to comment by J.-P. Valet and L. Meynadier on "A relative geomagnetic intensity stack from Ontong-Java Plateau sediments for the Matuyama". *J. Geophys. Res.*, **107**(B3), DOI: 10.1029/2001JB000667

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### Books 2002

- Mitrovica, J.X. & Vermeersen L.L.A. (eds.) (2002) Ice Sheets, Sea Level and the Dynamic Earth. Geodynamics Series, **29**, 310 pp., American Geophysical Union (Washington DC, USA)

### Chapters in books 2002

- Mitrovica, J.X. & Vermeersen, L.L.A. (2002) Glacial isostatic adjustment and the Earth system. *In: Mitrovica J.X., Vermeersen L.L.A. (eds.); Ice Sheets, Sea Level and the Dynamic Earth. Geodynamics Series, 29, American Geophysical Union (Washington DC, USA), 1-2.*
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- Visser, P.N.A.M., Rummel, R., Balmino, G., Sünkel, H., Johannessen, J., Aguirre, M., Woodworth, P.L., Le Provost, C., Tscherning, C.C. & Sabadini, R. (2002) The European Earth Explorer Mission GOCE: Impact for the Geosciences. *In: Mitrovica J.X., Vermeersen L.L.A. (eds.), Ice Sheets, Sea Level and the Dynamic Earth. Geodynamics Series, 29, American Geophysical Union (Washington DC, USA), 95-107.*

### Conference proceedings 2002

- Ditmar, P. & Klees, R. (2002) The performance of the time-wise semi-analytical inversion of satellite gravity gradients. *In: J. Ádám and K.-P. Schwarz (eds.), Vistas for geodesy in the new millennium: IAG 2001 Scientific Assembly, Budapest, Hungary, September 2-7, 2001, International Association of Geodesy Symposia, 125, 253-258, Springer, Berlin.*
- Ditmar, P., Schrama, E.J.O. & Klees, R. (2002) Improved block-diagonal approximation of the normal matrix in the inversion of satellite gradiometry observations. *In: J. Ádám and K.-P. Schwarz (eds.), Vistas for geodesy in the new millennium: IAG 2001 Scientific Assembly, Budapest, Hungary, September 2-7, 2001, International Association of Geodesy Symposia, 125, 7 pp., Springer, Berlin.*

- Haagmans, R., Prijatna, K. & Omang, O.D. (2002) An alternative concept for validation of GOCE gradiometry results based on regional gravity. *In: The Proceedings of 3<sup>rd</sup> Meeting of the International Gravity and Geoid Commission, Thessaloniki, Aug. 2002.*
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## Other scientific publications 2002

- Alverson, K. & LeGrand, P. (2002) Does carbon isotope data help explain atmospheric CO<sub>2</sub> concentrations during glacial periods ? *In: Study of environmental change using isotope techniques, IAEA-CN-80/102, Vienna, 13, 113-128.*
- Balmino, G., Beutler, G., Ilk, K.H., Klees, R., Visser, P., Koop, R., Reigber, Ch., Rummel, R., Sanso, F., Suenkel, H. & Tscherning, C.C. (2002) GOCE: Preparation of the GOCE level 1 to level 2 data processing. Final report. Rapport aan European Space Agency, ESA, ESA/ESTEC rapportnummer 14986/01/NL/DC, 38 pp.
- Balmino, G., Beutler, G., Ilk, K.H., Klees, R., Visser, P., Koop, R., Reigber, Ch., Rummel, R., Sanso, F., Suenkel, H. & Tscherning, C.C. (2002) GOCE products definition document (PDD). Rapport aan European Space Agency, ESA, ESA/ESTEC rapportnummer 14986/01/NL/DC, 56 pp.
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- Balmino, G., Beutler, G., Ilk, K.H., Klees, R., Visser, P., Koop, R., Reigber, Ch., Rummel, R., Sanso, F., Suenkel, H. & Tscherning, C.C. (2002) GOCE architecture design document (ADD). European Space Agency, ESA, ESA/ESTEC rapportnummer 14986/01/NL/DC, 70 pp.
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