

JOHN M. WAHR

EDUCATION

Bachelor of Science Degree, University of Michigan, Physics (Honors) and Mathematics (Highest Honors), 1973
Master of Science Degree, University of Colorado, Physics, 1976.
Ph.D., University of Colorado, Physics, 1979.

EXPERIENCE

1980-82 Visiting Scientist, Geophysical Fluid Dynamics Program, Department of Geological and Geophysical Sciences, Princeton University
1983-86 Assistant Professor, Dept. of Physics, University of Colorado
1986-1992 Associate Professor, Dept. of Physics, University of Colorado
1992-present Professor, Dept. of Physics, University of Colorado
1983-present Fellow of The Cooperative Institute for Research in Environmental Sciences, University of Colorado
1989-present Distinguished Visiting Scientist, Jet Propulsion Laboratory, Pasadena, California.

POST-PhD AWARDS AND HONORS

Guy Bomford Prize for Geodetic Research, 1983, from the International Association of Geodesy and London's Royal Society.
James B. Macelwane Award of the American Geophysical Union, 1985.
Fellow of the American Geophysical Union (1985) and of the IAG (1991).
Bowie Lecturer (American Geophysical Union, 1994)
Vening Meinesz Medal (1998) from Utrecht and Delft Universities in The Netherlands.
Editors' Citation for Excellence in Refereeing, AGU (2002).
Vening Meinesz Medal (2004) of the European Geosciences Union.

ACTIVE RESEARCH INTERESTS

Time-variable gravity and its earth science applications; rotation of the Earth; earth and ocean tides; polar ice balance; global sea level rise; geological/geophysical applications of InSAR; interaction of the atmosphere and oceans with the Earth; post-glacial deformation; mantle anelasticity; the Earth's three dimensional internal structure.

SELECTED, REFEREED PUBLICATIONS (133 total)

Wahr, J.M., 1981, Body tides on an elliptical, rotating, elastic and oceanless Earth, *Geophys. J.R. Astr. Soc.*, 64, 677-704.
Wahr, J.M., 1981, The forced nutations of an elliptical, rotating, elastic and oceanless Earth, *Geophys. J.R. Astr. Soc.*, 64, 705-728.
Wahr, J.M., 1982, The effect of the atmosphere and oceans on the earth's wobble: 1. theory, *Geophys. J.R. Astr. Soc.*, 70, 349-372.
Wahr, J.M., 1983, The effects of the atmosphere and oceans on the earth's wobble and on the seasonal variations in the length of day - 2. results, *Geophys. J.R. Astr. Soc.*, 74, 451-487.
Wahr, J.M. and Z. Bergen, 1986. The effects of mantle anelasticity on nutations, earth tides, and tidal variations in rotation rate, *Geophys. J. R. astr. Soc.*, 87, 633-688.
Van Dam, R. T.M. and J.M. Wahr, 1987. Deformation of the Earth's surface due to atmospheric loading: effects on gravity and baseline measurements, *J. Geophys. Res.*, 92, 1281-1286.

- Trupin, A. and J. Wahr, 1990. Spectroscopic Analysis of Global Tidal Gauge Sea Level Data, *Geophys. J. Int.* 100, 441-453.
- Rodgers, A. and J. Wahr, 1993. Inference of Core-Mantle Boundary Topography from ISC PcP and PKP Travel Times, *Geophys. J. Int.*, 115, 991-1011.
- Han, Dazhong and J. Wahr, 1995. The Viscoelastic Relaxation of a Realistically Stratified Earth, and a Further Analysis of Post-Glacial Rebound, *Geophys. J. Int.*, 120, 287-311.
- Desai, S. and J. Wahr, 1995 Empirical Ocean Tide Models Estimated from TOPEX/POSEIDON Altimetry, *J. Geophys. Res.*, 100 (C12), 25205-25228.
- Wahr, John M., Dazhong Han, and Andrew Trupin, 1995. Predictions of Vertical Uplift Caused by Changing Polar Ice Volumes on a Visco-Elastic Earth, *Geophys. R. Lett.*, 22, 977-980.
- Dickey, J.O., Bentley, C.R., Bilham, R., Carton, J.A., Eanes, R.J., Herring, T.A., Kaula, W.M., Lagerloef, G.S.E., Rojstaczer, S., Smith, W.H.F., van den Dool, H.M., Wahr, J.M., Zuber, M.T., Satellite Gravity and the Geosphere, *National Research Council Report*, National Academy Press, 112 pp., 1997.
- Wahr, J., M. Molenaar, and F. Bryan, 1998. Time-Variability of the Earth's Gravity Field: Hydrological and Oceanic Effects and Their Possible Detection Using GRACE, *J. Geophys. Res.*, 103, 30205-30230.
- Tierney, C., J. Wahr, F. Bryan, V. Zlotnicki, 2000. Short-period oceanic circulation: implications for satellite altimetry, *Geophys. Res. Lett.*, 27, 1255-1258.
- Wahr, J., D. Wingham, C.R. Bentley, 2000. A method of combining ICESAT and GRACE satellite data to constrain Antarctic mass balance, *J. Geophys. Res.*, 105, 16279-16294.
- Swenson, S, J. Wahr, and P.C.D. Milly. Estimated accuracies of regional water storage anomalies inferred from GRACE. *Water Resources Research*, 39, NO.8, 1223, doi:10.1029/2002WR001808, 2003.
- Wahr, J., S. Swenson, V. Zlotnicki, and I. Velicogna, Time-Variable Gravity From GRACE: First Results, *Geophys. Res. Lett.*, 31, L11501, doi:10.1029/2004GL019779, 2004.
- Chambers, D.P., J. Wahr, and R.S. Nerem, Preliminary observations of global ocean mass variations with GRACE, *Geophys. Res. Lett.*, 31, L13310, doi:10.1029/2004GL020461, 2004.
- Mitrovica, J.X., J. Wahr, I. Matsuyama, and A. Paulson. The rotational stability of an Ice Age Earth, *Geophys. J. Int.*, 161, 491-506, 2005.
- Furuya, M. and J.M. Wahr. Water level changes at an ice-dammed lake in west Greenland inferred from InSAR data, *Geophys. R. Lett.*, 32 L14501, 10.1029/2005GL023458, 2005.
- Paulson, A., S. Zhong, and J. Wahr, Modelling Post-Glacial Rebound With Lateral Viscosity Variations, *Geophys. J. Int.*, 163, 357-371, 2005.
- Velicogna, I. and J. Wahr. Greenland mass balance from GRACE. *Geophys. Res. Lett.*, 32, L18505, doi:10.1029/2005GL023458, 2005.