



**Philip Leslie Woodworth**

**UK**

**Professor Philip Woodworth** is a retired researcher from the National Oceanography Centre (NOC) in Liverpool. He has been a leader in international Sea Level Science with research interests in sea level changes on timescales from hours (tides) to centuries (climate change). He has published extensively on these topics, especially with the use of data from tide gauges. In addition, he has expertise in geodetic measurements and various forms of remote sensing. He has supervised over a dozen PhD students. He is a former Director of the Permanent Service for Mean Sea Level (PSMSL) and Chairman of Global Sea Level Observing System (GLOSS) of the Intergovernmental Oceanographic Commission. He has been a Lead or Contributing Author or Review Editor for each of the IPCC Research Assessments and is one of the IPCC's 2007 Nobel Peace Prize Laureates. He is a member of the American Geophysical Union and Challenger Society. He has been awarded the Denny Medal of IMAREST (2009), the Vening Meinesz Medal of the European Geosciences Union (2010) and an MBE for services to science (2011). He is at present an Emeritus Fellow at NOC and a Visiting Professor at Liverpool University.

**Research Interests:** Sea level variations from time scales of hours (e.g. tides) through to long term changes, using primarily data from tide gauges and radar altimetry. Tide gauge technology. Aspects of maritime and oceanographic history.

**University Degrees:** Univ. Durham, Hatfield College, B.Sc. 1<sup>st</sup> Class Hons., Physics, 1970; Univ. Birmingham, Ph.D (High Energy Physics), 1974; Univ. Durham, D.Sc., 2002.

**Memberships:** Remote Sensing & Photogrammetry Society, Challenger Society, American Geophysical Union, Honorary member of the "Christian Le Provost, Océanographe" Association, Coastal Education and Research Foundation (CERF).

**Career History:** CERN Fellow, Geneva, Switzerland (1975-1977), Senior Research Associate Rutherford Appleton Laboratory based at DESY, Hamburg (1978-1983), Researcher and group leader at the Proudman Oceanographic Laboratory (1983-2014), Director of the Permanent Service for Mean Sea Level (ICSU/IUGG), the global data bank for Mean Sea Level information from tide gauges (1988-2007), Chairman of the Intergovernmental Oceanographic Commission (IOC) Global Sea Level Observing System (GLOSS) Group of Experts (1996-2006), President IAPSO Commission on MSL and Tides (2004-2012), Founder of the UK National Tidal & Sea Level Facility at POL (2004), Secretary Federation of Astronomical and Geophysical Data Analysis Services (ICSU) (2007-2012), NOC Visiting Scientist (2014), Emeritus Fellow at NOC (2018).

**Marks of Esteem:** Fellowship of International Association of Geodesy (IAG) (1991), Visiting Professor Liverpool University (ongoing) (1999-ongoing), Associate Fellowship Remote Sensing and Photogrammetry Society (2002), Letter of Appreciation from Dr. Patricio Bernal (IOC) for chairmanship of GLOSS (2003), Nobel Peace Prize awarded to participants in the IPCC process (2007), Denny Medal of IMAREST (2009), 'Highly Commended' certificate from the Institute of Engineering and Technology (2009), Certificate of Appreciation from ICSU and World Meteorological Organization for contributions to International Polar Year (2009), Vening Meinesz medal of the European Geosciences Union (2010), Member of the Order of the British Empire (MBE) in New Year's Honours List (2011), Intergovernmental Oceanographic Commission 50th Anniversary Commemorative Medal (2011), Interviewed as a 'UK leading scientist' for the British Library Oral History of British Science (2011), Leverhulme Trust Emeritus Fellowship (2015), Certificate to mark appointment as Emeritus Fellow at the National Oceanography Centre (2018), Fellow of the International Union of Geodesy and Geophysics (IUGG) (2019).

**Editorial Positions:** Editorial Board of Journal of Coastal Research (1990-2013), Editor of IUGG Geophysical Monograph Vol.69 (Proceedings of Union Symposium at IUGG 1991 in Vienna), Co-Editor of the 'Tidal Science 1996' special issue of Progress in Oceanography, Editor sea level theme volume of Philosophical Transactions of the Royal Society (2006), Co-editor of special issue of Ocean Dynamics (2006), Co-editor of Wiley-Blackwell book following WCRP Workshop on Sea-Level Rise and Variability, Paris (2006), Co-editor of special issue of Surveys in Geophysics (2011), Review editor for the IPCC AR5 WG1 Chapter 13 (2012-2013), Editor of the sustained ocean observations theme volume of Phil Trans (2014), Co-Editor of special issue on tides spanning four Copernicus journals to mark the 100th anniversary of the Liverpool Tidal Institute (2018-19).