

TS14.1 Celebrating the 100th birth anniversary of Marie Tharp: Seafloor mapping and ocean plate tectonics

Click to access display



Conveners: Mathilde Cannat, Susanne Buiter, Javier Escartin, and Philipp Brandl





And at Lamont in July 2001, after she received the Lamont-Doherty Heritage Award. Photo credit: Bruce Gilbert

Marie Tharp, July 30, 1920 (Ypsilanti, Michigan) –August 23, 2006 (Nyack, New York). The pioneering seafloor mapping and visualization by Marie Tharp played a key role in the acceptance of the plate tectonic theory. Her physiographic maps, published with Bruce Heezen, covered the Earth's oceans and revealed with astonishing accuracy the submarine landscape.

Marie Tharp co-authored the first papers describing the major fracture zones in the Central Atlantic (Chain, Romanche, Vema), and her work directly contributed to the recognition of the role of mid-ocean ridges in plate tectonics and oceanic accretion.

To honour Marie Tharp's profound and lasting contribution to plate tectonics and marine geosciences, this session will address plate tectonics in the oceans, based primarily on information from seafloor mapping, including regular or high resolution bathymetry, seafloor imagery and geophysical characterization of the oceanic domains.



Heezen &*Tharp physiographic diagram of the North Atlantic, painted by H.C. Berann in 1968*