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HOAPS-3: Improved global ocean freshwater-flux climatology derived from SSM/I satellite data.

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HOAPS-3, the third version of the "Hamburg Ocean Atmosphere Parameters and Fluxes from Satellite Data" climatology of precipitation and evaporation over the global ice-free ocean between 1987 and 2005, has recently been released and is freely available from www.hoaps.org.
The climatology is entirely satellite-based. All variables are derived from SSM/I passive microwave radiometers (except for the SST), including multi-satellite averages, inter-sensor calibration, and an efficient sea ice detection procedure. The most important improvements over the previous version are a neural network based precipitation-algorithm, the integration of the completely reprocessed Version 5 NOAA Pathfinder SST dataset and a considerably longer time series of now more than 18 years. The new precipitation algorithm together with the evaporation leads to an improved global freshwater balance, which now compares much better to GRDS runoff-data results than previous versions.
The presentation will cover the validation evidence from other surface and satellite based data products and first results on global precipitation fields and their temporal development.