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NASA's Earth Science Mission Directorate Applied Sciences Program (ASP) is supporting a formal effort to optimize the value of upcoming NASA Earth missions to a broad user community and to society at large. The objective of the Surface Water and Ocean Topography (SWOT) Applications program is to pave the way for operational use of SWOT data products soon after the mission launches in 2020.

A wide range of existing and potential oceanography applications utilizing current altimetry data products will be enhanced with the introduction of high spatial resolution data from SWOT. With time series of surface water measurements provided by SWOT, a broad range of hydrology applications will inform water managers for river commerce, drought, floods, transboundary river issues, reservoir storage, and much more.

As part of the SWOT applications effort, several studies have already been proposed to ASP that will provide valuable demonstrations, data sets, and outcomes which will highlight the applications potential of SWOT for a broad range of users. The studies proposed to date include the development of an altimetry toolbox for forecasting floods in remote areas, the use of remote sensing measurements to improve the understanding, monitoring and management of estuaries and deltas, and the use of simulated SWOT data to assess the quality and potential value of SWOT measurements to both oceanography and hydrology applications.

Planned strategies to enhance science and practical applications of SWOT data will be discussed, including methods of engaging with the science community, operational users, and mission planners.

OSTS session

Outreach, Education and Altimetric Data Services

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