Introductory Webinar: Groundwater Monitoring using Observations from NASA’s Gravity Recovery and Climate Experiment (GRACE) Missions

June 25, 2020
11:00-12:30 ET (English) or 14:00-15:30 ET (Spanish) (UTC-4)

Groundwater makes up roughly 30% of global freshwater. It also provides drinking water for the world's population, and irrigation for close to 1/3rd of global agricultural land. Because of this level of reliance, monitoring groundwater is crucial for water resources and land management. The Gravity Recovery and Climate Experiment (GRACE) and GRACE-Follow On (GRACE-FO) missions from NASA and the German Research Centre for Geosciences (GFZ) provide large-scale terrestrial water storage estimation from mid-2000 to present. The mission uses twin satellites to accurately map variations in the Earth's gravity field and surface mass distribution. GRACE observations have been used for detecting groundwater depletion and for drought and flood predictions.

This lightning-style training is designed to answer the demand and interest from the applications community in technologies that can be used to support water resources management. The webinar will provide an overview of the GRACE missions, groundwater data availability, and their applications in the monitoring and management of water resources. This lightning webinar will also serve as the foundation for the upcoming advanced webinar: Using Earth Observations to Monitor Water Budgets for River Basin Management II.

Agenda:

- Introduction to GRACE and GRACE-FO
- Data Format, Variables, and Resolution
- GRACE Data Access
- Q&A Session