IGPP Virtual Seminar Series

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Shallow Water Seafloor Geodesy: GPS on An Anchored Spar Buoy

Date: Tuesday, Dec 1, 2020
Time: 12:00 pm, Pacific Time
Host: Tianze Liu (tianzeliu@ucsd.edu)
Zoom link: https://ucsd.zoom.us/j/93680859042?pwd=Q01HSGwzd1haYzdHcEhRNE5rYkNKZz09
(Password: seafloor)
High precision space geodetic techniques have been widely used in earth deformation studies. However, many large earthquakes and most tsunamis occur at subduction zones, where the critical region of strain accumulation and release lies offshore but is poorly monitored. Existing seafloor geodetic techniques tend to be expensive and difficult to obtain long-duration continuous measurements in this technically challenging environment. In this talk I will introduce a shallow water seafloor geodetic system that is capable of measuring three-component seafloor motion with centimeter precision. I will also report the results and some lessons we learnt from our experiment conducted in the Tampa Bay, Florida.