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Poster
Multidecadal sea level variability in East Asian seas is examined using satellite altimetry and sea level reconstructions to better understand long-term sea level trends in the western Pacific. The 25 East Asian seas are grouped into two regions: Southeast Asian Seas (SEAS) and Northeast Asian Seas (NEAS) as defined by the Limits of the Ocean and Seas published in 1953. The SEAS span the largest archipelago in the global ocean, the Indonesian Archipelago, and provide a complex oceanic pathway connecting the Pacific and Indian Oceans. This is the only existing tropical interoceanic throughflow and is comprised of a total of 20 seas, straits, and gulfs. SEAS regional sea level trends are some of the highest observed in the modern satellite altimeter record that now spans two decades. In contrast, the five Pacific marginal seas that comprise the NEAS of the western North Pacific exhibit significantly lower trend rates with the exception of the Philippine Sea. Initial comparisons of different global sea level reconstructions over the past 60 years find that 17-year sea level trends exhibit good agreement in areas and at times of strong signal to noise associated with multidecadal variability forced by low frequency variations in Pacific trade winds. Forcing of the sea level trends in the SEAS and NEAS regions, and coupling between the two regions, will be discussed further in the poster.
OSTS session
Science Results from Satellite Altimetry
Meeting name
Ocean Surface Topography Science Team (OSTST) Meeting
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