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Poster
The rate of coastal sea level change in the Northeast Pacific (NEP) has decreased in recent decades. The relative contributions to the decreased rate from remote equatorial wind-stress, local longshore wind-stress, local wind-stress-curl are examined. Regressions of sea level onto wind-stress time series and comparisons between NEP and Fremantle sea levels suggest the decreased rate in the NEP is primarily due to oceanic adjustment to strengthened trade winds along the equatorial and coastal waveguides. The roles of longshore wind-stress and local wind-stress-curl are found to be of minor importance in comparison to equatorial forcing. The predictability of decadal sea level change rates along the NEP coastline is therefore largely determined by tropical variability. In addition, we demonstrate the importance of accounting for regional, wind-driven sea level variations when attempting to calculate accelerations in the long-term rate of sea level rise.
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