

# Space-Time Causality Analysis of Regional Impacts of ENSO on Terrestrial and Oceanic Precipitation

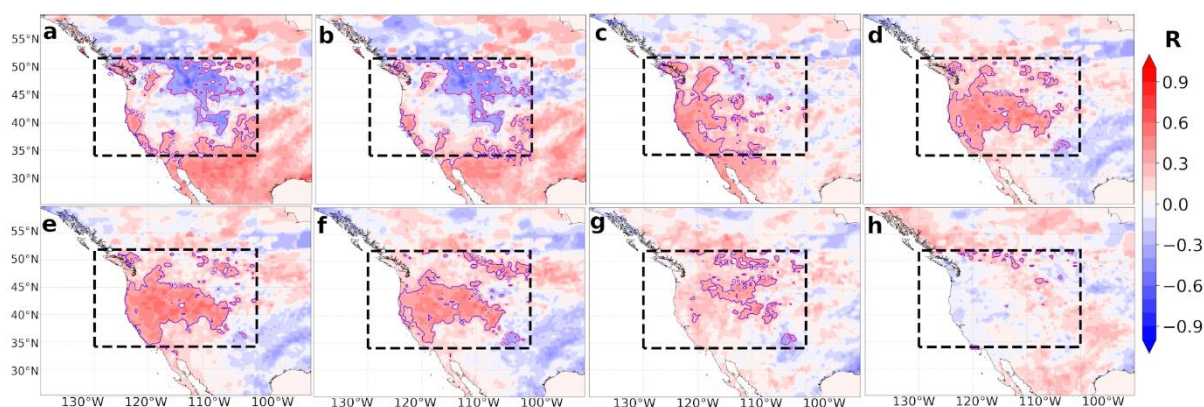
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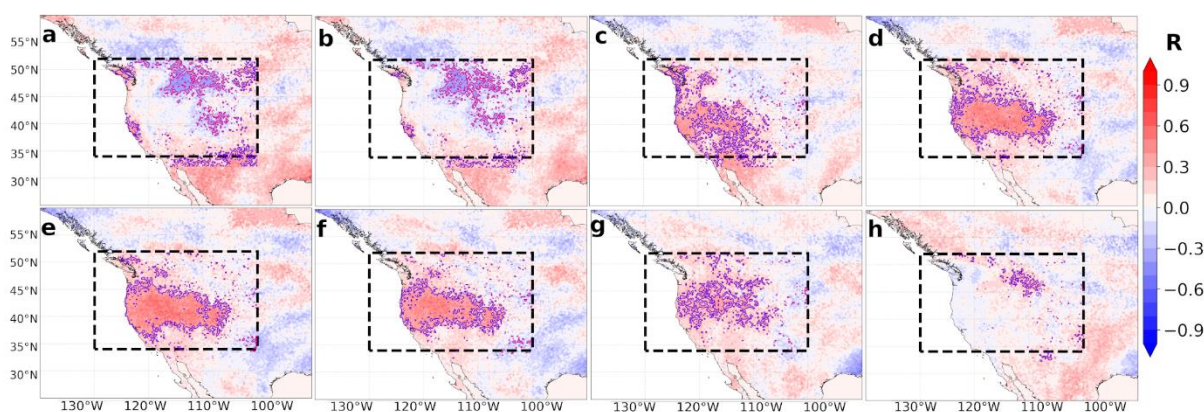
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## Section S1. Winter season



**Figure S1.** Correlation pattern between the MSWEP data and the ENSO index for the WNA region. The contours represent the areas with statistically significant correlation values at 95%. (a–h) represent temporal lags 1–8, respectively; and period: 1981–2018. The interest region is within the black frame.



**Figure S2.** As Figure S1 but for PL.

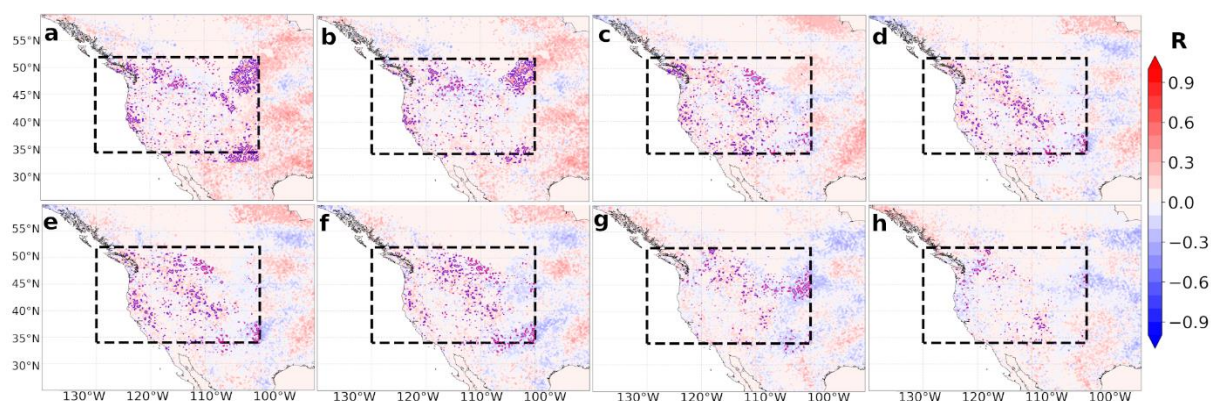


Figure S3. As Figure S1 but for PLT.

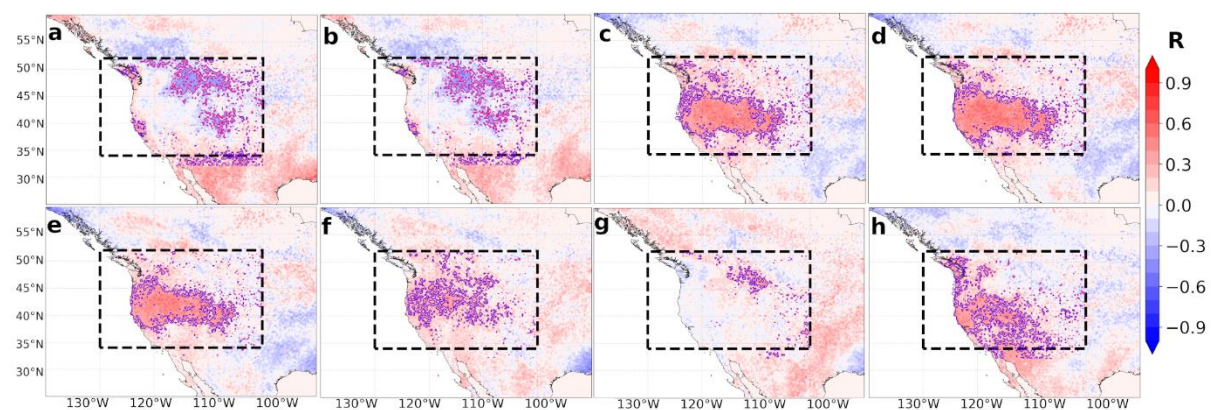


Figure S4. As Figure S1 but for PLO.

## Section S2. Winter season

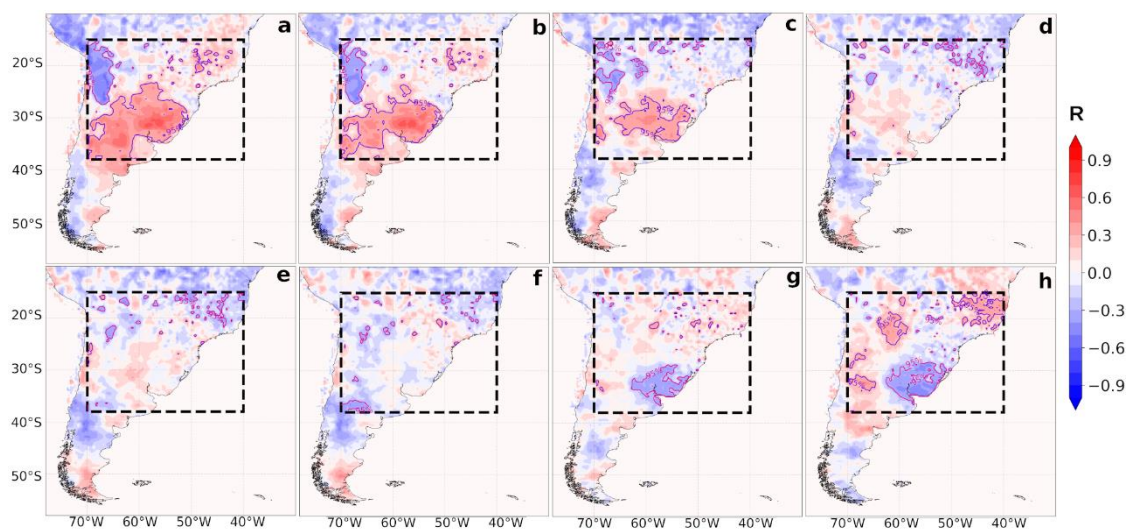
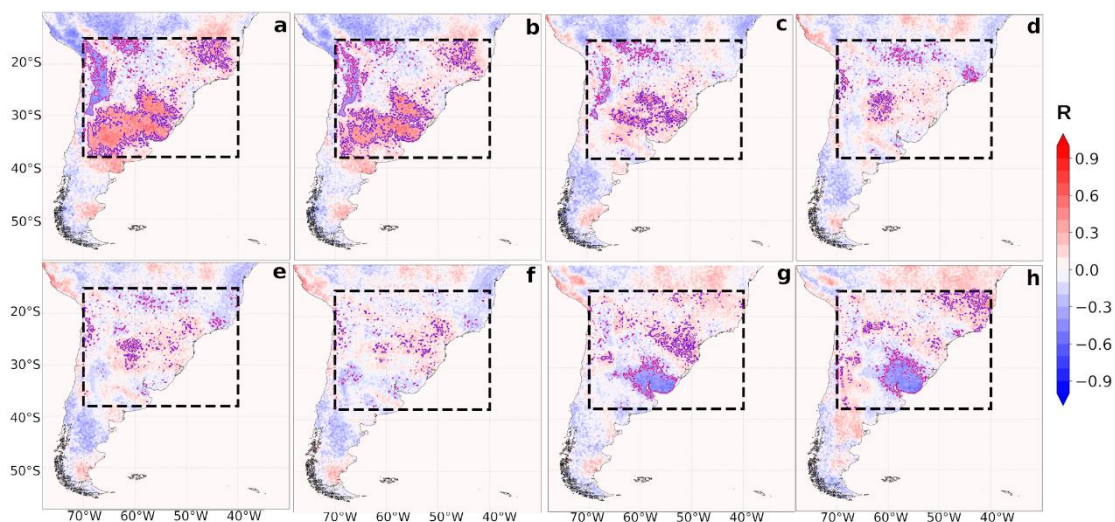


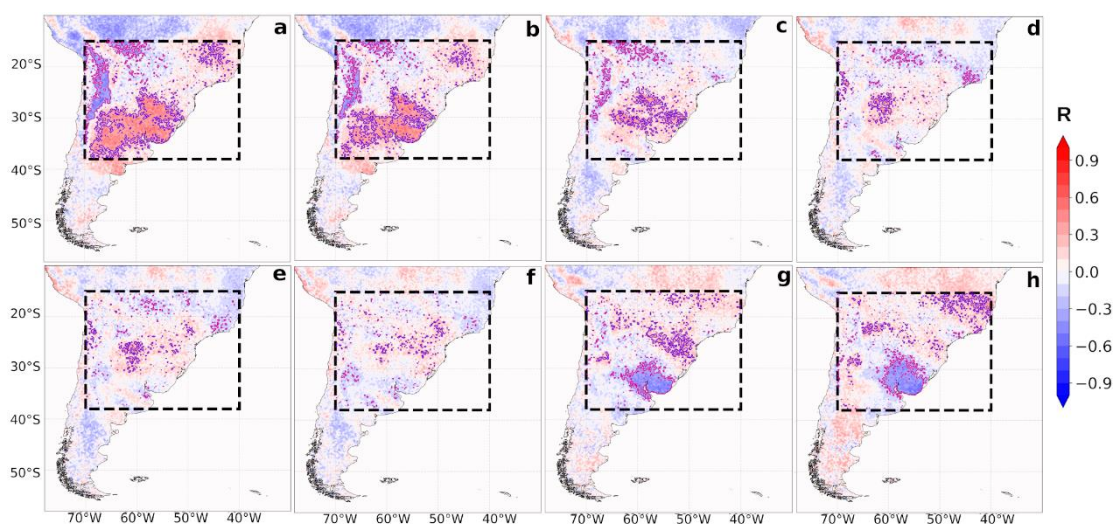
Figure S5. Correlation pattern between the MSWEP data and the ENSO index for the ESA region. The contours represent the areas with statistically significant correlation values at 95%. (a–h)



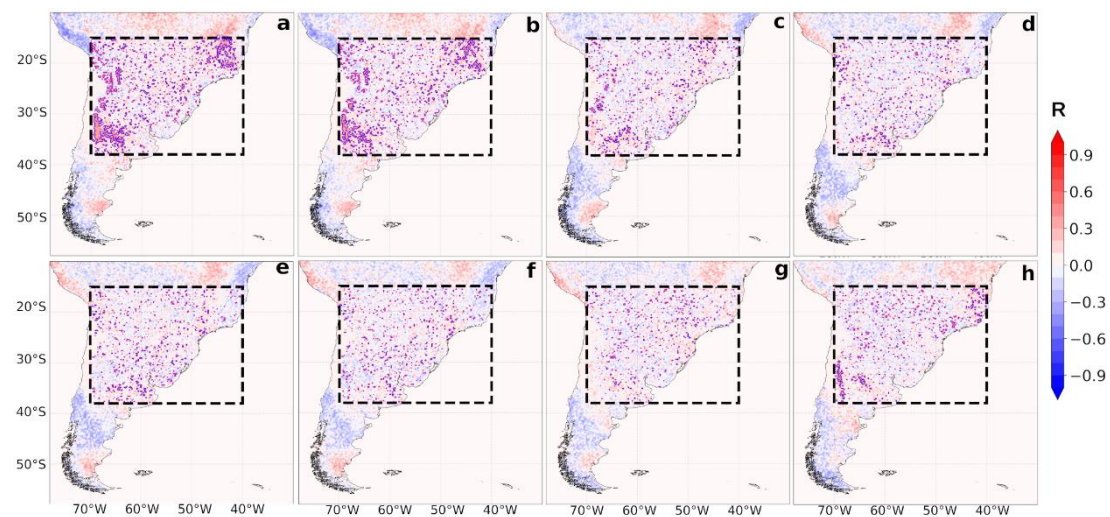
represent temporal lags 1–8, respectively; and period: 1981–2018. The interest region is within the black frame.



**Figure S6.** As Figure S5 but for PL.

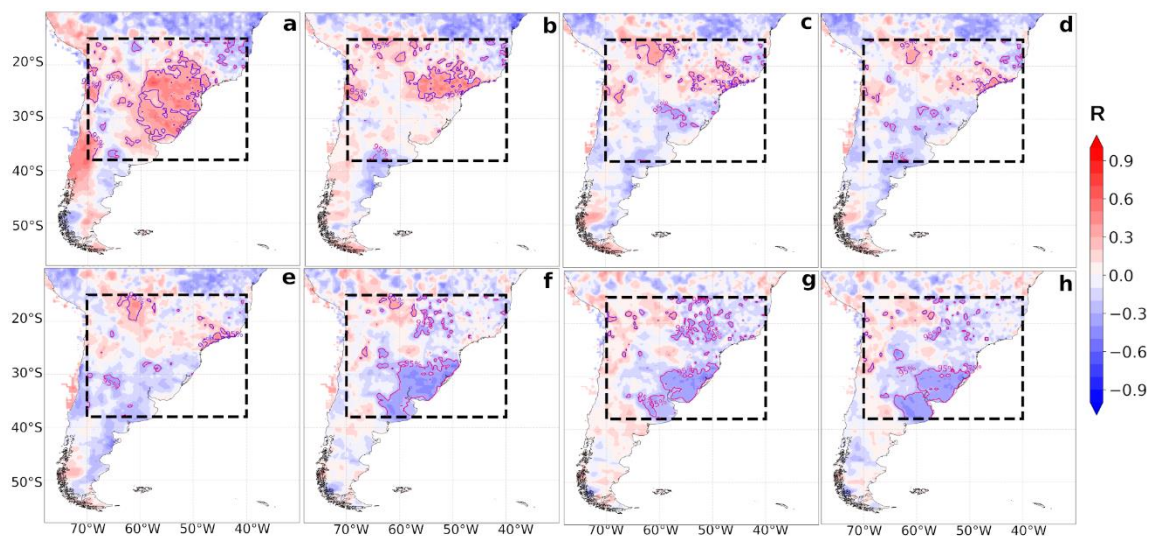


**Figure S7.** As Figure S5 but for PLT.

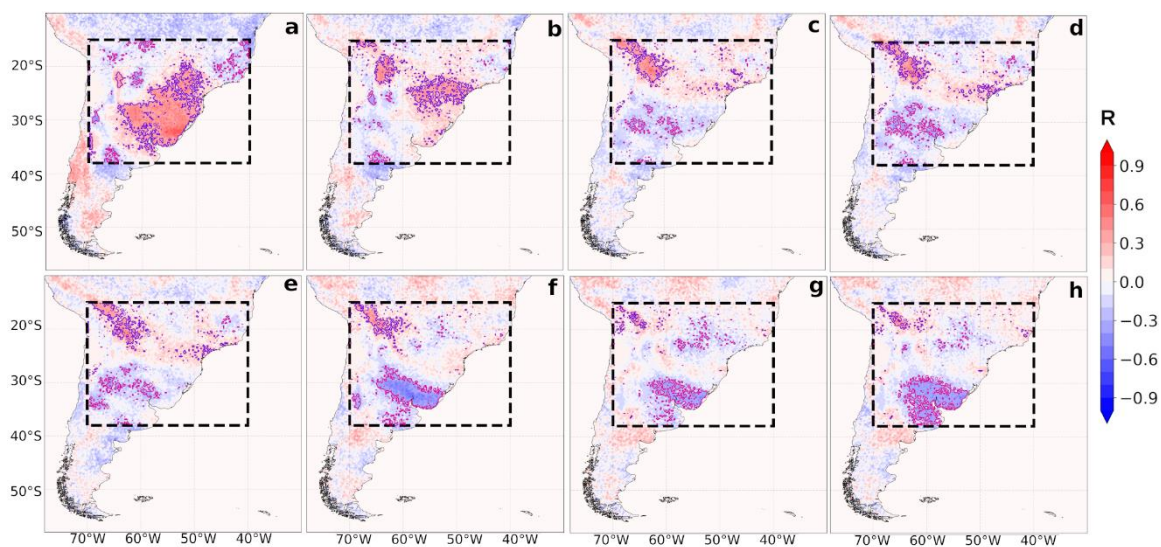


**Figure S8.** As Figure S5 but for PLO.

## Section S3. Autumn season



**Figure S9.** Correlation pattern between the MSWEP data and the ENSO index for the ESA region. The contours represent the areas with statistically significant correlation values at 95%. (a–h) represent temporal lags 1–8, respectively; and period: 1981–2018. The interest region is within the black frame.



**Figure S10.** As Figure S9 but for PL.



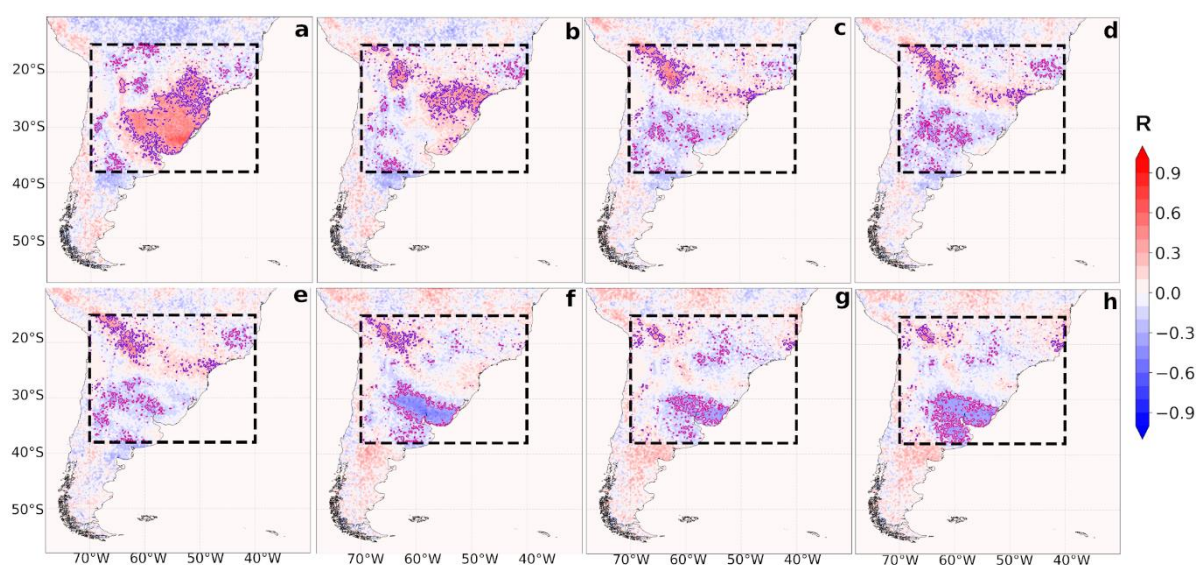


Figure S11. As Figure S9 but for PLT.

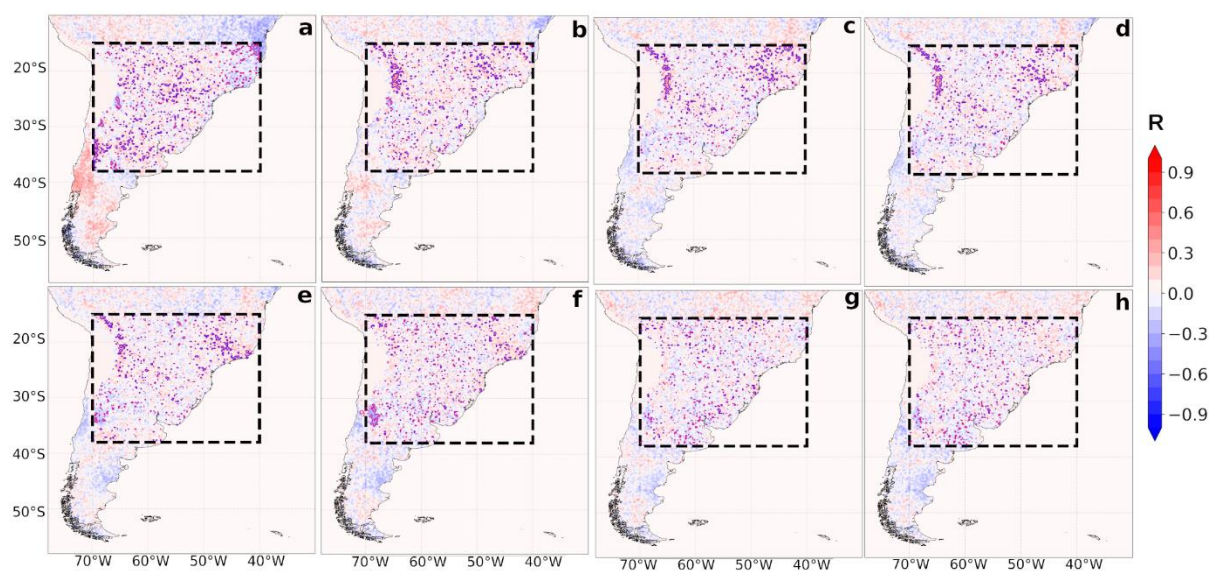


Figure S12. As Figure S9 but for PLO.