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## Supplemental Material

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## Supplemental material for

### **The impact of interacting climate modes on east Australian precipitation moisture sources**

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#### **Contents of this file**

Figures S1 to S4

#### **Introduction**

Supplementary Figures S1 and S2 show moisture sources for precipitation falling in the Northern Murray-Darling Basin (NMDB) during phase combinations of ENSO and IOD, and ENSO and SAM, respectively.

Supplementary Figures S3 and S4 show NMDB-wide precipitation anomalies during phase combinations of ENSO and IOD, and ENSO and SAM, respectively.

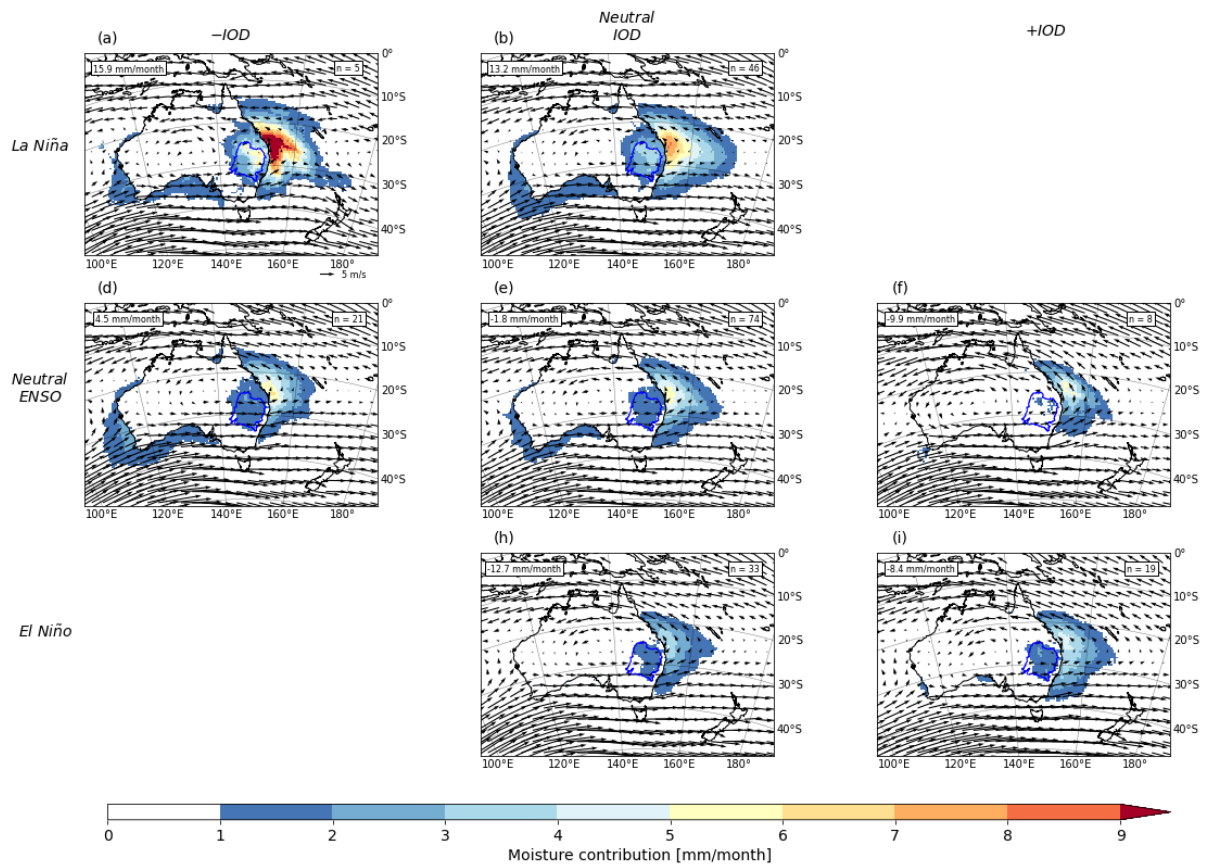


Figure S1. NMDB June-November moisture source contribution during combined phases of ENSO and IOD, overlain by 850 hPa wind velocity. The number of months ( $n$ ) making up each composite is given in the top right corner of each panel, with the mean composite precipitation anomaly in the top left corner.

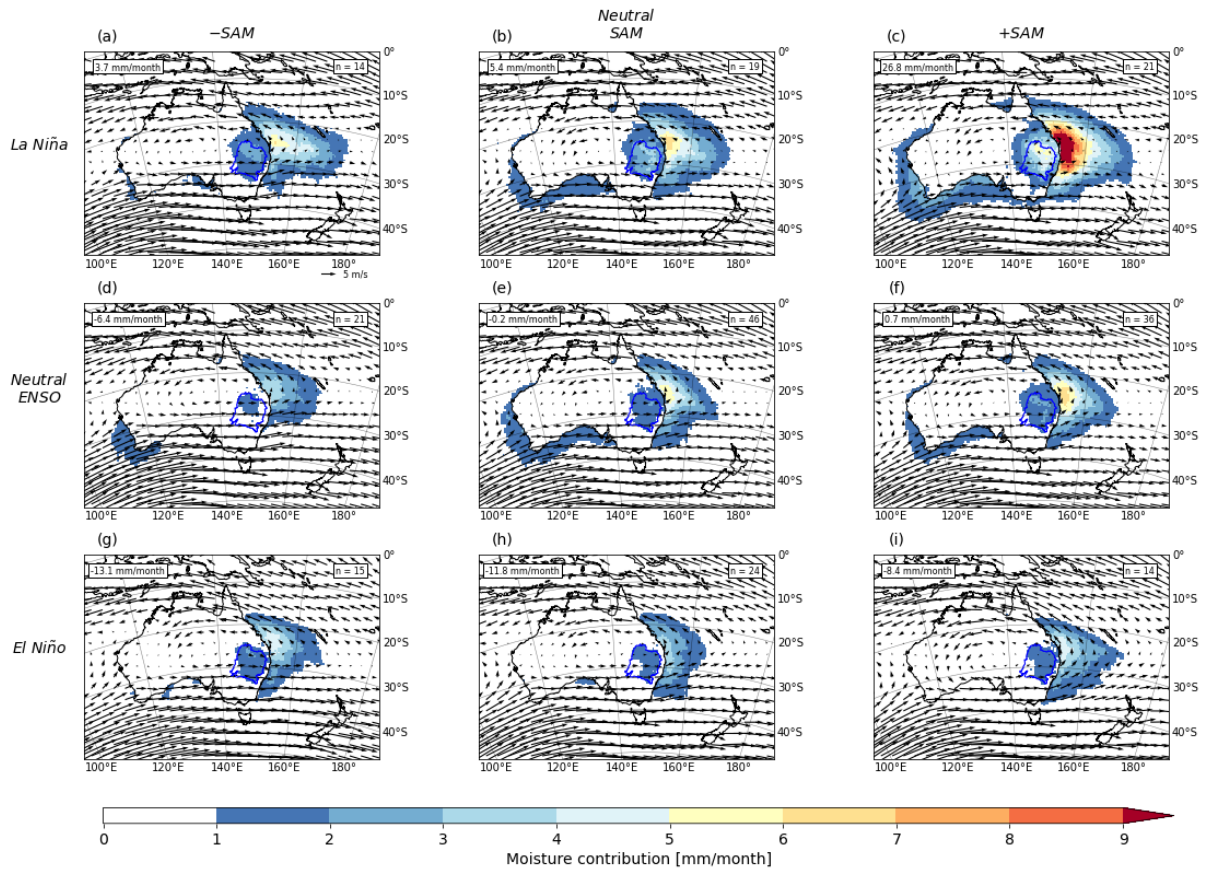


Figure S2. Same as Figure S1, but for combined phases of ENSO and SAM.

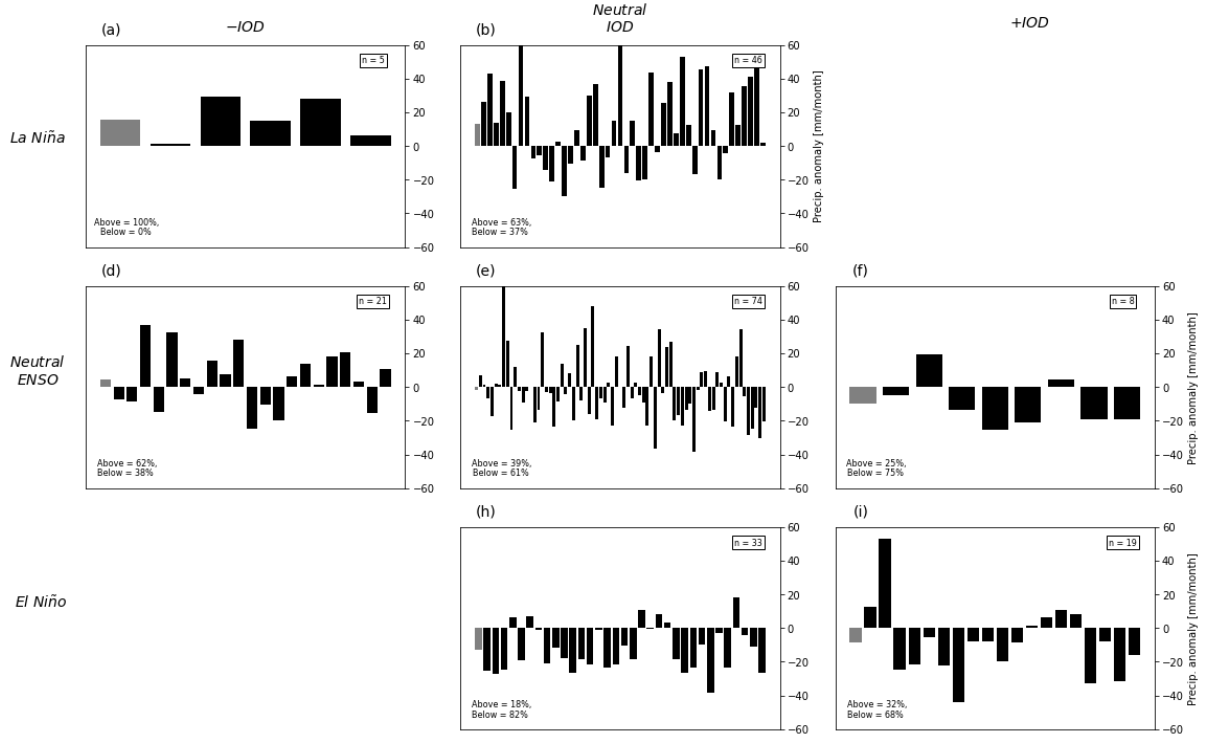


Figure S3. NMDB June-November monthly precipitation anomalies (y-axis) during each month (x-axis) of the combined phases of ENSO and IOD (black) with the composite mean (grey). The number of months ( $n$ ) making up each composite is given in the top right corner of each panel. The proportion of months with above or below average precipitation is given in the bottom left corner of each panel.

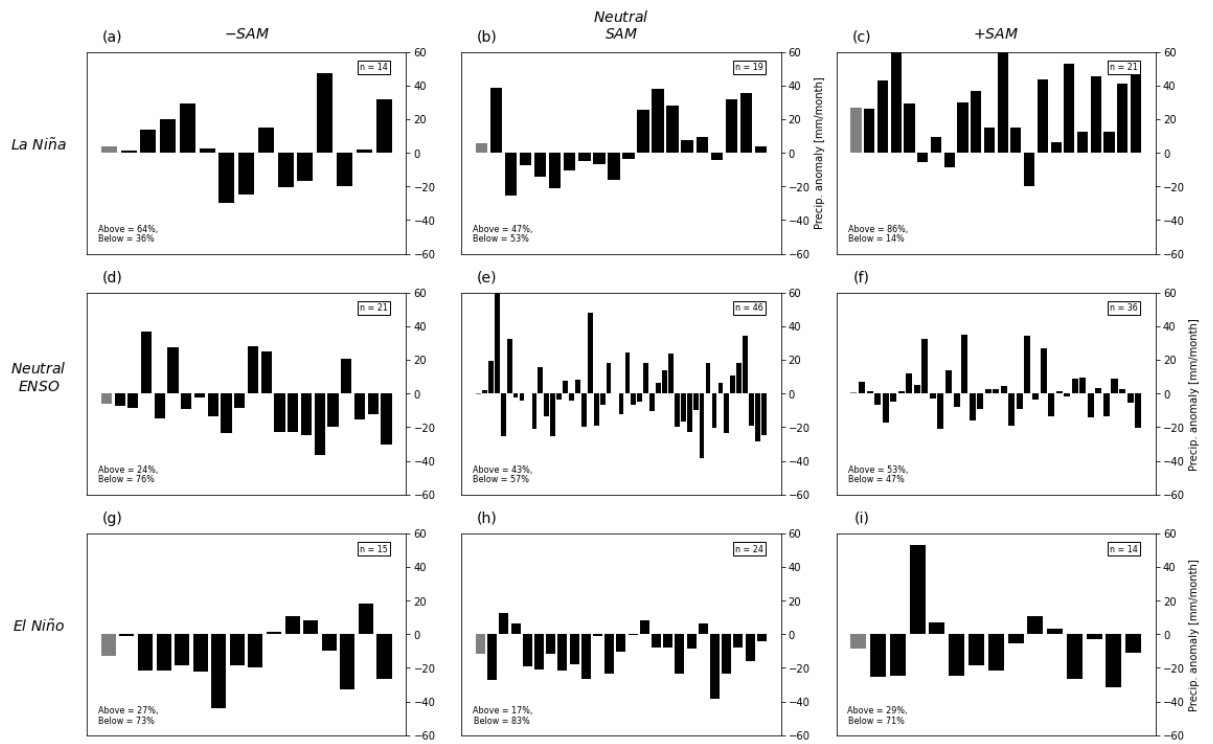


Figure S4. Same as Figure S3, but for combined phases of ENSO and SAM.