

Sublimation origin of negative deuterium excess observed in snow and ice samples from McMurdo Dry Valleys and Allan Hills Blue Ice Areas, East Antarctica

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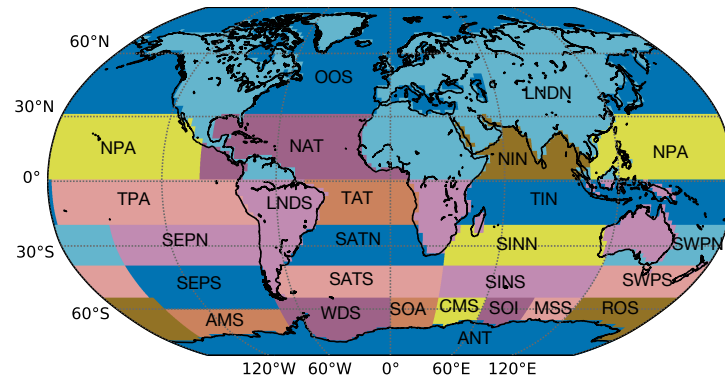


Figure S1. Moisture source regions tagged in the numerical experiment.

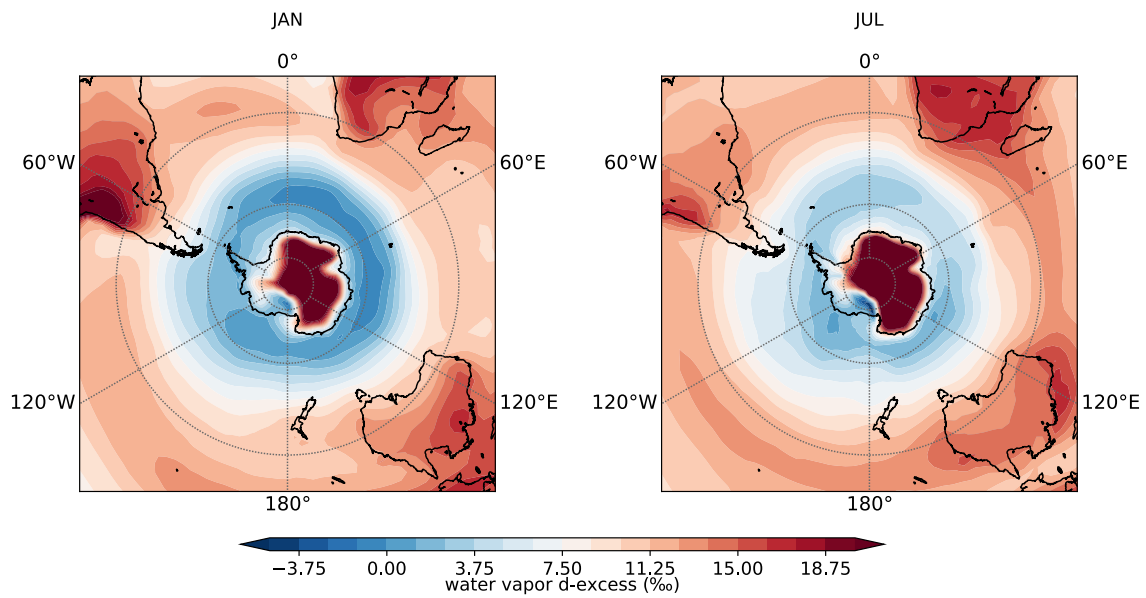


Figure S2. Climatological water vapor d excess near the surface over the Southern Ocean during austral summer (left) and winter (right).

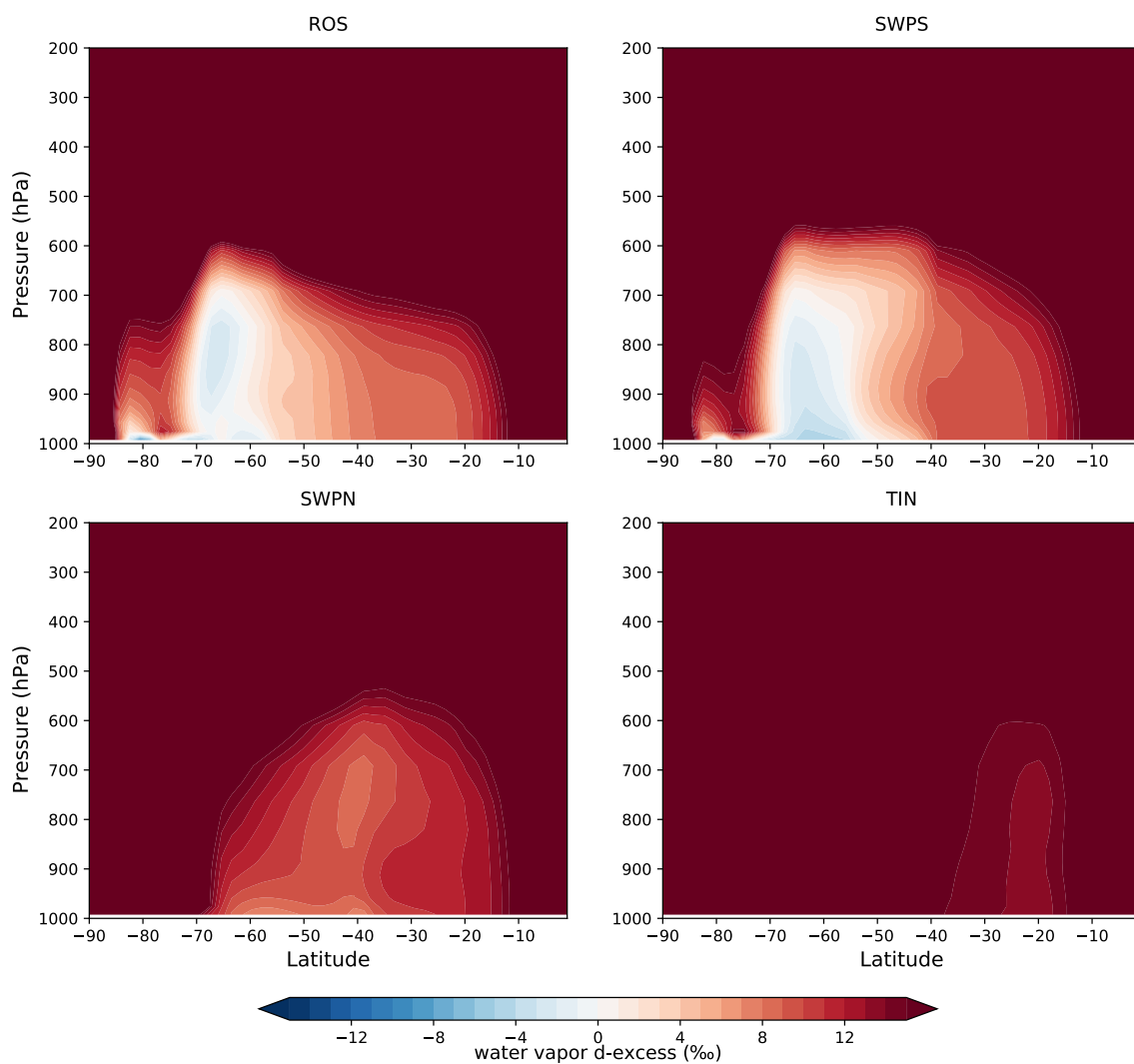


Figure S3. Climatological water vapor d-excess originating from the Ross Sea (ROS), Southwestern Pacific South (SWPS), Southwestern Pacific North (SWPN), and Tropical Indian Ocean (TIN). Please refer to Figure S1 for the tagging regions.

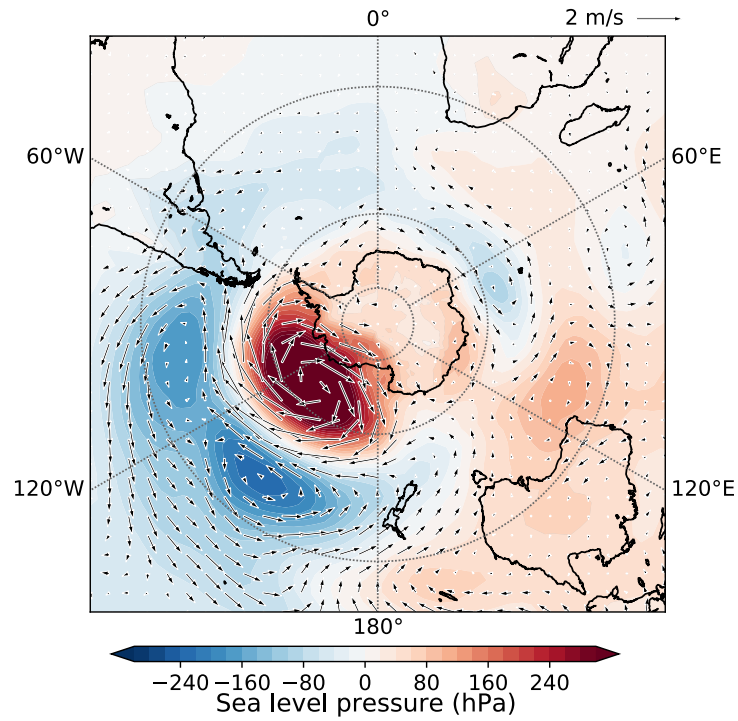


Figure S4. Composite difference of wind at 850 hPa (vectors, unit: m/s) and sea level pressure (shades, unit: hPa) between years of relatively negative d excess and positive d excess at Allan Hills.

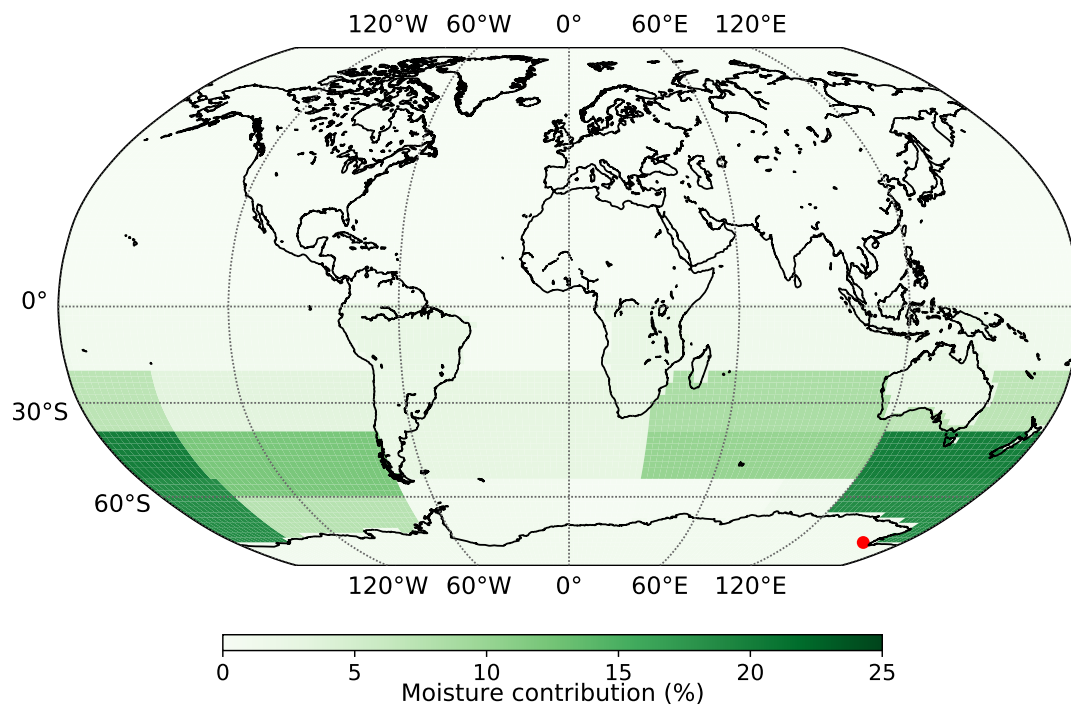


Figure S5. Climatological moisture contribution to Allan Hills (Note: South Pacific accounts for above half of moisture sources).