

**Water vapor isotope experiment was conducted at Trinity Beach (Coast, about 0.5km inland), Australia, Cairns region (-16.7916667N, 145.6966667E) from April 10–13, 2014.**

### **1. Time stamps**

Data files are stored in hourly resolutions using end time stamps (YYYYMMDDHHmm).

### **2. Data format**

Data files are CSV formatted.

### **3. Time zone convention**

Time is reported in UTC.

### **4. Missing data**

Missing data is replaced with -9999.

### **5. Variable definitions**

Column	Description	Unit	Equipment	Height (m)	Additional description
Column 1	Time	–	–	–	UTC
Column 2	Water mixing ratio	ppmv	Picarro L2130-i	17.0	–
Column 3	Water vapour isotopic ratio (18O)	per mil	Picarro L2130-i	17.0	Normalized to V-SMOW; Humidity dependence correlation: No
Column 4	Standard deviation of 18O	per mil	Picarro L2130-i	17.0	25 sec
Column 5	Water vapour isotopic ratio (D)	per mil	Picarro L2130-i	17.0	Normalized to V-SMOW; Humidity dependence correlation: No
Column 6	Standard deviation of D	per mil	Picarro L2130-i	17.0	25 sec
Column 7	Air temperature	Celsius (°C)	HMP45C	3	Will be updated
Column 8	Relative humidity	<=1	HMP45C	3	Will be updated
Column 9	Air pressure	kPa	HMP45C	3	Will be updated

Column 10	Precipitation	mm	Tipping bucket	–	Will be updated
Column 11	Net radiation	W/m <sup>2</sup>	CNR4	–	Will be updated
Column 12	Wind speed	m/s	CSAT3	–	Will be updated
Column 13	Wind direction	°C	CSAT3	–	Will be updated
Column 14	Time	–	–	–	UTC
Column 15	Precipitation	mm	–	–	10 min
Column 16	Time	–	–	–	UTC
Column 17	pressure	Kpa	–	–	10 min

## 6. Reference papers

Munksgaard, N. C., Zwart, C., Kurita, N., Bass, A., Nott, J., & Bird, M. I. (2015). Stable isotope anatomy of tropical cyclone Ita, North-Eastern Australia, April 2014. **PLoS One**, 10(3), e0119728. doi:10.1371/journal.pone.0119728.

## 7. Site contact

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