

Water vapor isotope experiment was conducted at Great Mountain site, CT, USA (41.98N, 73.23W) from May 2005 to SEP 2005.

1. Time stamps

Data files are stored in hourly resolutions using start and 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	Start time	–	–	–	UTC
Column 2	End time	–	–	–	UTC
Column 3	Water mixing ratio	ppmv	Campbell TGA-100A	30.7	–
Column 4	Water vapour isotopic ratio (18O)	per mil	Campbell TGA-100A	30.7	Normalized to V-SMOW; Humidity dependence correlation: Dripper system
Column 5	Standard deviation of 18O	per mil	Campbell TGA-100A	30.7	Hourly
Column 6	Water vapour isotopic ratio (D)	per mil	Campbell TGA-100A	30.7	Normalized to V-SMOW; Humidity dependence correlation: Dripper system
Column 7	Standard deviation of D	per mil	Campbell TGA-100A	30.7	Hourly
Column 8	Air temperature	Celsius (°C)	HMP-45C	25.6	–

Column 9	Relative humidity	<1, dimensionless	HMP-45C	25.6	–
Column 10	Air pressure	Kpa	–	1	–
Column 11	Precipitation	mm	Tipping bucket	–	–
Column 12	Net radiation	W/m ²	Q7	–	–
Column 13	Wind speed	m/s	RMY sensor	29.0	–
Column 14	Wind direction	degree (°C)	RMY sensor	29.0	–
Column 15	Air temperature	Celsius (°C)	–	2	ERA5
Column 16	Relative humidity	<=1	–	2	ERA5
Column 17	Air pressure	kPa	–	2	ERA5
Column 18	Precipitation	mm	–	–	ERA5
Column 19	Net radiation	W/m ²	–	–	ERA5
Column 20	Wind speed	m/s	–	–	ERA5
Column 21	Wind direction	°C	–	10	ERA5

6. Reference papers

Lee X, Kim K., Smith R. ,2007. Temporal variations of the isotopic signal of the whole-canopy transpiration in a temperate forest. Global Biogeochemical Cycles 21: GB3013, doi:10.1029/2006GB002871.

7. Site contact

Name: Xuhui Lee

Email: xuhui.lee@yale.edu