

**Table S1.** Station ID, latitude(°), longitude(°) and plant functional type of the 36 Selected flux stations

SITE_ID	LAT	LONG	PFT
BE-Lon	50.5516	4.7462	CRO
DE-Geb	51.0997	10.9146	CRO
DE-Kli	50.8931	13.5224	CRO
FR-Gri	48.8442	1.9519	CRO
IT-CA2	42.3772	12.026	CRO
US-ARM	36.6058	-97.4888	CRO
US-Ne1	41.1651	-96.4766	CRO
US-Ne2	41.1649	-96.4701	CRO
US-Ne3	41.1797	-96.4397	CRO
IT-CA1	42.3804	12.0266	DBF
IT-CA3	42.38	12.0222	DBF
IT-Ro2	42.3903	11.9209	DBF
US-MMS	39.3232	-86.4131	DBF
US-WCr	45.8059	-90.0799	DBF
CA-SF1	54.485	-105.8176	ENF
FI-Sod	67.3624	26.6386	ENF
FR-LBr	44.7171	-0.7693	ENF
NL-Loo	52.1666	5.7436	ENF
SITE_ID	LAT	LONG	PFT
RU-Fyo	56.4615	32.9221	ENF
US-Blo	38.8953	-120.6328	ENF
AU-Emr	-23.8587	148.4746	GRA
AU-Stp	-17.1507	133.3502	GRA
CH-Cha	47.2102	8.4104	GRA
CN-Cng	44.5934	123.5092	GRA
DE-Gri	50.95	13.5126	GRA
RU-Ha1	54.7252	90.0022	GRA
US-AR1	36.4267	-99.42	GRA
US-AR2	36.6358	-99.5975	GRA
US-Var	38.4133	-120.9508	GRA
US-Wkg	31.7365	-109.9419	GRA
AU-ASM	-22.283	133.249	SAV
AU-Cpr	-34.0021	140.5891	SAV
AU-DaS	-14.1593	131.3881	SAV
AU-Dry	-15.2588	132.3706	SAV
SD-Dem	13.2829	30.4783	SAV

SN-Dhr	15.4028	-15.4322	SAV
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