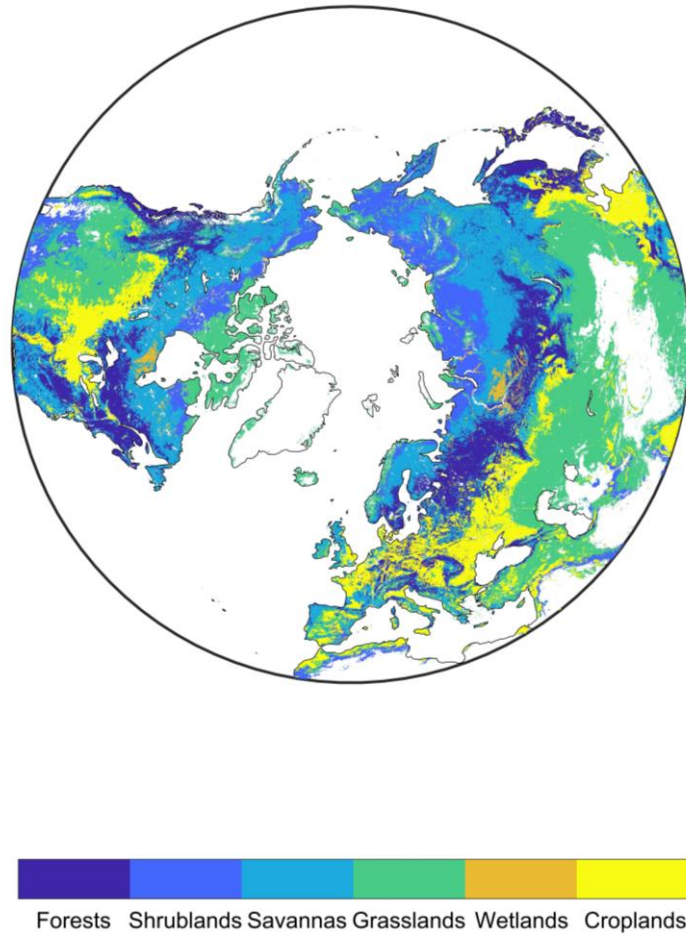


**Table S1.** The flux tower sites in the Northern Hemisphere.

<b>Site-name</b>	<b>Vegetation type</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Start year</b>	<b>End year</b>	<b>Unavailable year</b>
BE-Bra	MF	51.31	4.52	2001	2014	2003
BE-Vie	MF	50.31	6.00	2001	2014	-
CA-Man	ENF	55.88	-98.48	2001	2008	2004, 2005
CA-NS2	ENF	55.91	-98.52	2002	2005	-
CA-NS3	ENF	55.91	-98.38	2002	2004	-
CA-NS4	ENF	55.91	-98.38	2003	2005	-
CA-NS5	ENF	55.86	-98.49	2002	2005	-
CA-Qfo	ENF	49.69	-74.34	2004	2010	-
CH-Cha	GRA	47.21	8.41	2006	2014	2008, 2011
CN-Du2	GRA	42.05	116.28	2008	2008	-
CN-Ha2	WET	37.61	101.33	2003	2005	-
CN-Ham	GRA	37.37	101.18	2002	2004	-
CZ-BK1	ENF	49.50	18.54	2005	2008	-
DE-Geb	CRO	51.10	10.91	2001	2014	-
DE-Hai	DBF	51.08	10.45	2001	2012	-
DE-lkb	ENF	49.10	13.30	2009	2013	-
DE-Obe	ENF	50.78	13.72	2008	2014	-
DE-RUR	GRA	50.62	6.30	2011	2014	-
DE-Spw	WET	51.89	14.03	2010	2014	-
DK-Tha	ENF	50.96	13.57	2001	2014	-
FI-Hyy	ENF	61.85	24.30	2001	2014	-
FR-Fon	DBF	48.48	2.78	2005	2014	-

FR-Lbr	ENF	44.72	-0.77	2001	2008	2002
IT-Col	DBF	41.85	13.59	2001	2014	-
IT-Cpz	EBF	41.71	12.38	2001	2008	2003, 2008
IT-Lav	ENF	45.96	11.28	2003	2014	-
IT-Ren	ENF	46.59	11.43	2002	2013	2004
JP-MBF	DBF	44.39	142.32	2004	2005	-
JP-SMF	MF	35.25	137.07	2002	2006	2002, 2004
NL-Loo	ENF	52.17	5.74	2001	2013	-
RU-Cok	OSH	70.83	147.49	2003	2013	-
RU-Fyo	ENF	56.46	32.92	2001	2014	-
RU-Ha1	GRA	54.73	90.00	2003	2004	-
US-Blo	ENF	38.90	-120.63	2001	2007	2005
US-GLE	ENF	41.36	-106.24	2005	2014	-
US-Ha1	DBF	42.54	-72.17	2001	2012	-
US-Me2	ENF	44.45	-121.56	2002	2014	2003
US-ME6	ENF	44.32	-121.60	2010	2013	2012, 2013, 2014
US-MMS	DBF	39.32	-86.41	2001	2014	-
US-Ne1	CRO	41.17	-96.48	2001	2012	
US-Ne2	CRO	41.16	-96.47	2002	2012	2002
US-Ne3	CRO	41.18	-96.44	2002	2012	2001
US-NR1	ENF	40.03	-105.55	2001	2014	-
US-Pfa	MF	45.95	-90.27	2001	2014	-
US-Prr	ENF	65.12	-147.49	2011	2013	-
US-Syv	MF	46.24	-89.35	2002	2014	2004
US-Ton	WSA	38.43	-120.97	2002	2014	-

US-Tw1	WET	38.11	-121.65	2013	2014	-
US-Wcr	DBF	45.81	-90.08	2001	2014	-
US-Wi3	DBF	46.63	-91.10	2002	2004	2003



**Fig. S1.** The spatial distribution of vegetation types in the Northern Hemisphere (0.05° spatial resolution).