

Annex 1 Sites list of the atmospheric methane observations.

Obs.ID	Lab.	Latitude (deg. N)	Longitude (deg. E)	Altitude (m.a.s.l.)	Station Type	Sampling Type ¹	Uncertainty (ppm)
abb006	ECCC	49.03	-122.3	93	Station	C	0.060
abp001	NOAA	-12.77	-38.17	6	Station	D	0.010
alt006	ECCC	82.45	-62.51	210	Station	C	0.019
alt001	NOAA	82.45	-62.51	195	Station	D	0.019
ams011	LSCE	-37.80	77.54	70, 75	Station	D/C	0.010
amt001	NOAA	45.03	-68.68	157, 160	Station	D	0.100
amy061	KMA	36.53	126.32	86	Station	C	0.063
aoa019	JMA	24.23 – 34.43	141.04 – 154.02	200 – 8100	Aircraft	D	0.021
arh015	NIWA	-77.80	166.67	189	Station	D	0.010
asc001	NOAA	-7.97	-14.40	90	Station	D	0.010
ask001	NOAA	23.26	5.63	2715	Station	D	0.013
ato045	MPI-BGC	-2.15	-59.01	209	Station	C	0.030
azr001	NOAA	38.77	-27.38	24	Station	D	0.021
azv	NIES	54.71	73.03	150	Station	C	0.050
bal001	NOAA	55.35	17.22	28	Station	D	0.038
bao001	NOAA	40.05	-105.00	1884	Station	D	0.100
beh006	ECCC	62.80	-117.55	220	Station	C	0.020
bgu011	LSCE	41.97	3.23	15	Station	D	0.018
bhd001	NOAA	-41.41	174.87	90	Station	D	0.010
bis011	LSCE	44.38	-1.23	167	Station	C	0.060
bkt105	EMPA	-0.20	100.32	877	Station	C	0.022
bkt001	NOAA	-0.20	100.32	875	Station	D	0.022
bme001	NOAA	32.37	-64.65	17	Station	D	0.020
bmw001	NOAA	32.27	-64.88	60	Station	D	0.015
brl006	ECCC	50.20	-104.71	630	Station	C	0.100
brw001	NOAA	71.32	-156.61	16, 27.5	Station	D	0.022
brz	NIES	56.15	84.33	230	Station	C	0.067
bsc001	NOAA	44.18	28.66	5	Station	D	0.046
bsl015	NIWA	-29.99 – 33.43	135.07 – 167.55	30	Ship	D	0.032
cab006	ECCC	69.11	-105.14	47	Station	C	0.020
cba001	NOAA	55.21	-162.72	57	Station	D	0.017
cbw196	RUG	51.97	4.93	199	Station	C	0.060
cfa002	CSIRO	-19.28	147.06	5	Station	D	0.010
cgo001	NOAA	-40.68	144.69	164	Station	D	0.019
cgo043	AGAGE	-40.68	144.68	94	Station	C	0.019
cha006	ECCC	49.82	-74.97	431	Station	C	0.020
chi006	ECCC	49.68	-74.34	423	Station	C	0.035
chr001	NOAA	1.70	-157.15	5	Station	D	0.020

chs001	NOAA	68.51	161.53	64.4	Station	D	0.025
chu006	ECCC	58.75	-94.07	89	Station	C	0.030
cib001	NOAA	41.81	-4.93	850	Station	D	0.020
cmn106	UNIURB/ISAC	44.18	10.70	2172	Station	D	0.020
coi020	NIES	43.16	145.50	94	Station	C	0.027
cpt036	SAWS	-34.35	18.49	260	Station	C	0.010
cpt001	NOAA	-34.35	18.49	260	Station	D	0.010
cri002	CSIRO	15.08	73.83	66	Station	D	0.036
crz001	NOAA	-46.43	51.85	202	Station	D	0.010
cya002	CSIRO	-66.28	110.52	55	Station	D	0.010
dem020	NIES	59.79	70.87	138	Station	C	0.068
dow006	ECCC	43.74	-79.47	218	Station	C	0.100
drp001	NOAA	-65.02 – 58.85	-65.73 – 58.65	10	Ship	D	0.010
dsi001	NOAA	20.70	116.73	8	Station	D	0.020
egb006	ECCC	44.23	-79.78	276	Station	C	0.042
eic001	NOAA	-27.15 -15.00 –	-109.45 -177.00 –	55, 69, 72	Station	D	0.010
eom010	MRI	39.16	178.00	3788 – 13106	Aircraft	D	0.024
esp006	ECCC	49.38	-126.54	47	Station	C	0.015
est006	ECCC	51.67	-110.21	757	Station	C	0.080
etl006	ECCC	54.35	-104.99	598	Station	C	0.052
fik011	LSCE	35.34	25.67	150, 152	Station	D	0.032
fsd006	ECCC	49.88	-81.57	250	Station	C	0.033
gif011	LSCE	48.71	2.15	167	Station	C	0.030
glh209	UMIT	36.07	14.22	167	Station	C	0.020
gmi001	NOAA	13.39	144.66	5, 8	Station	D	0.023
gpa002	CSIRO	-12.25	131.04	37	Station	D	0.020
gsn	NIER	33.17	126.10	82, 144	Station	C	0.060
hat020	NIES	24.06	123.81	47.3	Station	C	0.032
hba001	NOAA	-75.61	-26.21	35	Station	D	0.010
hle011	LSCE	32.78	78.96	4517, 4522	Station	D	0.020
hpb001	NOAA	47.80	11.02	990, 941	Station	D	0.067
hun001	NOAA	46.95	16.65	344	Station	D	0.056
ice001	NOAA	63.40	-20.29	127	Station	D	0.020
igr020	NIES	63.19	64.42	72	Station	C	0.139
inu006	ECCC	68.32	-133.53	123	Station	C	0.020
izo001	NOAA	28.31	-16.50	2377.9	Station	D	0.020
izo027	AEMET	28.30	-16.48	2360	Station	C	0.020
jfj005	EMPA	46.55	7.99	3583	Station	C	0.022
key001	NOAA	25.66	-80.16	6	Station	D	0.024
kmw196	RIVM	53.33	6.28	0	Station	C	0.100
krs020	NIES	58.25	82.42	117	Station	C	0.056
kum001	NOAA	19.52	-154.82	8, 41.1	Station	D	0.015

kzd001	NOAA	44.45	75.57	412, 600	Station	D	0.038
kzm001	NOAA	43.25	77.86	2524	Station	D	0.038
lau015	NIWA	-45.03	169.67	380	Station	D/C	0.010
lef001	NOAA	45.95	-90.27	868	Station	D	0.070
llb006	ECCC	54.95	-112.45	588	Station	C	0.092
llb001	NOAA	54.95	-112.45	546	Station	D	0.092
lln001	NOAA	23.47	120.87	2867	Station	D	0.029
lmp001	NOAA	35.52	12.62	50	Station	D	0.025
lmp028	ENEA	35.52	12.62	45	Station	D	0.025
lpo011	LSCE	48.80	-3.58	20	Station	D	0.066
lto011	LSCE	6.22	-5.03	205	Station	C	0.030
maa002	CSIRO	-67.62	62.87	42	Station	D	0.010
mex001	NOAA	18.98	-97.31	4469	Station	D	0.021
mhd001	NOAA	53.33	-9.90	26	Station	D	0.015
mhd043	AGAGE	53.33	-9.90	8	Station	C	0.015
mid001	NOAA	28.21	-177.38	8, 16	Station	D	0.016
mkn001	NOAA	-0.06	37.30	3649	Station	D	0.025
mlo001	NOAA	19.54	-155.58	3402, 3437	Station	D/C	0.016
mnm019	JMA	24.30	153.97	8	Station	C	0.016
mqa002	CSIRO	-54.48	158.97	12	Station	D	0.010
mwo001	NOAA	34.22	-118.06	1770.6, 1774	Station	D	0.100
nat001	NOAA	-5.51	-35.26	20, 87	Station	D	0.015
ngl025	UBA- Germany	53.17	13.03	68.4	Station	C	0.047
nmb001	NOAA	-23.58	15.03	461	Station	D	0.010
nov004- 070	NIES	55.00	83.00	400 – 7000	Aircraft	D	0.013 – 0.096
noy	NIES	63.43	75.78	143	Station	C	0.017
nwr001	NOAA	40.05	-105.58	3526	Station	D	0.017
ope011	LSCE	48.55	5.50	440, 510	Station	D/C	0.100
ota002	CSIRO	-38.52	142.82	50	Station	D	0.020
oxk001	NOAA	50.03	11.81	1172, 1185	Station	D	0.037
pal001	NOAA	67.97	24.12	570	Station	D	0.022
pal030	FMI	67.97	24.12	567	Station	C	0.022
pbl011	LSCE	11.65	92.76	20, 21 2877, 2887,	Station	D	0.030
pdm011	LSCE	42.94	0.14	2905	Station	D	0.034
pip008	TU	37.81	141.35	198 – 3813	Aircraft	D	0.028
poc000- s35	NOAA	-35.00 – 30.00	-179.00 – 178.43	20	Ship	D	0.014
pon011	LSCE	12.01	79.86	20, 30	Station	D	0.030
prs021	RSE	45.93	7.70	3490	Station	C	0.018
psa001	NOAA	-64.92	-64.00	15	Station	D	0.010
pta001	NOAA	38.95	-123.74	22	Station	D	0.020
puy011	LSCE	45.77	2.97	1465, 1475	Station	D	0.044
rpb001	NOAA	13.16	-59.43	20	Station	D	0.013

rpb043	AGAGE	13.17	-59.43	45	Station	C	0.013
ryo019	JMA	39.03	141.83	260	Station	C	0.026
sct001	NOAA	33.41	-81.83	420	Station	D	0.100
sdz001	NOAA	40.65	117.12	298	Station	D	0.098
sey001	NOAA	-4.68	55.53	7	Station	D	0.018
sgp001	NOAA	36.61	-97.49	374	Station	D	0.060
shm001	NOAA	52.72	174.10	28	Station	D	0.018
smo001	NOAA	-14.25	-170.56	47, 60	Station	D	0.010
smo043	AGAGE	-14.24	-170.57	42	Station	C	0.010
smr421	UHELS	61.51	24.17	306	Station	C	0.030
snb211	EAA	47.05	12.95	3111	Station	C	0.020
sod030	FMI	67.36	26.64	227	Station	C	0.030
spo001	NOAA	-89.98	-24.80	2815, 2821.3	Station	D	0.010
ssl025	UBA- Germany	47.92	7.92	1205	Station	C	0.045
str001	NOAA	37.76	-122.45	486	Station	D	0.100
sum001	NOAA	72.60	-38.42	3214.5	Station	D	0.015
sur005- 070	NIES	61.00	73.00	500 – 7000	Aircraft	D	0.015 – 0.070
syo001	NOAA	-69.00	39.58	16, 19	Station	D	0.010
tap001	NOAA	36.73	126.13	21	Station	D	0.047
tda008	TU	33.26 – 38.10	130.47 – 141.23	3962 – 11278	Aircraft	D	0.024
ter055	MGO	69.20	35.10	42	Station	D	0.028
thd001	NOAA	41.05	-124.15	112	Station	D	0.015
thd043	AGAGE	41.05	-124.15	120	Station	C	0.015
tik001	MGO	71.60	128.89	29	Station	D	0.030
tr3011	LSCE	47.96	2.11	311	Station	D	0.100
tup006	ECCC	42.68	-80.33	266	Station	C	0.020
ush001	NOAA	-54.85	-68.31	32	Station	D	0.010
uta001	NOAA	39.90	-113.72	1332	Station	D	0.023
uto030	FMI	59.78	21.37	65	Station	C	0.030
uum001	NOAA	44.45	111.10	1012	Station	D	0.036
vgn	NIES	54.50	62.33	285	Station	C	0.058
wbi001	NOAA	41.73	-91.35	620	Station	D	0.100
wgc001	NOAA	38.27	-121.49	91	Station	D	0.120
wis001	NOAA	30.86	34.78	156, 482	Station	D	0.028
wkt001	NOAA	31.32	-97.33	708	Station	D	0.100
wlg001	NOAA	36.29	100.90	3815	Station	D	0.023
wlg033	CMA/NOAA	36.28	100.90	3810	Station	D	0.023
wpc001	NOAA	-30.45 – 30.10	136.62 – 170.47	10	Ship	D	0.010
wpsEQ0- S35	NIES	-36.99 – 54.00	136.64 – 179.90	10	Ship	D	0.010
wsa006	ECCC	43.93	-60.01	30	Station	D/C	0.022
yak010- 030	NIES	62.09	129.36	287, 1000 – 3000	Station/Aircraft	C/D	0.015 – 0.042

yon019	JMA	24.47	123.02	30	Station	C	0.032
zep001	NOAA	78.91	11.89	479	Station	D	0.019
zot045	MPI-BGC	60.48	89.21	415	Station	D/C	0.020
zsf025	UBA- Germany	47.42	10.98	2673.5	Station	C	0.020

¹ C: continuous measurement, D: discrete flask