

Source Identifier	Plume Latitude (deg)	Plume Longitude (deg)	Date of detection	Time of detection (UTC)	Source type (best estimate)	Sectors (IPCC)	IME/r (kg/m)	σ _{ME} /r (kg/m)	U ₁₀ (m/s)	σ _{U10} (m/s)	Q _{plume} (kg/hr)*	σ _{Qplume} (kg/hr)*
S00006	34.4471	-118.5883	9/10/16	18:57	gas storage facility	1B2 Oil & Natural Gas	0.031	0.008	1.17	0.33	132	50
S00006	34.4471	-118.5883	9/10/16	19:16	gas storage facility	1B2 Oil & Natural Gas	0.012	0.006	2.05	0.65	89	52
S00006	34.4471	-118.5883	9/10/16	19:22	gas storage facility	1B2 Oil & Natural Gas	0.025	0.005	2.05	0.65	185	70
S00006	34.4471	-118.5883	9/12/16	19:52	gas storage facility	1B2 Oil & Natural Gas	0.018	0.002	2.15	0.76	138	52
S00006	34.4471	-118.5883	9/12/16	22:57	gas storage facility	1B2 Oil & Natural Gas	0.026	0.006	3.77	0.73	350	106
S00006	34.4471	-118.5883	9/16/16	22:15	gas storage facility	1B2 Oil & Natural Gas	0.011	0.004	2.77	0.99	111	56
S00006	34.4471	-118.5883	9/17/16	18:16	gas storage facility	1B2 Oil & Natural Gas	0.025	0.004	1.05	0.39		
S00006	34.4471	-118.5883	9/17/16	22:43	gas storage facility	1B2 Oil & Natural Gas	0.019	0.003	5.02	0.83	340	78
S00006	34.4471	-118.5883	9/25/16	17:01	gas storage facility	1B2 Oil & Natural Gas	0.037	0.006	8.61	0.70	1134	202
S00006	34.4471	-118.5883	9/25/16	20:12	gas storage facility	1B2 Oil & Natural Gas	0.015	0.008	7.48	0.91	400	223
S00006	34.4471	-118.5883	10/3/16	19:22	gas storage facility	1B2 Oil & Natural Gas	0.019	0.011	3.11	0.88	212	138
S00006	34.4471	-118.5883	10/8/16	22:04	gas storage facility	1B2 Oil & Natural Gas	0.027	0.015	3.55	1.40	348	235
S00006	34.4471	-118.5883	11/3/16	22:18	gas storage facility	1B2 Oil & Natural Gas	0.021	0.004	5.16	0.45	382	74
S00006	34.4471	-118.5883	11/3/16	22:24	gas storage facility	1B2 Oil & Natural Gas	0.037	0.005	5.16	0.45	683	117
S00006	34.4471	-118.5883	11/3/16	22:45	gas storage facility	1B2 Oil & Natural Gas	0.095	0.012	5.16	0.45	1767	263
S00006	34.4471	-118.5883	11/4/16	18:30	gas storage facility	1B2 Oil & Natural Gas	0.045	0.008	3.21	0.35	519	107
S00006	34.4471	-118.5883	11/4/16	19:54	gas storage facility	1B2 Oil & Natural Gas	0.058	0.008	3.15	0.50	656	138
S00006	34.4471	-118.5883	9/1/17	18:50	gas storage facility	1B2 Oil & Natural Gas	0.023	0.008	6.54	0.47	542	200
S00006	34.4471	-118.5883	9/2/17	17:34	gas storage facility	1B2 Oil & Natural Gas	0.018	0.005	2.77	0.40	182	53
S00006	34.4471	-118.5883	9/5/17	17:27	gas storage facility	1B2 Oil & Natural Gas	0.032	0.004	0.91	0.35		
S00006	34.4471	-118.5883	9/5/17	22:25	gas storage facility	1B2 Oil & Natural Gas	0.013	0.003	2.48	0.49	118	36
S00006	34.4471	-118.5883	9/6/17	22:39	gas storage facility	1B2 Oil & Natural Gas	0.013	0.004	4.50	0.65	207	76
S00006	34.4471	-118.5883	9/7/17	17:35	gas storage facility	1B2 Oil & Natural Gas	0.028	0.007	1.32	0.34	133	47
S00006	34.4471	-118.5883	9/7/17	18:19	gas storage facility	1B2 Oil & Natural Gas	0.024	0.006	1.73	0.57	150	61
S00006	34.4471	-118.5883	9/9/17	22:07	gas storage facility	1B2 Oil & Natural Gas	0.046	0.012	3.79	0.51	623	183
S00006	34.4471	-118.5883	9/13/17	23:56	gas storage facility	1B2 Oil & Natural Gas	0.044	0.017	3.54	0.78	564	249
S00006	34.4471	-118.5883	9/20/17	22:36	gas storage facility	1B2 Oil & Natural Gas	0.007	0.002	3.96	0.94	96	33
S00006	34.4471	-118.5883	9/28/17	19:05	gas storage facility	1B2 Oil & Natural Gas	0.012	0.004	3.31	1.39	140	77
S00006	34.4471	-118.5883	10/7/17	22:11	gas storage facility	1B2 Oil & Natural Gas	0.007	0.005	2.47	0.53	61	49
S00006	34.4471	-118.5883	10/10/17	17:35	gas storage facility	1B2 Oil & Natural Gas	0.026	0.006	3.50	1.29	333	142
S00006	34.4471	-118.5883	10/10/17	17:40	gas storage facility	1B2 Oil & Natural Gas	0.035	0.011	3.50	1.29	445	217
S00006	34.4471	-118.5883	10/10/17	17:45	gas storage facility	1B2 Oil & Natural Gas	0.041	0.012	3.50	1.29	517	245
S00006	34.4471	-118.5883	10/10/17	17:50	gas storage facility	1B2 Oil & Natural Gas	0.028	0.012	3.50	1.29	350	201
S00006	34.4471	-118.5883	10/10/17	17:55	gas storage facility	1B2 Oil & Natural Gas	0.049	0.015	3.50	1.29	618	294
S00006	34.4471	-118.5883	10/10/17	17:59	gas storage facility	1B2 Oil & Natural Gas	0.030	0.010	3.50	1.29	376	188
S00006	34.4471	-118.5883	10/16/17	19:10	gas storage facility	1B2 Oil & Natural Gas	0.043	0.013	3.14	0.58	490	170
S00006	34.4471	-118.5883	10/16/17	19:15	gas storage facility	1B2 Oil & Natural Gas	0.035	0.008	3.14	0.58	394	115
S00006	34.4471	-118.5883	10/16/17	19:20	gas storage facility	1B2 Oil & Natural Gas	0.049	0.015	3.14	0.58	549	199
S00006	34.4471	-118.5883	10/16/17	19:24	gas storage facility	1B2 Oil & Natural Gas	0.038	0.008	3.14	0.58	433	122
S00006	34.4471	-118.5883	10/26/17	19:00	gas storage facility	1B2 Oil & Natural Gas	0.026	0.012	0.64	0.26		
S00006	34.4471	-118.5883	10/26/17	19:17	gas storage facility	1B2 Oil & Natural Gas	0.049	0.018	0.64	0.26		
S00006	34.4471	-118.5883	10/26/17	19:21	gas storage facility	1B2 Oil & Natural Gas	0.020	0.005	0.64	0.26		
S00006	34.4471	-118.5883	10/26/17	19:25	gas storage facility	1B2 Oil & Natural Gas	0.022	0.010	0.64	0.26		
S00006	34.4471	-118.5883	10/26/17	19:30	gas storage facility	1B2 Oil & Natural Gas	0.030	0.005	0.64	0.26		
S00006	34.4471	-118.5883	10/26/17	19:33	gas storage facility	1B2 Oil & Natural Gas	0.037	0.013	0.64	0.26		
S00006	34.4471	-118.5883	10/26/17	19:37	gas storage facility	1B2 Oil & Natural Gas	0.026	0.004	0.64	0.26		
S00006	34.4471	-118.5883	10/26/17	19:41	gas storage facility	1B2 Oil & Natural Gas	0.022	0.007	0.64	0.26		
S00006	34.4471	-118.5883	10/26/17	19:45	gas storage facility	1B2 Oil & Natural Gas	0.042	0.016	0.64	0.26		
S00006	34.4471	-118.5883	11/8/17	18:21	gas storage facility	1B2 Oil & Natural Gas	0.042	0.017	1.21	0.30	182	86
S00006	34.4471	-118.5883	11/8/17	18:25	gas storage facility	1B2 Oil & Natural Gas	0.059	0.006	1.21	0.30	257	69
S00007	33.9060	-118.4063	3/9/17	22:10	refinery	1A1 Energy Industries	0.029	0.004	2.41	0.09	248	37
S00007	33.9060	-118.4063	6/16/17	18:31	refinery	1A1 Energy Industries	0.022	0.004	1.11	0.66	88	56
S00008	33.9054	-118.4064	9/10/16	19:35	refinery	1A1 Energy Industries	0.005	0.001	2.47	0.65	49	16
S00008	33.9054	-118.4064	9/1/17	21:22	refinery	1A1 Energy Industries	0.014	0.005	3.30	0.15	166	58
S00009	33.9060	-118.4035	9/10/16	19:35	refinery	1A1 Energy Industries	0.003	0.001	2.47	0.65		
S00011	33.7770	-118.2870	9/10/16	20:16	refinery	1A1 Energy Industries	0.009	0.001	1.60	0.78	54	27
S00012	33.7726	-118.2864	9/1/17	21:11	refinery	1A1 Energy Industries	0.009	0.002	2.32	0.98	77	38
S00014	33.8047	-118.2439	9/10/16	20:44	refinery	1A1 Energy Industries	0.006	0.001	1.06	0.39	22	9
S00014	33.8047	-118.2439	9/11/17	19:45	refinery	1A1 Energy Industries	0.014	0.002	1.18	0.20	59	14
S00016	33.8158	-118.2469	9/10/16	20:44	refinery	1A1 Energy Industries	0.017	0.008	1.06	0.39	64	40
S00017	33.9727	-117.6999	9/10/16	21:44	gas distribution line	1B2 Oil & Natural Gas	0.014	0.005	4.16	0.67	207	87
S00017	33.9727	-117.6999	9/15/16	18:52	gas distribution line	1B2 Oil & Natural Gas	0.055	0.011	1.40	0.43	274	102
S00017	33.9727	-117.6999	9/15/16	19:09	gas distribution line	1B2 Oil & Natural Gas	0.052	0.016	1.88	0.39	354	129
S00019	34.7799	-116.5943	9/11/16	18:20	gas compressor	1B2 Oil & Natural Gas	0.010	0.006	3.26	0.32	122	74
S00022	35.1851	-119.1021	9/12/16	20:19	dairy/manure	3A2 Manure Management	0.009	0.001	3.72	0.20	125	20
S00023	35.2007	-119.0523	9/12/16	20:19	dairy/manure	3A2 Manure Management	0.046	0.010	3.72	0.20	620	133
S00023	35.2007	-119.0523	9/12/16	20:26	dairy/manure	3A2 Manure Management	0.024	0.006	3.72	0.20	327	89
S00023	35.2007	-119.0523	9/26/17	18:50	dairy/manure	3A2 Manure Management	0.043	0.020	1.93	0.09	299	136
S00023	35.2007	-119.0523	9/26/17	21:48	dairy/manure	3A2 Manure Management	0.006	0.003	2.89	0.23	66	32
S00024	35.2139	-118.9880	9/12/16	20:19	dairy/manure	3A2 Manure Management	0.009	0.004	3.72	0.20	122	54
S00025	35.1750	-119.1243	9/12/16	20:19	dairy/manure	3A2 Manure Management	0.009	0.001	3.72	0.20	114	11
S00027	35.1860	-119.1034	9/12/16	20:26	dairy/manure	3A2 Manure Management	0.014	0.002	3.72	0.20	184	23
S00029	35.2039	-119.1989	9/12/16	20:41	dairy/manure	3A2 Manure Management	0.047	0.015	3.28	0.48	559	197
S00030	35.2143	-119.2074	9/12/16	20:49	dairy/manure	3A2 Manure Management	0.025	0.004	3.34	0.45	296	59
S00030	35.2143	-119.2074	6/20/17	16:30	dairy/manure	3A2 Manure Management	0.015	0.005	0.88	0.25		
S00031	35.2142	-119.2097	9/12/16	20:49	dairy/manure	3A2 Manure Management	0.023	0.001	3.34	0.45	275	40
S00032	35.2024	-119.1988	9/12/16	20:49	dairy/manure	3A2 Manure Management	0.013	0.004	3.34	0.45	159	55
S00033	35.2514	-119.1572	9/12/16	21:04	dairy/manure	3A2 Manure Management	0.013	0.003	3.97	0.19	188	48
S00035	36.0005	-119.5009	9/13/16	21:07	dairy/manure	3A2 Manure Management	0.050	0.016	1.63	0.37	294	114
S00036	35.9909	-119.4919	9/13/16	21:07	dairy/manure	3A2 Manure Management	0.018	0.004	1.63	0.37	106	33
S00037	36.0185	-119.4168	9/13/16	21:07	dairy/manure	3A2 Manure Management	0.044	0.024	1.63	0.37	258	150
S00037	36.0185	-119.4168	6/16/17	20:43	dairy/manure	3A2 Manure Management	0.023	0.013	3.13	0.05	258	150
S00038	36.0445	-119.2168	9/13/16	21:07	dairy/manure	3A2 Manure Management	0.023	0.012	1.63	0.37	137	76
S00039	36.0935	-119.3397	9/13/16	22:11	dairy/manure	3A2 Manure Management	0.010	0.002	0.65	0.30		
S00039	36.0935	-119.3397	6/16/17	20:43	dairy/manure	3A2 Manure Management	0.010	0.001	3.13	0.05	117	8
S00040	36.0813	-119.4213	9/13/16	22:11	dairy/manure	3A2 Manure Management	0.008	0.003	0.65	0.30		
S00041	36.0735	-119.4409	9/13/16	22:11	dairy/manure - digester	3A2 Manure Management	0.038	0.009	0.65	0.30		
S00041	36.0735	-119.4409	10/29/16	18:50	dairy/manure - digester	3A2 Manure Management	0.022	0.008	1.75	0.13	139	50
S00041	36.0735	-119.4409	10/29/16	21:54	dairy/manure - digester	3A2 Manure Management	0.022	0.004	0.36	0.10		
S00041	36.0735	-119.4409	3/9/17	20:24	dairy/manure - digester	3A2 Manure Management	0.083	0.027	1.28	0.21	382	140

Source Identifier	Plume Latitude (deg)	Plume Longitude (deg)	Date of detection	Time of detection (UTC)	Source type (best estimate)	Sectors (IPCC)	IME/r (kg/m)	σ _{IME} /r (kg/m)	U ₁₀ (m/s)	σ _{U10} (m/s)	Q _{plume} (kg/hr)*	σ _{Qplume} (kg/hr)*
S00041	36.0735	-119.4409	6/16/17	21:20	dairy/manure - digester	3A2 Manure Management	0.036	0.007	3.09	0.27	400	88
S00042	37.9864	-121.4737	10/8/16	17:29	gas storage facility	1B2 Oil & Natural Gas	0.017	0.006	1.47	0.17	92	31
S00042	37.9864	-121.4737	6/20/17	18:25	gas storage facility	1B2 Oil & Natural Gas	0.012	0.002	1.28	0.31	57	16
S00042	37.9864	-121.4737	8/31/17	17:45	gas storage facility	1B2 Oil & Natural Gas	0.005	0.002	2.02	0.15	37	15
S00042	37.9864	-121.4737	9/10/17	18:27	gas storage facility	1B2 Oil & Natural Gas	0.033	0.007	2.53	0.10	304	61
S00042	37.9864	-121.4737	10/6/17	19:23	gas storage facility	1B2 Oil & Natural Gas	0.032	0.011	0.66	0.09		
S00042	37.9864	-121.4737	10/6/17	19:28	gas storage facility	1B2 Oil & Natural Gas	0.033	0.017	0.66	0.09		
S00042	37.9864	-121.4737	10/6/17	19:35	gas storage facility	1B2 Oil & Natural Gas	0.023	0.006	0.66	0.09		
S00042	37.9864	-121.4737	10/6/17	19:41	gas storage facility	1B2 Oil & Natural Gas	0.019	0.009	0.66	0.09		
S00042	37.9864	-121.4737	10/7/17	19:43	gas storage facility	1B2 Oil & Natural Gas	0.008	0.004	1.69	0.06	49	22
S00042	37.9864	-121.4737	10/7/17	19:49	gas storage facility	1B2 Oil & Natural Gas	0.039	0.022	1.69	0.06	236	136
S00043	36.0786	-119.4416	9/13/16	22:11	dairy/manure	3A2 Manure Management	0.004	0.001	0.65	0.30	9	5
S00048	36.1414	-119.5360	9/14/16	19:21	dairy/manure	3A2 Manure Management	0.040	0.011	1.85	0.34	266	86
S00049	36.2158	-119.1659	9/14/16	19:36	dairy/manure	3A2 Manure Management	0.009	0.002	2.67	0.36	90	22
S00050	36.2032	-119.1911	9/14/16	19:36	dairy/manure	3A2 Manure Management	0.009	0.002	2.67	0.36	90	22
S00051	36.1653	-119.5379	9/14/16	19:50	dairy/manure	3A2 Manure Management	0.043	0.008	1.85	0.34	284	75
S00053	36.1640	-119.6925	9/14/16	20:06	dairy/manure	3A2 Manure Management	0.007	0.001	2.11	0.20	57	7
S00054	36.1824	-119.6591	9/14/16	20:20	dairy/manure	3A2 Manure Management	0.003	0.001	0.88	0.16	11	3
S00055	36.1926	-119.5310	9/14/16	20:20	dairy/manure	3A2 Manure Management	0.029	0.009	0.88	0.16		
S00058	36.1941	-119.5610	9/14/16	20:20	dairy/manure	3A2 Manure Management	0.011	0.001	0.88	0.16		
S00060	36.2055	-119.5324	9/14/16	20:36	dairy/manure	3A2 Manure Management	0.004	0.002	1.12	0.23	16	9
S00063	36.2072	-119.6964	9/14/16	20:52	dairy/manure	3A2 Manure Management	0.026	0.012	1.04	0.20		
S00065	36.2159	-119.6076	9/14/16	20:52	dairy/manure	3A2 Manure Management	0.026	0.012	1.04	0.20		
S00067	36.2486	-119.4982	9/14/16	21:09	dairy/manure	3A2 Manure Management	0.018	0.004	2.49	0.51	159	46
S00068	36.2300	-119.6132	9/14/16	21:09	dairy/manure	3A2 Manure Management	0.030	0.011	2.49	0.51	269	114
S00070	36.2212	-119.6855	9/16/17	19:48	dairy/manure	3A2 Manure Management	0.017	0.009	1.00	0.17		
S00071	36.2422	-119.5489	9/14/16	21:09	dairy/manure	3A2 Manure Management	0.018	0.004	2.49	0.51	159	46
S00074	36.2761	-119.4522	9/14/16	21:41	dairy/manure	3A2 Manure Management	0.051	0.012	1.84	0.16	340	84
S00075	36.2623	-119.6278	9/14/16	21:41	dairy/manure	3A2 Manure Management	0.008	0.003	1.84	0.16	53	20
S00075	36.2623	-119.6278	9/16/17	19:08	dairy/manure	3A2 Manure Management	0.017	0.001	1.33	0.15	84	12
S00078	34.3857	-118.4967	9/15/16	18:00	oil/gas tank	1B2 Oil & Natural Gas	0.013	0.002	1.70	0.49	78	26
S00080	34.4474	-118.5867	9/16/16	22:15	gas compressor	1B2 Oil & Natural Gas	0.011	0.006	2.77	0.99	114	71
S00080	34.4474	-118.5867	9/17/16	18:16	gas compressor	1B2 Oil & Natural Gas	0.060	0.032	1.05	0.39		
S00080	34.4474	-118.5867	9/17/16	22:43	gas compressor	1B2 Oil & Natural Gas	0.015	0.003	5.02	0.83	277	74
S00080	34.4474	-118.5867	9/25/16	20:12	gas compressor	1B2 Oil & Natural Gas	0.010	0.003	7.48	0.91	264	95
S00080	34.4474	-118.5867	11/3/16	22:18	gas compressor	1B2 Oil & Natural Gas	0.049	0.027	5.16	0.45	919	501
S00080	34.4474	-118.5867	11/3/16	22:24	gas compressor	1B2 Oil & Natural Gas	0.059	0.020	5.16	0.45	1098	382
S00080	34.4474	-118.5867	11/3/16	22:45	gas compressor	1B2 Oil & Natural Gas	0.051	0.020	5.16	0.45	948	388
S00080	34.4474	-118.5867	11/4/16	18:30	gas compressor	1B2 Oil & Natural Gas	0.057	0.010	3.21	0.35	659	135
S00080	34.4474	-118.5867	3/9/17	21:43	gas compressor	1B2 Oil & Natural Gas	0.037	0.015	3.44	0.73	462	206
S00080	34.4474	-118.5867	6/15/17	20:37	gas compressor	1B2 Oil & Natural Gas	0.067	0.019	2.91	0.62	700	245
S00080	34.4474	-118.5867	6/19/17	0:32	gas compressor	1B2 Oil & Natural Gas	0.064	0.016	3.66	0.83	844	281
S00080	34.4474	-118.5867	9/2/17	17:34	gas compressor	1B2 Oil & Natural Gas	0.019	0.006	2.77	0.40	192	62
S00080	34.4474	-118.5867	9/5/17	22:25	gas compressor	1B2 Oil & Natural Gas	0.030	0.013	2.48	0.49	265	126
S00080	34.4474	-118.5867	9/7/17	17:35	gas compressor	1B2 Oil & Natural Gas	0.046	0.009	1.32	0.34	219	69
S00080	34.4474	-118.5867	9/7/17	18:19	gas compressor	1B2 Oil & Natural Gas	0.029	0.007	1.73	0.57	180	74
S00080	34.4474	-118.5867	9/20/17	22:36	gas compressor	1B2 Oil & Natural Gas	0.012	0.006	3.96	0.94	165	91
S00080	34.4474	-118.5867	10/7/17	22:11	gas compressor	1B2 Oil & Natural Gas	0.019	0.008	2.47	0.53	165	80
S00081	36.4994	-119.6175	9/17/16	20:04	wastewater treatment	4D2 Industrial Wastewater Treatment & Discharge	0.078	0.032	1.71	0.17	480	205
S00082	36.4138	-119.8651	9/17/16	21:34	dairy/manure	3A2 Manure Management	0.036	0.013	2.05	0.23	263	97
S00083	35.1666	-119.1019	10/25/16	22:42	dairy/manure	3A2 Manure Management	0.036	0.010	2.96	0.06	387	109
S00083	35.1666	-119.1019	10/29/16	22:17	dairy/manure	3A2 Manure Management	0.028	0.009	4.68	0.14	471	152
S00083	35.1666	-119.1019	9/15/17	21:52	dairy/manure	3A2 Manure Management	0.014	0.003	2.53	0.51	129	37
S00083	35.1666	-119.1019	9/26/17	22:06	dairy/manure	3A2 Manure Management	0.008	0.003	2.45	0.16	73	23
S00083	35.1666	-119.1019	10/10/17	19:35	dairy/manure	3A2 Manure Management	0.010	0.001	2.95	0.44	103	22
S00083	35.1666	-119.1019	10/26/17	20:26	dairy/manure	3A2 Manure Management	0.024	0.005	2.81	0.10	243	54
S00087	34.4830	-120.1242	9/30/16	22:16	landfill	4A1 Managed Waste Disposal Sites	0.011	0.005	3.96	0.79	152	82
S00088	33.8562	-117.0803	10/1/16	18:10	dairy/manure	3A2 Manure Management	0.009	0.002	1.54	0.63	47	22
S00089	34.0021	-117.6164	10/1/16	19:27	dairy/manure	3A2 Manure Management	0.006	0.002	3.42	0.45	74	21
S00090	36.7243	-120.2339	10/1/16	21:37	dairy/manure	3A2 Manure Management	0.005	0.002	5.57	0.13	103	48
S00091	34.3805	-118.4982	10/3/16	19:36	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.021	0.003	3.04	0.44	230	46
S00092	34.3852	-118.4963	10/3/16	19:36	oil/gas tank	1B2 Oil & Natural Gas	0.012	0.003	3.04	0.44	136	35
S00094	38.0423	-122.2523	10/5/16	18:41	refinery	1A1 Energy Industries	0.028	0.012	2.36	0.52	239	113
S00094	38.0423	-122.2523	10/5/17	18:16	refinery	1A1 Energy Industries	0.032	0.009	1.50	0.61	171	85
S00094	38.0423	-122.2523	10/5/17	18:25	refinery	1A1 Energy Industries	0.020	0.004	1.50	0.61	108	48
S00094	38.0423	-122.2523	10/5/17	18:33	refinery	1A1 Energy Industries	0.025	0.005	1.50	0.61	133	60
S00094	38.0423	-122.2523	10/5/17	18:41	refinery	1A1 Energy Industries	0.022	0.003	1.50	0.61	118	50
S00094	38.0423	-122.2523	10/6/17	20:16	refinery	1A1 Energy Industries	0.032	0.015	1.90	1.00	218	152
S00098	37.9368	-122.4044	10/5/16	19:49	refinery	1A1 Energy Industries	0.022	0.005	2.07	0.47	163	53
S00099	37.9497	-122.3966	10/5/16	19:49	refinery	1A1 Energy Industries	0.113	0.034	2.07	0.47	843	317
S00099	37.9497	-122.3966	9/10/17	21:28	refinery	1A1 Energy Industries	0.049	0.010	2.10	1.11	370	209
S00099	37.9497	-122.3966	10/5/17	17:41	refinery	1A1 Energy Industries	0.097	0.031	0.90	0.40		
S00101	33.9418	-117.8371	10/6/16	18:18	landfill	4A1 Managed Waste Disposal Sites	0.007	0.001	1.65	0.45	43	12
S00102	33.9950	-118.1521	10/6/16	18:48	gas LNG station	1B2 Oil & Natural Gas	0.029	0.006	1.31	0.25	139	37
S00103	34.0016	-118.3693	10/6/16	20:01	oil/gas tank	1B2 Oil & Natural Gas	0.013	0.003	2.71	0.39	126	32
S00103	34.0016	-118.3693	9/1/17	20:12	oil/gas tank	1B2 Oil & Natural Gas	0.009	0.003	2.46	0.46	78	29
S00103	34.0016	-118.3693	9/1/17	20:23	oil/gas tank	1B2 Oil & Natural Gas	0.008	0.002	2.81	0.13	84	16
S00103	34.0016	-118.3693	10/23/17	21:09	oil/gas tank	1B2 Oil & Natural Gas	0.007	0.002	1.14	0.79	31	23
S00103	34.0016	-118.3693	10/23/17	21:20	oil/gas tank	1B2 Oil & Natural Gas	0.017	0.006	0.40	0.16		
S00103	34.0016	-118.3693	10/24/17	19:21	oil/gas tank	1B2 Oil & Natural Gas	0.022	0.005	3.50	0.19	280	65
S00103	34.0016	-118.3693	10/24/17	19:48	oil/gas tank	1B2 Oil & Natural Gas	0.013	0.002	2.95	0.29	135	25
S00104	36.1638	-120.3952	10/12/16	19:31	oil/gas gathering line	1B2 Oil & Natural Gas	0.029	0.006	2.92	0.68	303	96
S00105	36.2090	-120.3931	10/12/16	19:37	oil/gas waste lagoon	1B2 Oil & Natural Gas	0.018	0.004	3.06	0.31	194	43
S00106	35.4460	-119.0150	10/25/16	19:29	oil/gas drill rig	1B2 Oil & Natural Gas	0.012	0.003	3.08	0.29	128	34
S00106	35.4460	-119.0150	9/2/17	19:13	oil/gas drill rig	1B2 Oil & Natural Gas	0.009	0.002	4.31	0.12	140	34
S00106	35.4460	-119.0150	9/26/17	21:02	oil/gas drill rig	1B2 Oil & Natural Gas	0.009	0.004	3.81	0.25	121	50
S00106	35.4460	-119.0150	10/26/17	20:53	oil/gas drill rig	1B2 Oil & Natural Gas	0.012	0.002	2.69	0.19	117	20
S00107	35.4708	-119.0394	10/25/16	19:29	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.037	0.008	3.08	0.29	412	99
S00110	35.4829	-119.0576	9/2/17	19:13	oil/gas pumpjack	1B2 Oil & Natural Gas	0.014	0.004	4.31	0.12	219	56
S00110	35.4829	-119.0576	9/8/17	21:05	oil/gas pumpjack	1B2 Oil & Natural Gas	0.007	0.000	9.07	0.19	221	9

Source Identifier	Plume Latitude (deg)	Plume Longitude (deg)	Date of detection	Time of detection (UTC)	Source type (best estimate)	Sectors (IPCC)	IME/r (kg/m)	σ _{ME} /r (kg/m)	U ₁₀ (m/s)	σ _{U10} (m/s)	Q _{plume} (kg/hr)*	σ _{Qplume} (kg/hr)*
S00110	35.4829	-119.0576	9/26/17	21:02	oil/gas pumpjack	1B2 Oil & Natural Gas	0.008	0.001	3.81	0.25	112	17
S00116	35.4990	-119.0721	10/8/16	20:40	oil/gas pumpjack	1B2 Oil & Natural Gas	0.014	0.001	4.49	0.83	228	48
S00116	35.4990	-119.0721	10/8/16	21:39	oil/gas pumpjack	1B2 Oil & Natural Gas	0.013	0.003	5.24	0.90	248	71
S00116	35.4990	-119.0721	10/25/16	19:29	oil/gas pumpjack	1B2 Oil & Natural Gas	0.015	0.003	3.08	0.29	168	41
S00116	35.4990	-119.0721	9/2/17	19:13	oil/gas pumpjack	1B2 Oil & Natural Gas	0.009	0.001	4.31	0.12	145	15
S00116	35.4990	-119.0721	9/5/17	19:11	oil/gas pumpjack	1B2 Oil & Natural Gas	0.015	0.002	4.81	0.20	251	35
S00116	35.4990	-119.0721	9/8/17	21:05	oil/gas pumpjack	1B2 Oil & Natural Gas	0.019	0.004	9.07	0.19	604	140
S00116	35.4990	-119.0721	9/26/17	21:02	oil/gas pumpjack	1B2 Oil & Natural Gas	0.028	0.003	3.81	0.25	378	45
S00117	35.5061	-119.0741	10/8/16	20:23	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.012	0.002	3.85	0.80	168	43
S00117	35.5061	-119.0741	10/8/16	20:55	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.008	0.002	4.65	0.78	128	40
S00117	35.5061	-119.0741	10/8/16	21:11	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.013	0.001	4.65	0.78	209	39
S00117	35.5061	-119.0741	10/26/17	20:53	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.011	0.000	2.69	0.19	105	8
S00118	35.5075	-119.0742	10/8/16	20:40	oil/gas pumpjack	1B2 Oil & Natural Gas	0.008	0.001	4.49	0.83	126	25
S00118	35.5075	-119.0742	10/8/16	21:39	oil/gas pumpjack	1B2 Oil & Natural Gas	0.009	0.002	5.24	0.90	165	52
S00118	35.5075	-119.0742	10/25/16	19:21	oil/gas pumpjack	1B2 Oil & Natural Gas	0.010	0.002	2.95	0.37	109	24
S00118	35.5075	-119.0742	10/25/16	19:29	oil/gas pumpjack	1B2 Oil & Natural Gas	0.014	0.001	3.08	0.29	156	19
S00118	35.5075	-119.0742	9/8/17	21:05	oil/gas pumpjack	1B2 Oil & Natural Gas	0.010	0.002	9.07	0.19	314	74
S00119	35.4749	-119.4306	9/15/17	18:06	dairy/manure	3A2 Manure Management	0.009	0.003	3.39	0.13	104	39
S00119	35.3476	-119.6628	9/20/17	19:09	oil/gas gathering line	1B2 Oil & Natural Gas	0.054	0.010	3.51	0.28	683	133
S00120	35.2382	-119.5914	10/29/16	20:19	oil/gas gathering line	1B2 Oil & Natural Gas	0.021	0.008	3.53	0.33	263	101
S00121	35.3647	-119.6700	9/2/17	21:13	oil/gas gathering line	1B2 Oil & Natural Gas	0.005	0.000	4.24	0.05	80	3
S00122	35.4805	-119.7431	10/29/16	20:07	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.010	0.005	3.24	0.25	111	55
S00123	35.5292	-119.7695	10/29/16	20:07	oil/gas gathering line	1B2 Oil & Natural Gas	0.012	0.003	3.24	0.25	136	34
S00124	35.2272	-119.5784	10/29/16	20:19	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.013	0.002	3.53	0.33	167	31
S00125	35.2480	-119.5808	10/29/16	20:19	oil/gas gathering line	1B2 Oil & Natural Gas	0.031	0.009	3.53	0.33	393	119
S00126	35.2536	-119.5865	10/29/16	20:19	oil/gas gathering line	1B2 Oil & Natural Gas	0.028	0.009	3.53	0.33	352	118
S00127	35.3419	-119.6461	10/29/16	20:19	oil/gas gathering line	1B2 Oil & Natural Gas	0.012	0.003	3.53	0.33	146	41
S00128	35.4295	-119.6902	10/29/16	20:19	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.011	0.003	3.53	0.33	136	40
S00129	35.1236	-119.4991	11/4/16	18:57	oil/gas tank	1B2 Oil & Natural Gas	0.009	0.001	2.68	0.63	86	22
S00130	35.1151	-119.4670	11/4/16	18:57	oil/gas gathering line	1B2 Oil & Natural Gas	0.015	0.003	2.68	0.63	142	46
S00130	35.1151	-119.4670	11/4/16	19:08	oil/gas gathering line	1B2 Oil & Natural Gas	0.008	0.002	2.26	0.33	63	16
S00131	35.0412	-119.3841	11/4/16	18:57	oil/gas tank	1B2 Oil & Natural Gas	0.004	0.001	2.68	0.63	41	12
S00132	35.0271	-119.3329	11/4/16	19:08	oil/gas tank	1B2 Oil & Natural Gas	0.009	0.001	2.26	0.33	72	12
S00133	35.0615	-119.3909	11/4/16	19:08	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.008	0.003	2.26	0.33	65	26
S00135	35.0459	-119.3497	11/4/16	19:08	dairy/manure	3A2 Manure Management	0.009	0.001	2.26	0.33	73	16
S00136	35.1325	-119.4866	11/4/16	19:08	oil/gas pumpjack	1B2 Oil & Natural Gas	0.007	0.002	2.26	0.33	58	18
S00137	35.1309	-119.4865	11/4/16	19:08	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.006	0.001	2.26	0.33	47	14
S00141	33.7794	-118.2351	9/10/16	20:50	refinery	1A1 Energy Industries	0.010	0.003	1.07	0.33	40	17
S00145	33.8162	-118.2357	9/10/16	20:50	refinery	1A1 Energy Industries	0.003	0.002	1.07	0.33		
S00145	33.8162	-118.2357	3/9/17	22:10	refinery	1A1 Energy Industries	0.025	0.007	2.41	0.09	220	63
S00148	35.2151	-119.2126	6/20/17	16:30	dairy/manure	3A2 Manure Management	0.047	0.020	0.88	0.25		
S00149	35.2148	-119.2108	9/12/16	20:56	dairy/manure	3A2 Manure Management	0.027	0.008	3.64	0.13	347	111
S00149	35.2148	-119.2108	6/16/17	20:06	dairy/manure	3A2 Manure Management	0.025	0.009	4.92	0.52	441	162
S00149	35.2148	-119.2108	9/26/17	18:25	dairy/manure	3A2 Manure Management	0.004	0.001	1.36	0.22	19	6
S00149	35.2148	-119.2108	10/26/17	20:20	dairy/manure	3A2 Manure Management	0.008	0.003	2.83	0.09	86	27
S00149	35.2148	-119.2108	11/13/17	19:32	dairy/manure	3A2 Manure Management	0.060	0.016	1.90	0.06	409	110
S00150	35.2438	-119.1574	9/12/16	20:56	dairy/manure	3A2 Manure Management	0.023	0.006	3.64	0.13	301	79
S00150	35.2438	-119.1574	11/13/17	21:04	dairy/manure	3A2 Manure Management	0.015	0.006	2.55	0.11	137	60
S00151	35.2463	-119.1404	9/12/16	20:56	dairy/manure	3A2 Manure Management	0.018	0.006	3.64	0.13	237	75
S00151	35.2463	-119.1404	9/26/17	18:50	dairy/manure	3A2 Manure Management	0.008	0.001	1.93	0.09	57	7
S00151	35.2463	-119.1404	9/26/17	21:48	dairy/manure	3A2 Manure Management	0.004	0.001	2.89	0.23	40	12
S00152	35.9013	-119.3199	9/12/16	22:06	dairy/manure	3A2 Manure Management	0.013	0.003	4.22	0.17	192	51
S00153	34.9015	-117.1600	9/13/16	19:01	gas compressor	1B2 Oil & Natural Gas	0.009	0.001	5.49	0.21	188	30
S00156	35.9593	-119.3722	9/13/16	20:21	dairy/manure	3A2 Manure Management	0.007	0.003	0.99	0.31	24	14
S00159	35.9727	-119.3590	9/13/16	20:33	dairy/manure	3A2 Manure Management	0.036	0.013	1.32	0.47	173	86
S00160	35.9873	-119.3264	9/13/16	20:33	dairy/manure	3A2 Manure Management	0.028	0.005	1.32	0.47	134	52
S00162	35.9711	-119.4401	9/13/16	20:44	dairy/manure	3A2 Manure Management	0.063	0.034	1.14	0.41		
S00164	35.9739	-119.4391	9/13/16	20:44	dairy/manure	3A2 Manure Management	0.012	0.001	1.14	0.41	49	18
S00165	36.0153	-119.2233	9/13/16	20:44	dairy/manure	3A2 Manure Management	0.009	0.001	1.14	0.41	35	13
S00171	36.0289	-119.3250	9/13/16	21:21	dairy/manure	3A2 Manure Management	0.006	0.001	1.89	0.55	41	13
S00176	36.0216	-119.5195	9/13/16	21:32	dairy/manure	3A2 Manure Management	0.021	0.008	2.05	0.44	153	70
S00176	36.0216	-119.5195	3/9/17	20:24	dairy/manure	3A2 Manure Management	0.096	0.019	1.28	0.21	444	116
S00176	36.0216	-119.5195	6/16/17	21:20	dairy/manure	3A2 Manure Management	0.043	0.020	3.09	0.27	478	222
S00177	36.0324	-119.5103	9/13/16	21:32	dairy/manure - digester	3A2 Manure Management	0.032	0.014	2.05	0.44	234	113
S00177	36.0324	-119.5103	10/26/16	17:32	dairy/manure - digester	3A2 Manure Management	0.387	0.079	0.56	0.13		
S00177	36.0324	-119.5103	10/26/16	18:02	dairy/manure - digester	3A2 Manure Management	0.040	0.009	1.01	0.14		
S00177	36.0324	-119.5103	6/16/17	21:20	dairy/manure - digester	3A2 Manure Management	0.024	0.009	3.09	0.27	272	102
S00177	36.0324	-119.5103	9/20/17	19:32	dairy/manure - digester	3A2 Manure Management	0.022	0.005	2.33	0.10	183	47
S00177	36.0324	-119.5103	9/20/17	19:41	dairy/manure - digester	3A2 Manure Management	0.027	0.006	2.44	0.26	235	59
S00177	36.0324	-119.5103	9/28/17	19:51	dairy/manure - digester	3A2 Manure Management	0.027	0.008	0.76	0.11		
S00178	36.0395	-119.3980	9/13/16	21:32	dairy/manure	3A2 Manure Management	0.005	0.002	2.05	0.44	40	14
S00181	36.0761	-119.1955	9/13/16	21:32	dairy/manure	3A2 Manure Management	0.006	0.003	2.05	0.44	46	26
S00183	36.0490	-119.4558	9/13/16	21:46	dairy/manure	3A2 Manure Management	0.016	0.001	1.98	0.48	116	30
S00186	36.0879	-119.2370	9/13/16	21:46	dairy/manure	3A2 Manure Management	0.013	0.006	1.98	0.48	96	46
S00191	36.1158	-119.3621	9/14/16	18:40	dairy/manure	3A2 Manure Management	0.010	0.003	2.02	0.41	70	28
S00191	36.1158	-119.3621	6/16/17	21:05	dairy/manure	3A2 Manure Management	0.005	0.001	3.19	0.23	59	10
S00192	36.1259	-119.3413	9/14/16	18:40	dairy/manure	3A2 Manure Management	0.010	0.003	2.02	0.41	70	28
S00193	36.1162	-119.3342	9/14/16	18:40	dairy/manure	3A2 Manure Management	0.010	0.003	2.02	0.41	70	28
S00193	36.1162	-119.3342	3/9/17	20:24	dairy/manure	3A2 Manure Management	0.025	0.005	1.28	0.21	113	31
S00194	36.1285	-119.4311	9/14/16	18:53	dairy/manure	3A2 Manure Management	0.013	0.002	1.85	0.26	89	17
S00195	36.1563	-119.2404	9/14/16	18:53	dairy/manure	3A2 Manure Management	0.015	0.004	1.85	0.26	98	29
S00196	36.1611	-119.2178	9/14/16	18:53	dairy/manure	3A2 Manure Management	0.010	0.001	1.85	0.26	66	10
S00198	37.1233	-120.3635	9/19/16	20:59	dairy/manure	3A2 Manure Management	0.007	0.002	2.48	0.24	60	20
S00199	37.1573	-120.3917	9/19/16	20:59	dairy/manure	3A2 Manure Management	0.092	0.030	2.48	0.24	822	280
S00200	37.2087	-120.4638	9/19/16	20:59	dairy/manure	3A2 Manure Management	0.035	0.011	2.48	0.24	312	100
S00201	37.1802	-120.4353	9/19/16	21:13	dairy/manure	3A2 Manure Management	0.017	0.010	1.75	0.34	108	64
S00203	36.0333	-119.4048	9/22/16	18:31	dairy/manure	3A2 Manure Management	0.011	0.002	4.06	0.08	167	30
S00204	36.0388	-119.3979	9/22/16	18:31	dairy/manure	3A2 Manure Management	0.010	0.004	4.06	0.08	143	55
S00204	36.0388	-119.3979	6/16/17	20:43	dairy/manure	3A2 Manure Management	0.029	0.010	3.13	0.05	331	117
S00205	36.0532	-119.3977	9/22/16	18:42	dairy/manure	3A2 Manure Management	0.004	0.001	3.98	0.05	59	

Source Identifier	Plume Latitude (deg)	Plume Longitude (deg)	Date of detection	Time of detection (UTC)	Source type (best estimate)	Sectors (IPCC)	IME/r (kg/m)	σ _{ME} /r (kg/m)	U ₁₀ (m/s)	σ _{U10} (m/s)	Q _{plume} (kg/hr)*	σ _{Qplume} (kg/hr)*
S00205	36.0532	-119.3977	9/22/16	19:23	dairy/manure	3A2 Manure Management	0.004	0.001	3.78	0.07	53	19
S00206	36.2272	-119.1638	9/22/16	18:42	dairy/manure	3A2 Manure Management	0.008	0.003	3.98	0.05	119	44
S00207	36.1567	-119.2831	9/22/16	18:52	dairy/manure	3A2 Manure Management	0.019	0.008	3.93	0.09	270	114
S00207	36.1567	-119.2831	9/22/16	19:33	dairy/manure	3A2 Manure Management	0.016	0.002	3.86	0.08	220	34
S00208	36.2127	-119.1990	9/22/16	18:52	dairy/manure	3A2 Manure Management	0.010	0.003	3.93	0.09	142	36
S00208	36.2127	-119.1990	9/22/16	20:13	dairy/manure	3A2 Manure Management	0.005	0.001	4.36	0.13	80	22
S00208	36.2127	-119.1990	9/22/16	21:31	dairy/manure	3A2 Manure Management	0.002	0.001	5.03	0.12		
S00209	36.0867	-119.3356	6/16/17	20:43	dairy/manure	3A2 Manure Management	0.011	0.001	3.13	0.05	120	10
S00210	36.1154	-119.2907	9/22/16	19:13	dairy/manure	3A2 Manure Management	0.008	0.003	3.85	0.18	105	38
S00210	36.1154	-119.2907	9/22/16	20:32	dairy/manure	3A2 Manure Management	0.004	0.000	4.49	0.09	57	2
S00211	36.1565	-119.2655	9/22/16	19:23	dairy/manure	3A2 Manure Management	0.042	0.012	3.78	0.07	578	166
S00211	36.1565	-119.2655	9/22/16	19:33	dairy/manure	3A2 Manure Management	0.005	0.002	3.86	0.08	68	23
S00212	36.2289	-119.1633	9/22/16	19:23	dairy/manure	3A2 Manure Management	0.002	0.001	3.78	0.07		
S00212	36.2289	-119.1633	9/22/16	20:03	dairy/manure	3A2 Manure Management	0.003	0.001	4.43	0.20	55	11
S00213	36.2320	-119.1660	9/22/16	19:33	dairy/manure	3A2 Manure Management	0.006	0.001	3.86	0.08	84	11
S00213	36.2320	-119.1660	9/22/16	20:03	dairy/manure	3A2 Manure Management	0.004	0.001	4.43	0.20	68	16
S00214	36.2137	-119.1662	9/22/16	19:53	dairy/manure	3A2 Manure Management	0.001	0.004	3.80	0.17		
S00216	36.2259	-119.1636	9/22/16	20:03	dairy/manure	3A2 Manure Management	0.004	0.002	4.43	0.20	70	33
S00217	36.2265	-119.1636	6/16/17	20:43	dairy/manure	3A2 Manure Management	0.011	0.004	3.13	0.05	127	47
S00218	36.1203	-119.3147	9/22/16	20:13	dairy/manure	3A2 Manure Management	0.004	0.001	4.36	0.13	60	10
S00219	36.1567	-119.2823	9/22/16	20:13	dairy/manure	3A2 Manure Management	0.016	0.006	4.36	0.13	247	98
S00219	36.1567	-119.2823	9/22/16	20:52	dairy/manure	3A2 Manure Management	0.004	0.000	4.50	0.10	72	5
S00219	36.1567	-119.2823	9/22/16	21:31	dairy/manure	3A2 Manure Management	0.010	0.001	5.03	0.12	174	23
S00220	36.1025	-119.3734	9/22/16	20:23	dairy/manure	3A2 Manure Management	0.022	0.007	4.52	0.17	355	116
S00220	36.1025	-119.3734	3/9/17	20:24	dairy/manure	3A2 Manure Management	0.072	0.024	1.28	0.21	332	125
S00220	36.1025	-119.3734	6/16/17	21:05	dairy/manure	3A2 Manure Management	0.074	0.022	3.19	0.23	848	264
S00220	36.1025	-119.3734	6/18/17	23:52	dairy/manure	3A2 Manure Management	0.014	0.002	4.88	0.27	244	36
S00221	36.1449	-119.2650	9/22/16	20:32	dairy/manure	3A2 Manure Management	0.005	0.001	4.49	0.09	86	10
S00222	36.1560	-119.2399	9/22/16	18:31	dairy/manure	3A2 Manure Management	0.011	0.002	4.06	0.08	167	30
S00222	36.1560	-119.2399	9/22/16	20:32	dairy/manure	3A2 Manure Management	0.002	0.000	4.49	0.09		
S00223	36.2275	-119.1638	9/22/16	20:42	dairy/manure	3A2 Manure Management	0.022	0.006	4.43	0.20	358	99
S00225	36.1696	-119.2752	9/22/16	19:43	dairy/manure	3A2 Manure Management	0.007	0.003	3.86	0.16	98	37
S00226	36.1592	-119.2647	9/22/16	21:22	dairy/manure	3A2 Manure Management	0.009	0.001	5.00	0.16	170	16
S00228	36.2275	-119.1638	9/22/16	20:42	dairy/manure	3A2 Manure Management	0.006	0.001	4.43	0.20	98	16
S00229	36.0702	-119.3895	9/22/16	21:31	dairy/manure	3A2 Manure Management	0.010	0.004	5.03	0.12	188	73
S00231	36.0770	-119.3854	9/22/16	21:31	dairy/manure	3A2 Manure Management	0.012	0.004	5.03	0.12	215	81
S00231	36.0770	-119.3854	6/16/17	20:54	dairy/manure	3A2 Manure Management	0.068	0.043	3.08	0.17	757	475
S00232	36.2250	-119.1794	9/22/16	20:13	dairy/manure	3A2 Manure Management	0.006	0.001	4.36	0.13	97	17
S00233	36.2265	-119.1802	9/22/16	21:31	dairy/manure	3A2 Manure Management	0.006	0.001	5.03	0.12	106	24
S00234	36.1568	-119.2831	9/22/16	21:41	dairy/manure	3A2 Manure Management	0.003	0.001	5.07	0.16		
S00238	36.3526	-119.4957	9/16/16	20:08	dairy/manure	3A2 Manure Management	0.011	0.002	3.40	0.20	140	27
S00240	36.3876	-119.3265	9/16/16	20:08	dairy/manure	3A2 Manure Management	0.022	0.005	3.40	0.20	266	63
S00244	36.3878	-119.4226	9/16/16	20:24	dairy/manure	3A2 Manure Management	0.020	0.003	3.12	0.14	229	33
S00248	36.3932	-119.3792	9/16/16	20:24	landfill	4A1 Managed Waste Disposal Sites	0.052	0.010	3.12	0.14	585	118
S00251	36.4124	-119.3673	9/16/16	20:43	dairy/manure	3A2 Manure Management	0.022	0.006	3.11	0.16	250	63
S00252	36.3962	-119.5226	9/16/16	20:58	dairy/manure	3A2 Manure Management	0.009	0.003	3.30	0.14	109	34
S00258	36.4545	-119.2816	9/16/16	21:11	dairy/manure	3A2 Manure Management	0.008	0.002	3.79	0.15	109	29
S00259	36.4531	-119.3990	9/16/16	21:26	dairy/manure	3A2 Manure Management	0.006	0.002	3.28	0.16	74	24
S00260	36.4719	-119.2706	9/16/16	21:26	dairy/manure	3A2 Manure Management	0.012	0.001	3.28	0.16	144	18
S00264	36.4719	-119.3431	9/17/16	18:57	dairy/manure	3A2 Manure Management	0.023	0.004	1.76	0.23	143	33
S00265	36.4261	-119.7334	9/17/16	19:10	dairy/manure	3A2 Manure Management	0.046	0.022	0.68	0.08		
S00267	36.4141	-119.8644	9/17/16	19:25	dairy/manure	3A2 Manure Management	0.015	0.005	0.93	0.14		
S00268	36.4486	-119.7540	9/17/16	19:38	dairy/manure	3A2 Manure Management	0.035	0.014	0.67	0.07		
S00269	36.4560	-119.7704	9/17/16	19:38	dairy/manure	3A2 Manure Management	0.013	0.003	0.67	0.07		
S00270	36.4361	-120.0102	9/17/16	21:01	dairy/manure	3A2 Manure Management	0.021	0.001	2.01	0.21	153	18
S00272	36.4827	-120.0742	9/17/16	21:11	dairy/manure	3A2 Manure Management	0.004	0.002	2.01	0.26	25	15
S00273	36.4367	-119.9875	9/17/16	21:11	dairy/manure	3A2 Manure Management	0.014	0.005	2.01	0.26	105	36
S00276	36.5830	-120.0550	9/19/16	18:28	dairy/manure	3A2 Manure Management	0.010	0.004	1.68	0.07	62	24
S00277	36.5304	-119.9751	9/19/16	18:28	dairy/manure	3A2 Manure Management	0.007	0.006	1.68	0.07	44	33
S00278	37.2696	-120.3694	9/19/16	19:38	dairy/manure	3A2 Manure Management	0.008	0.002	3.11	0.22	94	21
S00280	37.2154	-120.4233	9/19/16	20:32	dairy/manure	3A2 Manure Management	0.015	0.007	2.94	0.17	159	73
S00281	37.2332	-120.4562	9/19/16	20:46	dairy/manure	3A2 Manure Management	0.011	0.002	2.56	0.29	104	21
S00284	37.1665	-120.3741	9/19/16	20:46	dairy/manure	3A2 Manure Management	0.018	0.001	2.56	0.29	169	21
S00286	35.4750	-119.4317	10/25/16	23:06	dairy/manure	3A2 Manure Management	0.023	0.004	2.83	0.11	236	46
S00286	35.4750	-119.4317	11/13/17	21:57	dairy/manure	3A2 Manure Management	0.067	0.031	0.79	0.11		
S00288	36.0491	-119.4559	10/26/16	17:32	dairy/manure	3A2 Manure Management	0.037	0.019	0.56	0.13		
S00290	36.0492	-119.4560	10/26/16	18:02	dairy/manure	3A2 Manure Management	0.020	0.004	1.01	0.14		
S00290	36.0492	-119.4560	9/16/17	21:38	dairy/manure	3A2 Manure Management	0.007	0.001	3.45	0.18	82	18
S00291	36.7927	-120.2528	10/26/16	18:25	gas storage facility	1B2 Oil & Natural Gas	0.016	0.002	1.68	0.20	95	17
S00291	36.7927	-120.2528	6/20/17	17:36	gas storage facility	1B2 Oil & Natural Gas	0.006	0.002	1.75	0.10	35	11
S00291	36.7927	-120.2528	6/20/17	17:44	gas storage facility	1B2 Oil & Natural Gas	0.007	0.001	1.75	0.10	41	7
S00291	36.7927	-120.2528	9/9/17	19:17	gas storage facility	1B2 Oil & Natural Gas	0.020	0.006	3.35	0.07	238	78
S00291	36.7927	-120.2528	9/10/17	17:59	gas storage facility	1B2 Oil & Natural Gas	0.046	0.013	1.41	0.09	233	70
S00291	36.7927	-120.2528	9/19/17	20:24	gas storage facility	1B2 Oil & Natural Gas	0.013	0.004	6.48	0.09	294	102
S00291	36.7927	-120.2528	9/19/17	20:31	gas storage facility	1B2 Oil & Natural Gas	0.011	0.002	6.48	0.09	247	51
S00291	36.7927	-120.2528	9/19/17	20:37	gas storage facility	1B2 Oil & Natural Gas	0.009	0.002	6.48	0.09	207	54
S00291	36.7927	-120.2528	9/28/17	20:20	gas storage facility	1B2 Oil & Natural Gas	0.026	0.005	0.41	0.10		
S00291	36.7927	-120.2528	9/30/17	18:47	gas storage facility	1B2 Oil & Natural Gas	0.030	0.012	4.45	0.08	484	195
S00291	36.7927	-120.2528	9/30/17	18:55	gas storage facility	1B2 Oil & Natural Gas	0.038	0.009	4.45	0.08	616	137
S00291	36.7927	-120.2528	10/7/17	20:58	gas storage facility	1B2 Oil & Natural Gas	0.031	0.008	0.69	0.07		
S00291	36.7927	-120.2528	10/7/17	21:05	gas storage facility	1B2 Oil & Natural Gas	0.058	0.018	0.79	0.05		
S00293	38.0207	-122.1156	9/10/17	20:07	refinery	1A1 Energy Industries	0.008	0.003	2.39	0.32	69	30
S00295	34.0235	-118.0344	11/2/16	21:16	gas LNG station	1B2 Oil & Natural Gas	0.030	0.006	2.35	0.33	257	62
S00296	36.1824	-119.6593	11/3/16	17:37	dairy/manure	3A2 Manure Management	0.032	0.005	1.11	0.07	129	23
S00299	35.3291	-119.6686	10/29/16	19:52	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.025	0.005	3.43	0.17	312	60
S00299	35.3291	-119.6686	9/2/17	21:25	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.015	0.005	4.22	0.21	221	79
S00299	35.3291	-119.6686	10/13/17	20:45	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.013	0.007	1.85	0.40	87	48
S00299	35.3291	-119.6686	10/13/17	21:10	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.015	0.005	2.43	0.37	132	45
S00299	35.3291	-119.6686	10/13/17	21:25	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.050	0.010	2.43	0.37	436	112
S00299	35.3291	-119.6686	10/13/17	21:31	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.013	0.003	2.43	0.37	111	28

Source Identifier	Plume Latitude (deg)	Plume Longitude (deg)	Date of detection	Time of detection (UTC)	Source type (best estimate)	Sectors (IPCC)	IME/r (kg/m)	σ _{ME} /r (kg/m)	U ₁₀ (m/s)	σ _{U10} (m/s)	Q _{plume} (kg/hr)*	σ _{Qplume} (kg/hr)*
S00300	35.2748	-119.4775	10/29/16	20:47	gas processing plant	1B2 Oil & Natural Gas	0.075	0.012	3.35	0.36	905	172
S00300	35.2748	-119.4775	10/29/16	20:57	gas processing plant	1B2 Oil & Natural Gas	0.053	0.009	3.35	0.36	634	126
S00300	35.2748	-119.4775	6/15/17	23:06	gas processing plant	1B2 Oil & Natural Gas	0.044	0.020	4.81	0.49	755	354
S00300	35.2748	-119.4775	6/15/17	23:41	gas processing plant	1B2 Oil & Natural Gas	0.013	0.001	4.81	0.49	224	29
S00301	35.2682	-119.4574	10/29/16	20:47	oil/gas gathering line	1B2 Oil & Natural Gas	0.043	0.004	3.35	0.36	522	75
S00302	35.2451	-119.3855	10/29/16	20:47	oil/gas gathering line	1B2 Oil & Natural Gas	0.032	0.005	3.35	0.36	391	78
S00303	35.2828	-119.4968	10/29/16	20:57	oil/gas compressor	1B2 Oil & Natural Gas	0.020	0.002	3.35	0.36	237	37
S00304	35.4552	-119.0488	10/8/16	20:46	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.088	0.042	3.76	0.71	1189	608
S00304	35.4552	-119.0488	10/8/16	21:06	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.012	0.004	3.76	0.71	158	59
S00306	34.4043	-118.9985	9/30/16	21:12	landfill	4A1 Managed Waste Disposal Sites	0.005	0.002	6.46	0.65	108	39
S00307	35.2806	-119.4784	10/29/16	20:57	oil/gas compressor	1B2 Oil & Natural Gas	0.012	0.002	3.35	0.36	146	27
S00307	35.2806	-119.4784	6/15/17	23:34	oil/gas compressor	1B2 Oil & Natural Gas	0.009	0.002	4.97	0.47		
S00307	35.2806	-119.4784	6/20/17	16:42	oil/gas compressor	1B2 Oil & Natural Gas	0.006	0.003	1.18	0.81	27	22
S00307	35.2806	-119.4784	6/20/17	16:49	oil/gas compressor	1B2 Oil & Natural Gas	0.006	0.001	1.18	0.81	24	17
S00307	35.2806	-119.4784	6/20/17	16:56	oil/gas compressor	1B2 Oil & Natural Gas	0.011	0.001	1.18	0.81		
S00311	33.7216	-117.7012	10/23/17	19:28	landfill	4A1 Managed Waste Disposal Sites	0.012	0.005	4.41	1.26	195	93
S00312	33.9589	-117.6263	10/1/16	19:11	dairy/manure	3A2 Manure Management	0.006	0.001	3.50	0.42	81	17
S00314	34.3271	-118.5160	10/3/16	20:05	landfill	4A1 Managed Waste Disposal Sites	0.116	0.042	3.97	0.81	1664	688
S00314	34.3271	-118.5160	10/16/17	19:52	landfill	4A1 Managed Waste Disposal Sites	0.027	0.007	3.61	0.66	347	116
S00315	34.3260	-118.5130	10/3/16	20:10	landfill	4A1 Managed Waste Disposal Sites	0.027	0.015	3.97	0.81	389	222
S00315	34.3260	-118.5130	10/10/17	19:10	landfill	4A1 Managed Waste Disposal Sites	0.008	0.001	1.17	0.45	34	14
S00315	34.3260	-118.5130	10/16/17	17:58	landfill	4A1 Managed Waste Disposal Sites	0.006	0.001	4.18	1.11	88	27
S00315	34.3260	-118.5130	10/16/17	18:57	landfill	4A1 Managed Waste Disposal Sites	0.011	0.002	3.99	0.63	158	35
S00315	34.3260	-118.5130	10/16/17	19:47	landfill	4A1 Managed Waste Disposal Sites	0.015	0.003	3.61	0.66	196	57
S00316	34.3243	-118.5085	10/3/16	20:10	landfill	4A1 Managed Waste Disposal Sites	0.053	0.015	3.97	0.81	751	267
S00316	34.3243	-118.5085	10/16/17	17:53	landfill	4A1 Managed Waste Disposal Sites	0.038	0.011	4.18	1.11	578	221
S00320	35.5082	-119.4072	10/1/16	20:54	landfill	4A1 Managed Waste Disposal Sites	0.011	0.002	3.84	0.07	148	27
S00320	35.5082	-119.4072	10/1/16	20:58	landfill	4A1 Managed Waste Disposal Sites	0.035	0.012	3.84	0.07	482	161
S00320	35.5082	-119.4072	10/10/17	20:46	landfill	4A1 Managed Waste Disposal Sites	0.042	0.024	1.82	0.16	274	161
S00321	33.9404	-117.8316	10/6/16	18:09	landfill	4A1 Managed Waste Disposal Sites	0.016	0.007	1.65	0.45	95	48
S00322	35.5117	-119.0745	10/8/16	20:40	oil/gas pumpjack	1B2 Oil & Natural Gas	0.006	0.003	4.49	0.83	101	47
S00322	35.5117	-119.0745	10/8/16	21:11	oil/gas pumpjack	1B2 Oil & Natural Gas	0.015	0.004	4.65	0.78	250	74
S00322	35.5117	-119.0745	10/8/16	21:39	oil/gas pumpjack	1B2 Oil & Natural Gas	0.013	0.002	5.24	0.90	238	57
S00322	35.5117	-119.0745	10/25/16	19:21	oil/gas pumpjack	1B2 Oil & Natural Gas	0.012	0.002	2.95	0.37		
S00322	35.5117	-119.0745	6/15/17	22:36	oil/gas pumpjack	1B2 Oil & Natural Gas	0.007	0.000	4.50	0.28		
S00322	35.5117	-119.0745	9/8/17	21:12	oil/gas pumpjack	1B2 Oil & Natural Gas	0.007	0.002	8.92	0.22		
S00323	35.5156	-119.0758	10/8/16	20:23	oil/gas pumpjack	1B2 Oil & Natural Gas	0.015	0.001	3.85	0.80		
S00323	35.5156	-119.0758	10/8/16	20:40	oil/gas pumpjack	1B2 Oil & Natural Gas	0.005	0.001	4.49	0.83		
S00323	35.5156	-119.0758	10/8/16	21:16	oil/gas pumpjack	1B2 Oil & Natural Gas	0.010	0.003	4.65	0.78		
S00323	35.5156	-119.0758	10/8/16	21:33	oil/gas pumpjack	1B2 Oil & Natural Gas	0.023	0.009	5.56	0.78		
S00323	35.5156	-119.0758	10/8/16	21:39	oil/gas pumpjack	1B2 Oil & Natural Gas	0.014	0.002	5.24	0.90		
S00323	35.5156	-119.0758	9/8/17	21:12	oil/gas pumpjack	1B2 Oil & Natural Gas	0.011	0.002	8.92	0.22	349	80
S00324	35.5183	-119.0782	10/8/16	20:23	oil/gas tank	1B2 Oil & Natural Gas	0.026	0.007	3.85	0.80	356	126
S00324	35.5183	-119.0782	10/8/16	20:40	oil/gas tank	1B2 Oil & Natural Gas	0.010	0.004	4.49	0.83	158	64
S00324	35.5183	-119.0782	10/8/16	21:16	oil/gas tank	1B2 Oil & Natural Gas	0.010	0.001	4.65	0.78	169	34
S00324	35.5183	-119.0782	10/8/16	21:33	oil/gas tank	1B2 Oil & Natural Gas	0.013	0.005	5.56	0.78	265	100
S00325	35.5340	-119.0832	10/8/16	20:23	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.052	0.008	3.85	0.80	724	190
S00325	35.5340	-119.0832	10/8/16	20:40	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.029	0.007	4.49	0.83	462	147
S00325	35.5340	-119.0832	10/8/16	20:55	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.017	0.008	4.65	0.78	279	143
S00325	35.5340	-119.0832	10/8/16	21:39	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.013	0.002	5.24	0.90	245	60
S00325	35.5340	-119.0832	10/25/16	19:21	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.067	0.018	2.95	0.37	714	214
S00326	35.4570	-119.0546	10/8/16	20:30	oil/gas tank	1B2 Oil & Natural Gas	0.023	0.004	3.76	0.71	307	77
S00326	35.4570	-119.0546	10/8/16	21:01	oil/gas tank	1B2 Oil & Natural Gas	0.024	0.009	3.76	0.71	319	139
S00326	35.4570	-119.0546	10/8/16	21:06	oil/gas tank	1B2 Oil & Natural Gas	0.033	0.007	3.76	0.71	445	127
S00326	35.4570	-119.0546	10/25/16	19:37	oil/gas tank	1B2 Oil & Natural Gas	0.011	0.001	2.92	0.35	117	20
S00327	35.4571	-119.0495	10/8/16	20:30	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.044	0.006	3.76	0.71	599	138
S00328	35.4554	-119.0498	10/8/16	21:23	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.022	0.008	3.76	0.71	295	121
S00329	35.5305	-119.0777	10/8/16	21:16	oil/gas pumpjack	1B2 Oil & Natural Gas	0.011	0.002	4.65	0.78	186	46
S00330	35.4562	-119.0528	10/8/16	21:23	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.059	0.012	3.76	0.71	800	227
S00332	35.4591	-119.0530	10/8/16	21:01	oil/gas pumpjack	1B2 Oil & Natural Gas	0.009	0.000	3.76	0.71	117	22
S00332	35.4591	-119.0530	10/8/16	21:06	oil/gas pumpjack	1B2 Oil & Natural Gas	0.007	0.000	3.76	0.71	95	18
S00332	35.4591	-119.0530	10/8/16	21:23	oil/gas pumpjack	1B2 Oil & Natural Gas	0.007	0.000	3.76	0.71	95	18
S00332	35.4591	-119.0530	10/25/16	19:37	oil/gas pumpjack	1B2 Oil & Natural Gas	0.012	0.008	2.92	0.35	123	81
S00333	35.5304	-119.0800	10/8/16	21:39	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.015	0.006	5.24	0.90	276	123
S00337	33.8487	-118.3341	10/11/16	22:23	refinery	1A1 Energy Industries	0.196	0.047	3.10	0.40	2192	592
S00337	33.8487	-118.3341	10/11/16	22:28	refinery	1A1 Energy Industries	0.141	0.057	3.10	0.40	1573	663
S00337	33.8487	-118.3341	9/1/17	20:59	refinery	1A1 Energy Industries	0.016	0.003	3.54	0.34	207	45
S00337	33.8487	-118.3341	10/23/17	20:36	refinery	1A1 Energy Industries	0.011	0.002	0.65	0.35		
S00337	33.8487	-118.3341	10/24/17	18:47	refinery	1A1 Energy Industries	0.030	0.009	1.41	0.47	153	69
S00337	33.8487	-118.3341	10/24/17	20:46	refinery	1A1 Energy Industries	0.025	0.010	2.44	0.90	216	121
S00337	33.8487	-118.3341	10/24/17	21:08	refinery	1A1 Energy Industries	0.015	0.004	2.22	0.54	117	42
S00337	33.8487	-118.3341	10/24/17	21:31	refinery	1A1 Energy Industries	0.031	0.006	2.22	0.54	247	79
S00337	33.8487	-118.3341	10/24/17	21:52	refinery	1A1 Energy Industries	0.023	0.006	2.22	0.54	186	67
S00342	35.5972	-118.9673	10/25/16	18:28	oil/gas tank	1B2 Oil & Natural Gas	0.027	0.007	2.74	0.23	262	75
S00343	35.5971	-118.9671	10/25/16	18:37	oil/gas tank	1B2 Oil & Natural Gas	0.006	0.003	2.74	0.23	62	28
S00344	35.4903	-118.8861	10/25/16	18:46	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.021	0.003	3.01	0.24	231	40
S00345	35.4927	-118.8905	10/25/16	18:46	oil/gas pumpjack	1B2 Oil & Natural Gas	0.010	0.008	3.01	0.24	108	86
S00346	35.4924	-118.8971	10/25/16	18:46	oil/gas tank	1B2 Oil & Natural Gas	0.051	0.020	3.01	0.24	550	220
S00347	35.4947	-118.8966	10/25/16	18:46	oil/gas gathering line	1B2 Oil & Natural Gas	0.009	0.005	3.01	0.24	102	50
S00349	35.5158	-119.0386	10/25/16	19:13	oil/gas tank	1B2 Oil & Natural Gas	0.023	0.010	3.10	0.21	253	115
S00349	35.5158	-119.0386	9/5/17	19:26	oil/gas tank	1B2 Oil & Natural Gas	0.026	0.009	4.53	0.29	425	151
S00349	35.5158	-119.0386	10/26/17	21:00	oil/gas tank	1B2 Oil & Natural Gas	0.007	0.003	2.82	0.28	70	30
S00350	35.5357	-119.0825	10/25/16	19:13	oil/gas pumpjack	1B2 Oil & Natural Gas	0.029	0.011	3.10	0.21	321	122
S00352	35.4733	-119.0577	10/8/16	20:30	oil/gas tank	1B2 Oil & Natural Gas	0.013	0.002	3.76	0.71	175	40
S00352	35.4733	-119.0577	10/8/16	20:46	oil/gas tank	1B2 Oil & Natural Gas	0.017	0.001	3.76	0.71	225	47
S00352	35.4733	-119.0577	10/25/16	19:29	oil/gas tank	1B2 Oil & Natural Gas	0.020	0.011	3.08	0.29	224	124
S00353	35.4627	-119.0507	10/8/16	20:30	oil/gas pumpjack	1B2 Oil & Natural Gas	0.014	0.004	3.76	0.71	191	61
S00353	35.4627	-119.0507	10/25/16	19:37	oil/gas pumpjack	1B2 Oil & Natural Gas	0.010	0.002	2.92	0.35	102	24
S00355	35.3752	-119.0808	10/25/16	19:51	refinery	1A1 Energy Industries	0.034	0.009	2.17	0.11	266	74

Source Identifier	Plume Latitude (deg)	Plume Longitude (deg)	Date of detection	Time of detection (UTC)	Source type (best estimate)	Sectors (IPCC)	IME/r (kg/m)	σ _{ME} /r (kg/m)	U ₁₀ (m/s)	σ _{U10} (m/s)	Q _{plume} (kg/hr)*	σ _{Qplume} (kg/hr)*
S00357	35.3717	-119.0769	10/25/16	19:56	refinery	1A1 Energy Industries	0.021	0.004	2.17	0.11	166	32
S00358	33.9245	-117.9545	10/6/16	17:59	wastewater treatment	4D2 Industrial Wastewater Treatment & Discharge	0.010	0.005	1.05	0.08	39	21
S00360	35.2816	-119.4808	10/29/16	20:57	oil/gas compressor	1B2 Oil & Natural Gas	0.021	0.006	3.35	0.36	253	72
S00360	35.2816	-119.4808	6/15/17	23:06	oil/gas compressor	1B2 Oil & Natural Gas	0.011	0.006	4.81	0.49	199	110
S00360	35.2816	-119.4808	6/20/17	16:42	oil/gas compressor	1B2 Oil & Natural Gas	0.010	0.003	1.18	0.81	43	32
S00360	35.2816	-119.4808	6/20/17	16:49	oil/gas compressor	1B2 Oil & Natural Gas	0.015	0.005	1.18	0.81	65	49
S00360	35.2816	-119.4808	6/20/17	16:56	oil/gas compressor	1B2 Oil & Natural Gas	0.011	0.005	1.18	0.81	47	38
S00363	34.4508	-118.5992	11/2/16	20:14	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.009	0.002	7.51	0.96	240	68
S00363	34.4508	-118.5992	6/19/17	0:34	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.034	0.011	4.21	0.62	512	177
S00364	35.4974	-119.0703	10/8/16	20:23	oil/gas pumpjack	1B2 Oil & Natural Gas	0.011	0.000	3.85	0.80	148	31
S00364	35.4974	-119.0703	10/8/16	20:40	oil/gas pumpjack	1B2 Oil & Natural Gas	0.011	0.001	4.49	0.83	181	37
S00365	35.5006	-119.0712	10/8/16	20:23	oil/gas pumpjack	1B2 Oil & Natural Gas	0.010	0.000	3.85	0.80	142	30
S00366	35.5022	-119.0714	10/8/16	20:40	oil/gas pumpjack	1B2 Oil & Natural Gas	0.016	0.002	4.49	0.83	255	56
S00366	35.5022	-119.0714	10/8/16	21:39	oil/gas pumpjack	1B2 Oil & Natural Gas	0.011	0.001	5.24	0.90	217	39
S00367	35.5019	-119.0784	10/8/16	20:23	oil/gas pumpjack	1B2 Oil & Natural Gas	0.010	0.001	3.85	0.80	141	32
S00367	35.5019	-119.0784	10/8/16	20:40	oil/gas pumpjack	1B2 Oil & Natural Gas	0.014	0.003	4.49	0.83	219	64
S00367	35.5019	-119.0784	10/8/16	21:16	oil/gas pumpjack	1B2 Oil & Natural Gas	0.007	0.001	4.65	0.78	125	23
S00367	35.5019	-119.0784	9/26/17	21:02	oil/gas pumpjack	1B2 Oil & Natural Gas	0.013	0.002	3.81	0.25	178	29
S00368	35.5037	-119.0824	10/8/16	20:23	oil/gas pumpjack	1B2 Oil & Natural Gas	0.007	0.001	3.85	0.80	99	27
S00368	35.5037	-119.0824	10/8/16	21:16	oil/gas pumpjack	1B2 Oil & Natural Gas	0.005	0.001	4.65	0.78	76	19
S00369	35.5181	-119.0752	10/8/16	20:23	oil/gas pumpjack	1B2 Oil & Natural Gas	0.014	0.002	3.85	0.80	187	49
S00369	35.5181	-119.0752	10/8/16	21:16	oil/gas pumpjack	1B2 Oil & Natural Gas	0.006	0.001	4.65	0.78	95	29
S00370	35.5224	-119.0737	10/8/16	21:39	oil/gas pumpjack	1B2 Oil & Natural Gas	0.008	0.001	5.24	0.90	156	31
S00371	35.5253	-119.0751	10/8/16	20:23	oil/gas pumpjack	1B2 Oil & Natural Gas	0.013	0.000	3.85	0.80	183	39
S00371	35.5253	-119.0751	10/8/16	21:16	oil/gas pumpjack	1B2 Oil & Natural Gas	0.005	0.002	4.65	0.78	80	29
S00371	35.5253	-119.0751	10/8/16	21:33	oil/gas pumpjack	1B2 Oil & Natural Gas	0.008	0.001	5.56	0.78	154	25
S00371	35.5253	-119.0751	10/8/16	21:39	oil/gas pumpjack	1B2 Oil & Natural Gas	0.013	0.004	5.24	0.90	240	88
S00371	35.5253	-119.0751	10/25/16	19:13	oil/gas pumpjack	1B2 Oil & Natural Gas	0.008	0.001	3.10	0.21	88	13
S00371	35.5253	-119.0751	6/15/17	22:36	oil/gas pumpjack	1B2 Oil & Natural Gas	0.006	0.001	4.50	0.28	101	16
S00372	35.4971	-118.8979	10/25/16	18:46	oil/gas pumpjack	1B2 Oil & Natural Gas	0.018	0.003	3.01	0.24	198	35
S00373	35.5155	-119.0341	10/25/16	19:04	oil/gas pumpjack	1B2 Oil & Natural Gas	0.007	0.001	3.12	0.19	76	11
S00374	35.4661	-118.9747	10/25/16	19:13	oil/gas pumpjack	1B2 Oil & Natural Gas	0.013	0.000	3.10	0.21	144	10
S00375	35.4394	-118.9782	10/25/16	19:21	oil/gas gathering line	1B2 Oil & Natural Gas	0.014	0.002	2.95	0.37	149	25
S00378	35.5402	-119.0922	10/25/16	19:21	oil/gas pumpjack	1B2 Oil & Natural Gas	0.019	0.006	2.95	0.37	202	67
S00379	35.5426	-119.0925	10/25/16	19:21	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.015	0.002	2.95	0.37	161	29
S00380	35.5449	-119.0917	10/25/16	19:21	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.009	0.002	2.95	0.37	98	25
S00382	35.5293	-119.0811	10/8/16	21:16	oil/gas pumpjack	1B2 Oil & Natural Gas	0.007	0.001	4.65	0.78	119	30
S00382	35.5293	-119.0811	10/8/16	21:33	oil/gas pumpjack	1B2 Oil & Natural Gas	0.015	0.003	5.56	0.78	295	69
S00383	35.4804	-119.0818	10/8/16	21:06	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.006	0.001	3.76	0.71	78	21
S00383	35.4804	-119.0818	10/8/16	21:23	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.010	0.004	3.76	0.71	131	64
S00383	35.4804	-119.0818	11/9/17	19:52	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.008	0.001	1.43	0.14	41	6
S00384	35.5375	-119.0764	10/8/16	21:16	oil/gas pumpjack	1B2 Oil & Natural Gas	0.004	0.001	4.65	0.78	72	17
S00385	35.5111	-119.0783	10/8/16	20:40	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.010	0.000	4.49	0.83	155	29
S00385	35.5111	-119.0783	10/8/16	21:16	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.005	0.001	4.65	0.78	84	19
S00385	35.5111	-119.0783	10/8/16	21:33	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.008	0.002	5.56	0.78	154	41
S00387	35.5037	-119.0765	9/2/17	19:13	oil/gas pumpjack	1B2 Oil & Natural Gas	0.013	0.005	4.31	0.12	205	79
S00387	35.5037	-119.0765	9/26/17	21:02	oil/gas pumpjack	1B2 Oil & Natural Gas	0.015	0.001	3.81	0.25	200	18
S00388	35.4790	-119.0625	10/25/16	19:37	oil/gas pumpjack	1B2 Oil & Natural Gas	0.013	0.002	2.92	0.35	138	29
S00389	35.5824	-119.7158	10/29/16	19:30	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.006	0.002	2.34	0.19	47	21
S00391	35.2603	-119.3923	10/29/16	20:57	oil/gas pumpjack	1B2 Oil & Natural Gas	0.021	0.006	3.35	0.36	254	75
S00392	35.5038	-119.0733	10/8/16	21:39	oil/gas pumpjack	1B2 Oil & Natural Gas	0.008	0.001	5.24	0.90	157	36
S00402	39.3484	-121.8205	6/17/17	18:21	gas storage facility	1B2 Oil & Natural Gas	0.046	0.013	4.41	0.18	724	212
S00403	37.9954	-121.4780	6/20/17	18:18	gas storage facility	1B2 Oil & Natural Gas	0.020	0.006	1.30	0.32	93	35
S00403	37.9954	-121.4780	6/20/17	18:30	gas storage facility	1B2 Oil & Natural Gas	0.021	0.006	1.30	0.32	97	35
S00500	34.3078	-118.5499	9/5/17	17:15	gas storage facility	1B2 Oil & Natural Gas	0.021	0.006	1.70	0.51	127	51
S00500	34.3078	-118.5499	9/5/17	17:20	gas storage facility	1B2 Oil & Natural Gas	0.030	0.008	1.70	0.51	186	74
S00500	34.3078	-118.5499	9/7/17	17:23	gas storage facility	1B2 Oil & Natural Gas	0.006	0.002	1.30	0.34	27	12
S00500	34.3078	-118.5499	9/7/17	17:29	gas storage facility	1B2 Oil & Natural Gas	0.015	0.004	1.30	0.34	70	27
S00500	34.3078	-118.5499	9/7/17	22:04	gas storage facility	1B2 Oil & Natural Gas	0.014	0.005	3.53	0.74	178	72
S00500	34.3078	-118.5499	9/9/17	22:12	gas storage facility	1B2 Oil & Natural Gas	0.023	0.009	4.13	1.05	337	162
S00500	34.3078	-118.5499	9/9/17	22:17	gas storage facility	1B2 Oil & Natural Gas	0.021	0.010	4.13	1.05	318	164
S00500	34.3078	-118.5499	9/16/17	22:32	gas storage facility	1B2 Oil & Natural Gas	0.018	0.004	3.20	0.45	211	59
S00500	34.3078	-118.5499	9/16/17	22:36	gas storage facility	1B2 Oil & Natural Gas	0.024	0.006	3.20	0.45	272	78
S00500	34.3078	-118.5499	9/16/17	22:42	gas storage facility	1B2 Oil & Natural Gas	0.015	0.004	3.20	0.45	172	54
S00500	34.3078	-118.5499	9/16/17	22:46	gas storage facility	1B2 Oil & Natural Gas	0.020	0.006	3.20	0.45	229	81
S00500	34.3078	-118.5499	9/18/17	20:32	gas storage facility	1B2 Oil & Natural Gas	0.013	0.003	3.42	0.62	156	46
S00500	34.3078	-118.5499	9/18/17	22:19	gas storage facility	1B2 Oil & Natural Gas	0.024	0.002	3.56	0.67	303	63
S00500	34.3078	-118.5499	9/18/17	22:23	gas storage facility	1B2 Oil & Natural Gas	0.014	0.003	3.56	0.67	174	51
S00501	38.1598	-121.9058	9/10/17	18:53	gas storage facility	1B2 Oil & Natural Gas	0.013	0.002	2.12	0.28	100	18
S00502	37.9953	-121.4781	8/31/17	17:45	gas storage facility	1B2 Oil & Natural Gas	0.010	0.004	2.02	0.15	73	28
S00502	37.9953	-121.4781	9/10/17	18:27	gas storage facility	1B2 Oil & Natural Gas	0.031	0.010	2.53	0.10	283	89
S00502	37.9953	-121.4781	9/28/17	20:50	gas storage facility	1B2 Oil & Natural Gas	0.066	0.048	1.49	0.12	354	257
S00502	37.9953	-121.4781	9/30/17	19:36	gas storage facility	1B2 Oil & Natural Gas	0.052	0.018	3.44	0.20	643	224
S00502	37.9953	-121.4781	9/30/17	19:42	gas storage facility	1B2 Oil & Natural Gas	0.027	0.010	3.44	0.20	334	125
S00502	37.9953	-121.4781	10/6/17	19:23	gas storage facility	1B2 Oil & Natural Gas	0.047	0.026	0.66	0.09		
S00502	37.9953	-121.4781	10/6/17	19:28	gas storage facility	1B2 Oil & Natural Gas	0.031	0.015	0.66	0.09		
S00502	37.9953	-121.4781	10/6/17	19:35	gas storage facility	1B2 Oil & Natural Gas	0.033	0.017	0.66	0.09		
S00502	37.9953	-121.4781	10/6/17	19:41	gas storage facility	1B2 Oil & Natural Gas	0.046	0.024	0.66	0.09		
S00502	37.9953	-121.4781	10/7/17	19:43	gas storage facility	1B2 Oil & Natural Gas	0.041	0.018	1.69	0.06	252	113
S00502	37.9953	-121.4781	10/7/17	19:49	gas storage facility	1B2 Oil & Natural Gas	0.059	0.029	1.69	0.06	360	177
S00503	38.2016	-121.2129	9/10/17	17:38	gas storage facility	1B2 Oil & Natural Gas	0.012	0.003	2.02	0.20	87	24
S00503	38.2016	-121.2129	9/10/17	17:38	gas storage facility	1B2 Oil & Natural Gas	0.010	0.005	2.02	0.20	74	40
S00504	35.2807	-119.4726	9/6/17	21:02	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.041	0.007	5.92	0.36	868	166
S00505	35.2790	-119.4760	6/20/17	16:42	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.012	0.002	1.18	0.81	50	36
S00505	35.2790	-119.4760	9/6/17	21:02	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.022	0.006	5.92	0.36	476	129
S00506	35.2777	-119.4796	9/8/17	22:33	gas processing plant	1B2 Oil & Natural Gas	0.004	0.002	7.19	0.37	107	52
S00506	35.2777	-119.4796	9/15/17	18:24	gas processing plant	1B2 Oil & Natural Gas	0.010	0.003	2.92	0.75	100	43
S00506	35.2777	-119.4796	9/15/17	18:35	gas processing plant	1B2 Oil & Natural Gas	0.004	0.002	2.92	0.75	41	24
S00506	35.2777	-119.4796	9/15/17	18:41	gas processing plant	1B2 Oil &						

Source Identifier	Plume Latitude (deg)	Plume Longitude (deg)	Date of detection	Time of detection (UTC)	Source type (best estimate)	Sectors (IPCC)	IME/r (kg/m)	IME/r (kg/m)	U ₁₀ (m/s)	σ _{U10} (m/s)	Q _{plume} (kg/hr)*	σ _{Qplume} (kg/hr)*
S00507	35.0619	-119.0262	9/2/17	21:45	oil/gas compressor	1B2 Oil & Natural Gas	0.035	0.005	3.22	0.36	411	73
S00507	35.0619	-119.0262	9/5/17	21:35	oil/gas compressor	1B2 Oil & Natural Gas	0.030	0.007	8.47	0.31	906	224
S00507	35.0619	-119.0262	9/5/17	21:41	oil/gas compressor	1B2 Oil & Natural Gas	0.047	0.013	8.47	0.31	1426	407
S00507	35.0619	-119.0262	9/6/17	21:15	oil/gas compressor	1B2 Oil & Natural Gas	0.051	0.007	5.49	0.20	1018	139
S00507	35.0619	-119.0262	9/8/17	22:48	oil/gas compressor	1B2 Oil & Natural Gas	0.064	0.020	9.19	0.32	2133	682
S00507	35.0619	-119.0262	9/9/17	17:49	oil/gas compressor	1B2 Oil & Natural Gas	0.065	0.008	2.98	0.19	701	95
S00507	35.0619	-119.0262	9/15/17	19:03	oil/gas compressor	1B2 Oil & Natural Gas	0.074	0.015	3.12	0.43		
S00507	35.0619	-119.0262	9/15/17	19:17	oil/gas compressor	1B2 Oil & Natural Gas	0.104	0.034	3.12	0.43		
S00600	35.4963	-119.0088	3/9/17	19:40	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.035	0.001	2.18	0.11	274	15
S00601	35.5092	-119.0362	3/9/17	19:40	oil/gas tank	1B2 Oil & Natural Gas	0.065	0.030	2.18	0.11	510	235
S00602	35.5308	-119.0737	3/9/17	19:40	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.062	0.015	2.18	0.11	487	119
S00603	35.4856	-119.0611	3/9/17	19:55	oil/gas pumpjack	1B2 Oil & Natural Gas	0.018	0.005	2.19	0.09	142	41
S00604	35.4883	-119.0677	3/9/17	19:55	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.020	0.006	2.19	0.09	157	44
S00605	33.9283	-118.4297	3/9/17	21:58	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.031	0.013	2.43	0.12	268	118
S00609	35.2646	-119.3994	6/15/17	23:34	oil/gas stack	1B2 Oil & Natural Gas	0.020	0.004	4.97	0.47	363	78
S00609	35.2646	-119.3994	6/15/17	23:41	oil/gas stack	1B2 Oil & Natural Gas	0.012	0.002	4.81	0.49	210	35
S00610	35.1872	-119.1151	6/15/17	23:49	dairy/manure	3A2 Manure Management	0.010	0.004	3.39	0.67	122	50
S00610	35.1872	-119.1151	6/16/17	19:59	dairy/manure	3A2 Manure Management	0.036	0.006	2.60	0.42	341	76
S00610	35.1872	-119.1151	9/20/17	18:24	dairy/manure	3A2 Manure Management	0.014	0.007	3.80	0.30	187	100
S00610	35.1872	-119.1151	9/26/17	18:37	dairy/manure	3A2 Manure Management	0.013	0.003	1.83	0.14	89	19
S00610	35.1872	-119.1151	10/26/17	20:31	dairy/manure	3A2 Manure Management	0.048	0.028	2.87	0.06	499	286
S00610	35.1872	-119.1151	11/13/17	18:14	dairy/manure	3A2 Manure Management	0.039	0.013	1.80	0.06	249	87
S00611	35.1868	-119.1019	6/16/17	19:59	dairy/manure	3A2 Manure Management	0.020	0.006	2.60	0.42	184	65
S00611	35.1868	-119.1019	10/26/17	20:31	dairy/manure	3A2 Manure Management	0.022	0.008	2.87	0.06	225	78
S00612	35.4932	-119.4502	6/16/17	20:22	dairy/manure	3A2 Manure Management	0.006	0.002	3.96	0.41	79	27
S00612	35.4932	-119.4502	10/10/17	20:56	dairy/manure	3A2 Manure Management	0.022	0.007	2.17	0.21	171	59
S00614	36.0439	-119.4562	3/9/17	20:24	dairy/manure	3A2 Manure Management	0.119	0.031	1.28	0.21	548	170
S00614	36.0439	-119.4562	6/16/17	21:05	dairy/manure	3A2 Manure Management	0.021	0.013	3.19	0.23	238	147
S00614	36.0439	-119.4562	9/16/17	21:38	dairy/manure	3A2 Manure Management	0.019	0.005	3.45	0.18	242	58
S00614	36.0439	-119.4562	9/20/17	19:32	dairy/manure	3A2 Manure Management	0.009	0.003	2.33	0.10	77	24
S00616	36.4128	-119.3452	6/16/17	21:50	dairy/manure	3A2 Manure Management	0.011	0.000	2.68	0.24	102	10
S00617	36.4115	-119.3660	6/16/17	21:50	dairy/manure	3A2 Manure Management	0.025	0.013	2.68	0.24	238	130
S00618	38.3146	-121.8338	6/17/17	18:51	dairy/manure	3A2 Manure Management	0.076	0.024	3.52	0.38	962	321
S00621	37.7488	-121.6548	6/18/17	18:31	landfill	4A1 Managed Waste Disposal Sites	0.013	0.011	3.59	0.19	171	143
S00622	37.4984	-122.4077	6/18/17	18:49	landfill	4A1 Managed Waste Disposal Sites	0.170	0.028	1.49	0.39	912	279
S00622	37.4984	-122.4077	10/6/17	21:54	landfill	4A1 Managed Waste Disposal Sites	0.088	0.030	3.65	0.85	1160	480
S00624	37.4312	-121.9486	6/18/17	19:39	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.052	0.018	2.08	0.42	392	159
S00624	37.4312	-121.9486	6/18/17	19:45	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.050	0.024	2.23	0.60	404	224
S00624	37.4312	-121.9486	6/20/17	22:42	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.004	0.002	4.57	0.48	64	35
S00624	37.4312	-121.9486	6/20/17	22:48	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.023	0.015	4.57	0.48	372	252
S00624	37.4312	-121.9486	6/20/17	22:53	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.017	0.007	4.36	0.50	267	108
S00628	37.7593	-121.7282	10/6/17	19:04	landfill	4A1 Managed Waste Disposal Sites	0.010	0.003	3.07	0.43	112	41
S00641	34.3273	-118.5176	3/9/17	19:18	landfill	4A1 Managed Waste Disposal Sites	0.143	0.041	2.72	1.43	1399	842
S00642	33.7650	-118.0993	8/30/17	19:15	powerplant	1A1 Energy Industries	0.007	0.002	3.18	0.15	75	28
S00642	33.7650	-118.0993	9/1/17	22:17	powerplant	1A1 Energy Industries	0.007	0.002	4.09	1.12	105	44
S00643	33.6394	-117.9566	8/30/17	19:26	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.012	0.004	2.67	0.16	115	41
S00644	33.7979	-118.2361	8/30/17	19:55	oil/gas tank	1B2 Oil & Natural Gas	0.027	0.010	2.77	0.54	265	108
S00645	33.7969	-118.2491	8/30/17	20:08	gas LNG station	1B2 Oil & Natural Gas	0.151	0.072	1.79	0.79	972	632
S00646	33.8054	-118.2440	8/30/17	20:08	refinery	1A1 Energy Industries	0.008	0.004	1.79	0.79	53	33
S00647	33.9401	-118.4253	8/30/17	20:42	gas LNG station	1B2 Oil & Natural Gas	0.017	0.006	2.93	0.22	176	65
S00647	33.9401	-118.4253	9/11/17	20:18	gas LNG station	1B2 Oil & Natural Gas	0.040	0.008	4.29	0.55	625	145
S00650	34.3178	-118.5733	9/1/17	18:22	oil/gas tank	1B2 Oil & Natural Gas	0.017	0.003	4.27	1.92	263	130
S00652	33.7968	-118.2374	9/1/17	20:35	oil/gas tank	1B2 Oil & Natural Gas	0.011	0.003	1.66	0.62	66	30
S00653	33.7808	-118.2564	9/1/17	20:46	oil/gas tank	1B2 Oil & Natural Gas	0.008	0.003	1.70	0.69	49	27
S00653	33.7808	-118.2564	10/23/17	20:47	oil/gas tank	1B2 Oil & Natural Gas	0.024	0.007	1.47	0.39	128	48
S00653	33.7808	-118.2564	10/24/17	20:57	oil/gas tank	1B2 Oil & Natural Gas	0.012	0.004	3.48	0.36	155	48
S00654	33.7751	-118.2888	10/23/17	20:24	refinery	1A1 Energy Industries	0.056	0.018	1.55	0.34	314	121
S00654	33.7751	-118.2888	10/24/17	20:36	refinery	1A1 Energy Industries	0.013	0.010	3.72	0.42	180	138
S00655	33.7744	-118.2820	9/1/17	21:11	refinery	1A1 Energy Industries	0.004	0.002	2.32	0.98	37	21
S00657	35.3950	-119.0531	9/2/17	18:31	oil/gas tank	1B2 Oil & Natural Gas	0.023	0.005	1.87	0.21	154	37
S00657	35.3950	-119.0531	9/2/17	18:38	oil/gas tank	1B2 Oil & Natural Gas	0.009	0.003	1.87	0.21	59	20
S00657	35.3950	-119.0531	9/5/17	18:12	oil/gas tank	1B2 Oil & Natural Gas	0.019	0.001	2.60	0.16	179	16
S00657	35.3950	-119.0531	9/5/17	18:19	oil/gas tank	1B2 Oil & Natural Gas	0.031	0.012	2.60	0.16	290	115
S00658	35.4217	-119.0796	9/2/17	18:31	gas distribution line	1B2 Oil & Natural Gas	0.033	0.015	1.87	0.21	220	102
S00658	35.4217	-119.0796	9/2/17	18:38	gas distribution line	1B2 Oil & Natural Gas	0.006	0.001	1.87	0.21	42	7
S00658	35.4217	-119.0796	9/5/17	18:12	gas distribution line	1B2 Oil & Natural Gas	0.013	0.006	2.60	0.16	126	61
S00658	35.4217	-119.0796	9/5/17	18:19	gas distribution line	1B2 Oil & Natural Gas	0.028	0.003	2.60	0.16	265	29
S00659	35.3660	-119.6704	9/5/17	21:03	oil/gas gathering line	1B2 Oil & Natural Gas	0.013	0.001	4.52	0.67	209	37
S00660	35.3766	-119.6843	9/2/17	21:13	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.009	0.001	4.24	0.05	131	23
S00661	35.2412	-119.5904	9/2/17	21:13	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.015	0.002	4.24	0.05	230	27
S00663	35.4174	-119.7027	9/2/17	21:13	oil/gas tank	1B2 Oil & Natural Gas	0.010	0.004	4.24	0.05	148	66
S00669	35.1796	-119.4602	9/6/17	19:01	oil/gas pumpjack	1B2 Oil & Natural Gas	0.070	0.020	3.53	0.32	883	266
S00670	35.1604	-119.3912	9/6/17	19:08	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.039	0.006	4.21	0.45	588	116
S00671	35.3984	-119.0488	9/6/17	20:37	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.017	0.006	4.46	0.23	280	96
S00672	35.3270	-118.9616	9/6/17	20:37	dairy/manure	3A2 Manure Management	0.010	0.001	4.46	0.23	157	16
S00673	35.2731	-119.4015	9/6/17	21:02	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.021	0.003	5.92	0.36	450	67
S00674	35.2740	-119.3930	9/6/17	21:02	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.025	0.002	5.92	0.36	533	57
S00677	34.3216	-119.3234	9/7/17	20:48	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.030	0.010	4.41	0.90	475	185
S00678	34.3374	-119.3808	9/7/17	20:48	oil/gas gathering line	1B2 Oil & Natural Gas	0.047	0.005	4.41	0.90	751	175
S00678	34.3374	-119.3808	9/7/17	21:00	oil/gas gathering line	1B2 Oil & Natural Gas	0.076	0.016	5.83	1.12	1587	454
S00678	34.3374	-119.3808	9/7/17	21:06	oil/gas gathering line	1B2 Oil & Natural Gas	0.082	0.020	5.83	1.12	1713	529
S00679	35.2397	-119.3798	9/9/17	17:58	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.085	0.022	1.11	0.37		
S00680	35.2934	-119.5698	9/9/17	18:14	oil/gas gathering line	1B2 Oil & Natural Gas	0.013	0.003	2.12	0.37	98	28
S00681	35.3144	-119.5762	9/9/17	18:22	oil/gas gathering line	1B2 Oil & Natural Gas	0.053	0.015	2.19	0.29	422	129
S00684	38.0433	-122.2510	9/10/17	20:21	refinery	1A1 Energy Industries	0.096	0.014	1.64	0.75	566	271
S00684	38.0433	-122.2510	9/10/17	20:34	refinery	1A1 Energy Industries	0.080	0.029	1.64	0.75	472	276
S00685	33.8159	-117.8635	9/11/17	19:12	gas distribution line	1B2 Oil & Natural Gas	0.027	0.004	2.05	0.15	201	34
S00685	33.8159	-117.8635	9/18/17	22:42	gas distribution line	1B2 Oil & Natural Gas	0.066	0.015	2.92	0.10	690	158
S00686	33.7832	-118.2219	9/11/17	19:53	gas LNG station	1B2 Oil & Natural Gas	0.008	0.002	1.35	0.35	38	15
S00686	33.7832	-118.2219	9/18									

Source Identifier	Plume Latitude (deg)	Plume Longitude (deg)	Date of detection	Time of detection (UTC)	Source type (best estimate)	Sectors (IPCC)	IME/r (kg/m)	σ _{ME} /r (kg/m)	U ₁₀ (m/s)	σ _{U10} (m/s)	Q _{plume} (kg/hr)*	σ _{Qplume} (kg/hr)*
S00686	33.7832	-118.2219	10/23/17	20:58	gas LNG station	1B2 Oil & Natural Gas	0.011	0.004	1.24	0.53	48	27
S00686	33.7832	-118.2219	10/23/17	21:09	gas LNG station	1B2 Oil & Natural Gas	0.023	0.011	1.14	0.79	93	78
S00686	33.7832	-118.2219	10/24/17	19:09	gas LNG station	1B2 Oil & Natural Gas	0.039	0.013	3.50	0.19	488	167
S00687	33.9107	-117.1229	9/11/17	21:50	gas compressor	1B2 Oil & Natural Gas	0.036	0.016	4.46	0.68	576	267
S00689	35.4749	-119.4306	9/15/17	17:43	dairy/manure	3A2 Manure Management	0.006	0.003	1.74	0.13	40	18
S00689	35.4749	-119.4306	9/15/17	17:53	dairy/manure	3A2 Manure Management	0.009	0.005	1.74	0.13	57	31
S00689	35.4749	-119.4306	9/15/17	17:57	dairy/manure	3A2 Manure Management	0.009	0.003	1.74	0.13	56	18
S00689	35.4749	-119.4306	9/15/17	18:06	dairy/manure	3A2 Manure Management	0.009	0.004	3.39	0.13	105	50
S00691	35.4730	-119.4305	9/15/17	18:11	dairy/manure	3A2 Manure Management	0.011	0.005	2.63	0.19	108	44
S00691	35.4730	-119.4305	9/15/17	20:15	dairy/manure	3A2 Manure Management	0.090	0.022	1.92	0.17	620	159
S00692	35.4734	-119.4322	9/15/17	17:57	dairy/manure	3A2 Manure Management	0.026	0.011	1.74	0.13	161	69
S00692	35.4734	-119.4322	9/20/17	19:05	dairy/manure	3A2 Manure Management	0.021	0.006	2.93	0.10	222	69
S00692	35.4734	-119.4322	9/26/17	20:18	dairy/manure	3A2 Manure Management	0.031	0.009	2.87	0.10	320	90
S00692	35.4734	-119.4322	11/13/17	19:15	dairy/manure	3A2 Manure Management	0.015	0.002	1.14	0.13	62	11
S00692	35.4734	-119.4322	11/13/17	20:37	dairy/manure	3A2 Manure Management	0.071	0.010	1.55	0.12	395	66
S00694	35.2804	-119.5093	9/15/17	18:29	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.010	0.003	2.92	0.75	110	39
S00696	35.2777	-119.4796	6/15/17	23:41	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.016	0.001	4.81	0.49	280	37
S00696	35.2777	-119.4796	9/15/17	18:29	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.017	0.004	2.92	0.75	181	60
S00697	35.2517	-119.5733	9/15/17	19:35	oil/gas tank	1B2 Oil & Natural Gas	0.017	0.007	2.90	0.40	179	79
S00697	35.2517	-119.5733	9/15/17	19:40	oil/gas tank	1B2 Oil & Natural Gas	0.016	0.004	2.90	0.40	167	45
S00697	35.2517	-119.5733	9/15/17	19:45	oil/gas tank	1B2 Oil & Natural Gas	0.010	0.003	2.90	0.40	106	31
S00697	35.2517	-119.5733	9/15/17	19:52	oil/gas tank	1B2 Oil & Natural Gas	0.006	0.001	2.90	0.40	66	12
S00697	35.2517	-119.5733	9/15/17	19:57	oil/gas tank	1B2 Oil & Natural Gas	0.011	0.000	2.90	0.40	116	16
S00698	35.2605	-119.5749	9/15/17	19:52	oil/gas gathering line	1B2 Oil & Natural Gas	0.035	0.004	2.90	0.40	368	68
S00698	35.2605	-119.5749	9/15/17	19:57	oil/gas gathering line	1B2 Oil & Natural Gas	0.011	0.003	2.90	0.40	112	36
S00699	36.2911	-119.4586	9/16/17	18:48	dairy/manure	3A2 Manure Management	0.060	0.015	0.46	0.21	116	39
S00700	36.2509	-119.4848	9/16/17	19:18	dairy/manure	3A2 Manure Management	0.019	0.006	1.75	0.12	116	39
S00701	36.2476	-119.4046	9/16/17	19:18	dairy/manure	3A2 Manure Management	0.020	0.002	1.75	0.12	126	16
S00702	36.2371	-119.5717	9/16/17	19:28	dairy/manure	3A2 Manure Management	0.024	0.006	1.34	0.15	116	31
S00703	36.1886	-119.6775	9/16/17	20:08	dairy/manure - digester	3A2 Manure Management	0.033	0.014	1.68	0.14	198	85
S00704	36.1825	-119.6783	9/16/17	20:08	dairy/manure - digester	3A2 Manure Management	0.076	0.018	1.68	0.14	463	118
S00707	35.2507	-119.4047	9/26/17	19:44	oil/gas gathering line	1B2 Oil & Natural Gas	0.019	0.003	2.62	0.29	174	37
S00708	35.2548	-119.3814	9/26/17	19:44	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.015	0.004	2.62	0.29	143	45
S00709	35.5258	-119.0794	9/8/17	21:12	oil/gas tank	1B2 Oil & Natural Gas	0.011	0.003	8.92	0.22	356	94
S00709	35.5258	-119.0794	9/26/17	21:10	oil/gas tank	1B2 Oil & Natural Gas	0.012	0.002	3.76	0.13	164	23
S00710	35.5310	-119.0722	9/26/17	21:17	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.009	0.000	3.82	0.12	118	6
S00711	35.5192	-119.0774	9/26/17	21:10	oil/gas tank	1B2 Oil & Natural Gas	0.019	0.002	3.76	0.13	260	30
S00712	35.4193	-119.0083	3/9/17	19:55	oil/gas tank	1B2 Oil & Natural Gas	0.017	0.001	2.19	0.09	135	13
S00712	35.4193	-119.0083	9/8/17	20:58	oil/gas tank	1B2 Oil & Natural Gas	0.009	0.003	6.59	0.19	223	75
S00712	35.4193	-119.0083	9/26/17	20:55	oil/gas tank	1B2 Oil & Natural Gas	0.011	0.004	3.17	0.50	123	47
S00713	35.1659	-119.0998	9/20/17	18:24	dairy/manure	3A2 Manure Management	0.003	0.001	3.80	0.30	45	15
S00713	35.1659	-119.0998	9/26/17	18:30	dairy/manure	3A2 Manure Management	0.017	0.003	1.93	0.11	116	20
S00713	35.1659	-119.0998	9/26/17	22:06	dairy/manure	3A2 Manure Management	0.008	0.001	2.45	0.16	66	9
S00714	35.3209	-119.5209	9/26/17	19:20	oil/gas tank	1B2 Oil & Natural Gas	0.019	0.007	3.26	0.27	218	90
S00714	35.3209	-119.5209	9/26/17	22:27	oil/gas tank	1B2 Oil & Natural Gas	0.047	0.009	5.00	0.64	839	190
S00714	35.3209	-119.5209	10/10/17	21:22	oil/gas tank	1B2 Oil & Natural Gas	0.015	0.002	2.99	0.21	165	20
S00716	35.3142	-119.5762	9/26/17	19:28	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.050	0.009	3.29	0.41	590	133
S00717	35.2716	-119.4090	9/26/17	19:36	oil/gas gathering line	1B2 Oil & Natural Gas	0.012	0.008	2.81	0.41	123	83
S00718	35.2492	-119.1171	9/26/17	21:42	dairy/manure - digester	3A2 Manure Management	0.032	0.013	2.91	0.13	339	141
S00719	35.2143	-119.2034	6/15/17	23:49	dairy/manure - digester	3A2 Manure Management	0.010	0.002	3.39	0.67	116	32
S00719	35.2143	-119.2034	6/16/17	20:06	dairy/manure - digester	3A2 Manure Management	0.025	0.001	4.92	0.52	445	48
S00719	35.2143	-119.2034	9/26/17	18:25	dairy/manure - digester	3A2 Manure Management	0.010	0.002	1.36	0.22	47	13
S00719	35.2143	-119.2034	9/26/17	22:13	dairy/manure - digester	3A2 Manure Management	0.009	0.002	1.87	0.64	60	23
S00720	35.2030	-119.1979	6/16/17	20:06	dairy/manure - digester	3A2 Manure Management	0.020	0.006	4.92	0.52	362	118
S00720	35.2030	-119.1979	9/26/17	18:25	dairy/manure - digester	3A2 Manure Management	0.040	0.014	1.36	0.22	198	75
S00720	35.2030	-119.1979	9/26/17	22:13	dairy/manure - digester	3A2 Manure Management	0.073	0.022	1.87	0.64	491	226
S00721	35.2744	-119.3773	9/26/17	22:35	oil/gas pumpjack	1B2 Oil & Natural Gas	0.026	0.015	4.13	0.74	392	235
S00722	35.2956	-119.5922	9/26/17	22:43	oil/gas pumpjack	1B2 Oil & Natural Gas	0.026	0.008	5.50	0.28	515	157
S00723	35.2966	-119.5375	9/26/17	22:43	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.022	0.001	5.50	0.28	433	31
S00724	38.7769	-121.8822	10/3/17	19:03	compost	4A1 Managed Waste Disposal Sites	0.030	0.007	7.35	0.14	795	187
S00725	37.8608	-120.9634	6/18/17	17:35	dairy/manure	3A2 Manure Management	0.021	0.005	2.02	0.14	152	37
S00725	37.8608	-120.9634	10/3/17	20:25	dairy/manure	3A2 Manure Management	0.009	0.005	3.44	0.14	108	61
S00726	37.8674	-121.0381	10/3/17	20:25	dairy/manure	3A2 Manure Management	0.015	0.004	3.44	0.14	192	45
S00727	37.8727	-121.0572	10/3/17	20:25	dairy/manure	3A2 Manure Management	0.010	0.006	3.44	0.14	127	72
S00728	37.8088	-121.0300	10/3/17	20:44	dairy/manure	3A2 Manure Management	0.016	0.003	3.48	0.09	204	35
S00729	37.8253	-121.0744	10/3/17	20:44	dairy/manure	3A2 Manure Management	0.039	0.012	3.48	0.09	494	150
S00730	37.8778	-121.1867	9/30/17	21:48	landfill	4A1 Managed Waste Disposal Sites	0.151	0.068	4.79	0.30	2595	1184
S00730	37.8778	-121.1867	10/3/17	22:21	landfill	4A1 Managed Waste Disposal Sites	0.085	0.025	4.49	0.17	1377	409
S00731	37.7544	-121.6572	10/6/17	18:41	landfill	4A1 Managed Waste Disposal Sites	0.009	0.003	2.95	0.46	92	36
S00731	37.7544	-121.6572	10/6/17	18:58	landfill	4A1 Managed Waste Disposal Sites	0.029	0.020	2.95	0.46	303	222
S00731	37.7544	-121.6572	10/6/17	19:04	landfill	4A1 Managed Waste Disposal Sites	0.004	0.002	3.07	0.43	48	23
S00732	38.0356	-122.2544	10/5/17	18:12	refinery	1A1 Energy Industries	0.013	0.003	1.50	0.61	70	33
S00733	37.4244	-121.9321	10/5/17	19:14	powerplant	1A1 Energy Industries	0.006	0.004	2.18	0.30	50	31
S00733	37.4244	-121.9321	10/5/17	19:46	powerplant	1A1 Energy Industries	0.025	0.005	2.18	0.30	194	49
S00733	37.4244	-121.9321	10/5/17	19:53	powerplant	1A1 Energy Industries	0.011	0.005	2.18	0.30	86	38
S00734	37.4296	-121.9485	10/5/17	19:46	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.023	0.006	2.18	0.30	183	55
S00736	38.5295	-121.3742	10/5/17	21:10	landfill	4A1 Managed Waste Disposal Sites	0.005	0.002	2.89	0.37	54	22
S00737	38.5183	-121.1851	10/5/17	21:17	landfill	4A1 Managed Waste Disposal Sites	0.052	0.013	3.90	0.06	731	184
S00737	38.5183	-121.1851	10/5/17	21:21	landfill	4A1 Managed Waste Disposal Sites	0.020	0.015	3.90	0.06	275	212
S00738	34.5685	-118.1536	10/12/17	17:45	landfill	4A1 Managed Waste Disposal Sites	0.013	0.003	2.70	0.46	128	33
S00739	34.5567	-117.4501	10/12/17	20:54	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.003	0.000	1.79	0.08		
S00740	34.7139	-114.4934	10/12/17	19:54	gas compressor	1B2 Oil & Natural Gas	0.005	0.002	2.23	0.68	41	19
S00741	34.3064	-116.8216	10/12/17	20:41	landfill	4A1 Managed Waste Disposal Sites	0.009	0.004	4.06	1.24	139	67
S00742	35.2546	-119.2858	10/13/17	18:47	gas processing plant	1B2 Oil & Natural Gas	0.022	0.002	1.20	0.15	96	14
S00743	35.4140	-119.2013	10/13/17	19:46	dairy/manure	3A2 Manure Management	0.021	0.007	1.96	0.16	150	53
S00744	35.3175	-119.6711	10/13/17	20:50	oil/gas pumpjack	1B2 Oil & Natural Gas	0.027	0.008	1.97	0.44	192	71
S00745	35.3188	-119.6664	10/13/17	20:50	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.015	0.002	1.97	0.44	108	28
S00746	35.3187	-119.6601	10/13/17	20:50	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.023	0.003	1.97	0.44	165	42
S00747	35.3067	-119.7093	10/13/17	20:54	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.022	0.005	2.68	1.15	208	102
S00748	35.3009	-119.6904	10/13/17	2								

Source Identifier	Plume Latitude (deg)	Plume Longitude (deg)	Date of detection	Time of detection (UTC)	Source type (best estimate)	Sectors (IPCC)	IME/r (kg/m)	IME/r (kg/m)	U ₁₀ (m/s)	σ _{U10} (m/s)	Q _{plume} (kg/hr)*	σ _{Qplume} (kg/hr)*
S00749	34.4449	-118.5874	10/16/17	19:10	gas storage facility	1B2 Oil & Natural Gas	0.012	0.002	3.14	0.58	140	38
S00749	34.4449	-118.5874	10/16/17	19:15	gas storage facility	1B2 Oil & Natural Gas	0.012	0.001	3.14	0.58	135	30
S00749	34.4449	-118.5874	10/16/17	19:20	gas storage facility	1B2 Oil & Natural Gas	0.011	0.002	3.14	0.58	123	32
S00749	34.4449	-118.5874	10/16/17	19:24	gas storage facility	1B2 Oil & Natural Gas	0.027	0.003	3.14	0.58	303	69
S00750	34.0867	-117.2206	8/30/17	18:34	landfill	4A1 Managed Waste Disposal Sites	0.019	0.004	1.29	0.27	86	24
S00751	35.4899	-119.0309	9/2/17	19:26	oil/gas gathering line	1B2 Oil & Natural Gas	0.012	0.004	4.38	0.17	184	70
S00753	35.3984	-119.1765	9/2/17	17:57	oil/gas tank	1B2 Oil & Natural Gas	0.014	0.004	0.78	0.21		
S00753	35.3984	-119.1765	9/8/17	19:38	oil/gas tank	1B2 Oil & Natural Gas	0.010	0.003	5.00	0.21	187	47
S00754	35.4919	-118.8971	9/2/17	20:05	oil/gas tank	1B2 Oil & Natural Gas	0.015	0.002	6.40	0.15	335	54
S00755	35.6031	-119.7053	9/2/17	20:42	oil/gas tank	1B2 Oil & Natural Gas	0.015	0.003	4.25	0.11	234	50
S00755	35.6031	-119.7053	9/5/17	20:31	oil/gas tank	1B2 Oil & Natural Gas	0.036	0.010	3.37	0.13	439	118
S00760	34.4459	-118.5868	11/8/17	18:21	gas storage facility	1B2 Oil & Natural Gas	0.023	0.005	1.21	0.30		
S00760	34.4459	-118.5868	11/8/17	18:25	gas storage facility	1B2 Oil & Natural Gas	0.028	0.005	1.21	0.30	123	37
S00761	34.3242	-118.5098	8/28/17	21:02	landfill	4A1 Managed Waste Disposal Sites	0.009	0.002	2.29	0.43	71	23
S00762	34.3267	-118.5177	8/28/17	21:02	landfill	4A1 Managed Waste Disposal Sites	0.073	0.020	2.29	0.43	604	199
S00762	34.3267	-118.5177	9/18/17	21:36	landfill	4A1 Managed Waste Disposal Sites	0.033	0.007	3.75	0.67	451	127
S00762	34.3267	-118.5177	10/16/17	17:58	landfill	4A1 Managed Waste Disposal Sites	0.004	0.001	4.18	1.11	63	20
S00764	34.3269	-118.5189	8/28/17	20:57	landfill	4A1 Managed Waste Disposal Sites	0.072	0.023	2.59	0.62	674	266
S00766	34.3282	-118.5201	10/10/17	19:05	landfill	4A1 Managed Waste Disposal Sites	0.020	0.012	1.31	0.52	95	67
S00766	34.3282	-118.5201	10/16/17	19:02	landfill	4A1 Managed Waste Disposal Sites	0.020	0.005	3.79	0.79	271	90
S00766	34.3282	-118.5201	10/16/17	19:52	landfill	4A1 Managed Waste Disposal Sites	0.018	0.007	3.61	0.66	230	97
S00767	34.3282	-118.5159	8/28/17	20:57	landfill	4A1 Managed Waste Disposal Sites	0.011	0.005	2.59	0.62	101	49
S00767	34.3282	-118.5159	10/26/17	21:51	landfill	4A1 Managed Waste Disposal Sites	0.040	0.008	1.29	0.59	187	93
S00768	34.3348	-118.5194	9/18/17	20:21	landfill	4A1 Managed Waste Disposal Sites	0.047	0.014	3.60	0.54	609	198
S00768	34.3348	-118.5194	9/18/17	21:31	landfill	4A1 Managed Waste Disposal Sites	0.069	0.017	3.90	0.65	961	285
S00768	34.3348	-118.5194	10/10/17	19:10	landfill	4A1 Managed Waste Disposal Sites	0.024	0.004	1.17	0.45	99	42
S00768	34.3348	-118.5194	10/16/17	17:53	landfill	4A1 Managed Waste Disposal Sites	0.039	0.011	4.18	1.11	593	224
S00769	34.3288	-118.5194	10/26/17	21:51	landfill	4A1 Managed Waste Disposal Sites	0.015	0.003	1.29	0.59	71	36
S00771	34.3302	-118.5175	8/28/17	20:57	landfill	4A1 Managed Waste Disposal Sites	0.113	0.033	2.59	0.62	1058	399
S00771	34.3302	-118.5175	9/18/17	20:21	landfill	4A1 Managed Waste Disposal Sites	0.009	0.005	3.60	0.54	121	62
S00771	34.3302	-118.5175	9/18/17	21:36	landfill	4A1 Managed Waste Disposal Sites	0.024	0.006	3.75	0.67	329	98
S00771	34.3302	-118.5175	10/16/17	18:57	landfill	4A1 Managed Waste Disposal Sites	0.032	0.013	3.99	0.63	453	197
S00771	34.3302	-118.5175	10/16/17	19:02	landfill	4A1 Managed Waste Disposal Sites	0.004	0.001	3.79	0.79	53	15
S00771	34.3302	-118.5175	10/26/17	21:55	landfill	4A1 Managed Waste Disposal Sites	0.040	0.010	1.23	0.52	177	87
S00772	34.3127	-118.5507	8/30/17	17:23	oil/gas drill rig	1B2 Oil & Natural Gas	0.033	0.013	2.05	0.88	246	142
S00773	34.3213	-118.5822	9/18/17	20:15	oil/gas pumpjack	1B2 Oil & Natural Gas	0.108	0.013	3.64	0.61	1412	294
S00773	34.3213	-118.5822	10/10/17	18:20	oil/gas pumpjack	1B2 Oil & Natural Gas	0.005	0.001	2.58	0.86	44	16
S00775	35.3690	-119.1813	10/13/17	19:32	gas distribution line	1B2 Oil & Natural Gas	0.006	0.003	1.81	0.13	40	17
S00776	35.4946	-118.8967	9/2/17	19:58	oil/gas gathering line	1B2 Oil & Natural Gas	0.015	0.003	4.53	0.23	249	53
S00778	39.5606	-122.0372	8/31/17	19:00	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.027	0.003	1.83	0.29	176	35
S00780	35.4138	-119.6994	9/5/17	21:03	oil/gas gathering line	1B2 Oil & Natural Gas	0.021	0.004	4.52	0.67	347	77
S00781	35.4169	-119.7023	9/5/17	21:03	oil/gas tank	1B2 Oil & Natural Gas	0.039	0.011	4.52	0.67	631	201
S00782	34.3946	-118.8199	9/7/17	19:37	compost	4A1 Managed Waste Disposal Sites	0.029	0.014	4.49	0.41	468	237
S00783	35.3173	-119.2550	10/13/17	19:15	oil/gas tank	1B2 Oil & Natural Gas	0.011	0.001	1.70	0.10	66	8
S00784	33.8632	-118.2444	10/23/17	21:20	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.023	0.010	0.40	0.16		
S00784	33.8632	-118.2444	10/24/17	19:48	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.035	0.017	2.95	0.29	370	185
S00785	33.8420	-118.2375	9/1/17	20:12	refinery	1A1 Energy Industries	0.006	0.003	2.46	0.46	52	29
S00786	33.8138	-118.2360	9/1/17	20:23	refinery	1A1 Energy Industries	0.014	0.004	2.81	0.13	144	45
S00786	33.8138	-118.2360	10/24/17	19:21	refinery	1A1 Energy Industries	0.014	0.004	3.50	0.19	172	46
S00788	33.8172	-118.2355	9/1/17	20:23	refinery	1A1 Energy Industries	0.008	0.003	2.81	0.13	84	26
S00788	33.8172	-118.2355	10/23/17	21:09	refinery	1A1 Energy Industries	0.067	0.021	1.14	0.79		
S00788	33.8172	-118.2355	10/24/17	19:21	refinery	1A1 Energy Industries	0.013	0.005	3.50	0.19	162	61
S00789	33.7403	-118.1391	9/1/17	22:03	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.005	0.001	3.33	0.31	54	15
S00790	36.1638	-120.3950	9/19/17	21:26	oil/gas gathering line	1B2 Oil & Natural Gas	0.008	0.001	4.38	0.63	128	25
S00790	36.1638	-120.3950	9/19/17	21:33	oil/gas gathering line	1B2 Oil & Natural Gas	0.014	0.002	4.38	0.63	222	42
S00791	36.2415	-120.3717	9/19/17	21:19	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.010	0.001	5.95	1.50	208	54
S00792	36.0739	-120.1485	9/20/17	20:27	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.015	0.002	1.76	0.25	97	21
S00794	37.4511	-120.7728	9/30/17	21:32	dairy/manure	3A2 Manure Management	0.018	0.008	5.80	1.14	375	165
S00795	37.4740	-120.7717	9/30/17	21:48	dairy/manure	3A2 Manure Management	0.013	0.003	4.79	0.30	218	46
S00797	35.3645	-119.6707	9/5/17	21:03	oil/gas gathering line	1B2 Oil & Natural Gas	0.018	0.003	4.52	0.67		
S00801	33.9058	-118.4067	10/24/17	18:25	refinery	1A1 Energy Industries	0.034	0.012	0.73	0.26		
S00802	33.9133	-118.4110	10/24/17	20:25	refinery	1A1 Energy Industries	0.027	0.005	1.44	0.50	139	54
S00803	33.9117	-118.4111	10/23/17	20:14	refinery	1A1 Energy Industries	0.025	0.004	0.70	0.48		
S00804	33.9081	-118.4106	10/23/17	20:14	refinery	1A1 Energy Industries	0.031	0.011	0.70	0.48		
S00805	33.9124	-118.4112	10/24/17	18:25	refinery	1A1 Energy Industries	0.015	0.003	0.73	0.26		
S00807	33.9142	-118.4121	10/24/17	18:25	refinery	1A1 Energy Industries	0.036	0.010	0.73	0.26		
S00810	33.9279	-118.4292	9/1/17	21:22	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.028	0.008	3.30	0.15		
S00810	33.9279	-118.4292	9/18/17	23:21	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.035	0.012	3.27	0.20		
S00815	36.5829	-120.0540	10/7/17	21:15	dairy/manure	3A2 Manure Management	0.092	0.022	0.90	0.06		
S00816	38.9320	-121.9160	8/31/17	22:51	oil/gas tank	1B2 Oil & Natural Gas	0.010	0.002	2.57	0.59		
S00817	38.9387	-121.9152	8/31/17	22:51	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.008	0.002	2.57	0.59	71	22
S00818	38.9721	-121.9231	8/31/17	22:51	oil/gas tank	1B2 Oil & Natural Gas	0.003	0.001	2.57	0.59		
S00819	33.6466	-117.9782	9/1/17	22:03	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.050	0.024	3.33	0.31		
S00820	33.6382	-117.9570	9/22/17	22:47	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.036	0.019	3.12	0.31		
S00821	34.0055	-118.3763	9/1/17	20:23	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.004	0.001	2.81	0.13		
S00821	34.0055	-118.3763	10/23/17	21:09	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.014	0.001	1.14	0.79		
S00822	34.0052	-118.3768	10/24/17	19:21	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.023	0.008	3.50	0.19		
S00823	34.0117	-118.3745	10/24/17	19:48	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.030	0.005	2.95	0.29		
S00826	35.4960	-119.0090	9/2/17	19:41	oil/gas stack	1B2 Oil & Natural Gas	0.020	0.006	4.38	0.19	314	91
S00826	35.4960	-119.0090	9/5/17	19:35	oil/gas stack	1B2 Oil & Natural Gas	0.006	0.004	4.81	0.37	102	70
S00827	35.4733	-119.0582	9/2/17	19:06	oil/gas tank	1B2 Oil & Natural Gas	0.007	0.002	4.32	0.10	115	31
S00827	35.4733	-119.0582	9/2/17	19:13	oil/gas tank	1B2 Oil & Natural Gas	0.007	0.004	4.31	0.12	108	57
S00827	35.4733	-119.0582	9/5/17	19:04	oil/gas tank	1B2 Oil & Natural Gas	0.007	0.004	4.81	0.20	119	64
S00827	35.4733	-119.0582	9/5/17	19:11	oil/gas tank	1B2 Oil & Natural Gas	0.007	0.004	4.81	0.20	127	70
S00827	35.4733	-119.0582	9/8/17	21:05	oil/gas tank	1B2 Oil & Natural Gas	0.016	0.003	9.07	0.19	532	106
S00827	35.4733	-119.0582	9/26/17	21:02	oil/gas tank	1B2 Oil & Natural Gas	0.008	0.002	3.81	0.25	108	27
S00828	35.5093	-119.0365	9/8/17	21:19	oil/gas tank	1B2 Oil & Natural Gas	0.023	0.001	8.78	0.24	740	48
S00828	35.5093	-119.0365	10/26/17	21:00	oil/gas tank	1B2 Oil & Natural Gas	0.012	0.004	2.82	0.28	118	40
S00829	35.5310	-119.0742	9/8/17	21:19	oil/gas tank	1B2 Oil & Natural Gas	0.010	0.009	8.78	0.24	301	285
S00830	35.5625	-119.0988	10/26/17	21:00	oil/gas tank	1B2 Oil & Natural Gas	0.009	0.001	2.82	0.28	95	17

Source Identifier	Plume Latitude (deg)	Plume Longitude (deg)	Date of detection	Time of detection (UTC)	Source type (best estimate)	Sectors (IPCC)	IME/r (kg/m)	σ _{ME} /r (kg/m)	U ₁₀ (m/s)	σ _{U10} (m/s)	Q _{plume} (kg/hr)*	σ _{Qplume} (kg/hr)*
S00832	35.5351	-119.0843	10/26/17	21:00	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.010	0.003	2.82	0.28	103	28
S00833	35.5540	-119.0961	10/26/17	21:00	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.013	0.002	2.82	0.28	132	26
S00834	35.4540	-119.0180	9/5/17	19:11	oil/gas pumpjack	1B2 Oil & Natural Gas	0.014	0.002	4.81	0.20	246	34
S00835	35.4431	-119.0031	9/26/17	21:02	oil/gas pumpjack	1B2 Oil & Natural Gas	0.012	0.002	3.81	0.25	160	35
S00836	35.4418	-119.0037	10/26/17	20:53	oil/gas pumpjack	1B2 Oil & Natural Gas	0.009	0.000	2.69	0.19	90	7
S00839	35.4706	-119.0394	9/2/17	19:13	oil/gas tank	1B2 Oil & Natural Gas	0.010	0.001	4.31	0.12	152	15
S00840	35.5365	-119.0779	6/15/17	22:36	oil/gas tank	1B2 Oil & Natural Gas	0.018	0.006	4.50	0.28	299	98
S00840	35.5365	-119.0779	9/5/17	19:26	oil/gas tank	1B2 Oil & Natural Gas	0.034	0.013	4.53	0.29	556	214
S00841	35.5539	-119.0969	9/5/17	19:26	oil/gas tank	1B2 Oil & Natural Gas	0.018	0.006	4.53	0.29	294	93
S00842	35.4372	-119.0091	10/26/17	20:53	oil/gas tank	1B2 Oil & Natural Gas	0.016	0.001	2.69	0.19	151	13
S00844	35.9601	-120.0152	9/20/17	20:41	landfill	4A1 Managed Waste Disposal Sites	0.034	0.007	1.11	0.36	137	53
S00845	37.5289	-120.9541	9/30/17	20:06	dairy/manure	3A2 Manure Management	0.016	0.004	5.38	0.43	302	83
S00846	37.5363	-120.9520	9/30/17	20:24	dairy/manure	3A2 Manure Management	0.011	0.007	5.39	0.43	213	139
S00847	37.5693	-120.9772	9/30/17	20:24	dairy/manure	3A2 Manure Management	0.004	0.002	5.39	0.43	80	34
S00848	32.7808	-117.0434	9/25/17	21:29	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.007	0.002	3.81	0.13	100	22
S00849	37.8788	-121.1893	9/30/17	21:48	landfill	4A1 Managed Waste Disposal Sites	0.039	0.018	4.79	0.30	676	318
S00850	37.8357	-121.2686	9/30/17	20:24	oil/gas tank	1B2 Oil & Natural Gas	0.005	0.001	5.39	0.43	96	27
S00852	33.8456	-118.2381	9/1/17	22:17	refinery	1A1 Energy Industries	0.058	0.022	4.09	1.12	856	401
S00853	35.5622	-119.6967	9/2/17	20:50	oil/gas pumpjack	1B2 Oil & Natural Gas	0.006	0.002	4.24	0.16	99	37
S00855	35.6424	-119.7466	9/5/17	20:31	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.017	0.003	3.37	0.13	204	40
S00857	38.0264	-122.1678	10/6/17	20:42	landfill	4A1 Managed Waste Disposal Sites	0.024	0.004	2.94	0.53	255	59
S00858	35.3026	-119.6898	10/13/17	21:19	oil/gas gathering line	1B2 Oil & Natural Gas	0.041	0.015	3.31	1.05	489	236
S00858	35.3026	-119.6898	10/13/17	21:40	oil/gas gathering line	1B2 Oil & Natural Gas	0.046	0.016	3.31	1.05	544	261
S00861	35.3165	-119.6716	10/13/17	21:36	oil/gas pumpjack	1B2 Oil & Natural Gas	0.013	0.003	2.54	0.42	116	36
S00862	35.3162	-119.6699	10/13/17	20:50	oil/gas pumpjack	1B2 Oil & Natural Gas	0.012	0.001	1.97	0.44	86	22
S00865	35.2931	-119.5697	9/9/17	18:06	oil/gas gathering line	1B2 Oil & Natural Gas	0.032	0.019	2.12	0.37	244	148
S00865	35.2931	-119.5697	9/26/17	22:51	oil/gas gathering line	1B2 Oil & Natural Gas	0.033	0.012	5.36	0.26	635	242
S00865	35.2931	-119.5697	10/10/17	21:39	oil/gas gathering line	1B2 Oil & Natural Gas	0.017	0.005	2.78	0.37	175	58
S00865	35.2931	-119.5697	10/10/17	21:47	oil/gas gathering line	1B2 Oil & Natural Gas	0.023	0.007	2.78	0.37	235	75
S00866	35.3133	-119.5678	10/10/17	21:30	oil/gas pumpjack	1B2 Oil & Natural Gas	0.008	0.006	2.82	0.25	85	65
S00868	35.2735	-119.3936	10/10/17	21:30	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.026	0.008	2.82	0.25	263	80
S00869	35.3470	-119.6575	10/13/17	20:59	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.008	0.005	1.57	0.37	44	29
S00870	35.3238	-119.6774	10/13/17	21:31	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.013	0.004	2.43	0.37	116	41
S00871	35.0230	-119.0737	9/6/17	22:16	oil/gas gathering line	1B2 Oil & Natural Gas	0.040	0.013	6.73	0.29	959	319
S00871	35.0230	-119.0737	9/8/17	23:06	oil/gas gathering line	1B2 Oil & Natural Gas	0.053	0.017	8.14	0.27	1562	490
S00873	34.9932	-119.0918	9/5/17	21:41	oil/gas tank	1B2 Oil & Natural Gas	0.014	0.004	8.47	0.31	435	118
S00874	35.2539	-119.5868	9/2/17	21:00	oil/gas gathering line	1B2 Oil & Natural Gas	0.017	0.002	4.26	0.07	260	28
S00874	35.2539	-119.5868	9/15/17	19:35	oil/gas gathering line	1B2 Oil & Natural Gas	0.006	0.002	2.90	0.40	57	20
S00874	35.2539	-119.5868	9/15/17	19:40	oil/gas gathering line	1B2 Oil & Natural Gas	0.038	0.014	2.90	0.40	399	152
S00874	35.2539	-119.5868	9/15/17	19:45	oil/gas gathering line	1B2 Oil & Natural Gas	0.012	0.004	2.90	0.40	130	46
S00874	35.2539	-119.5868	9/15/17	19:52	oil/gas gathering line	1B2 Oil & Natural Gas	0.011	0.005	2.90	0.40	113	53
S00875	35.2479	-119.5809	9/15/17	19:40	oil/gas gathering line	1B2 Oil & Natural Gas	0.018	0.007	2.90	0.40	185	79
S00876	35.0798	-119.3715	9/6/17	18:39	oil/gas gathering line	1B2 Oil & Natural Gas	0.012	0.003	3.38	0.33	140	40
S00877	35.1151	-119.4668	9/6/17	18:11	oil/gas gathering line	1B2 Oil & Natural Gas	0.016	0.001	3.01	0.35	173	24
S00878	35.1311	-119.4866	9/6/17	18:11	oil/gas gathering line	1B2 Oil & Natural Gas	0.012	0.001	3.01	0.35	132	19
S00879	35.2781	-119.6008	9/2/17	21:00	oil/gas possible plugged well	1B2 Oil & Natural Gas	0.005	0.000	4.26	0.07	78	6
S00880	35.3596	-119.6606	9/2/17	21:00	oil/gas pumpjack	1B2 Oil & Natural Gas	0.022	0.002	4.26	0.07	334	26
S00883	35.4297	-119.601	9/5/17	21:14	oil/gas tank	1B2 Oil & Natural Gas	0.012	0.002	4.54	0.33	192	41
S00885	35.3417	-119.6460	9/2/17	21:00	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.013	0.004	4.26	0.07	192	54
S00886	35.2479	-119.5813	9/5/17	21:14	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.048	0.019	4.54	0.33	788	308
S00887	35.2657	-119.5493	9/5/17	21:14	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.020	0.009	4.54	0.33	321	144
S00890	35.0615	-119.3907	9/6/17	18:02	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.010	0.001	4.13	0.36	142	22
S00890	35.0615	-119.3907	9/6/17	18:28	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.005	0.000	4.12	0.35	69	6
S00891	35.1017	-119.4594	9/6/17	18:02	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.026	0.003	4.13	0.36	390	51
S00892	37.6275	-120.9319	9/30/17	21:48	powerplant	1A1 Energy Industries	0.007	0.003	4.79	0.30	113	58
S00893	36.8046	-121.7772	10/7/17	20:15	powerplant	1A1 Energy Industries	0.006	0.002	3.83	0.46	85	29
S00894	34.3974	-118.6432	9/7/17	18:49	oil/gas gathering line	1B2 Oil & Natural Gas	0.012	0.004	1.76	0.55	76	36
S00897	33.8513	-118.3316	10/24/17	18:47	refinery	1A1 Energy Industries	0.007	0.003	1.41	0.47	36	20
S00897	33.8513	-118.3316	10/24/17	21:08	refinery	1A1 Energy Industries	0.009	0.001	2.22	0.54	76	21
S00897	33.8513	-118.3316	10/24/17	21:31	refinery	1A1 Energy Industries	0.004	0.001	2.22	0.54	32	10
S00899	33.8473	-118.3188	10/24/17	21:52	refinery	1A1 Energy Industries	0.019	0.002	2.22	0.54	155	40
S00902	38.0132	-121.8579	10/6/17	19:50	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.029	0.006	2.06	0.52	218	73
S00903	35.5185	-119.0781	9/8/17	21:12	oil/gas pumpjack	1B2 Oil & Natural Gas	0.007	0.001	8.92	0.22	228	25
S00904	35.4814	-119.0781	9/2/17	19:06	oil/gas tank	1B2 Oil & Natural Gas	0.016	0.002	4.32	0.10	255	38
S00904	35.4814	-119.0781	9/5/17	19:04	oil/gas tank	1B2 Oil & Natural Gas	0.023	0.004	4.81	0.20	395	77
S00905	33.8511	-118.3947	9/1/17	21:45	powerplant	1A1 Energy Industries	0.006	0.001	3.67	0.37	81	21
S00906	37.9499	-122.3969	10/5/17	17:56	refinery	1A1 Energy Industries	0.082	0.031	0.90	0.40		
S00908	38.0404	-122.2518	10/5/17	18:21	refinery	1A1 Energy Industries	0.004	0.001	1.50	0.61	22	12
S00908	38.0404	-122.2518	10/5/17	18:29	refinery	1A1 Energy Industries	0.004	0.002	1.50	0.61	20	14
S00908	38.0404	-122.2518	10/5/17	18:37	refinery	1A1 Energy Industries	0.003	0.003	1.50	0.61	18	18
S00909	33.9086	-118.2854	10/23/17	21:20	oil/gas tank	1B2 Oil & Natural Gas	0.014	0.003	0.40	0.16		
S00910	35.4388	-119.1324	9/2/17	18:25	oil/gas tank	1B2 Oil & Natural Gas	0.007	0.002	1.96	0.19	50	16
S00911	35.4346	-119.1411	9/2/17	18:25	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.024	0.003	1.96	0.19	172	24
S00914	32.6943	-117.1465	9/25/17	21:22	powerplant	1A1 Energy Industries	0.044	0.007	3.28	0.38	515	105
S00916	35.1379	-119.3034	9/6/17	22:10	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.011	0.003	7.31	0.34	297	75
S00917	35.4326	-119.1434	9/5/17	18:33	oil/gas tank	1B2 Oil & Natural Gas	0.012	0.004	2.60	0.12	113	35
S00918	33.8112	-118.1748	9/1/17	22:17	gas processing plant	1B2 Oil & Natural Gas	0.036	0.013	4.09	1.12	528	243
S00919	37.9530	-122.3994	9/10/17	21:28	refinery	1A1 Energy Industries	0.021	0.003	2.10	1.11	159	87
S00920	32.8522	-117.1632	9/25/17	21:46	landfill	4A1 Managed Waste Disposal Sites	0.046	0.009	3.33	0.26	548	117
S00921	37.4945	-120.9645	9/30/17	19:17	dairy/manure	3A2 Manure Management	0.009	0.004	4.22	0.08	144	56
S00922	37.4945	-120.9812	9/30/17	19:17	dairy/manure	3A2 Manure Management	0.004	0.001	4.22	0.08	55	19
S00923	34.3382	-119.0128	9/7/17	20:24	oil/gas gathering line	1B2 Oil & Natural Gas	0.022	0.002	5.03	0.38	404	50
S00924	34.3618	-118.9222	9/7/17	20:24	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.006	0.001	5.03	0.38	115	17
S00925	34.2617	-118.4076	9/7/17	21:55	gas distribution line	1B2 Oil & Natural Gas	0.008	0.002	3.03	0.21	92	21
S00927	34.2469	-118.3898	9/7/17	21:55	powerplant	1A1 Energy Industries	0.009	0.003	3.03	0.21	96	28
S00928	37.7557	-121.6527	10/6/17	18:41	landfill	4A1 Managed Waste Disposal Sites	0.006	0.001	2.95	0.46	69	18
S00928	37.7557	-121.6527	10/6/17	18:58	landfill	4A1 Managed Waste Disposal Sites	0.013	0.006	2.95	0.46	138	72
S00928	37.7557	-121.6527	10/6/17	19:04	landfill	4A1 Managed Waste Disposal Sites	0.007	0.003	3.07	0.43	73	33
S00929	34.4290	-118.5899	10/16/17	19:10	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.008	0.002	3.14	0.58	90	28
S00929	34.4290	-118.5										

Source Identifier	Plume Latitude (deg)	Plume Longitude (deg)	Date of detection	Time of detection (UTC)	Source type (best estimate)	Sectors (IPCC)	IME/r (kg/m)	σ _{ME} /r (kg/m)	U ₁₀ (m/s)	σ _{U10} (m/s)	Q _{plume} (kg/hr)*	σ _{Qplume} (kg/hr)*
S00929	34.4290	-118.5899	10/26/17	19:17	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.005	0.001	0.64	0.26	11	5
S00929	34.4290	-118.5899	10/26/17	19:37	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.017	0.004	0.64	0.26		
S00929	34.4290	-118.5899	10/26/17	19:45	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.012	0.004	0.64	0.26		
S00929	34.4290	-118.5899	11/8/17	18:21	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.020	0.005	1.21	0.30	86	32
S00930	34.2985	-119.2996	10/16/17	21:02	oil/gas compressor	1B2 Oil & Natural Gas	0.020	0.004	4.68	0.74	344	81
S00932	35.0122	-118.9624	9/5/17	22:10	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.042	0.005	7.46	0.27	1133	133
S00934	33.8050	-118.2724	10/24/17	20:57	oil/gas pumpjack	1B2 Oil & Natural Gas	0.081	0.019	3.48	0.36	1009	254
S00935	33.7747	-118.2905	10/24/17	18:36	refinery	1A1 Energy Industries	0.083	0.020	2.62	0.36	783	214
S00936	33.8042	-118.2439	9/1/17	20:35	refinery	1A1 Energy Industries	0.011	0.004	1.66	0.62	67	37
S00936	33.8042	-118.2439	9/1/17	22:03	refinery	1A1 Energy Industries	0.015	0.004	3.33	0.31	185	55
S00936	33.8042	-118.2439	9/22/17	22:47	refinery	1A1 Energy Industries	0.036	0.021	3.12	0.31	406	239
S00938	33.8051	-118.2459	9/11/17	19:45	refinery	1A1 Energy Industries	0.014	0.004	1.18	0.20	60	20
S00939	33.7835	-118.2344	9/18/17	23:04	refinery	1A1 Energy Industries	0.026	0.007	2.43	0.59	226	83
S00940	33.7763	-118.2292	3/9/17	22:22	refinery	1A1 Energy Industries	0.029	0.007	1.68	0.76	173	90
S00940	33.7763	-118.2292	10/23/17	20:58	refinery	1A1 Energy Industries	0.012	0.004	1.24	0.53	51	28
S00941	33.8045	-118.2445	10/23/17	20:58	refinery	1A1 Energy Industries	0.051	0.023	1.24	0.53	228	142
S00941	33.8045	-118.2445	10/23/17	21:38	refinery	1A1 Energy Industries	0.052	0.014	0.72	0.41		
S00941	33.8045	-118.2445	10/24/17	19:09	refinery	1A1 Energy Industries	0.034	0.011	3.50	0.19	422	146
S00943	33.8036	-118.2847	9/1/17	20:59	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.038	0.020	3.54	0.34	480	264
S00943	33.8036	-118.2847	10/24/17	20:46	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.041	0.009	2.44	0.90	358	154
S00943	33.8036	-118.2847	10/24/17	21:52	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.018	0.005	2.22	0.54	148	56
S00944	33.8023	-118.2793	10/24/17	21:52	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.005	0.003	2.22	0.54	39	24
S00945	37.9527	-122.3973	10/5/17	17:41	refinery	1A1 Energy Industries	0.023	0.002	0.90	0.40		
S00947	37.9191	-122.3667	10/5/17	18:06	gas LNG station	1B2 Oil & Natural Gas	0.014	0.003	1.05	0.31	51	19
S00949	35.4788	-119.7541	9/2/17	21:25	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.038	0.017	4.22	0.21	575	264
S00951	35.3067	-119.7100	10/13/17	21:40	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.012	0.001	3.31	1.05	145	48
S00953	35.4377	-119.0089	3/9/17	19:55	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.016	0.004	2.19	0.09	125	33
S00954	35.4426	-119.0006	3/9/17	19:55	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.012	0.003	2.19	0.09		
S00955	36.1037	-119.4519	3/9/17	20:12	dairy/manure	3A2 Manure Management	0.025	0.001	0.86	0.14		
S00957	36.1489	-119.2779	3/9/17	20:24	dairy/manure	3A2 Manure Management	0.024	0.009	1.28	0.21	112	47
S00958	36.2256	-119.1644	3/9/17	20:24	dairy/manure	3A2 Manure Management	0.036	0.014	1.28	0.21	165	69
S00959	36.2286	-119.1659	3/9/17	20:24	dairy/manure	3A2 Manure Management	0.023	0.006	1.28	0.21	104	32
S00960	36.2313	-119.1642	3/9/17	20:24	dairy/manure	3A2 Manure Management	0.048	0.018	1.28	0.21	220	90
S00962	33.8187	-118.2361	3/9/17	22:10	refinery	1A1 Energy Industries	0.030	0.018	2.41	0.09	257	152
S00963	34.4061	-118.9918	10/16/17	20:20	landfill	4A1 Managed Waste Disposal Sites	0.061	0.024	2.39	1.26	522	345
S00964	34.4051	-118.9940	9/30/16	21:12	landfill	4A1 Managed Waste Disposal Sites	0.028	0.015	6.46	0.65	660	346
S00965	34.4059	-118.9950	10/16/17	20:45	landfill	4A1 Managed Waste Disposal Sites	0.164	0.068	2.44	1.20	1446	927
S00967	35.2018	-119.0538	6/15/17	22:03	dairy/manure	3A2 Manure Management	0.004	0.000	3.26	0.27	47	6
S00968	35.2014	-119.0499	6/15/17	22:03	dairy/manure	3A2 Manure Management	0.006	0.001	3.26	0.27	74	13
S00969	35.2824	-119.4735	6/15/17	23:06	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.010	0.001	4.81	0.49	166	22
S00969	35.2824	-119.4735	6/15/17	23:34	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.009	0.001	4.97	0.47	164	22
S00969	35.2824	-119.4735	6/20/17	16:42	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.007	0.002	1.18	0.81	29	21
S00969	35.2824	-119.4735	6/20/17	16:49	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.031	0.006	1.18	0.81	132	94
S00969	35.2824	-119.4735	6/20/17	16:56	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.010	0.005	1.18	0.81	44	37
S00970	35.2881	-119.4219	6/15/17	23:26	oil/gas pumpjack	1B2 Oil & Natural Gas	0.010	0.004	4.48	0.97	161	78
S00972	35.2849	-119.4841	6/15/17	23:34	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.008	0.000	4.97	0.47	143	14
S00973	35.2967	-119.5374	6/15/17	23:34	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.012	0.004	4.97	0.47	216	67
S00973	35.2967	-119.5374	6/20/17	16:42	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.023	0.004	1.18	0.81	97	68
S00974	35.2647	-119.4127	6/15/17	23:41	oil/gas gathering line	1B2 Oil & Natural Gas	0.011	0.008	4.81	0.49	195	148
S00975	35.2783	-119.4829	6/15/17	23:41	gas processing plant	1B2 Oil & Natural Gas	0.010	0.002	4.81	0.49	180	44
S00976	35.1872	-119.1119	6/15/17	23:49	dairy/manure	3A2 Manure Management	0.005	0.001	3.39	0.67	65	20
S00976	35.1872	-119.1119	9/26/17	22:00	dairy/manure	3A2 Manure Management	0.012	0.006	2.33	0.20	99	51
S00977	35.2073	-119.1715	6/15/17	23:49	dairy/manure	3A2 Manure Management	0.009	0.004	3.39	0.67	112	54
S00978	33.9264	-118.4303	6/16/17	18:31	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.007	0.002	1.11	0.66	27	18
S00979	35.2013	-119.0528	6/16/17	19:47	dairy/manure	3A2 Manure Management	0.012	0.002	2.71	0.33	117	28
S00979	35.2013	-119.0528	6/20/17	16:18	dairy/manure	3A2 Manure Management	0.018	0.007	0.79	0.35		
S00980	35.2027	-119.1726	6/16/17	20:06	dairy/manure	3A2 Manure Management	0.006	0.004	4.92	0.52	109	72
S00981	35.4779	-119.4479	6/16/17	20:16	dairy/manure	3A2 Manure Management	0.005	0.000	4.26	0.26	78	8
S00982	35.9352	-119.3988	6/16/17	20:34	dairy/manure	3A2 Manure Management	0.069	0.020	3.16	0.19		
S00983	35.9463	-119.3980	6/16/17	20:34	dairy/manure	3A2 Manure Management	0.023	0.007	3.16	0.19	267	84
S00984	36.0293	-119.3358	9/20/17	19:41	dairy/manure	3A2 Manure Management	0.014	0.004	2.44	0.26	121	38
S00986	35.9573	-119.3729	6/16/17	20:34	dairy/manure	3A2 Manure Management	0.054	0.035	3.16	0.19	618	397
S00987	35.9728	-119.3611	6/16/17	20:34	dairy/manure	3A2 Manure Management	0.010	0.002	3.16	0.19	112	20
S00988	36.0586	-119.3797	6/16/17	20:43	dairy/manure	3A2 Manure Management	0.014	0.004	3.13	0.05	156	44
S00989	36.0723	-119.3641	6/16/17	20:43	dairy/manure	3A2 Manure Management	0.025	0.007	3.13	0.05	276	81
S00990	36.0815	-119.3372	6/16/17	20:43	dairy/manure	3A2 Manure Management	0.006	0.004	3.13	0.05	68	41
S00993	36.1840	-119.2194	6/16/17	20:43	dairy/manure	3A2 Manure Management	0.004	0.001	3.13	0.05	42	13
S00994	36.0611	-119.4021	6/16/17	20:54	dairy/manure	3A2 Manure Management	0.178	0.063	3.08	0.17	1971	707
S00996	36.0478	-119.4560	6/16/17	21:05	dairy/manure	3A2 Manure Management	0.019	0.001	3.19	0.23	222	23
S00997	36.1594	-119.2830	6/16/17	21:05	dairy/manure	3A2 Manure Management	0.011	0.002	3.19	0.23	126	26
S00998	36.2072	-119.7590	6/16/17	21:38	dairy/manure	3A2 Manure Management	0.012	0.002	3.34	0.21	148	25
S01000	37.8676	-121.0352	6/18/17	17:35	dairy/manure	3A2 Manure Management	0.004	0.001	2.02	0.14	27	7
S01001	37.8506	-121.1130	6/18/17	17:51	dairy/manure	3A2 Manure Management	0.013	0.004	1.78	0.33	84	28
S01003	37.1853	-121.6639	6/18/17	20:01	landfill	4A1 Managed Waste Disposal Sites	0.039	0.011	1.40	0.68	196	111
S01003	37.1853	-121.6639	6/18/17	20:11	landfill	4A1 Managed Waste Disposal Sites	0.004	0.002	1.40	0.68	20	13
S01007	37.0734	-120.3923	6/18/17	22:38	dairy/manure	3A2 Manure Management	0.008	0.002	1.41	0.46	42	18
S01008	37.0585	-120.4914	6/18/17	23:07	dairy/manure	3A2 Manure Management	0.033	0.013	2.49	0.28	294	125
S01009	36.0451	-119.4561	6/18/17	23:52	dairy/manure	3A2 Manure Management	0.026	0.009	4.88	0.27	462	162
S01010	35.1867	-119.1032	6/20/17	16:24	dairy/manure	3A2 Manure Management	0.046	0.011	0.75	0.39		
S01011	35.1874	-119.1135	6/20/17	16:24	dairy/manure	3A2 Manure Management	0.046	0.010	0.75	0.39		
S01011	35.1874	-119.1135	6/20/17	16:30	dairy/manure	3A2 Manure Management	0.025	0.006	0.88	0.25		
S01011	35.1874	-119.1135	9/26/17	22:06	dairy/manure	3A2 Manure Management	0.026	0.008	2.45	0.16	230	72
S01012	35.1871	-119.1180	6/20/17	16:30	dairy/manure	3A2 Manure Management	0.045	0.008	0.88	0.25		
S01013	35.2134	-119.1861	6/20/17	16:30	dairy/manure	3A2 Manure Management	0.011	0.006	0.88	0.25		
S01014	35.1776	-119.1249	6/20/17	16:36	dairy/manure	3A2 Manure Management	0.021	0.014	1.06	0.68	82	75
S01017	35.2685	-119.3823	6/20/17	16:42	oil/gas pumpjack	1B2 Oil & Natural Gas	0.018	0.009	1.18	0.81	75	63
S01018	35.2674	-119.4086	6/20/17	16:42	oil/gas pumpjack	1B2 Oil & Natural Gas	0.018	0.004	1.18	0.81	77	55
S01019	35.2787	-119.4568	6/20/17	16:42	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.011	0.003	1.18	0.81	47	35
S01022	35.2952	-119.5280	6/20/17	16:42	oil/gas gathering line	1B2 Oil & Natural Gas	0.008	0.002	1.18	0.81	36	26
S01023	35.3006	-119.5438	6/20/17	16:42	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.014	0.000	1.18	0.81	59	41

Source Identifier	Plume Latitude (deg)	Plume Longitude (deg)	Date of detection	Time of detection (UTC)	Source type (best estimate)	Sectors (IPCC)	IME/r (kg/m)	σ _{IME} /r (kg/m)	U ₁₀ (m/s)	σ _{U10} (m/s)	Q _{plume} (kg/hr)*	σ _{Qplume} (kg/hr)*
S01024	35.3055	-119.5654	6/20/17	16:42	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.025	0.005	1.18	0.81	106	76
S01025	35.2824	-119.5062	6/20/17	16:56	oil/gas compressor	1B2 Oil & Natural Gas	0.006	0.002	1.18	0.81	27	20
S01026	35.2864	-119.5103	6/20/17	16:56	oil/gas compressor	1B2 Oil & Natural Gas	0.007	0.001	1.18	0.81	30	21
S01027	35.2793	-119.4373	6/20/17	17:00	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.006	0.001	2.03	0.94	47	22
S01028	37.7614	-121.7265	6/20/17	19:34	landfill	4A1 Managed Waste Disposal Sites	0.013	0.002	2.17	0.59	105	33
S01028	37.7614	-121.7265	6/20/17	19:45	landfill	4A1 Managed Waste Disposal Sites	0.024	0.001	2.10	0.72	183	63
S01030	37.4997	-122.4093	6/18/17	18:49	landfill	4A1 Managed Waste Disposal Sites	0.108	0.056	1.49	0.39	581	338
S01031	37.5006	-122.4119	6/18/17	18:49	landfill	4A1 Managed Waste Disposal Sites	0.075	0.016	1.49	0.39	404	136
S01034	35.4769	-119.3727	11/13/17	21:46	dairy/manure	3A2 Manure Management	0.017	0.005	1.04	0.17	62	21
S01035	35.4921	-119.3759	11/13/17	21:46	dairy/manure	3A2 Manure Management	0.012	0.001	1.04	0.17	44	8
S01036	35.2046	-119.1978	11/13/17	21:24	dairy/manure	3A2 Manure Management	0.037	0.005	2.01	0.13	266	38
S01037	35.2155	-119.2049	11/13/17	21:24	dairy/manure	3A2 Manure Management	0.090	0.017	2.01	0.13	653	130
S01038	35.2154	-119.2129	11/13/17	21:24	dairy/manure	3A2 Manure Management	0.059	0.019	2.01	0.13	424	142
S01039	35.2014	-119.0519	10/10/17	19:52	dairy/manure	3A2 Manure Management	0.025	0.007	2.35	0.39	213	67
S01039	35.2014	-119.0519	11/13/17	21:04	dairy/manure	3A2 Manure Management	0.021	0.006	2.55	0.11	190	52
S01040	35.2463	-119.1415	11/13/17	21:04	dairy/manure	3A2 Manure Management	0.038	0.006	2.55	0.11		
S01041	35.2861	-119.1406	11/13/17	18:42	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.104	0.049	1.71	0.18	643	307
S01041	35.2861	-119.1406	11/13/17	20:53	oil/gas unknown infrastructure	1B2 Oil & Natural Gas	0.071	0.019	2.22	0.14	569	155
S01042	35.4791	-119.4470	11/13/17	20:41	dairy/manure	3A2 Manure Management	0.021	0.006	1.56	0.12	117	33
S01043	35.4940	-119.4504	11/13/17	20:41	dairy/manure	3A2 Manure Management	0.027	0.008	1.56	0.12		
S01044	35.4517	-119.3765	11/13/17	20:25	dairy/manure	3A2 Manure Management	0.011	0.004	1.54	0.06		
S01045	35.2499	-119.1162	11/13/17	19:58	dairy/manure	3A2 Manure Management	0.016	0.003	1.89	0.06		
S01046	35.1887	-119.1159	10/10/17	19:41	dairy/manure	3A2 Manure Management	0.018	0.007	2.68	0.25		
S01046	35.1887	-119.1159	11/13/17	19:37	dairy/manure	3A2 Manure Management	0.027	0.014	2.08	0.09	203	106
S01046	35.1887	-119.1159	11/13/17	19:42	dairy/manure	3A2 Manure Management	0.011	0.007	1.98	0.08		
S01047	35.2025	-119.1717	11/13/17	19:37	dairy/manure	3A2 Manure Management	0.018	0.004	2.08	0.09		
S01048	35.2151	-119.1859	11/13/17	19:37	dairy/manure	3A2 Manure Management	0.052	0.014	2.08	0.09		
S01050	35.4798	-119.3406	11/13/17	18:54	dairy/manure	3A2 Manure Management	0.022	0.003	0.94	0.09		
S01051	35.1878	-119.1146	11/13/17	18:20	dairy/manure	3A2 Manure Management	0.079	0.022	1.81	0.04	512	141
S01052	35.1781	-119.1232	10/10/17	19:35	dairy/manure - digester	3A2 Manure Management	0.043	0.014	2.95	0.44	456	159
S01052	35.1781	-119.1232	11/13/17	18:14	dairy/manure - digester	3A2 Manure Management	0.030	0.007	1.80	0.06	195	45
S01056	35.1663	-119.1083	11/13/17	19:37	dairy/manure	3A2 Manure Management	0.071	0.018	2.08	0.09	529	140
S01057	35.1783	-119.1224	10/26/17	20:26	dairy/manure	3A2 Manure Management	0.020	0.004	2.81	0.10	199	39
S01058	35.2061	-119.1733	10/26/17	20:26	dairy/manure	3A2 Manure Management	0.013	0.003	2.81	0.10	129	27
S01059	35.2077	-119.1732	10/10/17	19:35	dairy/manure	3A2 Manure Management	0.028	0.005	2.95	0.44	296	72
S01060	35.2159	-119.2037	10/26/17	20:26	dairy/manure - digester	3A2 Manure Management	0.030	0.006	2.81	0.10	305	66
S01064	33.7171	-117.7025	10/1/16	18:45	landfill	4A1 Managed Waste Disposal Sites	0.058	0.020	2.12	0.51	442	184
S01064	33.7171	-117.7025	10/23/17	21:54	landfill	4A1 Managed Waste Disposal Sites	0.007	0.002	2.01	1.22	52	34
S01064	33.7171	-117.7025	10/23/17	21:54	landfill	4A1 Managed Waste Disposal Sites	0.007	0.001	2.01	1.22	54	33
S01066	33.7146	-117.7060	10/23/17	21:50	landfill	4A1 Managed Waste Disposal Sites	0.037	0.010	2.01	1.22	264	174
S01066	33.7146	-117.7060	10/23/17	21:54	landfill	4A1 Managed Waste Disposal Sites	0.004	0.002	2.01	1.22	27	20
S01066	33.7146	-117.7060	10/23/17	21:54	landfill	4A1 Managed Waste Disposal Sites	0.042	0.012	2.01	1.22	301	202
S01071	35.4771	-119.4477	10/10/17	20:56	dairy/manure	3A2 Manure Management	0.046	0.012	2.17	0.21	361	100
S01073	35.2521	-119.1587	10/10/17	19:52	dairy/manure	3A2 Manure Management	0.018	0.006	2.35	0.39	155	54
S01078	37.7564	-121.6574	6/18/17	18:26	landfill	4A1 Managed Waste Disposal Sites	0.045	0.007	3.59	0.19	579	92
S01078	37.7564	-121.6574	10/6/17	18:41	landfill	4A1 Managed Waste Disposal Sites	0.012	0.001	2.95	0.46	131	23
S01078	37.7564	-121.6574	10/6/17	18:53	landfill	4A1 Managed Waste Disposal Sites	0.016	0.011	2.95	0.46	171	116
S01078	37.7564	-121.6574	10/6/17	19:04	landfill	4A1 Managed Waste Disposal Sites	0.009	0.001	3.07	0.43	104	21
S01079	38.5178	-121.1876	10/5/17	21:21	landfill	4A1 Managed Waste Disposal Sites	0.007	0.003	3.90	0.06	96	41
S01080	36.1900	-119.6028	9/28/17	20:00	dairy/manure	3A2 Manure Management	0.010	0.003	1.25	0.13	44	14
S01081	36.1897	-119.6075	9/28/17	20:00	dairy/manure	3A2 Manure Management	0.025	0.005	1.25	0.13	113	26
S01082	36.0370	-119.3475	9/28/17	19:51	dairy/manure	3A2 Manure Management	0.020	0.002	0.76	0.11		
S01083	35.2133	-119.1857	9/26/17	22:06	dairy/manure	3A2 Manure Management	0.012	0.003	2.45	0.16	110	24
S01094	36.3305	-119.5680	9/16/17	18:28	dairy/manure	3A2 Manure Management	0.019	0.004	0.54	0.28		
S01096	36.2667	-119.4063	9/16/17	19:08	dairy/manure	3A2 Manure Management	0.019	0.008	1.33	0.15	90	37
S01097	36.2489	-119.4967	9/16/17	19:18	dairy/manure	3A2 Manure Management	0.010	0.004	1.75	0.12	66	25
S01098	36.1642	-119.5348	9/16/17	20:19	dairy/manure	3A2 Manure Management	0.043	0.014	2.18	0.18	334	112
S01099	36.1705	-119.4234	9/16/17	20:19	dairy/manure	3A2 Manure Management	0.012	0.000	2.18	0.18	94	9
S01100	36.1343	-119.4588	9/16/17	20:38	dairy/manure	3A2 Manure Management	0.025	0.010	2.18	0.07	198	77
S01101	36.0885	-119.3794	9/16/17	21:14	dairy/manure	3A2 Manure Management	0.027	0.004	3.50	0.34	337	59
S01103	36.3876	-119.3804	9/19/17	19:49	landfill	4A1 Managed Waste Disposal Sites	0.013	0.001	4.62	0.10	215	13
S01105	34.3336	-118.5222	10/26/17	21:55	landfill	4A1 Managed Waste Disposal Sites	0.092	0.026	1.23	0.52	407	208
S01106	34.3300	-118.5195	9/18/17	21:36	landfill	4A1 Managed Waste Disposal Sites	0.031	0.008	3.75	0.67	423	133
S01107	34.3275	-118.5147	10/16/17	19:02	landfill	4A1 Managed Waste Disposal Sites	0.004	0.001	3.79	0.79	51	14
S01109	34.3265	-118.5113	3/9/17	19:18	landfill	4A1 Managed Waste Disposal Sites	0.071	0.025	2.72	1.43	696	439
S01110	34.3323	-118.5156	9/18/17	20:26	landfill	4A1 Managed Waste Disposal Sites	0.014	0.004	3.49	0.56	181	63
S01117	35.4746	-119.4311	11/13/17	19:15	dairy/manure	3A2 Manure Management	0.026	0.006	1.14	0.13		
S01117	35.4746	-119.4311	11/13/17	20:37	dairy/manure	3A2 Manure Management	0.103	0.016	1.55	0.12	573	100
S01119	35.4734	-119.4317	9/15/17	17:43	dairy/manure	3A2 Manure Management	0.011	0.004	1.74	0.13	72	27
S01120	35.4732	-119.4333	9/15/17	17:47	dairy/manure	3A2 Manure Management	0.041	0.009	1.78	0.14	263	64
S01120	35.4732	-119.4333	9/15/17	18:06	dairy/manure	3A2 Manure Management	0.025	0.004	3.39	0.13	301	54
S01120	35.4732	-119.4333	9/20/17	19:09	dairy/manure	3A2 Manure Management	0.074	0.022	3.51	0.28	939	291
S01121	35.4728	-119.4308	9/15/17	17:47	dairy/manure	3A2 Manure Management	0.007	0.005	1.78	0.14	45	30
S01123	35.4754	-119.4327	9/15/17	18:11	dairy/manure	3A2 Manure Management	0.011	0.004	2.63	0.19	100	42
S01123	35.4754	-119.4327	9/20/17	19:09	dairy/manure	3A2 Manure Management	0.004	0.001	3.51	0.28	53	19
S01126	34.4054	-118.9958	10/16/17	21:25	landfill	4A1 Managed Waste Disposal Sites	0.032	0.012	3.67	0.74	428	181
S01126	34.4054	-118.9958	10/16/17	21:36	landfill	4A1 Managed Waste Disposal Sites	0.018	0.006	3.67	0.74	242	96
S01127	34.4038	-118.9960	10/16/17	20:29	landfill	4A1 Managed Waste Disposal Sites	0.089	0.015	2.44	1.20	781	406
S01127	34.4038	-118.9960	10/16/17	20:45	landfill	4A1 Managed Waste Disposal Sites	0.042	0.010	2.44	1.20	371	202
S01131	35.1663	-119.0973	9/20/17	18:47	dairy/manure	3A2 Manure Management	0.018	0.004	3.80	0.30	249	59
S01132	35.1658	-119.1054	10/26/17	20:26	dairy/manure	3A2 Manure Management	0.010	0.002	2.81	0.10	104	17
S01133	33.9281	-118.4296	9/10/16	19:35	wastewater treatment	4D1 Domestic Wastewater Treatment & Discharge	0.013	0.003	2.47	0.65	114	41
S01134	35.4706	-119.0626	10/8/16	21:01	oil/gas pumpjack	1B2 Oil & Natural Gas	0.010	0.002	3.76	0.71	139	34
S01134	35.4706	-119.0626	10/8/16	21:06	oil/gas pumpjack	1B2 Oil & Natural Gas	0.008	0.001	3.76	0.71	108	28
S01134	35.4706	-119.0626	10/8/16	21:28	oil/gas pumpjack	1B2 Oil & Natural Gas	0.006	0.001	3.76	0.71	83	20
S01135	35.4564	-119.0498	10/25/16	19:37	oil/gas pumpjack	1B2 Oil & Natural Gas	0.012	0.003	2.92	0.35	131	31
S01136	35.2894	-119.5147	6/20/17	16:42	oil/gas gathering line	1B2 Oil & Natural Gas	0.012	0.002	1.18	0.81	49	34
S01137	35.1772	-119.1233	10/26/17	20:20	dairy/manure - digester	3A2 Manure Management	0.042	0.010	2.83	0.09	426	102
S01138	38.0145	-122.1142	9/10/17	20:07	refinery	1A1 Energy Industries	0.016	0.004	2.39	0.32		
S01139	35.1772	-119.1233	10/26/17	20:20	dairy/manure - digester	3A2 Manure Management	0.072	0.021	2.83	0.09	730	211

Source Identifier	Plume Latitude (deg)	Plume Longitude (deg)	Date of detection	Time of detection (UTC)	Source type (best estimate)	Sectors (IPCC)	IME/r (kg/m)	σ _{IME} /r (kg/m)	U ₁₀ (m/s)	σ _{U10} (m/s)	Q _{plume} (kg/hr)*	σ _{Qplume} (kg/hr)*
S01140	37.7531	-121.6546	6/18/17	18:31	landfill	4A1 Managed Waste Disposal Sites	0.090	0.023	3.59	0.19	1160	302
S01140	37.7531	-121.6546	10/6/17	18:47	landfill	4A1 Managed Waste Disposal Sites	0.003	0.001	2.95	0.46		
S01140	37.7531	-121.6546	10/6/17	19:10	landfill	4A1 Managed Waste Disposal Sites	0.012	0.004	3.07	0.43		
S01142	37.7530	-121.6482	6/18/17	18:31	landfill	4A1 Managed Waste Disposal Sites	0.024	0.023	3.59	0.19	304	293
S01142	37.7530	-121.6482	10/6/17	18:58	landfill	4A1 Managed Waste Disposal Sites	0.067	0.034	2.95	0.46	712	380
S01143	37.7544	-121.6490	10/6/17	18:53	landfill	4A1 Managed Waste Disposal Sites	0.004	0.002	2.95	0.46	44	18
S01144	37.7562	-121.6494	10/6/17	18:41	landfill	4A1 Managed Waste Disposal Sites	0.010	0.001	2.95	0.46	105	21
S01144	37.7562	-121.6494	10/6/17	18:58	landfill	4A1 Managed Waste Disposal Sites	0.060	0.031	2.95	0.46	635	339
S01144	37.7562	-121.6494	10/6/17	19:04	landfill	4A1 Managed Waste Disposal Sites	0.007	0.000	3.07	0.43	83	12
S01150	37.7492	-121.6501	6/18/17	18:31	landfill	4A1 Managed Waste Disposal Sites	0.003	0.002	3.59	0.19	45	25
S01152	37.7546	-121.6546	10/6/17	18:41	landfill	4A1 Managed Waste Disposal Sites	0.003	0.002	2.95	0.46	32	23
S01164	37.7556	-121.6552	10/6/17	18:47	landfill	4A1 Managed Waste Disposal Sites	0.010	0.003	2.95	0.46	106	36
S01181	38.2101	-121.9728	10/6/17	18:10	landfill	4A1 Managed Waste Disposal Sites	0.010	0.006	2.04	0.19	72	46
S01182	38.2091	-121.9715	10/6/17	18:29	landfill	4A1 Managed Waste Disposal Sites	0.029	0.010	2.04	0.19	217	73
S01184	38.2091	-121.9745	10/6/17	18:29	landfill	4A1 Managed Waste Disposal Sites	0.037	0.022	2.04	0.19	273	167
S01185	38.2082	-121.9716	10/6/17	18:10	landfill	4A1 Managed Waste Disposal Sites	0.043	0.013	2.04	0.19	318	100
S01185	38.2082	-121.9716	10/6/17	18:22	landfill	4A1 Managed Waste Disposal Sites	0.010	0.001	2.04	0.19	77	10
S01186	38.2089	-121.9759	10/6/17	18:10	landfill	4A1 Managed Waste Disposal Sites	0.132	0.032	2.04	0.19	968	252
S01186	38.2089	-121.9759	10/6/17	18:22	landfill	4A1 Managed Waste Disposal Sites	0.119	0.039	2.04	0.19	872	296
S01187	38.2088	-121.9808	10/6/17	18:10	landfill	4A1 Managed Waste Disposal Sites	0.038	0.010	2.04	0.19	276	75
S01197	38.1691	-122.5656	6/17/17	20:07	landfill	4A1 Managed Waste Disposal Sites	0.020	0.004	5.58	0.42	406	83
S01197	38.1691	-122.5656	6/20/17	22:18	landfill	4A1 Managed Waste Disposal Sites	0.006	0.004	3.58	0.96	76	60
S01197	38.1691	-122.5656	10/5/17	20:32	landfill	4A1 Managed Waste Disposal Sites	0.008	0.002	1.39	0.34	42	15
S01198	38.1666	-122.5629	6/20/17	22:18	landfill	4A1 Managed Waste Disposal Sites	0.010	0.004	3.58	0.96	123	57
S01198	38.1666	-122.5629	10/5/17	20:32	landfill	4A1 Managed Waste Disposal Sites	0.011	0.003	1.39	0.34	56	20
S01199	38.1637	-122.5625	6/17/17	20:07	landfill	4A1 Managed Waste Disposal Sites	0.011	0.001	5.58	0.42	227	29
S01199	38.1637	-122.5625	6/20/17	22:18	landfill	4A1 Managed Waste Disposal Sites	0.022	0.002	3.58	0.96	287	83
S01200	38.1624	-122.5625	10/5/17	20:32	landfill	4A1 Managed Waste Disposal Sites	0.029	0.009	1.39	0.34	146	56
S01207	35.3482	-118.7641	9/13/17	21:41	landfill	4A1 Managed Waste Disposal Sites	0.009	0.002	4.66	0.24	152	31
S01209	35.3510	-118.7656	9/13/17	21:41	landfill	4A1 Managed Waste Disposal Sites	0.005	0.002	4.66	0.24	91	28
S01212	35.9616	-120.0142	9/20/17	20:41	landfill	4A1 Managed Waste Disposal Sites	0.029	0.004	1.11	0.36	116	42
S01213	34.4385	-118.6448	9/7/17	18:41	landfill	4A1 Managed Waste Disposal Sites	0.114	0.030	1.95	0.34	802	253
S01214	34.4322	-118.6485	9/7/17	18:41	landfill	4A1 Managed Waste Disposal Sites	0.005	0.001	1.95	0.34	35	8
S01215	34.4355	-118.6462	9/7/17	18:41	landfill	4A1 Managed Waste Disposal Sites	0.014	0.004	1.95	0.34	98	32
S01217	37.5027	-122.4093	6/18/17	18:49	landfill	4A1 Managed Waste Disposal Sites	0.181	0.102	1.49	0.39	969	601
S01223	37.5011	-122.4139	10/6/17	21:54	landfill	4A1 Managed Waste Disposal Sites	0.112	0.030	3.65	0.85	1469	524
S01224	37.4987	-122.4124	10/6/17	21:54	landfill	4A1 Managed Waste Disposal Sites	0.033	0.017	3.65	0.85	431	250
S01225	37.8796	-121.1872	10/3/17	22:32	landfill	4A1 Managed Waste Disposal Sites	0.018	0.008	4.49	0.17	285	124
S01230	37.8773	-121.1898	10/3/17	22:32	landfill	4A1 Managed Waste Disposal Sites	0.067	0.030	4.49	0.17	1084	487
S01235	36.5298	-121.4045	10/7/17	20:42	landfill	4A1 Managed Waste Disposal Sites	0.014	0.002	1.99	0.65	98	34
S01236	36.5315	-121.4061	10/7/17	20:42	landfill	4A1 Managed Waste Disposal Sites	0.007	0.001	1.99	0.65	52	17
S01238	37.1861	-121.6681	6/18/17	20:01	landfill	4A1 Managed Waste Disposal Sites	0.008	0.001	1.40	0.68	40	21
S01238	37.1861	-121.6681	6/18/17	20:11	landfill	4A1 Managed Waste Disposal Sites	0.013	0.001	1.40	0.68	66	33
S01243	36.7101	-121.7588	10/7/17	20:21	landfill	4A1 Managed Waste Disposal Sites	0.050	0.007	4.19	0.36	755	124
S01245	36.7078	-121.7564	10/7/17	20:21	landfill	4A1 Managed Waste Disposal Sites	0.006	0.002	4.19	0.36	97	37
S01247	38.5166	-121.1835	10/5/17	21:17	landfill	4A1 Managed Waste Disposal Sites			3.90	0.06		
S01247	38.5166	-121.1835	10/5/17	21:21	landfill	4A1 Managed Waste Disposal Sites	0.075	0.022	3.90	0.06	1058	309
S01250	38.5214	-121.1878	10/5/17	21:21	landfill	4A1 Managed Waste Disposal Sites	0.010	0.002	3.90	0.06	136	23
S01253	35.5086	-119.4106	10/10/17	20:46	landfill	4A1 Managed Waste Disposal Sites	0.017	0.003	1.82	0.16	113	19
S01255	35.5107	-119.4110	11/13/17	20:33	landfill	4A1 Managed Waste Disposal Sites	0.022	0.004	1.44	0.04	112	19
S01256	32.7339	-117.0657	9/25/17	21:22	landfill	4A1 Managed Waste Disposal Sites	0.040	0.003	3.28	0.38	478	63
S01259	34.5945	-117.2681	9/11/16	17:48	landfill	4A1 Managed Waste Disposal Sites	0.012	0.007	2.30	0.61	103	61
S01260	34.5916	-117.2671	9/11/16	17:48	landfill	4A1 Managed Waste Disposal Sites	0.007	0.017	2.30	0.61	54	144
S01261	36.3917	-119.3786	9/19/17	19:49	landfill	4A1 Managed Waste Disposal Sites	0.003	0.001	4.62	0.10	130	18
S01262	36.3946	-119.3808	9/19/17	19:49	landfill	4A1 Managed Waste Disposal Sites	0.008	0.001	4.62	0.10	130	18
S01265	32.8530	-117.1676	9/25/17	21:46	landfill	4A1 Managed Waste Disposal Sites	0.009	0.002	3.33	0.26	110	30
S01266	32.8519	-117.1695	9/25/17	21:46	landfill	4A1 Managed Waste Disposal Sites	0.004	0.002	3.33	0.26	46	19
S01267	32.8508	-117.1661	9/25/17	21:46	landfill	4A1 Managed Waste Disposal Sites	0.014	0.001	3.33	0.26	170	21
S01269	37.7593	-121.7287	6/18/17	18:26	landfill	4A1 Managed Waste Disposal Sites	0.013	0.003	3.59	0.19	164	45
S01271	37.7610	-121.7258	6/18/17	18:26	landfill	4A1 Managed Waste Disposal Sites	0.028	0.002	3.59	0.19	366	31
S01272	37.7588	-121.7251	6/18/17	18:26	landfill	4A1 Managed Waste Disposal Sites	0.025	0.002	3.59	0.19	318	37
S01272	37.7588	-121.7251	10/6/17	18:53	landfill	4A1 Managed Waste Disposal Sites	0.058	0.008	2.95	0.46	620	132
S01273	37.7620	-121.7304	6/20/17	19:34	landfill	4A1 Managed Waste Disposal Sites	0.016	0.002	2.17	0.59	122	38
S01280	37.7593	-121.7238	10/6/17	18:41	landfill	4A1 Managed Waste Disposal Sites	0.011	0.001	2.95	0.46	122	23
S01280	37.7593	-121.7238	10/6/17	19:04	landfill	4A1 Managed Waste Disposal Sites	0.012	0.002	3.07	0.43	129	27
S01287	33.7204	-117.7028	10/23/17	21:50	landfill	4A1 Managed Waste Disposal Sites	0.098	0.022	2.01	1.22	709	457
S01287	33.7204	-117.7028	10/23/17	21:54	landfill	4A1 Managed Waste Disposal Sites	0.171	0.025	2.01	1.22	1240	771
S01288	33.7196	-117.7046	10/23/17	19:28	landfill	4A1 Managed Waste Disposal Sites	0.057	0.008	4.41	1.26	903	286
S01288	33.7196	-117.7046	10/23/17	21:54	landfill	4A1 Managed Waste Disposal Sites	0.063	0.023	2.01	1.22	456	324
S01295	33.9393	-117.8296	10/6/16	18:09	landfill	4A1 Managed Waste Disposal Sites	0.005	0.001	1.65	0.45	30	12
S01296	33.9399	-117.8415	10/6/16	18:09	landfill	4A1 Managed Waste Disposal Sites	0.016	0.002	1.65	0.45	96	29
S01305	37.4598	-121.9449	6/18/17	19:28	landfill	4A1 Managed Waste Disposal Sites	0.013	0.006	2.23	0.60	103	55
S01305	37.4598	-121.9449	6/18/17	19:28	landfill	4A1 Managed Waste Disposal Sites	0.015	0.002	2.23	0.60	118	36
S01305	37.4598	-121.9449	6/18/17	19:45	landfill	4A1 Managed Waste Disposal Sites	0.016	0.008	2.23	0.60	128	76
S01305	37.4598	-121.9449	10/6/17	21:35	landfill	4A1 Managed Waste Disposal Sites	0.010	0.001	3.28	0.73	114	28
S01306	37.4614	-121.9420	6/18/17	19:28	landfill	4A1 Managed Waste Disposal Sites	0.047	0.038	2.23	0.60	379	325
S01308	37.4600	-121.9462	6/18/17	19:34	landfill	4A1 Managed Waste Disposal Sites	0.045	0.013	2.23	0.60	359	141
S01309	37.4604	-121.9429	6/18/17	19:34	landfill	4A1 Managed Waste Disposal Sites	0.078	0.024	2.23	0.60	625	259
S01309	37.4604	-121.9429	6/18/17	19:45	landfill	4A1 Managed Waste Disposal Sites	0.037	0.020	2.23	0.60	296	183
S01311	37.4582	-121.9413	6/18/17	19:34	landfill	4A1 Managed Waste Disposal Sites	0.074	0.016	2.23	0.60	597	206
S01311	37.4582	-121.9413	6/18/17	19:45	landfill	4A1 Managed Waste Disposal Sites	0.107	0.048	2.23	0.60	861	451
S01311	37.4582	-121.9413	10/5/17	18:56	landfill	4A1 Managed Waste Disposal Sites	0.055	0.022	1.70	0.34	336	152
S01311	37.4582	-121.9413	10/5/17	19:07	landfill	4A1 Managed Waste Disposal Sites	0.090	0.023	2.29	0.44	739	239
S01311	37.4582	-121.9413	10/5/17	19:20	landfill	4A1 Managed Waste Disposal Sites	0.064	0.016	2.29	0.44	525	164
S01311	37.4582	-121.9413	10/5/17	19:26	landfill	4A1 Managed Waste Disposal Sites	0.132	0.052	2.29	0.44	1088	476
S01311	37.4582	-121.9413	10/6/17	21:35	landfill	4A1 Managed Waste Disposal Sites	0.066	0.018	3.28	0.73	777	275
S01311	37.4582	-121.9413	10/6/17	21:40	landfill	4A1 Managed Waste Disposal Sites	0.045	0.016	3.28	0.73	529	220
S01312	37.4597	-121.9371	6/18/17	19:34	landfill	4A1 Managed Waste Disposal Sites	0.271	0.096	2.23	0.60	2176	972
S01312	37.4597	-121.9371	6/18/17	19:45	landfill	4A1 Managed Waste Disposal Sites	0.233	0.072	2.23	0.60		
S01313	37.4575	-121.9436	10/5/17	18:56	landfill	4A1 Managed Waste Disposal Sites	0.023	0.014	1.70	0.34	142	89

Source Identifier	Plume Latitude (deg)	Plume Longitude (deg)	Date of detection	Time of detection (UTC)	Source type (best estimate)	Sectors (IPCC)	IME/r (kg/m)	$\sigma_{IME/r}$ (kg/m)	U_{10} (m/s)	σ_{U10} (m/s)	Q_{plume} (kg/hr)*	σ_{Qplume} (kg/hr)*
S01313	37.4575	-121.9436	10/5/17	19:20	landfill	4A1 Managed Waste Disposal Sites	0.086	0.034	2.29	0.44	710	311
S01313	37.4575	-121.9436	10/5/17	19:26	landfill	4A1 Managed Waste Disposal Sites	0.029	0.018	2.29	0.44	240	155
S01318	37.4584	-121.9471	10/5/17	18:56	landfill	4A1 Managed Waste Disposal Sites	0.017	0.004	1.70	0.34		
S01318	37.4584	-121.9471	10/5/17	19:07	landfill	4A1 Managed Waste Disposal Sites	0.004	0.001	2.29	0.44		
S01318	37.4584	-121.9471	10/5/17	19:20	landfill	4A1 Managed Waste Disposal Sites	0.016	0.001	2.29	0.44		
S01319	37.4570	-121.9385	10/5/17	18:56	landfill	4A1 Managed Waste Disposal Sites	0.032	0.014	1.70	0.34		
S01321	37.4598	-121.9414	10/5/17	19:07	landfill	4A1 Managed Waste Disposal Sites	0.082	0.024	2.29	0.44	676	237
S01323	37.4578	-121.9450	10/6/17	21:35	landfill	4A1 Managed Waste Disposal Sites	0.012	0.004	3.28	0.73		
S01327	34.4035	-118.9970	10/16/17	20:20	landfill	4A1 Managed Waste Disposal Sites	0.021	0.004	2.39	1.26		
S01328	34.4075	-118.9938	10/16/17	20:29	landfill	4A1 Managed Waste Disposal Sites	0.167	0.053	2.44	1.20	1467	857
S01330	34.4041	-118.9983	10/16/17	20:45	landfill	4A1 Managed Waste Disposal Sites	0.018	0.009	2.44	1.20		