SMM position	<b>Event location</b>	Means	No.	Observation	Description	Weapon	Date, time
SMM camera in Chermalyk	4-6km SSE	Recorded	2	Projectile	W to E	N/K	31-Oct, 19:26
(government- controlled, 77km S of Donetsk)	4-6km SSE	Recorded	8	Projectile	W to E	N/K	31-Oct, 19:28
SMM camera at Donetsk Filtration Station (15km N of Donetsk)	1-3km SSW	Recorded	1	Projectile	E to W	N/K	1-Nov, 02:36
SMM camera 1.5km NE of	3-5km E	Recorded	1	Explosion	Undetermined	N/K	31-Oct, 19:06
Hnutove (government-	3-5km E	Recorded	3	Projectile	In vertical flight	N/K	31-Oct, 19:07
controlled, 90km S of	3-5km E	Recorded	5	Projectile	S to N	N/K	31-Oct, 19:07
Donetsk)	3-5km E	Recorded	7	Projectile	S to N	N/K	31-Oct, 19:08
	3-5km E	Recorded	5	Projectile	SW to NE	N/K	31-Oct, 19:09
	3-5km E	Recorded	2	Projectile	W to E	N/K	31-Oct, 19:10
	3-5km E	Recorded	9	Projectile	S to N	N/K	31-Oct, 19:11
	3-5km E	Recorded	1	Projectile	N to S	N/K	31-Oct, 19:11
	3-5km E	Recorded	1	Explosion	Undetermined	N/K	31-Oct, 19:11
	2-4km E	Recorded	5	Projectile	SW to NE	N/K	31-Oct, 19:26
	3-5km E	Recorded	1	Explosion	Undetermined	N/K	31-Oct, 19:40
	3-5km E	Recorded	1	Burst	In vertical flight	N/K	31-Oct, 19:41
	1-3km ENE	Recorded	3	Projectile	S to N	N/K	1-Nov, 01:03
	1-3km ENE	Recorded	6	Projectile	W to E (also recorded by SMM camera in Pyshchevyk)	N/K	1-Nov, 01:30
	1-3km E	Recorded	2	Projectile	NW to SE	N/K	1-Nov, 01:46
	3-5km ENE	Recorded	4	Projectile	S to N	N/K	1-Nov, 16:59
	3-5km ENE	Recorded	8	Projectile	S to N (also recorded by SMM camera in Pyshchevyk)	N/K	1-Nov, 17:01
	3-5km ENE	Recorded	3	Explosion	Undetermined	N/K	1-Nov, 17:01
	3-5km ENE	Recorded	2	Projectile	S to N	N/K	1-Nov, 17:02

Table of ceasefire violations as of 1 November 2019<sup>9</sup>

<sup>&</sup>lt;sup>9</sup> The table only includes ceasefire violations directly observed by the SMM and it may include those also assessed to be live-fire exercises, controlled detonations, etc. Details provided – in terms of distance, direction, weapons-type, etc. – are based on assessments provided by monitors on the ground, and are not always necessarily precise. When information is not known (indicated with an "N/K"), the SMM was unable to ascertain such information due to distance, weather conditions and/or other considerations. Ceasefire violations recorded by more than one patrol and assessed to be the same are entered only once.

	3-5km ENE	Recorded	1	Projectile	S to N	N/K	1-Nov, 17:04
	3-5km E	Recorded	1	Projectile	S to N	N/K	1-Nov, 17:07
	3-5km E	Recorded	6	Projectile	S to N (also recorded by SMM camera in Pyshchevyk)	N/K	1-Nov, 17:08
	3-5km E	Recorded	3	Projectile	S to N	N/K	1-Nov, 17:09
	3-5km E	Recorded	1	Projectile	S to N	N/K	1-Nov, 17:10
	3-5km E	Recorded	1	Projectile	S to N	N/K	1-Nov, 17:12
	3-5km E	Recorded	2	Projectile	S to N	N/K	1-Nov, 17:13
	3-5km E	Recorded	4	Projectile	S to N	N/K	1-Nov, 17:15
	3-5km ENE	Recorded	9	Projectile	S to N	N/K	1-Nov, 17:16
	3-5km E	Recorded	4	Projectile	S to N	N/K	1-Nov, 17:17
	3-5km E	Recorded	12	Projectile	S to N (also recorded by SMM camera in Pyshchevyk)	N/K	1-Nov, 17:18
	3-5km E	Recorded	7	Projectile	S to N (also recorded by SMM camera in Pyshchevyk)	N/K	1-Nov, 17:19
	3-5km E	Recorded	3	Projectile	S to N (also recorded by SMM camera in Pyshchevyk)	N/K	1-Nov, 17:20
	3-5km E	Recorded	6	Projectile	S to N	N/K	1-Nov, 17:24
MM camera in Trasnohorivka government- ontrolled, 1km W of Donetsk)	3-5km SSE	Recorded	1	Projectile	WSW to ENE	N/K	31-Oct, 20:58
MM camera at ntry-exit heckpoint in	2-4km S	Recorded	2	Explosion	Also recorded by SMM camera in Hnutove camera	N/K	31-Oct, 19:06
Pyshchevyk (government- controlled, 84km S of Donetsk)	2-4km S	Recorded	5	Projectile	W to E (also recorded by SMM camera in Hnutove)	N/K	31-Oct, 19:07
	2-4km S	Recorded	1	Projectile	W to E (also recorded by SMM camera in Hnutove)	N/K	31-Oct, 19:08
	2-4km SSE	Recorded	2	Projectile	E to W	N/K	31-Oct, 19:08
	2-4km S	Recorded	3	Projectile	W to E (also recorded by SMM camera in Hnutove)	N/K	31-Oct, 19:09
	2-4km S	Recorded	2	Projectile	W to E (also recorded by SMM camera in Hnutove)	N/K	31-Oct, 19:10

2-4km S	Recorded	9	Projectile	W to E (also recorded by SMM camera in Hnutove)	N/K	31-Oct, 19:11
2-4km S	Recorded	2	Projectile	E to W (also recorded by SMM camera in Hnutove)	N/K	31-Oct, 19:11
2-4km S	Recorded	2	Explosion	Undetermined	N/K	31-Oct, 19:11
2-4km S	Recorded	3	Projectile	W to E	N/K	31-Oct, 19:12
2-4km S	Recorded	6	Projectile	W to E	N/K	31-Oct, 19:13
2-4km S	Recorded	3	Projectile	E to W	N/K	31-Oct, 19:13
2-4km S	Recorded	4	Projectile	W to E	N/K	31-Oct, 19:14
2-4km S	Recorded	10	Projectile	W to E	N/K	31-Oct, 19:15
2-4km S	Recorded	2	Projectile	W to E	N/K	31-Oct, 19:18
2-4km S	Recorded	2	Projectile	W to E	N/K	31-Oct, 19:20
2-4km S	Recorded	3	Projectile	W to E	N/K	31-Oct, 19:26
2-4km S	Recorded	2	Projectile	W to E	N/K	31-Oct, 19:28
4-6km S	Recorded	1	Projectile	W to E (also recorded by SMM camera in Hnutove)	N/K	31-Oct, 19:31
3-5km S	Recorded	1	Explosion	Undetermined	N/K	31-Oct, 19:32
4-6km S	Recorded	1	Illumination flare	In vertical flight (also recorded by SMM cameras in Hnutove and Chermalyk)	N/K	31-Oct, 19:36
4-6km S	Recorded	3	Projectile	NE to SW	N/K	31-Oct, 19:41
2-4km S	Recorded	2	Projectile	In vertical flight	N/K	31-Oct, 20:06
2-4km S	Recorded	1	Projectile	NE to SW (also recorded by SMM camera in Hnutove)	N/K	31-Oct, 20:18
2-4km S	Recorded	2	Projectile	NE to SW (also recorded by SMM camera in Hnutove)	N/K	31-Oct, 20:19
2-4km S	Recorded	3	Projectile	W to E (also recorded by SMM camera in Hnutove)	N/K	31-Oct, 20:19
2-4km S	Recorded	1	Projectile	N to S (also recorded by SMM camera in Hnutove)	N/K	31-Oct, 20:19
2-4km S	Recorded	14	Projectile	W to E (also recorded by SMM camera in Hnutove)	N/K	31-Oct, 20:23

2-4km S	Recorded	1	Projectile	W to E (also recorded by SMM camera in Hnutove)	N/K	31-Oct, 20:24
2-4km S	Recorded	5	Projectile	NE to SW also recorded by SMM camera in Hnutove)	N/K	31-Oct, 21:28
2-4km S	Recorded	10	Projectile	W to E (also recorded by SMM camera in Hnutove)	N/K	31-Oct, 22:19
2-4km S	Recorded	4	Projectile	W to E	N/K	31-Oct, 22:20
2-4km S	Recorded	3	Projectile	W to E	N/K	31-Oct, 22:21
2-4km S	Recorded	10	Projectile	W to E (also recorded by SMM camera in Hnutove)	N/K	31-Oct, 23:18
2-4km S	Recorded	3	Projectile	W to E (also recorded by SMM camera in Hnutove)	N/K	31-Oct, 23:36
2-4km S	Recorded	3	Projectile	W to E (also recorded by SMM camera in Hnutove)	N/K	31-Oct, 23:47
2-4km S	Recorded	4	Projectile	NE to SW	N/K	31-Oct, 23:48
2-4km S	Recorded	1	Projectile	NE to SW	N/K	31-Oct, 23:50
2-4km S	Recorded	3	Projectile	W to E (also recorded by SMM camera in Hnutove)	N/K	31-Oct, 23:50
2-4km S	Recorded	8	Projectile	W to E (also recorded by SMM camera in Hnutove)	N/K	31-Oct, 23:53
2-4km S	Recorded	2	Projectile	W to E (also recorded by SMM camera in Hnutove)	N/K	31-Oct, 23:56
2-4km S	Recorded	2	Projectile	W to E (also recorded by SMM camera in Hnutove)	N/K	1-Nov, 00:18
2-4km S	Recorded	7	Projectile	WSW to ENE	N/K	1-Nov, 00:30
3-5km S	Recorded	1	Explosion	Undetermined	N/K	1-Nov, 00:30
2-4km S	Recorded	1	Projectile	W to E	N/K	1-Nov, 00:58
3-5km S	Recorded	1	Projectile	W to E	N/K	1-Nov, 01:03
3-5km S	Recorded	1	Projectile	W to E	N/K	1-Nov, 01:09
3-5km S	Recorded	1	Projectile	SW to NE	N/K	1-Nov, 01:10
3-5km S	Recorded	1	Projectile	W to E	N/K	1-Nov, 01:15
2-4km S	Recorded	4	Projectile	W to E (also recorded by SMM camera in Hnutove)	N/K	1-Nov, 01:20

	2-4km S	Recorded	3	Projectile	W to E (also recorded by SMM camera in Hnutove)	N/K	1-Nov, 01:23
	2-4km S	Recorded	2	Projectile	WSW to ENE (also recorded by SMM camera in Hnutove)	N/K	1-Nov, 01:30
	3-5km S	Recorded	1	Projectile	W to E (in vertical flight)	N/K	1-Nov, 01:37
	2-4km S	Recorded	1	Muzzle flash		N/K	1-Nov, 01:42
	3-5km S	Recorded	5	Projectile	E to W	N/K	1-Nov, 01:46
	2-4km S	Recorded	1	Projectile	W to E (also recorded by SMM camera in Hnutove)	N/K	1-Nov, 02:00
	2-4km S	Recorded	1	Projectile	W to E (also recorded by SMM camera in Hnutove)	N/K	1-Nov, 02:01
	2-4km S	Recorded	2	Projectile	NW to SE (in vertical flight, also recorded by SMM camera in Hnutove)	N/K	1-Nov, 02:24
	3-5km S	Recorded	3	Projectile	W to E	N/K	1-Nov, 02:43
	3-5km S	Recorded	2	Projectile	W to E	N/K	1-Nov, 02:57
	3-5km S	Recorded	13	Projectile	W to E	N/K	1-Nov, 02:58
	3-5km S	Recorded	3	Projectile	W to E	N/K	1-Nov, 03:00
	3-5km S	Recorded	6	Projectile	W to E	N/K	1-Nov, 03:19
	2-4km S	Recorded	2	Projectile	W to E (also recorded by SMM camera in Hnutove)	N/K	1-Nov, 04:01
	3-5km S	Recorded	15	Projectile	W to E	N/K	1-Nov, 17:37
	3-5km S	Recorded	4	Projectile	SSW to NNE	N/K	1-Nov, 17:58
	2-4km S	Recorded	1	Projectile	E to W	N/K	1-Nov, 18:14
	2-4km S	Recorded	1	Explosion	Impact	N/K	1-Nov, 18:14
Oleksandrivka (non- government- controlled, 20km SW of Donetsk)	2-3km W	Heard	1	Explosion	Undetermined	N/K	1-Nov, 10:46
W edge of Petrovskyi (non- government- controlled, 15km SW of Donetsk city centre)	1-2km SW	Heard	2	Burst		Small arms	1-Nov, 11:15
About 1.5km WSW of Styla	3-4km NNE	Heard	1	Explosion	Undetermined	N/K	1-Nov, 11:08

(non- government- controlled, 34km S of Donetsk)	3-4km NNE	Heard	1	Explosion	Undetermined	N/K	1-Nov, 11:09
About 2km N of Petrivske (non- government- controlled, 41km S of Donetsk)	4-6km NNW	Heard	1	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	1-Nov, 10:43
About 1.5km E of Avdiivka	2km E	Heard	22	Shot		Small arms	1-Nov, 10:00
(government- controlled, 17km N of Donetsk)	2km E	Heard	3	Burst		Small arms	1-Nov, 10:00
SE edge of Avdiivka	1-1.5km ESE	Heard	4	Burst		HMG	1-Nov, 08:55
(government- controlled,	2km NNE	Heard	3	Burst		Small arms	1-Nov, 08:55
17km N of Donetsk)	1-1.5km SE	Heard	3	Burst		HIMG	1-Nov, 09:25-09:30
	1-1.5km SE	Heard	3	Shot		AGL	1-Nov, 09:25-09:30
	1km SE	Heard	3	Burst		HMG	1-Nov, 09:42
	2km SE	Heard	4	Explosion	Undetermined	N/K	1-Nov, 09:42
	2-3km NE	Heard	2	Explosion	Undetermined	N/K	1-Nov, 11:55
Bohdanivka (government- controlled, 41km south- west of Donetsk)	5-6km NNW	Heard	1	Explosion	Undetermined	N/K	1-Nov, 09:58
About 1.5km S of Nova Marivka (non- government- controlled, 64km south of Donetsk)	5-7km NW	Heard and saw	47	Explosion	Impact	Artillery (type N/K)	1-Nov, 12:30-12:59
Starohnativka (government-	2-3km ENE	Heard and saw	53	Explosion	Impact	N/K	1-Nov, 12:30-13:01
controlled, 51km south of Donetsk)	2-3km ENE	Heard	14	Burst		HMG	1-Nov, 12:30-13:01
About 2km NE of Chernenko	2-4km SE	Heard	2	Explosion	Undetermined	N/K	1-Nov, 14:12
(government- controlled, 86km S of	2-4km NE	Heard and saw	1	Explosion	Impact	Artillery (type N/K)	1-Nov, 14:16
Donetsk)	2-4km SE	Heard	15	Burst		HMG	1-Nov, 14:21
	2-4km NE	Heard and saw	1	Explosion	Impact	N/K	1-Nov, 14:26
SW edge of Zalizne (government- controlled, 42km NE of Donetsk)	5-7km SSE	Heard	2	Explosion	Undetermined	N/K	1-Nov, 10:15

E edge of Stanytsia Luhanska (government- controlled,	4-6km WSW	Heard	1	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	31-Oct, 21:29
16km NE of Luhansk)	4-6km WSW	Heard	1	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	31-Oct, 21:40