

**Table of ceasefire violations as of 2 November 2018<sup>1</sup>**

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
SMM camera in Berezove (government-controlled, 31km SW of Donetsk)	3-4km SE	Recorded	6	Projectile	SW to NE	N/K	1-Nov, 20:17
	3-4km SE	Recorded	1	Projectile	SW to NE	N/K	1-Nov, 20:19
	3-4km SE	Recorded	2	Explosion	Undetermined	N/K	1-Nov, 20:19
	3-4km SE	Recorded	6	Projectile	SW to NE	N/K	1-Nov, 22:23
	3-4km SE	Recorded	8	Projectile	SW to NE	N/K	1-Nov, 22:24
SMM camera in Chermalyk (government-controlled, 31km NE of Mariupol)	2-4km S	Recorded	2	Projectile	WSW to ENE	N/K	1-Nov, 19:20
	3-5km S	Recorded	3	Projectile	ENE to WSW	N/K	1-Nov, 20:06
	3-5km S	Recorded	1	Projectile	WSW to ENE	N/K	2-Nov, 00:52
SMM camera at Donetsk Filtration Station (15km N of Donetsk)	1-2km SSW	Recorded	1	Projectile	W to E	N/K	1-Nov, 17:31
	1-2km S	Recorded	1	Explosion	Undetermined	N/K	1-Nov, 18:29
	1-2km S	Recorded	15	Explosion	Undetermined	N/K	1-Nov, 18:30
	1-2km SSE	Recorded	1	Explosion	Undetermined	N/K	1-Nov, 18:30
	1-2km S	Recorded	3	Explosion	Undetermined	N/K	1-Nov, 18:32
	2-3km S	Recorded	1	Explosion	Undetermined	N/K	1-Nov, 18:40
	1-2km SSW	Recorded	1	Projectile	W to E	N/K	1-Nov, 18:45
	1-2km SSW	Recorded	1	Projectile	W to E	N/K	1-Nov, 18:46
	1-2km S	Recorded	2	Explosion	Undetermined	N/K	1-Nov, 19:34
	1-2km S	Recorded	1	Explosion	Undetermined	N/K	1-Nov, 19:35
	1-2km S	Recorded	1	Explosion	Undetermined	N/K	1-Nov, 19:36
	2-3km SSW	Recorded	1	Projectile	W to E	N/K	1-Nov, 19:37
	2-3km SSW	Recorded	1	Projectile	S to N	N/K	1-Nov, 19:37

<sup>1</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.

	1-2km SSW	Recorded	1	Projectile	W to E	N/K	1-Nov, 19:39
	1-2km S	Recorded	2	Projectile	E to W	N/K	1-Nov, 19:39
	1-2km SSW	Recorded	5	Explosion	Undetermined	N/K	1-Nov, 19:44
	1-2km S	Recorded	1	Projectile	W to E	N/K	1-Nov, 19:45
	1-2km SSW	Recorded	1	Projectile	W to E	N/K	1-Nov, 19:49
	1-2km SSW	Recorded	2	Projectile	E to W	N/K	1-Nov, 19:49
	1-2km SSW	Recorded	1	Projectile	NW to SE	N/K	1-Nov, 22:20
	1-2km SSW	Recorded	1	Projectile	NW to SE	N/K	1-Nov, 23:11
	1-2km S	Recorded	1	Projectile	E to W	N/K	1-Nov, 23:29
	1-2km S	Recorded	1	Projectile	E to W	N/K	2-Nov, 01:31
	SMM camera 1.5km NE of Hnutove (government-controlled, 20km NE of Mariupol)	2-4km E	Recorded	7	Projectile	S to N	N/K
2-4km E		Recorded	16	Projectile	WNW to ESE	Anti-aircraft gun (ZU-23, 23mm)	1-Nov, 21:55
2-4km ESE		Recorded	14	Projectile	WSW to ENE	Anti-aircraft gun (ZU-23, 23mm)	1-Nov, 22:09
2-4km ESE		Recorded	1	Illumination flare	WSW to ENE	N/K	1-Nov, 22:09
2-4km ESE		Recorded	7	Projectile	WSW to ENE	N/K	1-Nov, 22:09
2-4km E		Recorded	11	Projectile	WNW to ESE	N/K	1-Nov, 22:55
2-4km E		Recorded	2	Projectile	WNW to ESE	N/K	1-Nov, 22:55
2-4km E		Recorded	3	Projectile	WSW to ENE	N/K	1-Nov, 23:31
2-4km ESE		Recorded	1	Projectile	W to E	N/K	2-Nov, 00:15
2-4km ESE		Recorded	1	Projectile	WSW to ENE	N/K	2-Nov, 00:32
2-4km ESE		Recorded	1	Projectile	WSW to ENE	N/K	2-Nov, 00:32
2-4km ESE		Recorded	1	Projectile	WSW to ENE	N/K	2-Nov, 00:38
2-4km ESE		Recorded	1	Projectile	WNW to ESE	N/K	2-Nov, 00:38
2-4km ESE		Recorded	1	Projectile	SW to NE	N/K	2-Nov, 00:38
2-4km ESE		Recorded	1	Projectile	SW to NE	N/K	2-Nov, 00:39

	2-4km ESE	Recorded	1	Projectile	SW to NE	N/K	2-Nov, 00:40
	2-4km ESE	Recorded	2	Projectile	SW to NE	N/K	2-Nov, 00:41
	2-4km ESE	Recorded	1	Projectile	SW to NE	N/K	2-Nov, 00:41
	2-4km ESE	Recorded	1	Projectile	SW to NE	N/K	2-Nov, 00:41
	2-4km ESE	Recorded	1	Projectile	SW to NE	N/K	2-Nov, 00:41
	2-4km ESE	Recorded	2	Projectile	SW to NE	N/K	2-Nov, 00:42
	2-4km ESE	Recorded	1	Projectile	SW to NE	N/K	2-Nov, 00:42
	2-4km ESE	Recorded	1	Projectile	SW to NE	N/K	2-Nov, 00:42
	2-4km ESE	Recorded	1	Projectile	SW to NE	N/K	2-Nov, 00:44
	2-4km ESE	Recorded	1	Projectile	SW to NE	N/K	2-Nov, 00:45
	2-4km ESE	Recorded	1	Projectile	SW to NE	N/K	2-Nov, 00:46
	2-4km ESE	Recorded	1	Projectile	SW to NE	N/K	2-Nov, 00:47
	2-4km E	Recorded	11	Projectile	S to N	N/K	2-Nov, 01:21
	2-4km ESE	Recorded	3	Projectile	W to E	N/K	2-Nov, 01:31
	2-4km E	Recorded	16	Projectile	S to N	N/K	2-Nov, 02:36
	2-4km E	Recorded	3	Projectile	NW to SE	N/K	2-Nov, 04:25
SMM camera E of Lomakyne (government-controlled, 15km NE of Mariupol)	2-4km NE	Recorded	2	Projectile	ESE to WNW	N/K	1-Nov, 18:22
	2-4km ENE	Recorded	1	Projectile	WNW to ESE	N/K	1-Nov, 18:46
	2-4km ENE	Recorded	1	Projectile	WNW to ESE	N/K	1-Nov, 18:51
	2-4km NE	Recorded	7	Projectile	WNW to ESE	N/K	1-Nov, 18:52
	2-4km NE	Recorded	1	Projectile	SE to NW	N/K	1-Nov, 19:10
	2-4km ENE	Recorded	4	Projectile	WNW to ESE	N/K	1-Nov, 19:15
	3-5km NE	Recorded	12	Projectile	NW to SE	N/K	1-Nov, 20:16
	3-5km ENE	Recorded	6	Projectile	NW to SE	N/K	1-Nov, 20:31
	3-5km ENE	Recorded	1	Projectile	NW to SE	N/K	1-Nov, 20:32
	3-5km NE	Recorded	5	Projectile	NW to SE	N/K	1-Nov, 20:35

	3-5km NE	Recorded	12	Projectile	NW to SE	N/K	1-Nov, 20:54
	3-5km NE	Recorded	17	Projectile	SE to NW	N/K	1-Nov, 20:54
	3-5km NE	Recorded	2	Projectile	NW to SE	N/K	1-Nov, 20:55
	3-5km NE	Recorded	2	Projectile	SE to NW	N/K	1-Nov, 21:21
	3-5km ENE	Recorded	15	Projectile	NW to SE	N/K	1-Nov, 21:26
	3-5km NE	Recorded	11	Projectile	NW to SE	N/K	1-Nov, 22:09
	3-5km ENE	Recorded	3	Projectile	NW to SE	N/K	1-Nov, 22:26
	3-5km ENE	Recorded	1	Explosion	Undetermined	N/K	1-Nov, 23:22
	3-5km NE	Recorded	1	Projectile	NW to SE	N/K	1-Nov, 23:36
	3-5km NE	Recorded	1	Explosion	Outgoing	N/K	1-Nov, 23:36
	3-5km NE	Recorded	1	Explosion	Undetermined	N/K	1-Nov, 23:44
	3-5km ENE	Recorded	3	Projectile	NW to SE	N/K	2-Nov, 00:07
	3-5km NE	Recorded	1	Projectile	NW to SE	N/K	2-Nov, 00:17
	3-5km NE	Recorded	2	Projectile	NW to SE	N/K	2-Nov, 00:31
	3-5km NE	Recorded	4	Projectile	SE to NW	N/K	2-Nov, 01:27
	3-5km NE	Recorded	3	Projectile	SE to NW	N/K	2-Nov, 01:31
	3-5km NE	Recorded	2	Projectile	In vertical flight	N/K	2-Nov, 01:31
	3-5km NE	Recorded	1	Projectile	SE to NW	N/K	2-Nov, 01:46
	3-5km NE	Recorded	1	Projectile	NW to SE	N/K	2-Nov, 01:46
	SMM camera at entry-exit checkpoint in Marinka (government-controlled, 23km SW of Donetsk)	2-4km NNE	Recorded	1	Projectile	W to E	N/K
2-4km NNE		Recorded	1	Projectile	W to E	N/K	1-Nov, 18:37
2-4km NNE		Recorded	1	Projectile	E to W	N/K	1-Nov, 18:39
2-4km NNE		Recorded	1	Explosion	Undetermined	N/K	1-Nov, 18:39
2-4km NNE		Recorded	7	Projectile	W to E	N/K	1-Nov, 18:41
1-3km NNE		Recorded	3	Projectile	E to W	N/K	1-Nov, 21:46
1-3km NNE		Recorded	1	Projectile	In vertical flight	N/K	2-Nov, 00:58
1-3km NNE		Recorded	2	Projectile	W to E	N/K	2-Nov, 00:59

	1-3km NNE	Recorded	7	Projectile	W to E	N/K	2-Nov, 01:28
	1-3km NNE	Recorded	2	Projectile	W to E	N/K	2-Nov, 02:43
	1-3km NNE	Recorded	1	Projectile	In vertical flight	N/K	2-Nov, 02:43
SMM camera at Oktiabr mine (non-government-controlled, 9km NW of Donetsk city centre)	2-3km NE	Recorded	1	Projectile	NW to SE	N/K	1-Nov, 18:44
	2-4km NNE	Recorded	1	Projectile	NW to SE	N/K	1-Nov, 18:44
SMM camera at entry-exit checkpoint in Pyshevyk (government-controlled, 25km NE of Mariupol)	2-4km SSE	Recorded	2	Projectile	E to W	N/K	1-Nov, 18:22
	2-4km SSE	Recorded	1	Projectile	E to W	N/K	1-Nov, 18:35
	2-4km SSE	Recorded	16	Projectile	W to E	N/K	1-Nov, 18:52
	2-4km SSE	Recorded	5	Projectile	E to W	N/K	1-Nov, 18:54
	2-4km SSE	Recorded	2	Projectile	W to E	N/K	1-Nov, 18:54
	2-4km SSE	Recorded	1	Projectile	E to W	N/K	1-Nov, 18:59
	2-4km SSE	Recorded	3	Projectile	E to W	N/K	1-Nov, 19:10
	2-4km SSE	Recorded	15	Projectile	W to E	N/K	1-Nov, 19:28
	2-4km SSE	Recorded	1	Projectile	E to W	N/K	1-Nov, 19:45
	2-3km SSE	Recorded	1	Projectile	W to E	N/K	1-Nov, 20:02
	2-3km SSE	Recorded	1	Projectile	W to E	N/K	1-Nov, 20:03
	2-3km SSE	Recorded	1	Projectile	W to E	N/K	1-Nov, 20:04
	2-3km SSE	Recorded	3	Projectile	W to E	N/K	1-Nov, 20:05
	2-3km SSE	Recorded	1	Projectile	W to E	N/K	1-Nov, 20:06
	2-3km SSE	Recorded	2	Projectile	W to E	N/K	1-Nov, 20:09
	2-3km SSE	Recorded	7	Projectile	W to E	N/K	1-Nov, 20:16
	2-3km SSE	Recorded	1	Projectile	NE to SW	N/K	1-Nov, 20:16
	2-3km S	Recorded	2	Projectile	SW to NE	N/K	1-Nov, 20:31
	2-3km SSE	Recorded	6	Projectile	W to E	N/K	1-Nov, 20:35
	2-3km SSE	Recorded	7	Projectile	W to E	N/K	1-Nov, 20:54
2-3km SSE	Recorded	7	Projectile	E to W	N/K	1-Nov, 20:54	
2-3km SSE	Recorded	1	Projectile	W to E	N/K	1-Nov, 20:55	

2-3km S	Recorded	1	Projectile	E to W	N/K	1-Nov, 21:00
2-3km SSE	Recorded	7	Projectile	E to W	N/K	1-Nov, 21:26
2-3km E	Recorded	1	Projectile	W to E	N/K	1-Nov, 21:26
1-2km S	Recorded	1	Explosion	Undetermined	N/K	1-Nov, 21:47
1-2km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	1-Nov, 22:09
1-2km SSE	Recorded	10	Projectile	SW to NE	N/K	1-Nov, 22:09
1-2km SSE	Recorded	4	Projectile	W to E	N/K	1-Nov, 23:10
1-2km S	Recorded	6	Projectile	E to W	N/K	1-Nov, 23:10
1-2km S	Recorded	1	Projectile	W to E	N/K	1-Nov, 23:12
1-2km S	Recorded	2	Projectile	W to E	N/K	1-Nov, 23:16
1-2km S	Recorded	1	Projectile	SW to NE	N/K	1-Nov, 23:36
1-2km S	Recorded	3	Muzzle flash		N/K	2-Nov, 00:07
1-2km S	Recorded	2	Projectile	E to W	N/K	2-Nov, 00:14
1-2km S	Recorded	1	Projectile	W to E	N/K	2-Nov, 00:31
1-2km S	Recorded	2	Projectile	SW to NE	N/K	2-Nov, 00:32
1-2km S	Recorded	2	Projectile	SW to NE	N/K	2-Nov, 00:40
1-2km S	Recorded	2	Projectile	E to W	N/K	2-Nov, 00:40
1-2km S	Recorded	6	Projectile	W to E	N/K	2-Nov, 00:41
1-2km S	Recorded	4	Projectile	W to E	N/K	2-Nov, 00:42
1-2km S	Recorded	2	Projectile	E to W	N/K	2-Nov, 00:42
1-2km S	Recorded	2	Projectile	E to W	N/K	2-Nov, 00:43
1-2km S	Recorded	3	Projectile	W to E	N/K	2-Nov, 00:44
1-2km S	Recorded	1	Projectile	E to W	N/K	2-Nov, 00:44
1-2km S	Recorded	1	Projectile	W to E	N/K	2-Nov, 00:46
1-2km S	Recorded	1	Projectile	W to E	N/K	2-Nov, 00:47
1-2km S	Recorded	1	Projectile	W to E	N/K	2-Nov, 00:48
1-2km S	Recorded	6	Projectile	E to W	N/K	2-Nov, 01:31

1.1km NW of the railway station in Yasynuvata (non-government-controlled, 16km NE of Donetsk)	2-3km SSW	Heard	2	Explosion	Undetermined	N/K	2-Nov, 09:12
	2-3km SW	Heard	3	Burst		Small arms	2-Nov, 09:18
	1-2km SW	Heard	5	Shot		Small arms	2-Nov, 09:21
	2-3km S	Heard	2	Shot		Small arms	2-Nov, 09:22
	2-3km SSW	Heard	2	Explosion	Impact	N/K	2-Nov, 09:25
	2-3km WNW	Heard	2	Explosion	Undetermined	N/K	2-Nov, 09:25
	2-3km SW	Heard	1	Explosion	Undetermined	N/K	2-Nov, 09:26
	3-4km SW	Heard	1	Explosion	Undetermined	N/K	2-Nov, 09:28
	2-3km SW	Heard	1	Explosion	Undetermined	N/K	2-Nov, 09:30
	3-4km S	Heard	2	Explosion	Undetermined	N/K	2-Nov, 09:31
	2-3km WSW	Heard	1	Burst		Small arms	2-Nov, 09:31
	2-3km S	Heard	2	Explosion	Undetermined	N/K	2-Nov, 09:37
	2-3km SE	Heard	4	Explosion	Undetermined	N/K	2-Nov, 09:48-09:56
	1km SW	Heard	1	Shot		Small arms	2-Nov, 09:57
	1-2km SW	Heard	6	Shot		Small arms	2-Nov, 09:59
	1-2km SW	Heard	26	Shot		Small arms	2-Nov, 10:00-10:03
	1-2km SW	Heard	1	Burst		Small arms	2-Nov, 10:03
	1-2km SW	Heard	26	Burst		HMG	2-Nov, 10:06-10:07
	2-3km W	Heard	2	Burst		Small arms	2-Nov, 10:08
	1-2km SW	Heard	7	Burst		HMG	2-Nov, 10:09
	2-3km S	Heard	2	Burst		Small arms	2-Nov, 10:11
	200m SW	Heard	1	Shot		Small arms	2-Nov, 10:12
	1-2km SE	Heard	1	Explosion	Undetermined	N/K	2-Nov, 10:12
	1-2km N	Heard	2	Shot		Small arms	2-Nov, 10:13
1km WSW	Heard and saw	3	Explosion	Outgoing	Mortar (type N/K)	2-Nov, 10:15-10:16	

3-4km SW	Heard	1	Explosion	Impact	Mortar (type N/K)	2-Nov, 10:17
1km SW	Heard	2	Burst		HMG	2-Nov, 10:18
1km S	Heard	1	Explosion	Outgoing	AGL	2-Nov, 10:19
1-2km S	Heard and saw	1	Explosion	Impact	AGL	2-Nov, 10:19
2-3km SW	Heard	2	Explosion	Undetermined	N/K	2-Nov, 10:19
1-3km SW	Heard	2	Explosion	Outgoing	AGL	2-Nov, 10:20
1-3km SW	Heard	4	Explosion	Undetermined	N/K	2-Nov, 10:20-10:21
2-3km SE	Heard	2	Explosion	Undetermined	N/K	2-Nov, 10:22
200m SW	Heard	1	Shot		Small arms	2-Nov, 10:27
3-4km SE	Heard	2	Explosion	Undetermined	N/K	2-Nov, 10:28
1km SW	Heard	1	Explosion	Undetermined	AGL	2-Nov, 10:29
1-2km SW	Heard	48	Burst		Small arms	2-Nov, 10:33-10:34
2km SW	Heard and saw	1	Explosion	Impact	N/K	2-Nov, 10:35
2-3km SW	Heard	2	Explosion	Undetermined	N/K	2-Nov, 10:36
1-2km SW	Heard	Uncountable	Burst	Uncountable	Small arms	2-Nov, 10:36
1-2km SW	Heard	1	Explosion	Undetermined	AGL	2-Nov, 10:38
1-2km SW	Heard	59	Burst		Small arms	2-Nov, 10:38-10:39
2-3km SW	Heard and saw	1	Explosion	Impact	N/K	2-Nov, 10:40
1-2km SW	Heard	8	Burst		Small arms	2-Nov, 10:42
3-4km SE	Heard	2	Explosion	Undetermined	N/K	2-Nov, 10:43
2-3km SW	Heard	3	Explosion	Undetermined	N/K	2-Nov, 10:47
2-3km SW	Heard and saw	2	Explosion	Impact	N/K	2-Nov, 10:47
1-2km SW	Heard	89	Burst		Small arms	2-Nov, 10:58-11:00
3-4km SE	Heard	2	Explosion	Undetermined	N/K	2-Nov, 11:02
2km SW	Heard	14	Shot		Small arms	2-Nov, 11:04



1-2km SW	Heard	1	Explosion	Undetermined	AGL	2-Nov, 11:05
3-4km SW	Heard	1	Explosion	Undetermined	N/K	2-Nov, 11:05
1-2km SW	Heard	2	Explosion	Undetermined	AGL	2-Nov, 11:07
3-4km WSW	Heard	4	Explosion	Undetermined	N/K	2-Nov, 11:08-11:09
3-4km SE	Heard	2	Explosion	Undetermined	N/K	2-Nov, 11:08
1-2km SW	Heard	1	Explosion	Undetermined	AGL	2-Nov, 11:09
3-4km SW	Heard	2	Explosion	Undetermined	N/K	2-Nov, 11:11
1-2km N	Heard	Uncountable	Burst	Overlapping	Small arms	2-Nov, 11:11
3-4km SW	Heard and saw	1	Explosion	Impact	N/K	2-Nov, 11:12
2-3km SW	Heard and saw	2	Explosion	Impact	N/K	2-Nov, 11:16
1km SW	Heard and saw	1	Explosion	Impact (airburst)	Artillery (type N/K)	2-Nov, 11:17
3-4km N	Heard	1	Explosion	Undetermined	AGL	2-Nov, 11:24
1-3km N	Heard	3	Burst		HMG	2-Nov, 11:25
3-4km SW	Heard	3	Explosion	Undetermined	N/K	2-Nov, 11:28
1-2km SW	Heard	43	Burst		Small arms	2-Nov, 11:36-11:46
5-6km N	Heard	1	Explosion	Undetermined	N/K	2-Nov, 11:58
5-6km SSW	Heard	1	Explosion	Undetermined	N/K	2-Nov, 11:59
3-5km SW	Heard and saw	1	Explosion	Undetermined	N/K	2-Nov, 13:03
1km SW	Heard	1	Shot		Small arms	2-Nov, 13:17
1-2km SW	Heard	3	Burst		Small arms	2-Nov, 13:20
2-3km SW	Heard	1	Explosion	Impact	N/K	2-Nov, 13:21
2-3km SW	Heard	2	Explosion	Undetermined	N/K	2-Nov, 13:22
1-2km SW	Heard	1	Explosion	Outgoing	AGL	2-Nov, 13:22
1-2km SW	Heard	1	Burst		HMG	2-Nov, 13:23
1-2km SW	Heard	4	Burst		Small arms	2-Nov, 13:25
3-4km SW	Heard	2	Explosion	Undetermined	N/K	2-Nov, 13:25

	1km SW	Heard	2	Shot		Small arms	2-Nov, 13:33
	2-3km SW	Heard	1	Explosion	Undetermined	N/K	2-Nov, 13:34
	1-2km SW	Heard	2	Shot		Small arms	2-Nov, 13:58-14:01
	3-4km SW	Heard	2	Explosion	Undetermined	N/K	2-Nov, 14:08
	2-4km WSW	Heard	4	Explosion	Undetermined	N/K	2-Nov, 14:10-14:11
	1-2km N	Heard	3	Shot		Small arms	2-Nov, 14:14
	1-2km N	Heard	10	Shot	Undetermined	IFV (BMP-2)	2-Nov, 14:15-14:18
	1km SW	Heard	2	Burst		Small arms	2-Nov, 14:18
	1-2km N	Heard	9	Shot	Undetermined	IFV (BMP-2)	2-Nov, 14:22-14:25
SE part of Avdiivka (government-controlled, 17km N of Donetsk)	2-3km SE	Heard	1	Explosion	Undetermined	N/K	2-Nov, 09:26
	2-3km E	Heard	3	Burst		Small arms	2-Nov, 09:29
	2-3km E	Heard	2	Explosion	Undetermined	N/K	2-Nov, 09:29
	2-3km E	Heard	16	Shot		Small arms	2-Nov, 09:29
	2-3km E	Heard	Uncountable	Shot and burst	Overlapping	Small arms	2-Nov, 10:06
	2-3km E	Heard	6	Explosion	Undetermined	N/K	2-Nov, 10:15-10:22
	2-3km E	Heard	4	Shot		Small arms	2-Nov, 10:15-10:22
	2-3km E	Heard	9	Shot		Small arms	2-Nov, 10:25-10:36
	2-3km E	Heard	43	Burst		HMG	2-Nov, 10:25-10:36
	2-3km E	Heard	4	Explosion	Undetermined	N/K	2-Nov, 10:25-10:36
	2-3km E	Heard	47	Burst		HMG	2-Nov, 10:38-10:43
	2-3km E	Heard	2	Explosion	Undetermined	N/K	2-Nov, 10:38-10:43

	2-3km E	Heard	6	Shot		Small arms	2-Nov, 10:38-10:43
	2-3km E	Heard	37	Burst		HMG	2-Nov, 10:58-11:01
	2-3km E	Heard	7	Explosion	Undetermined	N/K	2-Nov, 11:03-11:13
	2-3km E	Heard	Uncountable	Shot and burst	Overlapping	Small arms	2-Nov, 11:03-11:13
	1.5-2km SE	Heard	6	Explosion	Undetermined	N/K	2-Nov, 11:16
	2-3km E	Heard	10	Explosion	Undetermined	AGL	2-Nov, 11:29
	2-3km E	Heard	Uncountable	Shot and burst	Overlapping	Small arms	2-Nov, 11:42
	2-4km E	Heard	1	Explosion	Outgoing	N/K	2-Nov, 14:05
	2-4km E	Heard and saw	1	Explosion	Impact	N/K	2-Nov, 14:05
	2-4km E	Heard	Uncountable	Shot	Overlapping	Small arms	2-Nov, 14:05-14:15
	2-4km E	Heard	1	Explosion	Undetermined	N/K	2-Nov, 14:15
Krasnohorivka (government-controlled, 21km W of Donetsk)	3-5km SSE	Heard	6	Explosion	Undetermined	N/K	2-Nov, 11:57-12:24
	3-4km SSE	Heard	5	Burst		HMG	2-Nov, 12:25
Marinka (government-controlled, 23km SW of Donetsk)	2-4km E	Heard	6	Explosion	Undetermined	N/K	2-Nov, 12:07-12:27
	2-3km NE	Heard	3	Shot		Small arms	2-Nov, 12:28
2km NE of Chernenko (government-controlled, 21km NE of Mariupol)	N/K E	Heard	3	Explosion	Undetermined	N/K	2-Nov, 09:51-09:55
1km NNW of Pyshevyk (government-controlled, 25km NE of Mariupol)	N/K ESE	Heard	1	Explosion	Undetermined	N/K	2-Nov, 09:59
	N/K SE	Heard	1	Explosion	Undetermined	N/K	2-Nov, 10:14

500m E of Pyshevyk (government-controlled, 25km NE of Mariupol)	1km ENE	Heard	1	Explosion	Outgoing	N/K	2-Nov, 10:15
Pyshevyk (government-controlled, 25km NE of Mariupol)	1-2km E	Heard	1	Explosion	Impact	N/K	2-Nov, 10:25
1km W of Verkhnohyrokiyske (non-government-controlled, 29km NE of Mariupol)	1-2km N	Heard	2	Explosion	Undetermined	N/K	2-Nov, 10:32
Horlivka (non-government-controlled, 39km NE of Donetsk)	5-6km SSW	Heard	16	Burst		HMG	1-Nov, 18:30-18:33
	4-5km SW	Heard	3	Burst		HMG	1-Nov, 18:35
	5-6km SW	Heard	2	Explosion	Undetermined	N/K	1-Nov, 18:37
	5-6km SW	Heard	2	Explosion	Undetermined	N/K	1-Nov, 18:40-18:41
	4-6km SW	Heard	1	Explosion	Undetermined	N/K	1-Nov, 18:50
	4-5km SW	Heard	1	Explosion	Undetermined	N/K	1-Nov, 20:12
	2-3km SW	Heard	11	Burst		HMG	1-Nov, 20:20-20:22
	2-3km SW	Heard	1	Explosion	Undetermined	N/K	1-Nov, 20:23
	6-7km SSW	Heard	1	Explosion	Undetermined	N/K	1-Nov, 20:25
	3-4km SW	Heard	1	Explosion	Undetermined	N/K	1-Nov, 20:26
	4-5km SW	Heard	3	Burst		HMG	1-Nov, 20:27-20:28
	3-4km SW	Heard	5	Explosion	Undetermined	N/K	1-Nov, 20:39-20:56

	3-4km SW	Heard	1	Explosion	Undetermined	N/K	1-Nov, 21:05
Svitlodarsk (government-controlled, 57km NE of Donetsk)	5-6km SW	Heard	7	Shot		Small arms	1-Nov, 20:38
	5-6km SW	Heard	6	Burst		Small arms	1-Nov, 21:15
	5-6km SW	Heard	13	Burst		Small arms	1-Nov, 21:48
E edge of Kamianka (government-controlled, 20km N of Donetsk)	1-2km E	Heard	1	Shot		Small arms	2-Nov, 09:00
	1-2km E	Heard	3	Burst		Small arms	2-Nov, 09:03
	1-2km E	Heard	4	Burst		Small arms	2-Nov, 09:04
	2km S	Heard	6	Burst		HMG	2-Nov, 09:21
	1-2km ESE	Heard	4	Shot		Small arms	2-Nov, 09:21
	1-2km S	Heard	6	Burst		HMG	2-Nov, 09:23
	2-3km S	Heard	1	Explosion	Undetermined	N/K	2-Nov, 09:25
	400-500m E	Heard	8	Shot		Small arms	2-Nov, 09:25-06:27
	2-3km SSW	Heard	3	Explosion	Undetermined	N/K	2-Nov, 10:18
	3-4km SSE	Heard	2	Explosion	Undetermined	N/K	2-Nov, 10:22
	2-3km SSE	Heard	6	Explosion	Undetermined	N/K	2-Nov, 10:35-10:46
	2-3km SSE	Heard	6	Explosion	Undetermined	N/K	2-Nov, 11:05
	4-6km SSE	Heard	3	Explosion	Undetermined	N/K	2-Nov, 11:12
	400-500m ESE	Heard	1	Explosion	Undetermined	N/K	2-Nov, 11:33
	5-7km S	Heard	1	Explosion	Undetermined	N/K	2-Nov, 12:26
	1km S	Heard	1	Explosion	Undetermined	N/K	2-Nov, 13:02
5-7km S	Heard	2	Explosion	Undetermined	N/K	2-Nov, 13:22	
5km SE	Heard	2	Burst		HMG	2-Nov, 13:33	
2km WSW of Zalizne (government-controlled, 42km NE of Donetsk)	2-3km NNE	Heard	2	Shot		Small arms	2-Nov, 12:29
	2-3km NNE	Heard	1	Burst		Small arms	2-Nov, 12:30
	5-7km S	Heard	1	Explosion	Undetermined	N/K	2-Nov, 13:02
	5-7km S	Heard	2	Explosion	Undetermined	N/K	2-Nov, 13:14

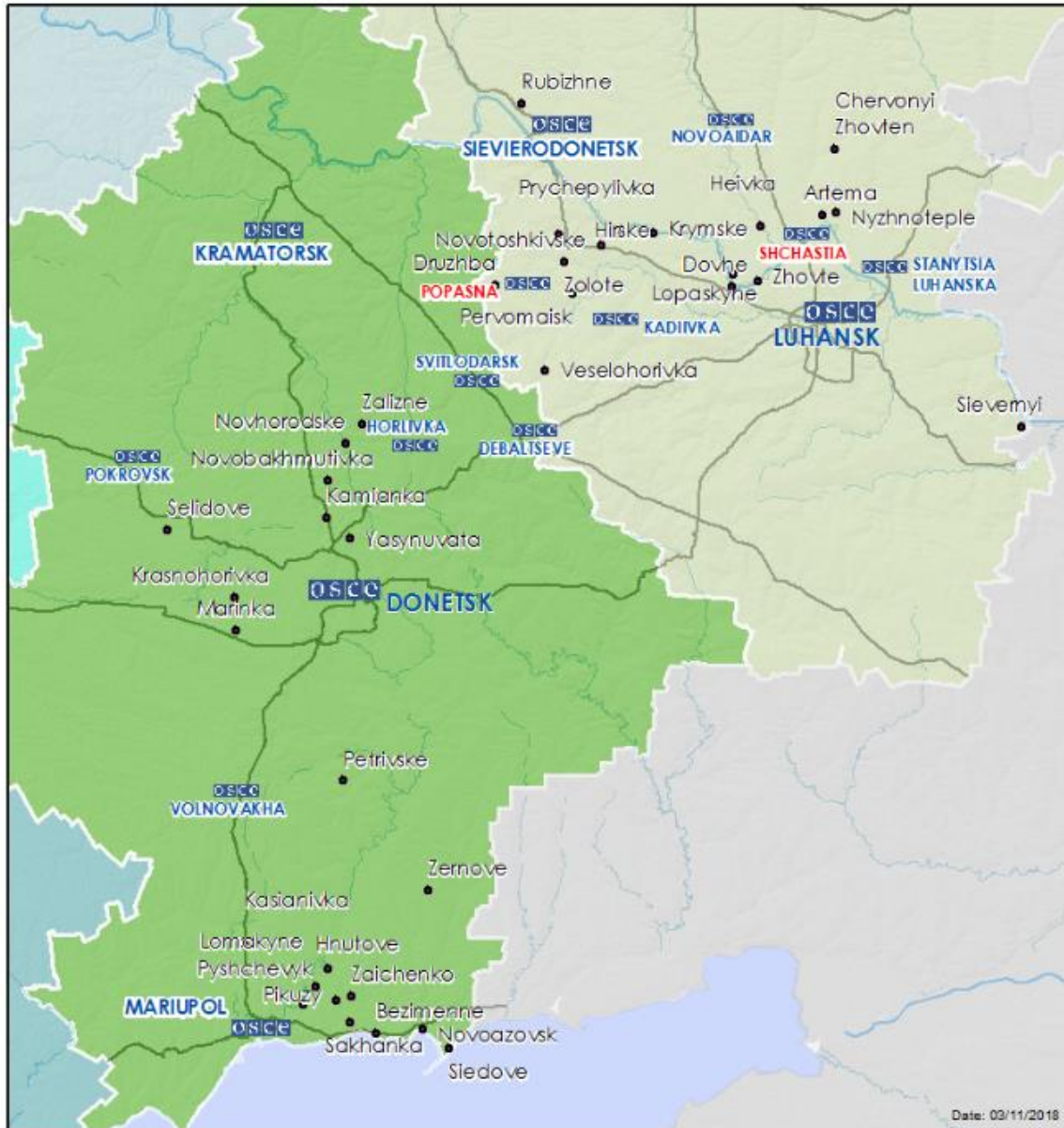
SMM camera in Kriakivka (government-controlled, 38km NW of Luhansk)	3-5km SW	Recorded	1	Projectile	W to E	N/K	1-Nov, 22:30
Kalynove (non-government-controlled, 60km W of Luhansk)	2km W	Heard	7	Shot and Burst		HMG	2-Nov, 09:37
	5km W	Heard	2	Explosion	Undetermined	N/K	2-Nov, 10:00
S edge of the Zolote disengagement area (58km W of Luhansk) (inside the disengagement area)	3-5km NE	Heard	5	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	2-Nov, 09:58-10:12
S outskirts of Zolote (government-controlled, 60km W of Luhansk)	2km SSE	Heard	6	Explosion	Outgoing (assessed as outside the disengagement area)	N/K	2-Nov, 10:00-10:21
	2km SSE	Heard	5	Shot	Assessed as outside the disengagement area	Small arms	2-Nov, 10:00
Zolote-3/Stakhanovets (government-controlled, 61km W of Luhansk)	10km SSE	Heard	4	Explosion	Outgoing (assessed as outside the disengagement area)	N/K	2-Nov, 11:15-11:26
	1-2km S	Heard	1	Shot	Assessed as outside the disengagement area	Small arms	2-Nov, 11:15-11:26
Kriakivka (government-controlled, 38km NW of Luhansk)	4-6km NNE	Heard	6	Shot	Outgoing	Mortar	2-Nov, 10:41-11:02
	6-10km SSE	Heard	6	Explosion	Impact	Mortar	2-Nov, 10:41-11:02
	3-5km SSE	Heard	8	Shot	Outgoing and impact	APC (BTR)	2-Nov, 10:41-11:02

	3-5km SSE	Heard	3	Burst		HMG	2-Nov, 10:41-11:02
	3-5km SSE	Heard	3	Shot		Small arms	2-Nov, 10:41-11:02
Muratove (government-controlled, 51km NW of Luhansk)	3-5km ESE	Heard	3	Explosion	Impact	Mortar (120mm)	2-Nov, 10:58-11:03
3km S of Muratove (government-controlled, 51km NW of Luhansk)	3km ESE	Heard	23	Burst		HMG	2-Nov, 12:15-12:20
VeseloHorivka (non-government-controlled, 64km W of Luhansk)	4-5km WSW	Heard	21	Explosion	Undetermined	N/K	2-Nov, 11:30
Central Nyzhnie (government-controlled, 56km NW of Luhansk)	5-7km S	Heard	4	Explosion	Undetermined	N/K	2-Nov, 11:55-12:03
Obozne (non-government-controlled, 18km N of Luhansk)	1-2km NE	Heard	9	Explosion	Undetermined	N/K	2-Nov, 11:45-12:07
N outskirts of Kalynove Borshchuvate (non-government-controlled, 61km W of Luhansk)	6-8km SSW	Heard	73	Burst		IFV (BMP-2) cannon (30mm)	2-Nov, 12:20-12:37
	6-8km SSW	Heard	11	Burst		AGL	2-Nov, 12:20-12:37
	6-8km SSW	Heard	7	Explosion	Undetermined	N/K	2-Nov, 12:20-12:37
Artema (government-controlled, 26km N of Luhansk)	3-5km ESE	Heard	2	Explosion	Undetermined	N/K	2-Nov, 12:27-12:30

E outskirts of Toshkivka (government-controlled, 60km NW of Luhansk)	5-7km S	Heard	2	Explosion	Undetermined	N/K	2-Nov, 12:38
Khrystove (non- government-controlled, 18km N of Luhansk)	1km NE	Heard	15	Shot		Small arms	2-Nov, 12:47- 13:20
Stanytsia Luhanska (government-controlled, 16km NE of Luhansk)	2.5-3km SE	Heard	1	Explosion	Undetermined (assessed as outside the dis- engagement area)	N/K	2-Nov, 13:24



### Map of Donetsk and Luhansk regions<sup>2</sup>



<sup>2</sup> The SMM is deployed to ten locations throughout Ukraine – Kherson, Odessa, Lviv, Ivano-Frankivsk, Kharkiv, Donetsk, Dnipro, Chernivtsi, Luhansk and Kyiv – as per Permanent Council Decision 1117 of 21 March 2014. This map of eastern Ukraine is meant for illustrative purposes and indicates locations mentioned in the report, as well as those where the SMM has offices (monitoring teams, patrol hubs, and forward patrol bases) in Donetsk and Luhansk regions. (In red: forward patrol bases from which SMM staff has temporarily relocated based on recommendations of security experts from participating States as well as SMM security considerations).