

**Table of ceasefire violations as of 28 October 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)	2-4km SE	Recorded	2	Projectile	W to E	N/K	26-Oct, 19:16
	2-4km SE	Recorded	2	Projectile	W to E	N/K	26-Oct, 19:18
	2-4km SE	Recorded	2	Projectile	W to E	N/K	26-Oct, 19:21
	2-4km SE	Recorded	1	Explosion		N/K	26-Oct, 19:30
	2-4km SE	Recorded	1	Explosion		N/K	26-Oct, 19:33
	2-4km SE	Recorded	5	Projectile	SW to NE	N/K	26-Oct, 21:54
	2-4km SE	Recorded	1	Projectile	SW to NE	N/K	26-Oct, 21:58
	2-4km SE	Recorded	1	Projectile	SW to NE	N/K	26-Oct, 21:59
	2-4km SE	Recorded	1	Projectile	SW to NE	N/K	26-Oct, 22:04
	2-4km SE	Recorded	9	Projectile	WSW to ENE	N/K	27-Oct, 04:14
	2-4km SE	Recorded	5	Projectile	SW to NE	N/K	27-Oct, 04:42
SMM camera in Chermalyk (government-controlled, 31km NE of Mariupol)	2-3km SSE	Recorded	1	Explosion	Undetermined	N/K	26-Oct, 16:59
	2-3km SSE	Recorded	1	Explosion	Undetermined	N/K	26-Oct, 17:18
	8-10km SE	Recorded	1	Explosion	Undetermined	N/K	26-Oct, 18:58
	1-3km SSE	Recorded	1	Projectile	ENE to WSW	N/K	26-Oct, 19:47
	2-4km SSE	Recorded	2	Projectile	WSW to ENE	N/K	26-Oct, 20:56
	2-4km SSE	Recorded	4	Projectile	ENE to WSW	N/K	26-Oct, 20:56
	2-4km SSE	Recorded	3	Projectile	ENE to WSW	N/K	27-Oct, 04:34
	2-4km SSE	Recorded	1	Muzzle flash		N/K	27-Oct, 05:12
	2-4km SSE	Recorded	5	Projectile	WSW to ENE	N/K	27-Oct, 05:40
	2-4km SSE	Recorded	3	Projectile	WSW to ENE	N/K	27-Oct, 05:41
	2-4km SSE	Recorded	2	Projectile	WSW to ENE	N/K	27-Oct, 05:42
	2-4km SSE	Recorded	3	Projectile	WSW to ENE	N/K	27-Oct, 05:43
	2-4km SSE	Recorded	4	Projectile	WSW to ENE	N/K	27-Oct, 05:46
	2-4km SSE	Recorded	2	Projectile	WSW to ENE	N/K	27-Oct, 05:47
	2-4km SSE	Recorded	1	Projectile	In vertical flight	N/K	27-Oct, 05:47
	2-4km ESE	Recorded	7	Projectile	NNE to SSW	N/K	27-Oct, 18:02
	2-4km ESE	Recorded	5	Projectile	SW to NE	N/K	27-Oct, 18:05
	2-4km ESE	Recorded	7	Projectile	SW to NE	N/K	27-Oct, 18:06
2-4km ESE	Recorded	3	Projectile	SW to NE	N/K	27-Oct, 18:07	
SMM camera at Donetsk Filtration Station (15km N of Donetsk)	0.5-1km S	Recorded	1	Projectile	E to W	N/K	26-Oct, 18:17
	2-4km SSW	Recorded	1	Projectile	E to W	N/K	26-Oct, 19:44
	0.5-1km SSW	Recorded	2	Projectile	W to E	N/K	26-Oct, 19:49
	0.5-1km SSW	Recorded	2	Projectile	W to E	N/K	26-Oct, 19:51
	0.5-1km SSW	Recorded	2	Projectile	E to W	N/K	26-Oct, 19:51
	0.5-1km SSW	Recorded	3	Explosion	Undetermined	N/K	26-Oct, 19:52
	0.5-1km SSW	Recorded	1	Projectile	E to W	N/K	26-Oct, 19:52
	0.5-1km SSW	Recorded	1	Explosion	Undetermined	N/K	26-Oct, 19:56
	0.5-1km SSW	Recorded	1	Projectile	W to E	N/K	26-Oct, 19:56
	0.5-1km SSW	Recorded	1	Projectile	W to E	N/K	26-Oct, 19:58
	1-2km SSW	Recorded	2	Muzzle flash		N/K	26-Oct, 20:07

<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	2	Projectile	SSE to NNW	N/K	26-Oct, 20:07
0.2-1km SSW	Recorded	2	Explosion	Airburst	N/K	26-Oct, 20:07
1-2km S	Recorded	4	Projectile	SW to NE	N/K	26-Oct, 20:12
1-2km S	Recorded	1	Explosion	Impact	N/K	26-Oct, 20:12
1-2km S	Recorded	4	Projectile	SW to NE	N/K	26-Oct, 20:13
2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	26-Oct, 20:13
1-2km S	Recorded	2	Projectile	NW to SE	N/K	26-Oct, 20:14
2-4km SSW	Recorded	2	Explosion	Undetermined	N/K	26-Oct, 20:14
1-2km S	Recorded	1	Projectile	NW to SE	N/K	26-Oct, 20:15
2-4km SSW	Recorded	2	Explosion	Undetermined	N/K	26-Oct, 20:15
2-4km SSW	Recorded	2	Explosion	Undetermined	N/K	26-Oct, 20:17
1-2km S	Recorded	3	Projectile	NW to SE	N/K	26-Oct, 20:18
2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	26-Oct, 20:19
2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	26-Oct, 20:20
2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	26-Oct, 20:21
1-3km S	Recorded	1	Explosion	Airburst	N/K	26-Oct, 20:21
1-2km S	Recorded	1	Illumination flare	In vertical flight	N/K	26-Oct, 20:22
1-2km S	Recorded	1	Projectile	W to E	N/K	26-Oct, 20:22
2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	26-Oct, 20:22
1-2km S	Recorded	2	Projectile	NW to SE	N/K	26-Oct, 20:23
1-2km SSW	Recorded	1	Projectile	NW to SE	N/K	26-Oct, 20:23
1-2km S	Recorded	1	Explosion	Airburst	N/K	26-Oct, 20:23
1-2km SSW	Recorded	1	Muzzle flash		N/K	26-Oct, 20:24
1-2km SSW	Recorded	1	Projectile	NW to SE	N/K	26-Oct, 20:24
1-2km SSW	Recorded	1	Projectile	SW to NE	N/K	26-Oct, 20:24
1-2km S	Recorded	1	Projectile	NW to SE	N/K	26-Oct, 20:26
1-2km SSW	Recorded	1	Muzzle flash		N/K	26-Oct, 20:27
1-2km SSW	Recorded	1	Projectile	SW to NE	N/K	26-Oct, 20:27
1-2km SSW	Recorded	1	Projectile	NW to SE	N/K	26-Oct, 20:34
1-2km SSW	Recorded	1	Projectile	W to E	N/K	26-Oct, 20:35
1-2km SSW	Recorded	3	Projectile	NW to SE	N/K	26-Oct, 20:53
1-2km S	Recorded	1	Projectile	In vertical flight	N/K	26-Oct, 21:06
2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	26-Oct, 21:06
1-2km S	Recorded	1	Explosion	Airburst	N/K	26-Oct, 21:06
1-2km SSW	Recorded	2	Projectile	SE to NW	N/K	26-Oct, 21:07
2-4km SSW	Recorded	2	Explosion	Undetermined	N/K	26-Oct, 21:12
2-4km SSW	Recorded	3	Explosion	Undetermined	N/K	26-Oct, 21:13
1-2km S	Recorded	1	Explosion	Airburst	N/K	26-Oct, 21:13
2-4km SSW	Recorded	2	Explosion	Undetermined	N/K	26-Oct, 21:14
1-2km SSW	Recorded	1	Projectile	NW to SE	N/K	26-Oct, 21:24
1-2km SSW	Recorded	7	Projectile	NW to SE	N/K	26-Oct, 21:41
1-2km SSW	Recorded	7	Projectile	NW to SE	N/K	26-Oct, 22:00
1-2km SSW	Recorded	10	Projectile	NW to SE	N/K	26-Oct, 22:08
0.2-1km S	Recorded	1	Projectile	SE to NW	N/K	26-Oct, 22:26
2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	26-Oct, 22:31
2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	26-Oct, 22:32
1-2km SSW	Recorded	8	Projectile	NW to SE	N/K	26-Oct, 22:32
1-2km SSW	Recorded	2	Projectile	NW to SE	N/K	26-Oct, 23:06
1-2km SSW	Recorded	8	Projectile	SE to NW	N/K	26-Oct, 23:58
2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	27-Oct, 00:00
1-2km SSW	Recorded	2	Projectile	NNW to SSE	N/K	27-Oct, 00:32
1-2km SSW	Recorded	1	Explosion	Impact	N/K	27-Oct, 00:32
2-4km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	27-Oct, 01:18
2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	27-Oct, 01:39
1-2km SSW	Recorded	1	Projectile	W to E	N/K	27-Oct, 02:45
2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	27-Oct, 04:09

	0.1-0.2km S	Recorded	7	Projectile	ENE to WSW	N/K	27-Oct, 05:41
	2-4km SSW	Recorded	2	Explosion	Undetermined	N/K	27-Oct, 18:16
SMM camera 1.5km NE of Hnutove (government-controlled, 20km NE of Mariupol)	2-4km E	Recorded	1	Explosion	Undetermined	N/K	26-Oct, 18:30
	2-4km E	Recorded	31	Projectile	SW to NE	N/K	26-Oct, 18:38
	2-4km ENE	Recorded	4	Projectile	N to S	N/K	27-Oct, 03:08
SMM camera in Kriakivka (government-controlled, 38km NW of Luhansk)	2-4km SSW	Recorded	1	Projectile	ESE to WNW	N/K	27-Oct, 02:58
SMM camera at entry-exit checkpoint in Pyshevyk (government-controlled, 25km NE of Mariupol)	2-4km SSE	Recorded	1	Burst	E to W	N/K	26-Oct, 18:38
	2-4km SSE	Recorded	9	Projectile	W to E	N/K	26-Oct, 18:48
	2-4km SSE	Recorded	15	Projectile	W to E	N/K	26-Oct, 18:58
	2-4km SSE	Recorded	1	Explosion	Undetermined	N/K	26-Oct, 18:58
	2-4km SSE	Recorded	6	Projectile	W to E	N/K	26-Oct, 18:59
	2-4km SSE	Recorded	2	Explosion	Undetermined	N/K	26-Oct, 18:59
	2-4km SSE	Recorded	1	Burst	W to E	N/K	26-Oct, 19:07
	2-4km SSE	Recorded	3	Explosion	Undetermined	N/K	26-Oct, 19:15
	2-4km SSE	Recorded	2	Projectile	W to E	N/K	26-Oct, 19:15
	2-4km S	Recorded	1	Illumination flare	In vertical flight	N/K	26-Oct, 21:03
SMM camera in Svitlodarsk (government-controlled, 57km NE of Donetsk)	2-4km E	Recorded	3	Projectile	N to S	N/K	27-Oct, 01:37
	2-4km ESE	Recorded	2	Illumination flare	In vertical flight	N/K	27-Oct, 04:58
	3-5km E	Recorded	2	Projectile	S to N	N/K	27-Oct, 18:01
	3-5km E	Recorded	5	Projectile	S to N	N/K	27-Oct, 18:17
	3-5km E	Recorded	2	Projectile	S to N	N/K	27-Oct, 18:18
SMM camera in Zolote (government-controlled, 60km W of Luhansk)	1-2km SE	Recorded	3	Projectile	ENE to WSW (assessed as outside the disengagement area)	N/K	26-Oct, 22:59
1.1km NW of railway station in Yasynuvata (non-government-controlled, 16km NE of Donetsk)	2-3km SW	Heard	1	Explosion	Undetermined	N/K	27-Oct, 09:00
	2-3km SW	Heard	3	Burst		Small arms	27-Oct, 09:00
	2-3km SW	Heard	10	Burst		Small arms	27-Oct, 09:03
	2-3km SW	Heard	5	Shot		Small arms	27-Oct, 09:03
	2-3km SW	Heard	15	Shot		Small arms	27-Oct, 09:40
	1-2km SW	Heard and saw	2	Explosion	Undetermined	N/K	27-Oct, 10:00
	1-2km SW	Heard	10	Burst		Small arms	27-Oct, 10:04
	2-3km SW	Heard	1	Burst		Small arms	27-Oct, 10:09
	2-3km SW	Heard	2	Explosion	Undetermined	N/K	27-Oct, 10:13
	2-3km S	Heard	1	Burst		Small arms	27-Oct, 10:19
	2-3km SW	Heard	3	Burst		HMG	27-Oct, 10:45
	4-5km SW	Heard	1	Explosion	Undetermined	N/K	27-Oct, 10:54
	1-2km SW	Heard		Burst	Uncountable	Small arms	27-Oct, 11:15-11:18
	2-4km S	Heard	1	Explosion	Undetermined	N/K	27-Oct, 11:25
		2-3km SW	Heard	8	Shot		Small arms

	1-2km SW	Heard	4	Shot		Small arms	27-Oct, 11:55
	1-2km SW	Heard	6	Shot		Small arms	27-Oct, 12:50
S edge of Avdiivka (government-controlled, 17km N of Donetsk)	1km ESE	Heard	2	Explosion	Undetermined	N/K	27-Oct, 10:00
	2-3km SE	Heard	1	Explosion	Undetermined	N/K	27-Oct, 11:25
Vuhlehirsk (non-government-controlled, 49km NE of Donetsk)	2-3km NW	Heard	1	Burst		Small arms	27-Oct, 10:30
	2-3km NW	Heard	2	Shot		Small arms	27-Oct, 10:30
	3-4km NW	Heard	7	Burst		HMG	27-Oct, 10:32
Oleksandrivka (non-government-controlled, 20km SW of Donetsk)	2-3km W	Heard	21	Burst		Small arms	27-Oct, 14:24-14:29
	2-3km W	Heard		Shot	Uncountable & overlapping	Small arms, HMG	27-Oct, 14:27-14:29
1 km NNW of entry-exit checkpoint in Pyshevyk (government controlled, 25 km NE of Mariupol)	N/K SSE	Heard	5	Explosion	Undetermined	N/K	27-Oct, 09:25-09:31
	N/K SSE	Heard	8	Burst		HMG	27-Oct, 09:25-09:31
	N/K SE	Heard	3	Explosion	Undetermined	N/K	27-Oct, 09:35
	N/K SE	Heard	3	Explosion	Undetermined	N/K	27-Oct, 09:38
Novohnativka (government-controlled, 40km S of Donetsk)	N/K SSW	Heard	6	Shot		Small arms	27-Oct, 10:15-10:25
	N/K SSW	Heard	5	Burst		Small arms	27-Oct, 10:15-10:25
	N/K SSW	Heard	5	Burst		Small arms	27-Oct, 10:30-10:40
3km NE of Zaichenko (non-government-controlled, 26km NE of Mariupol)	2-3km SW	Heard	2	Explosion	Outgoing	Mortar (type N/K)	27-Oct, 10:21-10:25
Sakhanka (non-government controlled, 24km NE of Mariupol)	1km SW	Heard	1	Explosion	Outgoing	N/K	27-Oct, 10:52-11:06
	1-2km W	Heard	4	Burst		HMG	27-Oct, 10:52-11:06
	1-2km SW	Heard	1	Explosion	Outgoing	Mortar (type N/K)	27-Oct, 10:52-11:06
	1-2km W	Heard	1	Burst		Small arms	27-Oct, 10:52-11:06
	2km SW	Heard	1	Explosion	Outgoing	Mortar (type N/K)	27-Oct, 10:52-11:06
	2km W	Heard	15	Shot		Small arms	27-Oct, 10:52-11:06
	1-2km SW	Heard	7	Burst		IFV (BMP-2)	27-Oct, 11:10-11:14
	2km SW	Heard	8	Burst		HMG	27-Oct, 11:10-11:14
	2km W	Heard	18	Shot		Small arms	27-Oct, 11:10-11:14
	1-2km S	Heard	24	Shot		Small arms	27-Oct, 11:10-11:14
Horlivka (non-government-	4-5km W	Heard	2	Explosion	Undetermined	N/K	26-Oct, 22:00-22:01

controlled, 39km NE of Donetsk)	4-5km W	Heard	6	Burst		HMG	26-Oct, 22:00- 22:01
Svitlodarsk (government- controlled, 57km NE of Donetsk)	3-5km SE	Heard	2	Burst		HMG	26-Oct, 18:27
	4-6km WSW	Heard	4	Burst		HMG	26-Oct, 18:28
	4-6km WSW	Heard	7	Burst		HMG	26-Oct, 18:36
	4-6km WSW	Heard	2	Burst		HMG	26-Oct, 18:40
	3-5km SE	Heard	2	Explosion	Undetermined	N/K	26-Oct, 18:47
	3-5km SE	Heard	5	Shot		Small arms	26-Oct, 18:51
	4-6km WSW	Heard	5	Burst		HMG	26-Oct, 18:52
	3-5km SE	Heard	3	Explosion	Undetermined	N/K	26-Oct, 18:56- 18:59
	4-6km WSW	Heard	6	Burst		HMG	26-Oct, 19:15- 19:17
	4-6km WSW	Heard	8	Burst		HMG	26-Oct, 19:19
	3-5km SE	Heard	1	Burst		Small arms	26-Oct, 19:25
	3-5km SE	Heard	1	Explosion	Undetermined	N/K	26-Oct, 20:15
	3-5km S	Heard	50	Burst		HMG	26-Oct, 21:07- 21:09
	3-5km S	Heard	5	Burst		HMG	26-Oct, 21:11
	3-5km S	Heard	50	Burst		HMG	26-Oct, 21:20- 21:22
	4-6km WSW	Heard	13	Burst		HMG	26-Oct, 22:55- 22:57
	4-6km WSW	Heard	31	Burst		HMG	26-Oct, 23:22- 23:28
	4-6km WSW	Heard	4	Explosion	Undetermined	N/K	26-Oct, 23:26
	2-3km SE	Heard	2	Explosion	Undetermined	N/K	27-Oct, 09:16
	2-3km SE	Heard	2	Explosion	Undetermined	N/K	27-Oct, 09:20
	2-3km SE	Heard	20	Burst		HMG	27-Oct, 09:22
	4-5km SE	Heard	4	Explosion	Undetermined	N/K	27-Oct, 10:30
	4-5km SE	Heard	10	Burst		N/K	27-Oct, 10:32
	2-3km SW	Heard	12	Burst		HMG	27-Oct, 11:13
	3-4km SW	Heard	10	Burst		HMG	27-Oct, 11:45
	3-5km SW	Heard	7	Burst		HMG	27-Oct, 17:07- 17:10
	3-5km SW	Heard	10	Burst		HMG	27-Oct, 18:13
	2-3km SE	Heard	2	Shot		Small arms	27-Oct, 18:14
	3-5km SE	Heard	4	Explosion	Undetermined	N/K	27-Oct, 18:22- 18:24
	3-5km SE	Heard	2	Burst		HMG	27-Oct, 18:26
	2-4km SE	Heard	2	Explosion	Undetermined	N/K	27-Oct, 18:28
	2-4km SE	Heard	1	Burst		Small arms	27-Oct, 18:29
	Novoluhanske (government- controlled, 53km NE of Donetsk)	4-6km SW	Heard	23	Burst		HMG
5-6km SW		Heard	3	Explosion	Undetermined	N/K	27-Oct, 10:21
2km SW		Heard	2	Shot		Small arms	27-Oct, 11:03
2-3km SW		Heard	8	Burst		HMG	27-Oct, 11:08
E edge of Kamianka (government- controlled, 20km N of Donetsk)	3-5km SSW	Heard	2	Explosion	Undetermined	N/K	27-Oct, 09:00
	3-5km SSW	Heard	2	Burst		HMG	27-Oct, 09:05
	3-5km SSW	Heard	12	Shot		Small arms	27-Oct, 09:12

Novoivanivka (government-controlled, 67km W of Luhansk)	10-12km SSW	Heard	1	Explosion	Undetermined	N/K	27-Oct, 11:00
Yuzhna-Lomuvatka (non-government-controlled, 60km W of Luhansk)	5-7km W	Heard	8	Burst		IFV (BMP-2) cannon (30mm)	27-Oct, 12:02-12:12
	5-7km W	Heard	7	Explosion	Undetermined	N/K	27-Oct, 12:02-12:12
	5-7km W	Heard	70	Burst		HMG	27-Oct, 12:02-12:12
3.5km SW of Metalist (non-government-controlled, 7km NW of Luhansk)	1-2km NW	Heard	30	Shot		Small arms	27-Oct, 12:25-12:26
Obozne (non-government-controlled, 18km N of Luhansk)	15-20km SW	Heard	1	Explosion	Undetermined	N/K	27-Oct, 13:55
S outskirts of Kalynove-Borshchuvate (non-government-controlled, 61km W of Luhansk)	5-7km SW	Heard	2	Explosion	Undetermined	N/K	27-Oct, 14:26-14:27
SMM camera in Avdiivka (government-controlled, 17km N of Donetsk)	3-5km SE	Recorded	1	Illumination flare	In vertical flight	N/K	27-Oct, 18:33
	2-4km SSE	Recorded	8	Projectile	In vertical flight	N/K	27-Oct, 22:29
	2-4km SSE	Recorded	1	Projectile	SW to NE	N/K	27-Oct, 22:35
	2-4km SSE	Recorded	1	Explosion	Undetermined	N/K	27-Oct, 22:45
	2-4km ESE	Recorded	2	Projectile	In vertical flight	N/K	27-Oct, 22:54
	2-4km SSE	Recorded	8	Projectile	SW to NE	N/K	28-Oct, 00:24
	2-4km SSE	Recorded	1	Explosion	Undetermined	N/K	28-Oct, 00:35
	2-4km SSE	Recorded	1	Projectile	NE to SW	N/K	28-Oct, 00:35
	2-4km SSE	Recorded	2	Projectile	SW to NE	N/K	28-Oct, 00:37
	2-4km SSE	Recorded	2	Explosion	Undetermined	N/K	28-Oct, 00:37
	2-4km SSE	Recorded	2	Projectile	SW to NE	N/K	28-Oct, 00:38
	2-4km SSE	Recorded	4	Explosion	Undetermined	N/K	28-Oct, 00:38
	2-4km SSE	Recorded	4	Projectile	SW to NE	N/K	28-Oct, 02:37
	2-4km SSE	Recorded	1	Explosion	Undetermined	N/K	28-Oct, 02:37
	3-5km SE	Recorded	1	Projectile	NE to SW	N/K	28-Oct, 17:34
3-5km SE	Recorded	1	Explosion	Impact	N/K	28-Oct, 17:34	
SMM camera in Berezove (government-controlled, 31km SW of Donetsk)	2-4km SE	Recorded	13	Projectile	W to E	N/K	27-Oct, 18:59
	2-4km SE	Recorded	2	Projectile	W to E	N/K	27-Oct, 19:05
	2-4km SE	Recorded	11	Projectile	W to E	N/K	27-Oct, 19:06
	2-4km SSE	Recorded	7	Projectile	SW to NE	N/K	27-Oct, 20:57
	2-4km SSE	Recorded	3	Projectile	SW to NE	N/K	27-Oct, 20:58
	2-4km SE	Recorded	2	Projectile	SW to NE	N/K	27-Oct, 21:11
	2-4km SSE	Recorded	2	Projectile	SW to NE	N/K	27-Oct, 21:49
	2-4km SE	Recorded	1	Projectile	SW to NE	N/K	27-Oct, 22:11
	2-4km SSE	Recorded	7	Projectile	WSW to ENE	N/K	27-Oct, 22:23
	2-4km SE	Recorded	5	Projectile	SW to NE	N/K	27-Oct, 22:31
	2-4km SE	Recorded	3	Projectile	SW to NE	N/K	27-Oct, 22:32
	2-4km ESE	Recorded	15	Projectile	SW to NE	N/K	28-Oct, 03:15
2-4km SSE	Recorded	5	Projectile	SW to NE	N/K	28-Oct, 04:42	

	2-4km SSE	Recorded	6	Projectile	SW to NE	N/K	28-Oct, 04:43	
	3-4km SE	Recorded	3	Projectile	SW to NE	N/K	28-Oct, 17:22	
	2-3km SE	Recorded	11	Projectile	N to S	N/K	28-Oct, 17:35	
SMM camera in Chermalyk (government-controlled, 31km NE of Mariupol)	2-4km SE	Recorded	7	Projectile	NNE to SSW	N/K	27-Oct, 18:02	
	2-4km SE	Recorded	5	Projectile	SW to NE	N/K	27-Oct, 18:05	
	2-4km SE	Recorded	7	Projectile	SW to NE	N/K	27-Oct, 18:06	
	2-4km SE	Recorded	3	Projectile	SW to NE	N/K	27-Oct, 18:07	
	2-4km SE	Recorded	4	Projectile	SW to NE	N/K	27-Oct, 18:43	
	2-4km SE	Recorded	4	Projectile	SW to NE	N/K	27-Oct, 20:01	
	2-4km SE	Recorded	13	Projectile	NE to SW	N/K	27-Oct, 20:02	
	2-4km SE	Recorded	1	Explosion	Undetermined	N/K	27-Oct, 20:02	
	2-4km SE	Recorded	1	Projectile	NE to SW	N/K	27-Oct, 20:08	
	2-4km SE	Recorded	5	Explosion	Undetermined	N/K	27-Oct, 20:14	
	2-4km SE	Recorded	17	Projectile	NE to SW	N/K	27-Oct, 20:15	
	2-4km SE	Recorded	3	Explosion		N/K	27-Oct, 20:15	
	2-4km SSE	Recorded	8	Projectile	SSW to NNE	N/K	27-Oct, 22:16	
	2-4km SSE	Recorded	4	Projectile	SSW to NNE	N/K	27-Oct, 22:17	
	2-4km SSE	Recorded	14	Projectile	NNE to SSW	N/K	27-Oct, 22:23	
	2-4km SSE	Recorded	3	Burst	NNE to SSW	N/K	27-Oct, 22:23	
	2-4km SSE	Recorded	1	Projectile	In vertical flight	N/K	27-Oct, 22:24	
	2-4km SSE	Recorded	7	Projectile	NNE to SSW	N/K	27-Oct, 22:24	
	2-4km SSE	Recorded	1	Projectile	NNW to SSE	N/K	27-Oct, 22:25	
	2-4km SSE	Recorded	1	Projectile	ENE to WSW	N/K	27-Oct, 22:25	
	2-4km SSE	Recorded	1	Burst	NNE to SSW	N/K	27-Oct, 22:37	
	3-4km SSE	Recorded	1	Projectile	W to E	N/K	28-Oct, 18:03	
	SMM camera at Donetsk Filtration Station (15km N of Donetsk)	2-4km SSW	Recorded	2	Explosion	Undetermined	N/K	27-Oct, 18:16
		2-4km SSW	Recorded	1	Projectile	W to E	N/K	27-Oct, 18:32
1-2km SSW		Recorded	1	Explosion	Undetermined	N/K	27-Oct, 18:34	
1-2km SSW		Recorded	1	Projectile	W to E	N/K	27-Oct, 18:45	
1-2km SSW		Recorded	1	Projectile	W to E	N/K	27-Oct, 18:48	
0.5-1km SSW		Recorded	1	Muzzle flash		N/K	27-Oct, 19:14	
0.5-1km SSW		Recorded	1	Explosion	Undetermined	N/K	27-Oct, 19:14	
0.5-1km S		Recorded	4	Muzzle flash		N/K	27-Oct, 19:16	
0.5-1km S		Recorded	11	Muzzle flash		N/K	27-Oct, 19:37	
0.5-1km S		Recorded	9	Projectile	SE to NW	N/K	27-Oct, 19:37	
0.5-1km S		Recorded	1	Burst	W to E	N/K	27-Oct, 19:38	
0.5-1km S		Recorded	15	Projectile	N to S	N/K	27-Oct, 19:39	
1-2km S		Recorded	1	Projectile	NW to SE	N/K	27-Oct, 19:40	
0.5-1km S		Recorded	1	Projectile	N to S	N/K	27-Oct, 19:40	
0.5-1km S		Recorded	8	Projectile	N to S	N/K	27-Oct, 19:41	
2-3km SSW		Recorded	4	Explosion	Undetermined	N/K	27-Oct, 19:44	
1-2km S		Recorded	8	Explosion	Undetermined	N/K	27-Oct, 19:48	
1-2km S		Recorded	1	Projectile	NW to SE	N/K	27-Oct, 19:48	
1-2km S		Recorded	6	Explosion	Undetermined	N/K	27-Oct, 19:49	
0.5-1km SSW		Recorded	23	Explosion	Undetermined	N/K	27-Oct, 19:50	
1-2km S		Recorded	11	Explosion	Impact	N/K	27-Oct, 19:51	
0.2-0.5km S		Recorded	1	Explosion	Impact	N/K	27-Oct, 19:53	
0.5-1km SSW		Recorded	1	Projectile	NW to SE	N/K	27-Oct, 20:01	
0.5-1km SSW		Recorded	1	Explosion	Undetermined		27-Oct, 20:01	
0.1-0.3km SSW		Recorded	1	Explosion	Undetermined	N/K	27-Oct, 20:02	
0.1-0.3km SSW		Recorded	1	Projectile	NNW to SSE	N/K	27-Oct, 20:02	
0.1-0.3km SSW		Recorded	1	Explosion	Undetermined	N/K	27-Oct, 20:03	

SMM camera 1.5km NE of Hnutove (government- controlled, 20km NE of Mariupol)	0.1-0.3km SSW	Recorded	1	Projectile	NNW to SSE	N/K	27-Oct, 20:03
	1-3km SSW	Recorded	2	Projectile	WNW to ESE	N/K	27-Oct, 20:05
	1-3km SSW	Recorded	1	Projectile	WNW to ESE	N/K	27-Oct, 20:10
	1-3km SSW	Recorded	5	Projectile	WNW to ESE	N/K	27-Oct, 20:15
	1-3km SSW	Recorded	4	Projectile	WNW to ESE	N/K	27-Oct, 20:17
	1-3km SSW	Recorded	2	Projectile	N to S	N/K	27-Oct, 20:17
	1-3km SSW	Recorded	8	Projectile	WNW to ESE	N/K	27-Oct, 20:18
	1-2km SSW	Recorded	1	Projectile	NW to SE	N/K	27-Oct, 20:35
	2-4km S	Recorded	1	Explosion	Undetermined	N/K	27-Oct, 20:36
	1-2km S	Recorded	1	Explosion	Undetermined	N/K	27-Oct, 20:42
	0.3-1km S	Recorded	15	Explosion	Impact	N/K	27-Oct, 20:51
	1-2km SSW	Recorded	2	Projectile	NW to SE	N/K	27-Oct, 21:32
	1-2km SSW	Recorded	2	Projectile	NW to SE	N/K	27-Oct, 22:07
	1-2km SSW	Recorded	1	Projectile	NW to SE	N/K	28-Oct, 02:32
	1-2km SSW	Recorded	3	Projectile	NW to SE	N/K	28-Oct, 02:35
	1-2km SSW	Recorded	8	Projectile	NW to SE	N/K	28-Oct, 02:36
	1-2km SSW	Recorded	3	Projectile	NW to SE	N/K	28-Oct, 02:37
	0.5-1km S	Recorded	6	Projectile	E to W	N/K	28-Oct, 17:12
	0.5-1km SSW	Recorded	7	Projectile	E to W	N/K	28-Oct, 17:13
	0.5-1km SSW	Recorded	4	Projectile	E to W	N/K	28-Oct, 17:14
	1-3km SSW	Recorded	1	Projectile	NE to SW	N/K	28-Oct, 17:16
	1-3km SSW	Recorded	1	Projectile	NW to SE	N/K	28-Oct, 17:16
	1-3km S	Recorded	2	Projectile	NNW to SSE	N/K	28-Oct, 17:37
	1-3km S	Recorded	2	Projectile	NNW to SSE	N/K	28-Oct, 17:44
	0.5-1km S	Recorded	2	Explosion		N/K	28-Oct, 17:45
	1-3km SSW	Recorded	1	Explosion	Airburst	N/K	28-Oct, 17:51
	1-3km SSW	Recorded	4	Projectile	WNW to ESE	N/K	28-Oct, 18:04
	1-3km SSW	Recorded	3	Projectile	WNW to ESE	N/K	28-Oct, 18:13
	1-3km SSW	Recorded	4	Projectile	E to W	N/K	28-Oct, 18:17
	1-3km SSW	Recorded	5	Projectile	E to W	N/K	28-Oct, 18:24
	1-2km E	Recorded	2	Projectile	WNW to ESE	N/K	27-Oct, 18:53
	2-4km ESE	Recorded	2	Projectile	WSW to ENE	N/K	27-Oct, 19:16
	2-4km ESE	Recorded	4	Projectile	WSW to ENE	N/K	27-Oct, 19:17
	2-4km ESE	Recorded	1	Projectile	WSW to ENE	N/K	27-Oct, 19:50
	2-4km ESE	Recorded	2	Projectile	WSW to ENE	N/K	27-Oct, 19:51
	2-4km E	Recorded	13	Projectile	WNW to ESE	N/K	27-Oct, 20:13
	2-4km ENE	Recorded	8	Projectile	WNW to ESE	N/K	27-Oct, 20:21
	2-4km E	Recorded	1	Muzzle flash		N/K	27-Oct, 20:26
	2-4km E	Recorded	1	Projectile	NW to SE	N/K	27-Oct, 20:26
	2-4km ENE	Recorded	14	Projectile	NW to SE	N/K	27-Oct, 20:38
	2-4km E	Recorded	3	Projectile	N to S	N/K	27-Oct, 20:53
	2-4km E	Recorded	1	Muzzle flash		N/K	27-Oct, 20:57
	2-4km E	Recorded	1	Projectile	S to N	N/K	27-Oct, 20:57
	2-4km E	Recorded	3	Projectile	N to S	N/K	27-Oct, 20:57
	2-4km E	Recorded	1	Projectile	N to S	N/K	27-Oct, 20:58
	2-4km ESE	Recorded	1	Muzzle flash		N/K	27-Oct, 21:19
	2-4km ESE	Recorded	6	Projectile	N to S	N/K	27-Oct, 21:19
	2-4km ESE	Recorded	6	Projectile	N to S	N/K	27-Oct, 21:21
	2-4km ESE	Recorded	4	Projectile	N to S	N/K	27-Oct, 21:23
	2-4km ESE	Recorded	1	Muzzle flash		N/K	27-Oct, 21:23
	2-4km E	Recorded	4	Projectile	N to S	N/K	27-Oct, 21:25
	2-4km E	Recorded	6	Projectile	N to S	N/K	27-Oct, 21:29
	2-4km E	Recorded	6	Projectile	N to S	N/K	27-Oct, 22:21
	2-4km E	Recorded	1	Muzzle flash		N/K	27-Oct, 22:21
2-4km E	Recorded	22	Projectile	N to S	N/K	27-Oct, 22:23	
2-4km E	Recorded	9	Projectile	WNW to ESE	N/K	27-Oct, 22:23	



	2-4km E	Recorded	6	Projectile	S to N	N/K	27-Oct, 22:23
	2-4km E	Recorded	4	Projectile	WSW to ENE	N/K	27-Oct, 22:54
	2-4km E	Recorded	1	Projectile	S to N	N/K	27-Oct, 23:42
	2-4km ENE	Recorded	1	Projectile	S to N	N/K	28-Oct, 01:15
	2-4km E	Recorded	1	Projectile	In vertical flight	N/K	28-Oct, 02:09
	2-4km E	Recorded	1	Burst	In vertical flight	N/K	28-Oct, 02:14
	2-4km ENE	Recorded	16	Projectile	NW to SE	N/K	28-Oct, 02:17
	2-4km E	Recorded	10	Projectile	S to N	N/K	28-Oct, 02:21
	2-4km E	Recorded	6	Projectile	S to N	N/K	28-Oct, 02:22
	2-4km ENE	Recorded	12	Projectile	N to S	N/K	28-Oct, 02:23
	2-4km ENE	Recorded	5	Projectile	N to S	N/K	28-Oct, 02:24
	2-4km ENE	Recorded	11	Projectile	N to S	N/K	28-Oct, 02:25
	2-4km E	Recorded	3	Projectile	N to S	N/K	28-Oct, 02:47
	2-4km E	Recorded	2	Projectile	N to S	N/K	28-Oct, 02:50
	2-4km ESE	Recorded	1	Explosion	Undetermined	N/K	28-Oct, 03:09
	2-4km ENE	Recorded	1	Projectile	N to S	N/K	28-Oct, 03:10
	2-4km ENE	Recorded	1	Projectile	N to S	N/K	28-Oct, 03:15
	2-4km ENE	Recorded	1	Projectile	N to S	N/K	28-Oct, 03:29
	2-4km ENE	Recorded	2	Projectile	NW to SE	N/K	28-Oct, 03:30
	2-4km ENE	Recorded	9	Projectile	NW to SE	N/K	28-Oct, 03:48
	2-4km E	Recorded	2	Projectile	N to S	N/K	28-Oct, 03:48
	2-4km ENE	Recorded	1	Projectile	S to N	N/K	28-Oct, 03:56
	2-4km E	Recorded	2	Projectile	NW to SE	N/K	28-Oct, 04:49
	2-4km E	Recorded	1	Projectile	N to S	N/K	28-Oct, 04:51
	2-4km ENE	Recorded	8	Projectile	N to S	N/K	28-Oct, 05:09
	2-4km ENE	Recorded	2	Projectile	N to S	N/K	28-Oct, 05:10
	4-6km ENE	Recorded	2	Projectile	In vertical flight	N/K	28-Oct, 17:20
	4-6km ENE	Recorded	11	Projectile	N to S	N/K	28-Oct, 17:44
	4-6km ENE	Recorded	3	Projectile	N to S	N/K	28-Oct, 17:45
	4-6km ESE	Recorded	1	Projectile	S to N	N/K	28-Oct, 18:00
	4-6km ESE	Recorded	6	Projectile	S to N	N/K	28-Oct, 18:01
	4-6km ESE	Recorded	5	Projectile	S to N	N/K	28-Oct, 18:02
	4-6km E	Recorded	2	Projectile	N to S	N/K	28-Oct, 18:02
	4-6km E	Recorded	1	Explosion		N/K	28-Oct, 18:02
	4-6km E	Recorded	3	Projectile	N to S	N/K	28-Oct, 18:16
	4-6km ESE	Recorded	1	Explosion		N/K	28-Oct, 18:16
SMM camera in Krasnohorivka (government-controlled, 21km W of Donetsk)	2-4km S	Recorded	1	Explosion	Undetermined	N/K	27-Oct, 19:13
SMM camera E of Lomakyne (government-controlled, 15km NE of Mariupol)	2-4km ENE	Recorded	4	Projectile	SW to NE	N/K	27-Oct, 18:42
	2-4km NE	Recorded	1	Explosion	Undetermined	N/K	27-Oct, 18:42
	2-4km NE	Recorded	5	Muzzle flash	NE to SW	N/K	27-Oct, 19:14
	2-4km ENE	Recorded	6	Projectile	S to N	N/K	27-Oct, 19:56
	2-4km ENE	Recorded	2	Projectile	SSW to NNE	N/K	28-Oct, 03:42
SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk)	2-4km ENE	Recorded	2	Muzzle flash		N/K	28-Oct, 03:42
	2-4km E	Recorded	1	Explosion	Undetermined	N/K	27-Oct, 18:35
	2-4km E	Recorded	3	Projectile	N to S	N/K	27-Oct, 19:00
	2-4km E	Recorded	2	Projectile	N to S	N/K	27-Oct, 19:11
	2-4km ENE	Recorded	2	Projectile	N to S	N/K	27-Oct, 19:51
SMM camera at entry-exit checkpoint in Marinka	2-4km ENE	Recorded	3	Projectile	N to S	N/K	27-Oct, 20:07
	2-4km ENE	Recorded	5	Projectile	S to N	N/K	28-Oct, 17:55
	1-3km NNE	Recorded	1	Projectile	W to E	N/K	27-Oct, 19:09
	1-2km N	Recorded	1	Projectile	W to E	N/K	27-Oct, 21:26
	1-2km N	Recorded	1	Explosion	Undetermined	N/K	27-Oct, 21:34
	1-2km N	Recorded	1	Projectile	In vertical flight	N/K	27-Oct, 22:50

(government-controlled, 23km SW of Donetsk)	1-3km NNE	Recorded	7	Projectile	W to E	N/K	28-Oct, 17:57
SMM camera at entry-exit checkpoint in Pyschchevyk (government-controlled, 25km NE of Mariupol)	2-4km SSE	Recorded	1	Burst	E to W	N/K	27-Oct, 18:39
	2-4km S	Recorded	2	Explosion	Airburst	N/K	27-Oct, 18:40
	2-4km SSE	Recorded	5	Explosion	Undetermined	N/K	27-Oct, 18:42
	2-4km SSE	Recorded	5	Projectile	W to E	N/K	27-Oct, 18:42
	2-4km SSE	Recorded	2	Projectile	W to E	N/K	27-Oct, 19:17
	2-4km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	27-Oct, 19:19
	2-4km S	Recorded	1	Projectile	E to W	N/K	27-Oct, 19:56
	2-4km S	Recorded	2	Projectile	E to W	N/K	27-Oct, 19:57
	2-4km SSE	Recorded	1	Projectile	WNW to ESE	N/K	27-Oct, 20:16
	2-4km SSE	Recorded	6	Projectile	E to W	N/K	27-Oct, 21:19
2-4km SSE	Recorded	6	Projectile	E to W	N/K	27-Oct, 21:21	
SMM camera in Svitlodarsk (government-controlled, 57km NE of Donetsk)	3-5km E	Recorded	2	Projectile	S to N	N/K	27-Oct, 18:01
	3-5km E	Recorded	5	Projectile	S to N	N/K	27-Oct, 18:17
	3-5km E	Recorded	2	Projectile	S to N	N/K	27-Oct, 18:18
	2-4km E	Recorded	4	Projectile	N to S	N/K	27-Oct, 21:08
	2-4km ESE	Recorded	1	Projectile	S to N	N/K	27-Oct, 21:09
	2-3km E	Recorded	1	Explosion	Impact	N/K	27-Oct, 21:09
	2-4km E	Recorded	10	Projectile	S to N	N/K	27-Oct, 21:27
	2-4km E	Recorded	3	Projectile	N to S	N/K	27-Oct, 21:27
	2-4km E	Recorded	1	Projectile	S to N	N/K	27-Oct, 21:29
	2-4km E	Recorded	1	Projectile	S to N	N/K	27-Oct, 21:30
	2-4km E	Recorded	1	Explosion	Impact	N/K	27-Oct, 21:30
	2-4km ENE	Recorded	1	Explosion	Impact	N/K	27-Oct, 21:30
	2-4km E	Recorded	1	Projectile	N to S	N/K	27-Oct, 21:41
	2-4km E	Recorded	1	Explosion	Impact	N/K	27-Oct, 21:41
	2-4km E	Recorded	14	Projectile	S to N	N/K	27-Oct, 21:45
	2-4km E	Recorded	8	Projectile	S to N	N/K	27-Oct, 21:46
	2-4km E	Recorded	16	Projectile	S to N	N/K	27-Oct, 21:47
	2-4km E	Recorded	2	Explosion	Impact	N/K	27-Oct, 22:07
	2-4km E	Recorded	1	Projectile	N to S	N/K	27-Oct, 22:07
	2-4km E	Recorded	1	Projectile	S to N	N/K	27-Oct, 22:10
	2-4km E	Recorded	1	Projectile	S to N	N/K	27-Oct, 22:14
	2-4km E	Recorded	7	Projectile	S to N	N/K	27-Oct, 22:29
	2-4km E	Recorded	1	Explosion	Undetermined	N/K	27-Oct, 22:32
	2-4km ENE	Recorded	6	Projectile	N to S	N/K	27-Oct, 22:35
	2-4km E	Recorded	7	Projectile	N to S	N/K	27-Oct, 22:36
	2-4km E	Recorded	1	Explosion	Impact	N/K	27-Oct, 22:36
	2-4km E	Recorded	1	Projectile	S to N	N/K	27-Oct, 22:36
	2-4km ESE	Recorded	1	Projectile	In vertical flight	N/K	27-Oct, 23:15
	2-4km E	Recorded	11	Projectile	N to S	N/K	28-Oct, 00:58
	2-4km E	Recorded	1	Projectile	S to N	N/K	28-Oct, 01:04
	2-4km E	Recorded	1	Projectile	N to S	N/K	28-Oct, 01:05
	2-4km E	Recorded	5	Projectile	S to N	N/K	28-Oct, 01:07
	2-4km E	Recorded	2	Projectile	N to S	N/K	28-Oct, 01:07
	2-4km E	Recorded	2	Projectile	S to N	N/K	28-Oct, 01:08
	2-4km ESE	Recorded	6	Projectile	S to N	N/K	28-Oct, 01:13
	2-4km ESE	Recorded	1	Projectile	N to S	N/K	28-Oct, 01:13
	2-4km ESE	Recorded	4	Projectile	N to S	N/K	28-Oct, 01:16
	2-4km ESE	Recorded	1	Projectile	In vertical flight	N/K	28-Oct, 01:16
	2-4km ESE	Recorded	1	Explosion	Airburst	N/K	28-Oct, 01:16
	2-4km ESE	Recorded	3	Projectile	S to N	N/K	28-Oct, 01:16
2-4km ESE	Recorded	2	Explosion	Impact	N/K	28-Oct, 01:16	
2-4km E	Recorded	10	Projectile	N to S	N/K	28-Oct, 01:29	
2-4km E	Recorded	13	Projectile	S to N	N/K	28-Oct, 03:40	

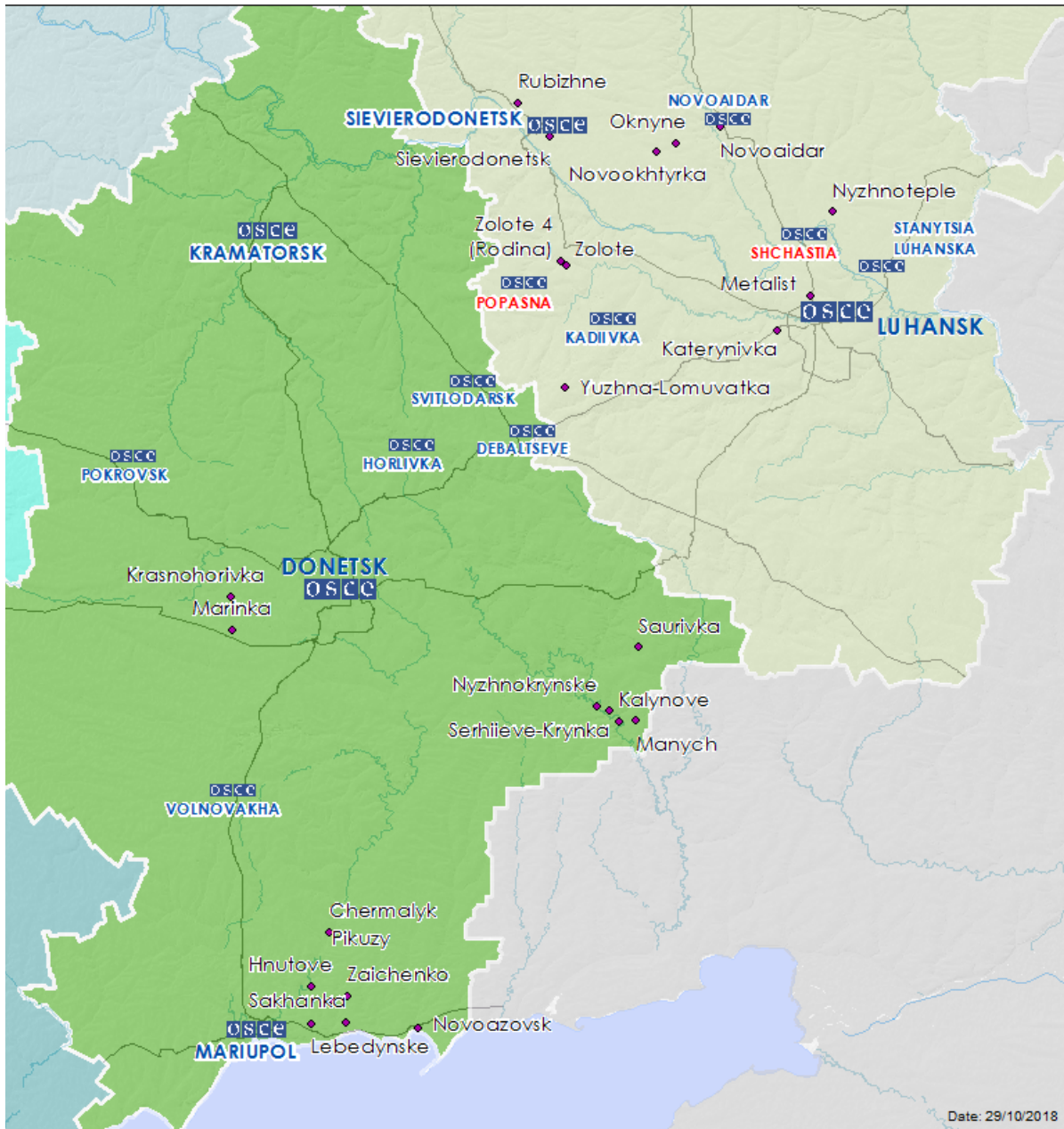
	2-4km E	Recorded	11	Projectile	N to S	N/K	28-Oct, 03:41
	2-4km E	Recorded	3	Projectile	S to N	N/K	28-Oct, 03:41
	2-4km E	Recorded	10	Projectile	S to N	N/K	28-Oct, 03:42
	2-4km E	Recorded	1	Explosion		N/K	28-Oct, 18:13
SMM camera in Zolote (government-controlled, 60km W of Luhansk)	4-5km ESE	Recorded	11	Projectile	SW to NE (assessed as outside the disengagement area)	N/K	28-Oct, 17:14
	4-5km ESE	Recorded	6	Projectile	In vertical flight (assessed as outside the disengagement area)	N/K	28-Oct, 17:14
Debaltseve (non-government-controlled, 58km NE of Donetsk)	5-6km NNE	Heard	1	Explosion		Other	27-Oct, 18:50
Oleksandrivka (non-government-controlled, 20km SW of Donetsk)	1-2km W	Heard	9	Shot		HMG	28-Oct, 11:08-11:10
1.5km WNW of Yasynuvata (non-government-controlled, 16km NE of Donetsk)	1.5km SW	Heard	1	Explosion		N/K	28-Oct, 07:48
	1.5km SW	Heard	3	Burst		HMG	28-Oct, 07:50
1.1km NW of railway station in Yasynuvata (non-government-controlled, 16km NE of Donetsk)	1.5km SW	Heard	1	Explosion		N/K	28-Oct, 07:56
	2km WNW	Heard	4	Explosion		N/K	28-Oct, 08:13
	1.5km SSW	Heard	3	Shot		HMG	28-Oct, 08:15
	1.5km SSW	Heard	1	Explosion		N/K	28-Oct, 08:26
	1.5km SSW	Heard	3	Burst		Small arms	28-Oct, 08:49
	1.5km SSW	Heard	7	Shot		Small arms	28-Oct, 09:00
	1-1.5km SSW	Heard	4	Shot		Small arms	28-Oct, 10:35
	1-1.5km SSW	Heard	3	Shot		Small arms	28-Oct, 11:07
	1-1.5km SSW	Heard	12	Shot		Small arms	28-Oct, 12:34-12:42
Horlivka (non-government-controlled, 39km NE of Donetsk)	1-1.5km SSW	Heard	1	Explosion		N/K	28-Oct, 13:35
	5-7km NNW	Heard	4	Explosion	Undetermined	N/K	27-Oct, 23:09-23:12
	5-7km NNW	Heard	3	Shot		Small arms	27-Oct, 23:13
Svitlodarsk (government-controlled, 57km NE of Donetsk)	5-7km NNW	Heard	3	Explosion	Undetermined	N/K	27-Oct, 23:15-23:18
	3-5km SE	Heard	1	Explosion	Undetermined	N/K	27-Oct, 18:35
	2-3km SE	Heard	25	Shot		Small arms	27-Oct, 18:39-18:41
	3-5km SE	Heard	18	Burst		HMG	27-Oct, 18:39-18:42
	2-4km SE	Heard	2	Explosion	Undetermined	N/K	27-Oct, 18:44
	2-4km SE	Heard	5	Burst		HMG	27-Oct, 18:44
	2-3km SE	Heard	17	Shot		Small arms	27-Oct, 18:44-18:47
3-4km SE	Heard	7	Burst		HMG	27-Oct, 18:51	

3-5km SE	Heard	3	Explosion	Undetermined	N/K	27-Oct, 18:53
2-3km S	Heard	3	Shot		Small arms	27-Oct, 18:53
3km SE	Heard	3	Burst		Small arms	27-Oct, 18:54
2-3km SE	Heard	2	Explosion	Undetermined	N/K	27-Oct, 18:56
2-3km SE	Heard	7	Burst		Small arms	27-Oct, 18:57
2-3km SE	Heard	9	Burst		HMG	27-Oct, 18:58
2-3km SE	Heard	6	Shot		Small arms	27-Oct, 18:58
3-4km SE	Heard	4	Burst		HMG	27-Oct, 19:05
2-3km SE	Heard	6	Burst		Small arms	27-Oct, 19:11
3-5km SE	Heard	2	Burst		HMG	27-Oct, 19:12
3-5km SE	Heard	1	Explosion	Undetermined	N/K	27-Oct, 19:17
3-5km SE	Heard	6	Burst		HMG	27-Oct, 19:19
2-3km SE	Heard	5	Shot		Small arms	27-Oct, 19:21
2-3km SE	Heard	1	Explosion	Undetermined	N/K	27-Oct, 19:23
2-4km SE	Heard	9	Burst		HMG	27-Oct, 19:25-19:27
2-4km SE	Heard	5	Burst		HMG	27-Oct, 19:29
3km SE	Heard	11	Burst		Small arms	27-Oct, 19:32-19:33
3-5km SE	Heard	12	Burst		HMG	27-Oct, 19:36-19:38
2-4km SE	Heard	1	Explosion	Undetermined	N/K	27-Oct, 19:37
2-3km SE	Heard	12	Shot		Small arms	27-Oct, 19:40-19:41
2-3km SE	Heard	9	Burst		Small arms	27-Oct, 19:42
2-4km SE	Heard	2	Explosion	Undetermined	N/K	27-Oct, 19:43
3-5km SE	Heard	5	Burst		HMG	27-Oct, 19:46
3-5km SE	Heard	5	Burst		HMG	27-Oct, 19:47
3-5km SE	Heard	10	Burst		HMG	27-Oct, 19:49
2-4km SE	Heard	8	Burst		HMG	27-Oct, 19:50
2-4km SE	Heard	1	Explosion	Undetermined	N/K	27-Oct, 19:57
2-3km SE	Heard	4	Burst		Small arms	27-Oct, 20:07
3-4km E	Heard	6	Burst		HMG	27-Oct, 20:14
3-5km SE	Heard	12	Burst		HMG	27-Oct, 20:19
3-5km SE	Heard	8	Burst		HMG	27-Oct, 20:22
3-5km SE	Heard	17	Burst		HMG	27-Oct, 20:23
2-3km SE	Heard	22	Shot		Small arms	27-Oct, 20:25-20:27
3-4km SE	Heard	5	Burst		HMG	27-Oct, 20:31
3-5km SE	Heard	12	Burst		HMG	27-Oct, 20:34
3-5km SE	Heard	5	Burst		HMG	27-Oct, 20:39
3-5km SE	Heard	8	Burst		HMG	27-Oct, 20:40
2-4km SE	Heard	8	Explosion	Undetermined	N/K	27-Oct, 20:41
3-5km SE	Heard	6	Burst		HMG	27-Oct, 20:42
2-4km SE	Heard	1	Explosion	Undetermined	N/K	27-Oct, 20:57
5-8km SE	Heard	2	Explosion	Undetermined	N/K	27-Oct, 20:57
2-4km SE	Heard	4	Explosion	Undetermined	N/K	27-Oct, 20:58-20:59
2-4km SE	Heard	5	Explosion	Undetermined	N/K	27-Oct, 21:02
2-4km SE	Heard	2	Explosion	Undetermined	N/K	27-Oct, 21:03
5-6km E	Heard	4	Explosion	Undetermined	N/K	27-Oct, 21:08
5-6km E	Heard	3	Explosion	Undetermined	N/K	27-Oct, 21:13-21:14
5-6km E	Heard	7	Explosion	Undetermined	N/K	27-Oct, 21:15-

						21:16
5-6km E	Heard		Burst	Uncountable	HMG	27-Oct, 21:15
5-6km E	Heard	2	Explosion	Undetermined	N/K	27-Oct, 21:16
6-8km E	Heard	2	Explosion	Undetermined	N/K	27-Oct, 21:18
5-6km E	Heard	7	Burst		HMG	27-Oct, 21:18
3-5km E	Heard	3	Burst		HMG	27-Oct, 21:18
2-4km E	Heard	1	Explosion	Undetermined	N/K	27-Oct, 21:19
2-3km E	Heard	3	Shot		Small arms	27-Oct, 21:20
5-6km E	Heard	3	Explosion	Undetermined	N/K	27-Oct, 21:21
5-6km E	Heard	5	Explosion	Undetermined	N/K	27-Oct, 21:25-21:26
3-5km E	Heard	2	Burst		HMG	27-Oct, 21:27
3-5km E	Heard	4	Burst		HMG	27-Oct, 21:28
3-5km E	Heard	8	Burst		HMG	27-Oct, 21:29
5-6km E	Heard	1	Explosion	Undetermined	N/K	27-Oct, 21:30
5-6km E	Heard	1	Explosion	Undetermined	N/K	27-Oct, 21:31
5-6km E	Heard	2	Explosion	Undetermined	N/K	27-Oct, 21:36
5-6km E	Heard	4	Explosion	Undetermined	N/K	27-Oct, 21:38
5-6km E	Heard	1	Explosion	Undetermined	N/K	27-Oct, 21:43
5-6km E	Heard	1	Explosion	Undetermined	N/K	27-Oct, 21:44
3-5km E	Heard	9	Burst		HMG	27-Oct, 21:48
3-5km E	Heard	2	Burst		HMG	27-Oct, 21:57
2-4km E	Heard	4	Burst		HMG	27-Oct, 21:59
5-6km E	Heard	3	Explosion	Undetermined	N/K	27-Oct, 22:00-22:01
2-4km E	Heard	12	Burst		HMG	27-Oct, 22:06-22:07
5-6km E	Heard	1	Explosion	Undetermined	N/K	27-Oct, 22:08
2-4km E	Heard		Burst	Uncountable	HMG	27-Oct, 22:08
3-5km E	Heard	1	Explosion	Undetermined	N/K	27-Oct, 22:09
2-3km E	Heard	3	Shot		Small arms	27-Oct, 22:09
2-4km E	Heard	9	Burst		HMG	27-Oct, 22:11
2-4km E	Heard	9	Burst		HMG	27-Oct, 22:12
5-6km E	Heard	1	Explosion	Undetermined	N/K	27-Oct, 22:12
5-6km E	Heard	3	Explosion	Undetermined	N/K	27-Oct, 22:14-22:16
2-4km E	Heard		Burst	Uncountable	HMG	27-Oct, 22:18-22:20
5-6km E	Heard	2	Explosion	Undetermined	N/K	27-Oct, 22:18-22:19
5-6km E	Heard	5	Explosion	Undetermined	N/K	27-Oct, 22:22-22:25
5-6km E	Heard	4	Explosion	Undetermined	N/K	27-Oct, 22:31
2-3km E	Heard		Burst	Uncountable	HMG	27-Oct, 22:31-22:33
5-6km E	Heard	3	Explosion	Undetermined	N/K	27-Oct, 22:33
2-3km SW	Heard	40	Burst		HMG	27-Oct, 22:35
5-6km E	Heard	5	Explosion	Undetermined	N/K	27-Oct, 22:35-22:38
5-6km E	Heard	1	Explosion	Undetermined	N/K	27-Oct, 22:39
2-3km E	Heard	7	Burst		HMG	27-Oct, 22:42-22:44
5-6km E	Heard	3	Explosion	Undetermined	N/K	27-Oct, 22:44-22:47
5-6km E	Heard	1	Explosion	Undetermined	N/K	27-Oct, 22:52
5-6km E	Heard	12	Explosion	Undetermined	N/K	27-Oct, 23:05-23:55
3-4km SW	Heard	80	Burst		HMG	27-Oct, 23:05-23:56
2-4km SW	Heard	2	Explosion	Undetermined	N/K	28-Oct, 07:32

	2-4km SE	Heard	2	Burst		HMG	28-Oct, 07:36
	2-4km SE	Heard	1	Explosion	Undetermined	N/K	28-Oct, 07:41
	3-5km SW	Heard	5	Burst		HMG	28-Oct, 17:40
	3-5km SW	Heard	4	Burst		HMG	28-Oct, 17:46
	3-5km S	Heard	2	Explosion	Undetermined	N/K	28-Oct, 17:56
	3km S	Heard	13	Burst		HMG	28-Oct, 18:05
	3km S	Heard	14	Burst		HMG	28-Oct, 18:07-18:09
	3km S	Heard	3	Burst		HMG	28-Oct, 18:10
	2km S	Heard	16	Burst		Small arms	28-Oct, 18:11
S outskirts of Muratove (government-controlled, 50km NW of Luhansk)	2-4km W	Heard	1	Explosion	Undetermined	N/K	28-Oct, 10:05
	2-4km SW	Heard	7	Explosion	Undetermined	N/K	28-Oct, 10:06-10:10
N outskirts of Zolote-4/Rodina (government-controlled, 59km W of Luhansk)	1-2km SW	Heard	39	Shot	Outgoing (assessed as inside the disengagement area)	Small arms	28-Oct, 11:10-11:17
Zolote-4/Rodina (government-controlled, 59km W of Luhansk)	1-2km SW	Heard	14	Shot	Assessed as inside the disengagement area)	Small arms	28-Oct, 11:20-11:32
	2-3km NW	Heard	6	Shot	Outgoing (assessed as outside the disengagement area)	Small arms	28-Oct, 11:20-11:32

### 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).