Table of ceasefire violations as of 9 December 2018¹

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
SMM camera in	1-3km SSE	Recorded	1	Projectile	ENE to WSW	N/K	7-Dec, 20:01
Chermalyk	1-3km SSE	Recorded	2	Projectile	ENE to WSW	N/K	7-Dec, 20:02
(government-	1-3km SSE	Recorded	1	Explosion	Undetermined	N/K	7-Dec, 20:59
controlled,	1-3km SSE	Recorded	5	Projectile	ENE to WSW	N/K	7-Dec, 21:16
31km NE of	1-3km SSE	Recorded	1	Explosion	Undetermined	N/K	7-Dec, 21:26
Mariupol)	1-3km SSE	Recorded	1	Projectile	WSW to ENE	N/K	7-Dec, 22:24
	1-3km SSE	Recorded	2	Projectile	ESE to WNW	N/K	7-Dec, 22:24
	1-3km SSE	Recorded	5	Projectile	ENE to WSW	N/K	7-Dec, 22:25
	1-3km SSE	Recorded	7	Projectile	ENE to WSW	N/K	7-Dec, 23:50
	6-9km SSE	Recorded	1	Explosion	Undetermined	N/K	8-Dec, 00:03
	1-3km SSE	Recorded	2	Projectile	ENE to WSW	N/K	8-Dec, 00:38
	1-3km SSE	Recorded	2	Projectile	ENE to WSW	N/K	8-Dec, 00:39
	1-3km SSE	Recorded	2	Projectile	ENE to WSW	N/K	8-Dec, 01:23
	1-3km SSE	Recorded	1	Projectile	ENE to WSW	N/K	8-Dec, 01:24
	1-3km SSE	Recorded	1	Projectile	ENE to WSW	N/K	8-Dec, 01:26
	1-3km SSE	Recorded	2	Explosion	Undetermined	N/K	8-Dec, 01:26
	1-3km SSE	Recorded	3	Projectile	ENE to WSW	N/K	8-Dec, 03:19
	1-3km SE	Recorded	9	Projectile	ENE to WSW	N/K	8-Dec, 04:04
	1-3km SE	Recorded	2	Projectile	WSW to ENE	N/K	8-Dec, 04:04
	1-3km SE	Recorded	5	Projectile	ENE to WSW	N/K	8-Dec, 04:05
	1-3km SE	Recorded	5	Projectile	ENE to WSW	N/K	8-Dec, 04:06
	1-3km SSE	Recorded	1	Projectile	WSW to ENE	N/K	8-Dec, 04:19
	1-3km SE	Recorded	8	Projectile	ENE to WSW	N/K	8-Dec, 04:19
	1-3km SE	Recorded	9	Projectile	ENE to WSW	N/K	8-Dec, 05:14
SMM camera at	1-2km SSW	Recorded	2	Projectile	W to E	N/K	7-Dec, 18:41
Donetsk	1-2km SSW	Recorded	4	Projectile	E to W	N/K	7-Dec, 18:59
Filtration	1-2km SSW	Recorded	1	Projectile	SSE to NNW	N/K	7-Dec, 19:09
Station (15km N	1-2km SSW	Recorded	1	Projectile	WNW to ESE	N/K	7-Dec, 19:09
of Donetsk)	1-2km SSW	Recorded	4	Projectile	SSE to NNW	N/K	7-Dec, 19:10
,	1-2km S	Recorded	1	Projectile	SSE to NNW	N/K	7-Dec, 19:33
	0-1km S	Recorded	5	Projectile	E to W	N/K	7-Dec, 19:56
	0-1km S	Recorded	4	Projectile	E to W	N/K	7-Dec, 21:03
	0-1km S	Recorded	3	Projectile	E to W	N/K	8-Dec, 00:39
	0-1km S	Recorded	1	Projectile	E to W	N/K	8-Dec, 00:58
	0-1km S	Recorded	1	Projectile	E to W	N/K	8-Dec, 01:47
	0-1km S	Recorded	1	Projectile	E to W	N/K	8-Dec, 04:08
	1-2km SSW	Recorded	2	Explosion	Undetermined	N/K	8-Dec, 05:30
	1-2km SSW	Recorded	1	Explosion	Undetermined	N/K	8-Dec, 05:50
	1-2km SSW	Recorded	1	Projectile	W to E	N/K	8-Dec, 17:01
	1-2km SSW	Recorded	1	Projectile	E to W	N/K	8-Dec, 17:06
	1-2km SSW	Recorded	1	Explosion	Impact	N/K	8-Dec, 17:14
	1-2km S	Recorded	2	Projectile	E to W	N/K	8-Dec, 17:14 8-Dec, 17:23
			1	•			
	1-2km SSW 1-2km SSW	Recorded Recorded	1	Explosion Projectile	Undetermined W to E	N/K N/K	8-Dec, 16:52
	1-2km SSW	Recorded	1	,	E to W	N/K N/K	8-Dec, 17:01
	1-2km SSW	Recorded		Projectile Explosion		N/K N/K	8-Dec, 17:06
			1	Explosion Projectile	Impact E to W		8-Dec, 17:14
	1-2km S	Recorded	2	Projectile Projectile	E to W	N/K	8-Dec, 17:23
	1-2km SSW 1-2km SSW	Recorded Recorded	1	Projectile Illumination flare	E to W In vertical flight	N/K N/K	8-Dec, 17:44 8-Dec, 17:44

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¹ 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	Illumination	In vertical flight	N/K	8-Dec, 17:46
				flare			,
C) D I	1-2km SSW	Recorded	1	Projectile	E to W	N/K	8-Dec, 17:47
SMM camera 1.5km NE of	1-3km E	Recorded	5	Projectile	N to S S to N (in	N/K	7-Dec, 18:32
Hnutove	1-3km E	Recorded	1	Projectile	vertical flight)	N/K	7-Dec, 18:32
(government-	1-3km E	Recorded	1	Projectile	N to S	N/K	7-Dec, 18:33
controlled,	1-3km E	Recorded	5	Projectile	N to S	N/K	7-Dec, 18:39
20km NE of	2-4km E	Recorded	3	Projectile	NW to SE	N/K	7-Dec, 20:42
Mariupol)	2-4km ESE	Recorded	6	Projectile	SW to NE	N/K	7-Dec, 22:29
	2-4km ESE	Recorded	9	Projectile	SW to NE	N/K	7-Dec, 22:30
	2-4km E	Recorded	6	Projectile	SW to NE	N/K	7-Dec, 22:44
	2-4km ENE	Recorded	8	Projectile	NW to SE	N/K	7-Dec, 22:45
	2-4km E	Recorded	22	Projectile	SW to NE	N/K	7-Dec, 23:08
	2-4km E	Recorded	12	Projectile	SW to NE	N/K	7-Dec, 23:09
	2-4km E	Recorded	7	Projectile	SW to NE	N/K	7-Dec, 23:10
	2-4km E	Recorded	1	Projectile	SW to NE	N/K	7-Dec, 23:16
	2-4km ESE	Recorded	4	Projectile	NW to SE	N/K	7-Dec, 23:18
	2-4km E	Recorded	9	Projectile	SW to NE	N/K	7-Dec, 23:21
	2-4km E	Recorded	1	Projectile	NW to SE	N/K	7-Dec, 23:23
	2-4km E	Recorded	1	Projectile	NW to SE	N/K	7-Dec, 23:32
	2-4km E	Recorded	3	Projectile	NW to SE	N/K	7-Dec, 23:38
	2-4km E	Recorded	5	Projectile	NW to SE	N/K	7-Dec, 23:42
	2-4km E	Recorded	4	Projectile	NW to SE	N/K	7-Dec, 23:54
	2-4km E	Recorded	1	Explosion	Undetermined	N/K	8-Dec, 00:03
	2-4km E	Recorded	17	Projectile	NW to SE	N/K	8-Dec, 04:33
	2-4km E	Recorded	4	Projectile	N to S	N/K	8-Dec, 17:44
	2-4km ESE	Recorded	2	Projectile	N to S	N/K	8-Dec, 17:49
	2-4km ESE	Recorded	2	Projectile	N to S	N/K	8-Dec, 17:50
of Lomakyne (government- controlled, 15km NE of Mariupol)	2-4km NE	Recorded	1	Explosion	Undetermined	N/K	7-Dec, 20:56
SMM camera at entry-exit	1-3km NE	Recorded	1	Illumination flare	In vertical flight	N/K	8-Dec, 00:27
checkpoint in Marinka (government- controlled, 23km SW of Donetsk)	1-3km NE	Recorded	6	Projectile	E to W	N/K	8-Dec, 02:33
SMM camera at	1.5-2km S	Recorded	3	Explosion	Undetermined	N/K	7-Dec, 23:38
entry-exit	2-4km SE	Recorded	1	Projectile	E to W	N/K	8-Dec, 17:50
checkpoint in	2-4km SSE	Recorded	7	Projectile	In vertical flight	N/K	8-Dec, 18:03
Pyshchevyk (government- controlled, 25km NE of Mariupol)	2-4km SSE	Recorded	3	Projectile	W to E	N/K	8-Dec, 18:03
7.5km NW of Makiivka (non- government- controlled, 12km NE of Donetsk)	2-4km W	Heard	12	Burst		Small arms	8-Dec, 10:00
1km NW of railway station	1-2km SSW	Heard	1	Shot		Small arms	8-Dec, 10:40
in Yasynuvata (non-	0.5-1km NW	Heard	4	Shot		Small arms	8-Dec, 10:40-10:42
government- controlled,	0.5-1km NNW	Heard	32	Shot		Small arms	8-Dec, 10:45-11:06
16km NE of Donetsk)	0.5-1km NNW	Heard	5	Burst		Small arms	8-Dec, 10:48-10:53

	0.5-1km	TT 1		Cl. 4		IIMC	0 D 11 04
	NNW	Heard	5	Shot		HMG	8-Dec, 11:04
	0.5-1km NNW	Heard	7	Explosion	Outgoing	Cannon 30mm	8-Dec, 12:43-12:44
	1-2km SW	Heard	20	Shot		Small arms	8-Dec, 12:52-12:55
	1-2km SW	Heard	1	Explosion	Outgoing	Mortar (type N/K)	8-Dec, 12:55
	0.5-1km NNW	Heard	4	Explosion	Outgoing	Cannon 30mm	8-Dec, 12:57
	1-2km SW	Heard	24	Shot		Small arms	8-Dec, 13:09-13:34
	1-2km WSW	Heard	23	Shot		Small arms	8-Dec, 13:12-13:22
	3-4km SW	Heard	1	Explosion	Undetermined	N/K	8-Dec, 13:49
	500-800m SW	Heard	19	Shot		Small arms	8-Dec, 14:05-14:13
	1-2km SW	Heard		Burst	Uncountable	Small arms	8-Dec, 14:33
Central railway station in Donetsk city (non- government- controlled, 6km NW of Donetsk city centre)	2-3km WNW	Heard	1	Explosion	Undetermined	N/K	8-Dec, 13:46
2km SE of Lebedynske	N/K ESE	Heard	7	Shot		Small arms	8-Dec, 12:26
(government	2-3km NE	Heard	2	Explosion	Undetermined	N/K	8-Dec, 12:43
controlled, 16km NE of Mariupol)	1-2km SE	Heard	1	Explosion	Outgoing	Mortar (type N/K)	8-Dec, 12:55
	1-3km NE	Heard	1	Explosion	Outgoing	Mortar (type N/K)	8-Dec, 12:55
	2-3km NE	Heard	2	Explosion	Undetermined	N/K	8-Dec, 12:57-12:58
	2-3km NE	Heard	2	Explosion	Outgoing	Mortar (type N/K)	8-Dec, 13:02
3km SW of Chermalyk (government controlled, 31km NE of Mariupol)	2-4km E	Heard	1	Explosion	Undetermined	N/K	8-Dec, 12:13
SE edge of Bila Hora (government- controlled, 54km N of Donetsk)	400-500m NNE	Heard	12	Shot		Small arms	8-Dec, 11:38-11:39
Horlivka (non- government- controlled, 39km NE of Donetsk)	4-6km SW	Heard	7	Explosion	Undetermined	N/K	8-Dec, 15:37-15:55
Dachne (non-	2-2.5km W	Heard	1	Shot		HMG	8-Dec, 10:50
government- controlled,	2-2.5km W	Heard	1	Burst		HMG	8-Dec, 10:54
47km W of Luhansk)	2km NNE	Heard	1	Burst		HMG	8-Dec, 11:05
Sentianivka (formerly	5-6km WNW	Heard	6	Burst		HMG	8-Dec, 10:55-11:06

Frunze, non-government-controlled, 44km W of Lahamsk)								
Solution Solution	Frunze, non-							
Controlled, 4km W of Lubansk)	C	5-6km					Small	8-Dec
Hand State Hand Heard Hand Heard Hand Hand	,		Heard	2	Shot			
Woutskirs of Pervomaisk (non-government-controlled, 58km w of Lubansk)	44km W of	,,,,,,					arms	10.55 11.00
Pervomaisk (non-government-controlled, 58km W of Luhansk)								
Second S	W outskirts of							
Second S	Pervomaisk							
Sakm N of Cathonics Sakm SW Heard Sakm SW Heard Sakm SW Heard Sakm SW Heard Sakm SW	`							8-Dec
Skm W of Luhansk Skm W of Luhansk Skm W of Luhansk Skm W of Kalynove-Borschchurate (non-government-controlled, 61km W of Luhansk Skm Ottokiris of Molodizhme (non-government-controlled, 62km NW of Luhansk Skm Ottokiris of Molodizhme (non-government-controlled, 62km NW of Luhansk Skm Ottokiris of Molodizhme (non-government-controlled, 62km NW of Luhansk Skm Ottokiris of Molodizhme (non-government-controlled, 62km NW of Luhansk Skm Ottokiris of Molodizhme (non-government-controlled, 71km Nof Donetsk Skm Ottokiris of Nof Donetsk	•	3-4km SW	Heard	9	Burst		HMG	
Lubansk	,							13.07-13.14
Ikm N of Kalynove Borshchuvate (non-government-controlled, 61km W of Luhansk)	58km W of							
Raynove-Borscheuward 13-09-13:14	Luhansk)							
13:09-15:14 13:09-15:14	1km N of	3-4km SW	Heard	2	Ruret		HMG	8-Dec,
George		3-4KIII 5 VV	Ticara		Durst		TIMO	13:09-13:14
Sovernment-controlled, of Skm NW of Luhansk)	Borshchuvate							
Controlled, College								
1,345-13:46		7-10km W	Heard	1	Explosion	Undetermined	N/K	8-Dec,
Luhansk		/-10Kiii v v	Ticaru	1	Explosion	Ondetermined	14/1	13:45-13:46
SW outskirts of Molodizline (non-government-controlled, 63km NW of Luhansk)								
Molodizhne (non-government-controlled, 63km NW of Luhansk)								
Controlled, 63km NW of Luhansk)								
2-4km S Heard 2 Shot Small arms 8-Dec, 14:10								
2-4km SW Recorded 1 Explosion Undetermined N/K 8-Dec, 05:34	`						Small	
Controlled, Gammark in Kriakivka (government-controlled, 38km NW of Luhansk)		2-4km S	Heard	2	Shot			8-Dec, 14:10
Lubansk SMM camera in Chernalyk (government-controlled, 31km SW of Donetsk)	,						arms	
SMM camera in Kriakivka (government-controlled, 38km NW of Luhansk)								
Controlled								
Qovernment-controlled, 38km NW of Luhansk)								
Controlled, 38km NW of Luhansky SMM camera in Avditivka (government-controlled, 17km N of Donetsky								
SMM camera in Avdiivka (government-controlled, 17km N of Donetsk) SMM camera in Berezove (government-controlled, 3-4km SE Recorded 1 Explosion N/K 8-Dec, 22:44	-	2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	8-Dec 05:34
Luhansk SMM camera in Avdiivka (government-controlled, 17km N of Donetsk) SMM camera in Berezove (government-controlled, 31km SW of Donetsk) SMM camera in Berezove (government-controlled, 31km SW of Donetsk) SMM camera in Chermalyk (government-controlled, 31km SW of Donetsk) 2-4km SSE	,	2 11111 55 11	recorded	1	Expression	Chacterninea	11/11	0 Bee, 03.31
SMM camera in Avdityka (government-controlled, 17km N of Donetsk)								
Avdiivka (government-controlled, 17km N of Donetsk) SMM camera in Berezove (government-controlled, 31km SW of Donetsk) SMM camera in Chermalyk (government-controlled, 31km SE Recorded 1 Explosion Undetermined N/K 8-Dec, 23:16								
(government-controlled, 17km N of Donetsk) 2-4km SE Recorded 1 Explosion N/K 8-Dec, 22:44 SMM camera in Berezove (government-controlled, 31km SW of Donetsk) 3-4km SE Recorded 1 Explosion Undetermined N/K 8-Dec, 23:16 SMM camera in Chermalyk (government-controlled, 31km NE of Mariupol) 2-4km SSE Recorded 3 Projectile E to W N/K 8-Dec, 20:23 1km NE of Mariupol) 2-4km SSE Recorded 1 Illumination flare In vertical flight N/K 8-Dec, 20:23 2-4km SSE Recorded 3 Projectile E to W N/K 8-Dec, 20:23 2-4km SSE Recorded 1 Projectile E to W N/K 8-Dec, 20:23 2-4km SSE Recorded 1 Projectile E to W N/K 8-Dec, 20:25 2-4km SSE Recorded 1 Projectile E to W N/K 8-Dec, 20:55 2-4km SSE Recorded 1 Projectile E to W N/K 9-Dec, 00:01 2-4km SSE <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
2-4km SE								
17km N of Donetsk SMM camera in Berezove (government-controlled, 31km SW of Donetsk SMM camera in Chermalyk (government-controlled, 31km SW of Donetsk SMM camera in Chermalyk (government-controlled, 31km SE Recorded 3 Projectile E to W N/K 8-Dec, 20:23		2-4km SE	Recorded	1	Explosion		N/K	8-Dec. 22:44
Donetsk SMM camera in Berezove (government-controlled, 31km SW of Donetsk)								
SMM camera in Berezove (government-controlled, 31km SW of Donetsk)								
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(government-controlled, 31km SW of Donetsk) 3-4km SE Recorded 1 Explosion Undetermined N/K 8-Dec, 23:16 SMM camera in Chermalyk (government-controlled, 31km NE of Mariupol) 2-4km SSE Recorded 1 Illlumination flare In vertical flight N/K 8-Dec, 22:26 2-4km SSE Recorded 6 Projectile E to W N/K 8-Dec, 22:55 2-4km SSE Recorded 3 Projectile E to W N/K 8-Dec, 22:55 2-4km SSE Recorded 1 Projectile E to W N/K 8-Dec, 22:55 2-4km SSE Recorded 1 Projectile E to W N/K 8-Dec, 22:55 2-4km SSE Recorded 1 Projectile E to W N/K 8-Dec, 23:12 2-4km SSE Recorded 1 Projectile E to W N/K 9-Dec, 00:01 2-4km SSE Recorded 2 Projectile E to W N/K 9-Dec, 03:03 2-4km SSE Recorded 1 Projectile E to								
Some controlled, 31km SW of Donetsk SMM camera in Chermalyk (government-controlled, 31km SSE Recorded 1 Recorded 2-4km SSE Recorded 3 Recorded 2-4km SSE Recorded 4 Recorded 2 Recorded 3 Re	Berezove							
SMM camera in Chermalyk (government-controlled, 3	· C	3-4km SE	Recorded	1	Explosion	Undetermined	N/K	8-Dec 23:16
Donetsk		3 Han SE	recoraca	1	Expression	Chacterininea	14/11	0 200, 23.10
SMM camera in Chermalyk (government-controlled, 3 Projectile E to W N/K 8-Dec, 20:23								
Chermalyk (government-controlled, 31km NE of Mariupol)								
(government-controlled, 31km NE of Mariupol) 2-4km SSE Recorded 6 Projectile E to W N/K 8-Dec, 22:55 2-4km SSE Recorded 3 Projectile E to W N/K 8-Dec, 22:55 Mariupol) 2-4km SSE Recorded 1 Projectile E to W N/K 8-Dec, 22:56 2-4km SSE Recorded 1 Projectile E to W N/K 8-Dec, 22:56 2-4km SSE Recorded 1 Projectile E to W N/K 8-Dec, 22:56 2-4km SSE Recorded 1 Projectile E to W N/K 9-Dec, 00:01 2-4km SSE Recorded 2 Projectile E to W N/K 9-Dec, 00:03 2-4km SSE Recorded 2 Projectile E to W N/K 9-Dec, 00:03 2-4km SSE Recorded 1 Projectile E to W N/K 9-Dec, 03:03 2-4km SSE Recorded 1 Projectile E to W N/K 9-Dec, 03:03		2-4km SSE	Recorded	3		E to W	N/K	8-Dec, 20:23
Controlled, 2-4km SSE		2-4km SSE	Recorded	1		In vertical flight	N/K	8-Dec, 22:26
2-4km SSE								·
Mariupol) 2-4km SSE Recorded 1 Projectile E to W N/K 8-Dec, 23:12 2-4km SSE Recorded 1 Projectile E to W N/K 9-Dec, 00:01 2-4km SSE Recorded 2 Projectile E to W N/K 9-Dec, 00:10 2-4km SSE Recorded 2 Projectile E to W N/K 9-Dec, 00:33 2-4km SSE Recorded 2 Projectile E to W N/K 9-Dec, 01:01 2-4km SSE Recorded 2 Projectile E to W N/K 9-Dec, 03:02 2-4km SSE Recorded 1 Projectile E to W N/K 9-Dec, 03:03 2-4km SSE Recorded 1 Projectile E to W N/K 9-Dec, 03:04 2-4km SSE Recorded 1 Explosion Undetermined N/K 9-Dec, 05:18 2-4km SSE Recorded 1 Burst In vertical flight N/K 9-Dec, 05:31 2-4km SSE Recorded								
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2-4km SSE Recorded 2 Projectile E to W N/K 9-Dec, 00:33 2-4km SSE Recorded 3 Projectile E to W N/K 9-Dec, 01:01 2-4km SSE Recorded 2 Projectile E to W N/K 9-Dec, 03:02 2-4km SSE Recorded 1 Projectile E to W N/K 9-Dec, 03:03 2-4km SSE Recorded 1 Projectile E to W N/K 9-Dec, 03:04 2-4km SSE Recorded 6 Projectile E to W N/K 9-Dec, 03:03 2-4km S Recorded 1 Explosion Undetermined N/K 9-Dec, 04:49 2-4km S Recorded 1 Burst In vertical flight N/K 9-Dec, 05:18 2-4km SSE Recorded 1 Projectile WNW to ESE N/K 9-Dec, 16:46 2-4km SSE Recorded 1 Projectile WNW to ESE N/K 9-Dec, 16:51								
2-4km SSE Recorded 3 Projectile E to W N/K 9-Dec, 01:01 2-4km SSE Recorded 2 Projectile E to W N/K 9-Dec, 03:02 2-4km SSE Recorded 1 Projectile E to W N/K 9-Dec, 03:03 2-4km SSE Recorded 1 Projectile E to W N/K 9-Dec, 03:04 2-4km SSE Recorded 6 Projectile E to W N/K 9-Dec, 03:33 2-4km S Recorded 1 Explosion Undetermined N/K 9-Dec, 04:49 2-4km S Recorded 1 Burst In vertical flight N/K 9-Dec, 05:18 2-4km SSE Recorded 1 Projectile In vertical flight N/K 9-Dec, 05:31 2-4km SSE Recorded 4 Projectile WNW to ESE N/K 9-Dec, 16:46 2-4km SSE Recorded 1 Projectile WNW to ESE N/K 9-Dec, 16:51								
2-4km SSE Recorded 2 Projectile E to W N/K 9-Dec, 03:02 2-4km SSE Recorded 1 Projectile E to W N/K 9-Dec, 03:03 2-4km SSE Recorded 1 Projectile E to W N/K 9-Dec, 03:04 2-4km SSE Recorded 6 Projectile E to W N/K 9-Dec, 03:33 2-4km S Recorded 1 Explosion Undetermined N/K 9-Dec, 04:49 2-4km S Recorded 1 Burst In vertical flight N/K 9-Dec, 05:18 2-4km SSE Recorded 1 Projectile In vertical flight N/K 9-Dec, 05:31 2-4km SSE Recorded 4 Projectile WNW to ESE N/K 9-Dec, 16:46 2-4km SSE Recorded 1 Projectile WNW to ESE N/K 9-Dec, 16:51					,			
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2-4km SSE Recorded 1 Projectile E to W N/K 9-Dec, 03:04 2-4km SSE Recorded 6 Projectile E to W N/K 9-Dec, 03:33 2-4km S Recorded 1 Explosion Undetermined N/K 9-Dec, 04:49 2-4km S Recorded 1 Burst In vertical flight N/K 9-Dec, 05:18 2-4km SSE Recorded 1 Projectile In vertical flight N/K 9-Dec, 05:31 2-4km SSE Recorded 4 Projectile WNW to ESE N/K 9-Dec, 16:46 2-4km SSE Recorded 1 Projectile WNW to ESE N/K 9-Dec, 16:51								
2-4km SSE Recorded 6 Projectile E to W N/K 9-Dec, 03:33 2-4km S Recorded 1 Explosion Undetermined N/K 9-Dec, 04:49 2-4km S Recorded 1 Burst In vertical flight N/K 9-Dec, 05:18 2-4km SSE Recorded 1 Projectile In vertical flight N/K 9-Dec, 05:31 2-4km SSE Recorded 4 Projectile WNW to ESE N/K 9-Dec, 16:46 2-4km SSE Recorded 1 Projectile WNW to ESE N/K 9-Dec, 16:51								
2-4km SRecorded1ExplosionUndeterminedN/K9-Dec, 04:492-4km SRecorded1BurstIn vertical flightN/K9-Dec, 05:182-4km SSERecorded1ProjectileIn vertical flightN/K9-Dec, 05:312-4km SSERecorded4ProjectileWNW to ESEN/K9-Dec, 16:462-4km SSERecorded1ProjectileWNW to ESEN/K9-Dec, 16:462-4km SSERecorded1ProjectileWNW to ESEN/K9-Dec, 16:51								
2-4km SRecorded1BurstIn vertical flightN/K9-Dec, 05:182-4km SSERecorded1ProjectileIn vertical flightN/K9-Dec, 05:312-4km SSERecorded4ProjectileWNW to ESEN/K9-Dec, 16:462-4km SSERecorded1ProjectileWNW to ESEN/K9-Dec, 16:462-4km SSERecorded1ProjectileWNW to ESEN/K9-Dec, 16:51				6				
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2-4km SSERecorded4ProjectileWNW to ESEN/K9-Dec, 16:462-4km SSERecorded1ProjectileWNW to ESEN/K9-Dec, 16:462-4km SSERecorded1ProjectileWNW to ESEN/K9-Dec, 16:51				1			N/K	9-Dec, 05:18
2-4km SSE Recorded 1 Projectile WNW to ESE N/K 9-Dec, 16:46 2-4km SSE Recorded 1 Projectile WNW to ESE N/K 9-Dec, 16:51		2-4km SSE	Recorded				N/K	
2-4km SSE Recorded 1 Projectile WNW to ESE N/K 9-Dec, 16:51		2-4km SSE	Recorded	4	Projectile	WNW to ESE	N/K	9-Dec, 16:46
		2-4km SSE	Recorded	1	Projectile		N/K	9-Dec, 16:46
SMM camera at 1-2km SSW Recorded 2 Projectile E to W N/K 8-Dec, 18:57		2-4km SSE	Recorded	1	Projectile	WNW to ESE	N/K	9-Dec, 16:51
	SMM camera at	1-2km SSW	Recorded	2	Projectile	E to W	N/K	8-Dec, $18:57$

				T	1		1
Donetsk	1-3km SSW	Recorded	10	Projectile	E to W	N/K	8-Dec, 20:01
Filtration	1-3km SSW	Recorded	1	Explosion	Undetermined	N/K	8-Dec, 20:30
Station (15km N	1-3km SSW	Recorded	3	Projectile	E to W	N/K	8-Dec, 20:39
of Donetsk)	1-3km SSW	Recorded	7	Projectile	NW to SE	N/K	8-Dec, 21:29
	1-3km SSW	Recorded	5	Projectile	NW to SE	N/K	8-Dec, 21:32
	1-3km SSW	Recorded	2	Projectile	NW to SE	N/K	8-Dec, 21:45
	1-3km SSW	Recorded	1	Projectile	NE to SW	N/K	8-Dec, 21:49
	1-3km SSW	Recorded	2	Projectile	NW to SE	N/K	8-Dec, 21:57
	1-3km SSW	Recorded	1	Projectile	NE to SW	N/K	8-Dec, 22:02
	1-3km SSW	Recorded	2	Projectile	NNE to SSW	N/K	8-Dec, 22:03
	1-3km SSW	Recorded	3	Projectile	ENE to WSW	N/K	8-Dec, 22:03
	1-3km SSW	Recorded	2	Explosion	Undetermined	N/K	8-Dec, 22:44
	1-3km SSW	Recorded	1	Explosion	Undetermined	N/K	8-Dec, 22:48
	1-3km SSW	Recorded	1	Explosion	Undetermined	N/K	8-Dec, 22:49
	1-3km SSW	Recorded	7	Projectile	NW to SE	N/K	8-Dec, 22:53
	1-3km SSW	Recorded	1	Projectile		N/K	8-Dec, 23:27
	1-3km SSW	Recorded	2	Projectile	E to W	N/K	9-Dec, 00:55
	1-3km S	Recorded	1	Projectile	ENE to WSW	N/K	9-Dec, 00:58
	1-3km S	Recorded	1	Projectile	ENE to WSW	N/K	9-Dec, 01:28
	1-3km SSW	Recorded	1	Projectile	WNW to ESE	N/K	9-Dec, 01:51
	1-3km SSW	Recorded	3	Projectile	ENE to WSW	N/K	9-Dec, 01:58
	1-3km SSW	Recorded	2	Projectile	WNW to ESE	N/K	9-Dec, 01:59
	1-2km S	Recorded	3	Projectile	SSE to NNW	N/K	9-Dec, 03:21
	1-3km SSW	Recorded	2	Projectile	NW to SE	N/K	9-Dec, 03:35
	1-3km SSW	Recorded	2	Projectile	NW to SE	N/K	9-Dec, 04:38
	1-3km S	Recorded	1	Projectile	E to W	N/K	9-Dec, 04:46
	1-3km S	Recorded	1	Projectile	NE to SW	N/K	9-Dec, 04:46
	1-3km SSW	Recorded	1	Projectile	NE to SW	N/K	9-Dec, 05:30
	1-3km SSW	Recorded	1	Projectile	NW to SE	N/K	9-Dec, 05:30
	2-3km SSW	Recorded	1	Projectile	SE to NW	N/K	9-Dec, 16:57
	2-3km SSE	Recorded	1	Explosion	Undetermined	N/K	9-Dec, 17:00
	1-3km SSE	Recorded	1	Projectile	SW to NE	N/K	9-Dec, 17:38
SMM camera	2-4km ESE	Recorded	8	Projectile	N to S	N/K	8-Dec, 19:09
1.5km NE of	2-4km ESE	Recorded	2	Projectile	N to S	N/K	8-Dec, 19:11
Hnutove	2 Alem ENE	Recorded	1	Illumination	In vertical flight	N/K	9 Dec 10.15
(government-	2-4km ENE	Recorded	1	flare	in vertical ilight	1 N / K	8-Dec, 19:15
controlled,	2-4km ENE	Recorded	1	Illumination	In vertical flight	N/K	8-Dec, 19:16
20km NE of	2-4KIII EINE	Recorded	1	flare	Ü	1 N/ IX	8-Dec, 19.10
Mariupol)	2-4km ENE	Recorded	1	Projectile	In vertical flight	N/K	8-Dec, 19:16
	2-4km ENE	Recorded	2	Projectile	N to S	N/K	8-Dec, 19:17
	2-4km ENE	Recorded	2	Explosion	Undetermined	N/K	8-Dec, 19:17
	2-4km ENE	Recorded	1	Illumination	In vertical flight	N/K	8-Dec, 19:18
	2-4KIII EINE	Recorded	1	flare	ili verticai iligiit	1 N / K	8-Dec, 19.18
	2-4km ENE	Recorded	2	Projectile	N to S	N/K	8-Dec, 19:33
	2-4km ENE	Recorded	2	Muzzle flash		N/K	8-Dec, 19:33
	2-4km ENE	Recorded	1	Explosion	Impact	N/K	8-Dec, 19:33
	2-4km ESE	Recorded	1	Projectile	S to N	N/K	8-Dec, 19:34
		recorded	1	Projectile	S to N	1 1/ 11	
	2-4km E	Recorded	3	Projectile	SW to NE	N/K	8-Dec, 20:31
	2-4km E	Recorded	3	Projectile	SW to NE	N/K	8-Dec, 20:31
	2-4km E 2-4km E	Recorded Recorded	3	Projectile Projectile	SW to NE SW to NE	N/K N/K	8-Dec, 20:31 8-Dec, 20:34
	2-4km E 2-4km E 2-4km ESE	Recorded Recorded Recorded	3 3 2	Projectile Projectile Projectile	SW to NE SW to NE SW to NE	N/K N/K N/K	8-Dec, 20:31 8-Dec, 20:34 8-Dec, 20:41
	2-4km E 2-4km E 2-4km ESE 2-4km E 2-4km E	Recorded Recorded Recorded Recorded Recorded	3 3 2 2 5	Projectile Projectile Projectile Projectile	SW to NE SW to NE SW to NE NW to SE	N/K N/K N/K N/K N/K	8-Dec, 20:31 8-Dec, 20:34 8-Dec, 20:41 8-Dec, 20:58 8-Dec, 22:22
	2-4km E 2-4km E 2-4km ESE 2-4km E	Recorded Recorded Recorded Recorded Recorded Recorded	3 3 2 2 2	Projectile Projectile Projectile Projectile Projectile	SW to NE SW to NE SW to NE NW to SE	N/K N/K N/K N/K	8-Dec, 20:31 8-Dec, 20:34 8-Dec, 20:41 8-Dec, 20:58
	2-4km E 2-4km ESE 2-4km ESE 2-4km E 2-4km E 2-4km E	Recorded Recorded Recorded Recorded Recorded Recorded Recorded	3 3 2 2 5 1	Projectile Projectile Projectile Projectile Projectile Illumination flare Projectile	SW to NE SW to NE SW to NE NW to SE NW to SE	N/K N/K N/K N/K N/K N/K N/K N/K	8-Dec, 20:31 8-Dec, 20:34 8-Dec, 20:41 8-Dec, 20:58 8-Dec, 22:22 8-Dec, 22:26 8-Dec, 22:38
	2-4km E 2-4km E 2-4km ESE 2-4km E 2-4km E	Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded	3 3 2 2 5 1 1 2	Projectile Projectile Projectile Projectile Projectile Illumination flare Projectile Projectile	SW to NE SW to NE SW to NE NW to SE NW to SE	N/K N/K N/K N/K N/K N/K N/K N/K N/K	8-Dec, 20:31 8-Dec, 20:34 8-Dec, 20:41 8-Dec, 20:58 8-Dec, 22:22 8-Dec, 22:26 8-Dec, 22:38 8-Dec, 22:50
	2-4km E 2-4km ESE 2-4km ESE 2-4km E 2-4km E 2-4km E	Recorded Recorded Recorded Recorded Recorded Recorded Recorded	3 3 2 2 5 1	Projectile Projectile Projectile Projectile Projectile Illumination flare Projectile	SW to NE SW to NE SW to NE NW to SE NW to SE	N/K N/K N/K N/K N/K N/K N/K N/K	8-Dec, 20:31 8-Dec, 20:34 8-Dec, 20:41 8-Dec, 20:58 8-Dec, 22:22 8-Dec, 22:26 8-Dec, 22:38
	2-4km E 2-4km ESE 2-4km ESE 2-4km E 2-4km E 2-4km E 2-4km E 2-4km E	Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded	3 3 2 2 5 1 1 2 17	Projectile Projectile Projectile Projectile Projectile Illumination flare Projectile Projectile	SW to NE SW to NE SW to NE NW to SE NW to SE In vertical flight NW to SE	N/K N/K N/K N/K N/K N/K N/K N/K N/K	8-Dec, 20:31 8-Dec, 20:34 8-Dec, 20:41 8-Dec, 20:58 8-Dec, 22:22 8-Dec, 22:26 8-Dec, 22:38 8-Dec, 22:50 8-Dec, 23:56 9-Dec, 00:41
	2-4km E 2-4km ESE 2-4km E 2-4km ESE	Recorded	3 3 2 2 5 1 1 2 17	Projectile Projectile Projectile Projectile Projectile Illumination flare Projectile Projectile Projectile	SW to NE SW to NE SW to NE NW to SE NW to SE In vertical flight NW to SE NW to SE	N/K	8-Dec, 20:31 8-Dec, 20:34 8-Dec, 20:41 8-Dec, 20:58 8-Dec, 22:22 8-Dec, 22:26 8-Dec, 22:38 8-Dec, 22:50 8-Dec, 23:56
	2-4km E 2-4km ESE 2-4km ESE	Recorded	3 3 2 2 5 1 1 2 17	Projectile Projectile Projectile Projectile Projectile Illumination flare Projectile Projectile Projectile Projectile	SW to NE SW to NE SW to NE NW to SE NW to SE In vertical flight NW to SE NW to SE SW to NE	N/K	8-Dec, 20:31 8-Dec, 20:34 8-Dec, 20:41 8-Dec, 20:58 8-Dec, 22:22 8-Dec, 22:26 8-Dec, 22:38 8-Dec, 22:50 8-Dec, 23:56 9-Dec, 00:41
	2-4km E 2-4km ESE 2-4km E 2-4km ESE	Recorded	3 3 2 2 5 1 1 2 17 1 2	Projectile Projectile Projectile Projectile Projectile Illumination flare Projectile Projectile Projectile Projectile Projectile Projectile Illumination Illumination	SW to NE SW to NE SW to NE NW to SE NW to SE In vertical flight NW to SE NW to SE SW to NE SW to NE	N/K	8-Dec, 20:31 8-Dec, 20:34 8-Dec, 20:41 8-Dec, 20:58 8-Dec, 22:22 8-Dec, 22:26 8-Dec, 22:38 8-Dec, 22:50 8-Dec, 23:56 9-Dec, 00:41 9-Dec, 00:45
	2-4km E 2-4km ESE 2-4km E 2-4km E 2-4km E 2-4km E 2-4km E 2-4km E 2-4km ESE 2-4km E 2-4km ESE 2-4km E 2-4km ESE	Recorded	3 3 2 2 5 1 1 2 17 1 2 17	Projectile Projectile Projectile Projectile Projectile Illumination flare Projectile Projectile Projectile Projectile Projectile Projectile Projectile	SW to NE SW to NE SW to NE NW to SE NW to SE In vertical flight NW to SE NW to SE SW to NE SW to NE	N/K	8-Dec, 20:31 8-Dec, 20:34 8-Dec, 20:41 8-Dec, 20:58 8-Dec, 22:22 8-Dec, 22:26 8-Dec, 22:38 8-Dec, 22:50 8-Dec, 23:56 9-Dec, 00:41 9-Dec, 00:45 9-Dec, 01:08

	1-3km E	Recorded	4	Projectile	S to N	N/K	9-Dec, 03:49
	1-3km E	Recorded	5	Projectile	S to N	N/K	9-Dec, 03:50
	1-3km ESE	Recorded	1	Projectile	S to N	N/K	9-Dec, 03:50
	1-3km ESE	Recorded	2	Projectile	S to N	N/K	9-Dec, 04:05
	1-3km ESE	Recorded	1	Explosion	Undetermined	N/K	9-Dec, 04:49
	2-4km E	Recorded	9	Explosion	Undetermined	N/K	9-Dec, 04:52
	2-4km E	Recorded	1	Projectile	N to S	N/K	9-Dec, 04:52
	2-4km E	Recorded	1	Projectile	N to S	N/K	9-Dec, 04:53
	2-4km ENE						
		Recorded	2	Projectile	N to S	N/K	9-Dec, 04:59
	2-4km ENE	Recorded	2	Projectile	N to S	N/K	9-Dec, 04:59
	2-4km E	Recorded	3	Projectile	NW to SE	N/K	9-Dec, 05:04
	2-4km E	Recorded	1	Illumination		N/K	9-Dec, 05:17
	2 TKIII E	recorded		flare		14/12	
	2-4km E	Recorded	1	Projectile	NW to SE	N/K	9-Dec, 05:31
	2-4km E	Recorded	3	Projectile	N to S	N/K	9-Dec, 17:31
	2-4km E	Recorded	1	Projectile	N to S	N/K	9-Dec, 17:53
SMM camera E				Illumination			, and the second second
of Lomakyne	2-4km NE	Recorded	1	flare		N/K	9-Dec, 01:29
(government-				Harc			
controlled.				Illumination			
,	2-4km NNE	Recorded	1			N/K	9-Dec, 05:17
15km NE of				flare			
Mariupol)							
SMM camera at	1-3km E	Recorded	1	Muzzle flash		N/K	8-Dec, 19:50
entry-exit	1-3km E	Recorded	1	Projectile	N to S	N/K	8-Dec, 19:50
checkpoint in	1-3km ENE	Recorded	1	Projectile	S to N	N/K	8-Dec, 20:17
Maiorsk	1-3km ENE	Recorded	1	Projectile	In vertical flight	N/K	8-Dec, 20:17
(government-				Ž			,
controlled,							
45km NE of	1-3km ENE	Recorded	4	Explosion		N/K	9-Dec, 05:11
Donetsk)							
SMM camera at	2-4km NNE	Recorded	1	Explosion	Undetermined	N/K	8-Dec, 18:53
entry-exit	2-4km NNE	Recorded	1	Explosion	Undetermined	N/K	8-Dec, 18:55
checkpoint in		Recorded			E to W		· · · · · · · · · · · · · · · · · · ·
Marinka	2-4km NNE		1	Projectile		N/K	8-Dec, 19:00
	2-4km NNE	Recorded	1	Explosion	Undetermined	N/K	8-Dec, 19:12
(government-	2-4km NNE	Recorded	1	Explosion	Undetermined	N/K	8-Dec, 19:13
controlled,	2-4km NNE	Recorded	2	Explosion	Impact	N/K	8-Dec, 19:14
23km SW of	2-4km NNE	Recorded	2	Projectile	W to E	N/K	8-Dec, 19:14
Donetsk)	2-4km NNE	Recorded	1	Projectile	E to W	N/K	8-Dec, 19:15
	2-4km NNE	Recorded	1	Explosion	Undetermined	N/K	8-Dec, 19:16
SMM camera at				,			
Oktiabr mine							
(non-							
`	2 51mm NIE	Recorded	4	Duoisatila	In ventical flight	N/K	9 Dag 22.12
government- controlled, 9km	3-5km NE	Recorded	4	Projectile	In vertical flight	IN/IX	8-Dec, 22:13
,							
NW of Donetsk							
city centre)							
SMM camera at	2-4km SSE	Recorded	4	Projectile	NE to SW	N/K	8-Dec, 18:55
entry-exit	2-4km SSE	Recorded	2	Projectile	NE to SW	N/K	8-Dec, 18:56
checkpoint in				Illumination			
Pyshchevyk	2-4km SSE	Recorded	1	flare	In vertical flight	N/K	8-Dec, 18:56
(government-	2-4km SSE	Recorded	10	Projectile	NE to SW	N/K	8-Dec, 19:09
controlled,		recorded	10	Illumination		1 1/ 13	0-1000, 17.07
controlled,						3 7 /7 7	0.50.04
	1-3km SSE	Recorded	1		In vertical flight	N/K	8-Dec, 22:26
25km NE of		Recorded	1	flare	In vertical flight	N/K	8-Dec, 22:26
	1-3km SSE			flare Illumination	-		·
25km NE of	1-3km SSE 2-4km SSE	Recorded	1	flare Illumination flare	In vertical flight	N/K	9-Dec, 01:29
25km NE of	1-3km SSE 2-4km SSE 2-4km SSE	Recorded Recorded	1	flare Illumination flare Explosion	-	N/K N/K	9-Dec, 01:29 9-Dec, 04:49
25km NE of	1-3km SSE 2-4km SSE	Recorded	1	flare Illumination flare	In vertical flight	N/K	9-Dec, 01:29 9-Dec, 04:49 9-Dec, 04:52
25km NE of	1-3km SSE 2-4km SSE 2-4km SSE 1-3km SSE	Recorded Recorded Recorded	1	flare Illumination flare Explosion Muzzle flash	In vertical flight Undetermined	N/K N/K N/K	9-Dec, 01:29 9-Dec, 04:49 9-Dec, 04:52
25km NE of	1-3km SSE 2-4km SSE 2-4km SSE 1-3km SSE 1-3km S	Recorded Recorded Recorded Recorded	1 1 2 1	flare Illumination flare Explosion Muzzle flash Explosion	In vertical flight Undetermined Undetermined	N/K N/K N/K N/K	9-Dec, 01:29 9-Dec, 04:49 9-Dec, 04:52 9-Dec, 04:53
25km NE of Mariupol)	1-3km SSE 2-4km SSE 2-4km SSE 1-3km SSE 1-3km S 1-3km S	Recorded Recorded Recorded Recorded Recorded	1 1 2 1 1	flare Illumination flare Explosion Muzzle flash Explosion Explosion	In vertical flight Undetermined Undetermined Undetermined	N/K N/K N/K N/K	9-Dec, 01:29 9-Dec, 04:49 9-Dec, 04:52 9-Dec, 04:53 9-Dec, 17:19
25km NE of Mariupol)	1-3km SSE 2-4km SSE 2-4km SSE 1-3km SSE 1-3km S 1-3km S 2-4km E	Recorded Recorded Recorded Recorded Recorded Recorded	1 1 2 1 1 3	flare Illumination flare Explosion Muzzle flash Explosion Explosion Projectile	In vertical flight Undetermined Undetermined Undetermined NW to SE	N/K N/K N/K N/K N/K	9-Dec, 01:29 9-Dec, 04:49 9-Dec, 04:52 9-Dec, 04:53 9-Dec, 17:19 8-Dec, 18:41
25km NE of Mariupol) SMM camera in Svitlodarsk	1-3km SSE 2-4km SSE 2-4km SSE 1-3km SSE 1-3km S 1-3km S 2-4km E 2-4km ESE	Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded	1 2 1 1 1 3	flare Illumination flare Explosion Muzzle flash Explosion Explosion Projectile Explosion	In vertical flight Undetermined Undetermined Undetermined NW to SE Undetermined	N/K N/K N/K N/K N/K N/K N/K	9-Dec, 01:29 9-Dec, 04:49 9-Dec, 04:52 9-Dec, 04:53 9-Dec, 17:19 8-Dec, 18:41 8-Dec, 18:50
25km NE of Mariupol) SMM camera in Svitlodarsk (government-	1-3km SSE 2-4km SSE 2-4km SSE 1-3km SSE 1-3km S 1-3km S 2-4km E 2-4km ESE 2-4km ESE	Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded	1 1 2 1 1 1 3 1 3	flare Illumination flare Explosion Muzzle flash Explosion Explosion Projectile Explosion Projectile	In vertical flight Undetermined Undetermined Undetermined NW to SE Undetermined S to N	N/K N/K N/K N/K N/K N/K N/K N/K N/K	9-Dec, 01:29 9-Dec, 04:49 9-Dec, 04:52 9-Dec, 04:53 9-Dec, 17:19 8-Dec, 18:41 8-Dec, 18:50 8-Dec, 18:52
25km NE of Mariupol) SMM camera in Svitlodarsk (government- controlled,	1-3km SSE 2-4km SSE 2-4km SSE 1-3km SSE 1-3km S 1-3km S 2-4km E 2-4km ESE 2-4km ESE 3-4km ESE	Recorded	1 2 1 1 3 1 3	flare Illumination flare Explosion Muzzle flash Explosion Explosion Projectile Explosion Projectile Projectile	In vertical flight Undetermined Undetermined NW to SE Undetermined S to N S to N	N/K	9-Dec, 01:29 9-Dec, 04:49 9-Dec, 04:52 9-Dec, 04:53 9-Dec, 17:19 8-Dec, 18:41 8-Dec, 18:50 8-Dec, 18:52 8-Dec, 21:22
25km NE of Mariupol) SMM camera in Svitlodarsk (government- controlled, 57km NE of	1-3km SSE 2-4km SSE 2-4km SSE 1-3km SSE 1-3km S 1-3km S 2-4km E 2-4km ESE 3-4km ESE 3-4km ESE	Recorded	1 2 1 1 3 1 3 1 3 9	flare Illumination flare Explosion Muzzle flash Explosion Explosion Projectile Explosion Projectile Projectile Explosion	In vertical flight Undetermined Undetermined NW to SE Undetermined S to N S to N Undetermined	N/K	9-Dec, 01:29 9-Dec, 04:49 9-Dec, 04:52 9-Dec, 04:53 9-Dec, 17:19 8-Dec, 18:41 8-Dec, 18:50 8-Dec, 18:52 8-Dec, 21:22 8-Dec, 21:37
25km NE of Mariupol) SMM camera in Svitlodarsk (government-controlled,	1-3km SSE 2-4km SSE 2-4km SSE 1-3km SSE 1-3km S 1-3km S 2-4km E 2-4km ESE 2-4km ESE 3-4km ESE	Recorded	1 2 1 1 3 1 3	flare Illumination flare Explosion Muzzle flash Explosion Explosion Projectile Explosion Projectile Projectile	In vertical flight Undetermined Undetermined NW to SE Undetermined S to N S to N	N/K	9-Dec, 01:29 9-Dec, 04:49 9-Dec, 04:52 9-Dec, 04:53 9-Dec, 17:19 8-Dec, 18:41 8-Dec, 18:50 8-Dec, 18:52 8-Dec, 21:22

	24 5	D 11		5 1 .01	G . 37	3.7/77	T 0 B 22 0 C
	3-4km E	Recorded	4	Projectile	S to N	N/K	8-Dec, 22:06
	3-4km ESE	Recorded	1	Explosion	Undetermined	N/K	8-Dec, 22:21
	3-4km E	Recorded	2	Projectile	N to S	N/K	8-Dec, 22:26
	3-4km ESE	Recorded	5	Projectile	S to N	N/K	8-Dec, 22:27
	3-4km ESE	Recorded	2	Projectile	N to S	N/K	8-Dec, 22:27
	3-4km ESE	Recorded	3	Projectile	S to N	N/K	8-Dec, 22:32
	3-4km E	Recorded	1	Explosion	Undetermined	N/K	8-Dec, 23:02
	3-4km E	Recorded	1	Projectile	S to N	N/K	8-Dec, 23:22
	3-4km E	Recorded	7	Projectile	S to N	N/K	9-Dec, 04:30
SW edge of Avdiivka	2-3km SE	Heard	4	Explosion	Undetermined	N/K	9-Dec, 11:20-11:23
(government- controlled,	2-3km SE	Heard	7	Burst		HMG	9-Dec, 11:20-11:23
17km N of Donetsk)	2-3km SE	Heard	4	Explosion	Undetermined	N/K	9-Dec, 12:20-12:42
Dokuchaievsk (non-	2-4km SW	Heard	23	Shot		Small arms	9-Dec, 09:18-09:24
government- controlled,	2-4km SW	Heard	2	Burst		Small arms	9-Dec, 09:18-09:24
30km SW of Donetsk)	2-4km SW	Heard	32	Shot		Small arms	9-Dec, 09:27-09:31
, , , , , , , , , , , , , , , , , , ,	2-4km SW	Heard	58	Shot		Small arms	9-Dec, 09:36-09:45
						Small	9-Dec,
	2-4km SW	Heard	3	Burst		arms	9-Dec, 09:36-09:45
3.5km NE of Petrovskyi district (non- government- controlled, 15km SW of Donetsk city centre)	2-3km NW	Heard	7	Burst		НМС	9-Dec, 10:50-10:53
3km WSW of central railway station in Donetsk (non- government- controlled, 6km NW of Donetsk)	1-2km SE	Heard	60	Shot		Small arms	9-Dec, 12:25-12:37
Petrivske (non- government- controlled, 41km S of Donetsk)	2-2.5km SSE	Heard	9	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	9-Dec, 12:43-12:50
	2-2.5km SSE	Heard	21	Burst	Assessed as outside the disengagement area	Small arms	9-Dec, 12:35-13:05
	2-3km SSE	Heard	12	Shot	Assessed as outside the disengagement area	Small arms	9-Dec, 13:10-13:20
	2-3km SSE	Heard	5	Burst	Assessed as outside the disengagement area	Small arms	9-Dec, 13:10-13:20
1km ENE of Yasnobrodivka (government- controlled, 25km NW of Donetsk)	1-2km W	Heard	3	Shot		Small arms	9-Dec, 10:38
1km NW of	4-6km SW	Heard	5	Burst		HMG	9-Dec, 09:09
railway station	1-2km SW	Heard	10	Burst		Small	9-Dec, 09:14

(non	1.5-2km				1	Small	9-Dec,
(non- government-	SW	Heard	14	Burst		arms	9-Dec, 09:45-10:17
controlled, 16km NE of	2km SW	Heard	4	Shot		Small arms	9-Dec, 13:10-13:20
Donetsk)						arms	13.10-13.20
Entry-exit checkpoint near							
Pyshchevyk							
(government-	N/K NE	Heard	4	Explosion	Undetermined	N/K	9-Dec, 09:50
controlled,							
25km NE of							
Mariupol) 1km NNW of							9-Dec,
entry-exit	N/K NE	Heard	4	Explosion	Undetermined	N/K	10:02-10:10
checkpoint near							
Pyshchevyk							
(government- controlled,	N/K NE	Heard	2	Explosion	Undetermined	N/K	9-Dec, 10:15
25km NE of							
Mariupol)							
Pavlopil	N/K SE	Heard	7	Shot		Small	9-Dec,
(government-	TVKSL	ricard	,	Shot		arms	10:25-10:35
controlled, 26km NE of	N/K SE	Heard	2	Explosion	Undetermined	N/K	9-Dec,
Mariupol)	N/K SE	пеага	2	Explosion	Undetermined	IN/IX	10:25-10:35
Orlivske							
(government-							9-Dec.
controlled,	N/K E	Heard	4	Explosion	Undetermined	N/K	11:08-11:15
23km NE of Mariupol)							
Talakivka							
(government-						C11	
controlled,	N/K SE	Heard	1	Burst		Small arms	9-Dec, 12:06
17km NE of						arms	
Mariupol) 2km SE of						Small	9-Dec,
Lebedynske	N/K NNE	Heard	22	Shot		arms	13:45-13:50
(government-							
controlled,	N/K NNE	Heard	1	Burst		Small	9-Dec,
16km north-east of Mariupol)						arms	13:45-13:50
Svitlodarsk				~-		Small	0.70
(government-	2-3km SW	Heard	3	Shot		arms	8-Dec, 18:50
controlled,	4-5km SW	Heard	1	Explosion	Undetermined	N/K	8-Dec, 18:54
57km NE of	4-5km SW	Heard	8	Explosion	Undetermined	N/K	8-Dec,
Donetsk)				•		Small	19:52-20:45
	2-3km SW	Heard	10	Shot		arms	8-Dec, 20:46
	4-5km SW	Heard	1	Explosion	Undetermined	N/K	8-Dec, 20:52
	2-3km SW	Heard	4	Shot		Small	8-Dec, 20:54
					IIl	arms	· ·
	4-5km SW	Heard	1	Explosion	Undetermined	N/K	8-Dec, 20:57 8-Dec,
	4-5km SW	Heard	10	Explosion	Undetermined	N/K	8-Dec, 21:16-21:30
	2 41 CW	II. 1	-	December		Cannon	9-Dec,
	3-4km SW	Heard	5	Burst		(30mm)	14:10-14:20
	4-5km SW	Heard	27	Burst		HMG	9-Dec,
	4-5km SW	Heard	3	Explosion	Impact	N/K	14:10-14:20 9-Dec, 14:24
	4-5km S W	Heard	1	Explosion Explosion	Undetermined	N/K N/K	9-Dec, 14:24 9-Dec, 14:27
	4-5km S	Heard	7	Explosion	Undetermined	N/K	9-Dec, 15:02
	4-5km S	Heard	70	Burst		HMG	9-Dec,
1	T-JAIII S	1 ICAI U	70	Duist		DIVILL	16:30-17:10
	4-5km S	Heard	35	Explosion	Undetermined	N/K	9-Dec, 16:30-17:10
	4-5km SW	Heard	153	Burst		HMG	9-Dec,
	4-24 IIIVC-4	Hearu	133	Durst	1	DIVILL	<i>J</i> -Dec,

							17:30-18:20
	4-5km SW	Heard	78	Explosion	Undetermined	N/K	9-Dec, 17:30-18:20
	5-7km S	Heard	35	Explosion	Undetermined	N/K	9-Dec, 17:30-18:20
	5-7km S	Heard	54	Burst		HMG	9-Dec, 17:30-18:20
SMM camera in	2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	8-Dec, 19:24
Kriakivka (government- controlled, 38km NW of Luhansk)	2-4km SSW	Recorded	2	Explosion	Undetermined	N/K	8-Dec, 19:25
1.5km SW of Molodizhne	1km SW	Heard	7	Shot		Small arms	9-Dec, 09:30-09:35
(non- government- controlled, 63km NW of Luhansk)	2-3km S	Heard	3	Burst		Small arms	9-Dec, 14:25-14:26
E edge of Popasna (government- controlled, 69km W of Luhansk)	1.5-2km SSW	Heard	2	Shot		Small arms	9-Dec, 09:30-09:31
N edge of Orikhove	2-3km S	Heard	9	Burst		Small arms	9-Dec, 10:48-11:40
(government- controlled,	2-3km S	Heard	46	Shot		Cannon (30mm)	9-Dec, 10:48-11:40
57km NW of Luhansk)	2-3km S	Heard	37	Explosion	Outgoing and impact	Recoilless gun (SPG- 9, 73mm)	9-Dec, 10:48-11:40
1km E of Toshkivka (government-	5-7km SSE	Heard	128	Explosion	Undetermined	Artillery (type N/K)	9-Dec, 11:00-12:20
controlled, 60km NW of	5-7km SSE	Heard	4	Burst		Cannon (30mm)	9-Dec, 11:00-12:20
Luhansk)	5-7km SSE	Heard	5	Burst		HMG	9-Dec, 11:00-12:20
E edge of Zolote- 2/Karbonit (government- controlled, 62km W of Luhansk)	3-7km SE	Heard	36	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	9-Dec, 11:05-11:27
W edge of Smile (non- government controlled, 31km NW of Luhansk)	10km WNW	Heard	35	Explosion	Undetermined	N/K	9-Dec, 11:11-11:34
W edge of Muratove (government- controlled, 51km NW of Luhansk)	8-10km SSW	Heard	58	Explosion	Undetermined	N/K	9-Dec, 11:00-11:28
2km S of Muratove	4-5km S	Heard	43	Shot		Cannon (73mm)	9-Dec, 12:20-12:45
(government- controlled, 51km NW of Luhansk)	5-7km S	Heard	35	Explosion	Undetermined	N/K	9-Dec, 12:25-12:45
1.5km W of	3-4km S	Heard	62	Explosion	Undetermined	N/K	9-Dec,

Orikhove-							11:46-12:15
Donetske (government- controlled, 44km NW of Luhansk)	3-4km S	Heard	100	Shot and Burst		HMG	9-Dec, 11:46-12:15
NE edge of Sentianivka	8-12km W	Heard	64	Explosion	Undetermined	N/K	9-Dec, 11:40-12:20
(formerly Frunze, non- government- controlled, 44km W of Luhansk)	5-7km W	Heard	257	Burst		HMG or cannon (30mm and 23mm)	9-Dec, 11:40-12:20
4km S of Slovianoserbsk	10km WNW	Heard	16	Explosion	Undetermined	N/K	9-Dec, 11:52-12:00
(non- government- controlled, 28km NW of Luhansk)	2km WNW	Heard	5	Shot		N/K	9-Dec, 11:52-12:00
SE edge of Kalynove- Borshchuvate (non- government- controlled, 61km W of Luhansk)	3km SSW	Heard	20	Shot		Cannon (30mm)	9-Dec, 12:12-12:23

Map of Donetsk and Luhansk regions²



² 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).