

Daily Report 243/2019

14 October 2019¹

Summary

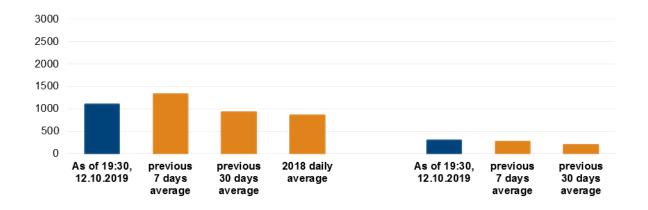
- Compared with the previous reporting period, between the evenings of 11 and 12 October, the SMM recorded fewer ceasefire violations in Donetsk region and more in Luhansk region.
- Between the evenings of 12 and 13 October, the SMM recorded fewer ceasefire violations in both Donetsk and Luhansk region, compared with the previous 24 hours.
- Inside the Stanytsia Luhanska disengagement area, the SMM saw continued construction works at the broken section of the bridge.
- Inside the Zolote disengagement area, the SMM saw continued clearing of vegetation along road T-1316.
- Inside the Petrivske disengagement area, the SMM saw strengthening of positions and presence of armoured combat vehicles.
- The Mission observed weapons in violation of withdrawal lines in government-controlled areas of Donetsk region.
- The SMM continued to observe anti-tank mines south of the bridge in Shchastia and observed possible unexploded ordnance in Novohryhorivka.
- Restrictions of the Mission's freedom of movement continued, including at a
 checkpoint of the armed formations near Petrivske, Zaichenko, Verkhnoshyrokivske,
 and Novoazovsk, and at a border crossing point in non-government-controlled
 Voznesenivka.*

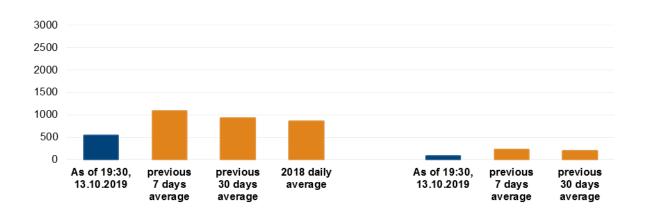
¹ Based on information from the Monitoring Teams as of 19:30, 13 October 2019. All times are in Eastern European Summer Time.

Ceasefire violations²

Number of recorded ceasefire violations³

Number of recorded explosions⁴





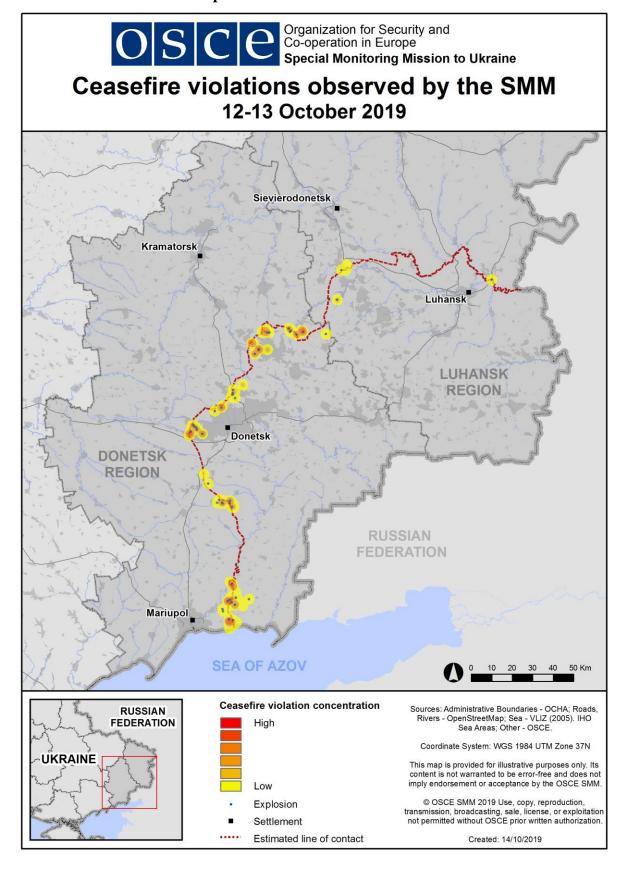
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² For a complete breakdown of ceasefire violations, please see the annexed table.

³ Including explosions.

⁴ Including from unidentified weapons.

Map of recorded ceasefire violations



In Donetsk region, between the evenings of 11 and 12 October, the SMM recorded fewer ceasefire violations, however more explosions (about 250), compared with the <u>previous reporting period</u> (about 150 explosions). The majority of ceasefire violations were recorded north and in north-easterly directions of Shyrokyne (government-controlled, 100km south of Donetsk), at southerly directions of Svitlodarsk (government-controlled, 57km north-east of Donetsk) and in areas south and south-south-east of Pyshchevyk (government-controlled, 84km south of Donetsk).

Between the evenings of 12 and 13 October, the SMM recorded fewer ceasefire violations, including fewer explosions (76), compared with the previous 24 hours. The majority of ceasefire violations were recorded north-north-east of Marinka (government-controlled, 23km south-west of Donetsk), and in areas north-west and north-east of Horlivka (non-government-controlled, 39km north-east of Donetsk).

In Luhansk region, between the evenings of 11 and 12 October, the SMM recorded more ceasefire violations, including one explosion, compared with the <u>previous reporting period</u> (zero ceasefire violations). All ceasefire violations were recorded west of Kalynove (non-government-controlled, 60km west of Luhansk).

Between the evenings of 12 and 13 October, the SMM recorded fewer ceasefire violations and the same number of explosions (one), compared with the previous 24 hours. The majority of ceasefire violations were recorded east-north-east, east, east-south-east, and south-east of Zolote (government-controlled, 60km west of Luhansk).

Disengagement areas near Stanytsia Luhanska, Zolote and Petrivske⁵

Inside the disengagement area near **Stanytsia Luhanska** (government-controlled, 16km north-east of Luhansk), on 12 October, the SMM saw six workers from government-controlled areas clearing the area south of the broken section of the Stanytsia Luhanska bridge (15km north-east of Luhansk) and taking measurements and a front-loader scattering ground concrete at the broken section of the bridge. The SMM also saw 18 workers from government-controlled areas with a mobile crane, an excavator and one loading truck shovelling gravel and placing concrete blocks under the western side of the broken section of the bridge and installing poles dividing the road north of the broken section of the bridge into two parts and installing dustbins.

On the morning of 13 October, while on the eastern edge of Stanytsia Luhanska, the SMM heard an undetermined explosion 3-4km south, unable to assess whether inside or outside the disengagement area. On the same day, inside the disengagement area, at the broken section of the bridge the SMM saw 11 workers from government-controlled areas building a metal structure on a concrete plate that will serve as a pillar under the new bridge.

On both 12 and 13 October, the SMM observed members of the armed formations (wearing "JCCC" armbands) on the southern edge of the broken section of the bridge and the previously observed blue container (50m south of the broken section of the bridge).

On 12 October, inside the **disengagement area near Zolote** (government-controlled, 60km west of Luhansk), the SMM observed the installation of eight Hesco-type barriers filled with

⁵ Disengagement is foreseen in the <u>Framework Decision of the Trilateral Contact Group relating to disengagement of forces and hardware</u> of 21 September 2016.

soil about 30m south of the northern edge of the disengagement area on the eastern side of road T-1316, a wheeled excavator (EOV-4421), two light utility trucks, and 15-20 Ukrainian Armed Forces soldiers clearing vegetation up to 10m on the eastern and western sides of road T-1316, from the checkpoint of the Ukrainian Armed Forces just north of the disengagement area to 600m south of the area's northern edge. An SMM unmanned aerial vehicle (UAV) spotted a combat engineering vehicle (BAT-2) with two heavy utility trucks clearing the eastern side of road T-1316 about 140m south of the northern edge of the disengagement area, a heavy utility truck on the west side of road T-1316 about 570m south of the northern edge of the disengagement area, a Ukrainian Armed Forces soldier about 350m further south, just south of the railway bridge, and four Ukrainian Armed Forces soldiers about 700m west. An SMM mini-UAV also spotted a Ukrainian Armed Forces soldier 60m south of the northern edge and 1.2km west of the eastern edge of the disengagement area.

On the same day, at a checkpoint of the Ukrainian Armed Forces just north of the Zolote disengagement area, the SMM saw two soldiers with a metal detector and two anti-tank mines (TM-62M) without fuses. An SMM mini-UAV spotted ongoing construction northeast of the checkpoint and also spotted ongoing trench construction over pre-existing trenches, starting about 200m north of the northern edge of the disengagement area, 150m west of road T-1316, and continuing west for about 500m. The UAV also spotted new trenches and bunkers, a wheeled excavator (EOV-4421) and a heavy utility truck loaded with concrete pads. SMM mini-UAVs spotted construction of a new bunker about 50m north of the northern edge of the disengagement area and 290m east of road T-1316, and an armoured personnel carrier (APC) about 20m north of the disengagement area.

On 13 October, inside the Zolote disengagement area, the SMM observed about 30 Ukrainian Armed Forces soldiers removing vegetation and cutting trees on both sides of road T-1316, south from the northern edge of the disengagement area. The SMM observed five military excavators, including one combat engineering vehicle (BAT-2) and at least eight military trucks operating in the fields about 500m south, west and east of the northern edge of the disengagement area. The SMM observed the construction of new trenches 40-45m south of the northern edge of the disengagement area, about 25m east of road T-1316. An SMM longrange UAV spotted an infantry fighting vehicle (IFV) (BMP-variant) in a residential area of Katerynivka (government-controlled, 64km west of Luhansk), inside the disengagement area. In the afternoon, the SMM camera in Zolote recorded one explosion 1.5-2km south-east assessed as a controlled detonation inside the disengagement area.

On the same day, outside the Zolote disengagement area, the SMM observed ongoing installation of a Ukrainian Armed Forces camera around 150m north-east of the checkpoint on the northern edge of the disengagement area. At the checkpoint, an SMM mini-UAV spotted an armoured combat vehicle (ACV) and an IFV (BMP-1). The SMM observed Ukrainian Armed Forces soldiers filling Hesco-type barriers with soil and strengthening them with wood logs, 30m south of the northern edge of the disengagement area (see above).

On 11 October, in the **disengagement area near Petrivske** (non-government-controlled, 41km south of Donetsk), an SMM mini-UAV spotted an ACV 1km south of its northern edge and about 2km west of its eastern edge and about 670m further west the same UAV <u>again</u> spotted an APC (BTR-80), two heavy utility trucks, a jeep and, about 150m south of the aforementioned position, a heavy utility truck, all assessed as belonging to the Ukrainian Armed Forces.

An SMM mini-UAV spotted a well-established defensive position of the armed formations on the eastern edge of the disengagement area, being repaired and strengthened. A large

amount of timber had been brought in and the UAV spotted cut logs in place over the top of emplacements to create fortifications. Two members of the armed formations were present.

On 12 October, the SMM saw that a recently established checkpoint of the armed formations on the road leading from Styla (non-government-controlled, 34km south of Donetsk) to Petrivske (about 2.5km north of Petrivske, outside the disengagement area) was empty and a barrier across the road was open. The SMM also saw members of the armed formations at a checkpoint at the northern entrance to Petrivske (not present on 8 October)*. On the road between Bohdanivka (government-controlled, 41km south-west of Donetsk) and Viktorivka (non-government-controlled, 42km south-west of Donetsk), an SMM mini-UAV spotted again 38 anti-tank mines laid across the road about 160m north of the disengagement area near Petrivske and spotted again nine anti-tank mines about 130m further east and seven anti-tank mines about 200m north of the northern edge of the disengagement area, all assessed as belonging to the Ukrainian Armed Forces.

Inside the disengagement area, on the same day, an SMM mini-UAV spotted six Ukrainian Armed Forces personnel and an armoured reconnaissance vehicle (BRDM-2), as well as a military truck about 2km east of the disengagement area's western edge. On the same day, an SMM long-range UAV again spotted an APC about 1.3km east of the western edge and 900m north of the southern edge of the disengagement area and, about 160m further south a military truck (Kamaz), both assessed as belonging to the Ukrainian Armed Forces.

On 12 October, positioned about 2km north of Petrivske, the SMM heard two undetermined explosions, two shots and 16 bursts of heavy machine-gun fire 2-3km south-west, all assessed as inside the disengagement area. The SMM also heard about 90 ceasefire violations (including 56 explosions) all assessed as outside the disengagement area but within its 5km periphery (for more details, see the table below).

Withdrawal of weapons

The SMM continued to monitor the withdrawal of weapons in implementation of the Memorandum and the Package of Measures and its Addendum.

On 11 October and again on 12 October, the Mission observed 12 weapons in violation of withdrawal lines in government-controlled areas of Donetsk region. It also observed 13 weapons beyond withdrawal lines but outside storage sites in government-controlled areas of Donetsk region (for more details, see the tables below).

Weapons permanent storage sites

At a permanent storage site in a non-government-controlled area of Donetsk region 13 October

The SMM noted that eight tanks (five T-72, three T-64) continued to be missing.

Indications of military and military-type presence in the security zone⁶

The SMM observed military presence in the security zone in government-controlled areas of Donetsk and Luhansk regions, including armoured personnel carriers, an armoured reconnaissance vehicle, armoured combat vehicles, an infantry fighting vehicle in a

⁶ The hardware mentioned in this section is not proscribed by the provisions of the Minsk agreements on the withdrawal of weapons.

residential area of Katerynivka, and an anti-aircraft gun (for more details, see the table below).

Anti-tank mines south of the bridge in Shchastia and unexploded ordnance in Novohryhorivka

On 10 October, an SMM mini-UAV <u>again</u> spotted 34 anti-tank mines laid in three rows across road H-21 south of the bridge in Shchastia (government-controlled, 20km north of Luhansk), assessed as belonging to the Ukrainian Armed Forces.

On 13 October, at an intersection in Novohryhorivka (non-government-controlled, 61km north-east of Donetsk), the SMM saw a metal object in the dirt road assessed as a possible 122-152mm artillery shell.

Mine hazard sign and road block in Raivka

On 13 October, in the south-western outskirts of Raivka (non-government-controlled, 16km north-west of Luhansk) the SMM observed, for the first time, a "No entry" sign attached to three wooden poles creating a barrier, that was placed in the middle of the road. At the same location, the SMM observed, for the first time, one mine hazard sign with "Stop-Mine" written in yellow Cyrillic stencilling, attached to a metal post, on the northern side of the road. A resident told the SMM that the road is used regularly and that they drive around the sign.

SMM facilitation of operation of and repair works to civilian infrastructure

On 12 October, the SMM monitored adherence to the ceasefire to facilitate inspection of powerlines and pipelines and for maintenance for well drilling near Pankivka (non-government-controlled, 16km north of Luhansk).

On 12 and 13 October, the Mission continued to facilitate the operation of the Donetsk Filtration Station (15km north of Donetsk) and monitor the security situation in the area of the pumping station near Vasylivka (non-government-controlled, 20km north of Donetsk).

Border areas outside government control

On 13 October, while at a border crossing point near Uspenka (73km south-east of Donetsk) for about 70 minutes, the SMM saw 33 cars (seven Ukrainian, six Russian Federation, and one Lithuanian licence plates, 19 "DPR" plates), ten covered cargo trucks (five Ukrainian, two Russian Federation licence plates, three "DPR" plates), two buses ("DPR" plates), and five pedestrians (three men, two women, 35-45 years old) entering Ukraine. It also saw 13 cars (one Ukrainian, six Russian Federation, one Lithuanian licence plates, as well as five "DPR" plates), six covered cargo trucks (three Ukrainian and one with Russian Federation licence plates, as well as two "DPR" plates), four buses ("DPR" plates), and three pedestrians (two women and one man 45-55 years old) exiting Ukraine.

On 13 October, upon arrival at a border crossing point near Voznesenivka (formerly Chervonopartyzansk, 65km south-east of Luhansk), a member of the armed formations told the SMM to leave the area.* While present, the SMM saw no traffic entering or exiting Ukraine.

The Mission continued monitoring in Kharkiv, Kherson, Odessa, Lviv, Ivano-Frankivsk, Dnipro, Chernivtsi and Kyiv.

*Restrictions of the SMM's freedom of movement or other impediments to fulfilment of its mandate

The SMM's monitoring and freedom of movement are restricted by security hazards and threats, including risks posed by mines, unexploded ordnance (UXO) and other impediments — which vary from day to day. The SMM's mandate provides for safe and secure access throughout Ukraine. All signatories of the Package of Measures have agreed on the need for this safe and secure access, that restriction of the SMM's freedom of movement constitutes a violation, and on the need for rapid response to these violations. They have also agreed that the JCCC should contribute to such response and co-ordinate mine clearance. Nonetheless, the armed formations in parts of Donetsk and Luhansk regions frequently deny the SMM access to areas adjacent to Ukraine's border outside control of the Government (for example, see below). The SMM's operations in Donetsk and Luhansk regions remain restricted following the fatal incident of 23 April 2017 near Pryshyb; these restrictions continued to limit the Mission's observations.

Denial of access:

- On 12 October, at a checkpoint on the northern edge of Petrivske (non-government-controlled, 41km south of Donetsk), a member of the armed formations <u>again</u> denied the SMM passage citing demining activities, thereby restricting the SMM's access to its camera in Petrivske.
- On 13 October, at a checkpoint 800m north of Zaichenko (non-government-controlled, 93km south of Donetsk), an armed member of the armed formations <u>again</u> prevented the SMM from proceeding towards Sakhanka (non-government-controlled, 97km south of Donetsk).
- On 13 October, at a checkpoint west of Verkhnoshyrokivske (formerly Oktiabr, non-government-controlled, 85km south of Donetsk), a member of the armed formations again denied the SMM passage.
- On 13 October, at a checkpoint on the northern edge of Novoazovsk (non-government-controlled, 102km south-east of Donetsk), an armed member of the armed formations <u>again</u> denied the SMM access south towards Novoazovsk and east towards the border crossing point.
- On 13 October, at the border crossing point near Voznesenivka (formerly Chervonopartyzansk, non-government-controlled, 65km south-east of Luhansk), a member of the armed formations again told the SMM to leave the area.

Conditional access:

- On 13 October, at a checkpoint near Kreminets (non-government-controlled, 16km south-west of Donetsk), a member of the armed formations insisted on inspecting an SMM trailer as a condition of passing the checkpoint. After a brief inspection, the SMM was allowed to proceed.

Regular restrictions related to disengagement areas and mines/UXO:

- The sides continued to deny the SMM full access, as well as the ability to travel certain roads previously identified as important for effective monitoring by the Mission and for civilians' movement, through failure to conduct comprehensive clearance of mines, UXO and other obstacles.

Other impediments:

- On the night between 11 and 12 October, an SMM long-range UAV lost its GPS signal due to signal interference, assessed as caused by probable jamming, while flying near Petrivske (non-government-controlled, 41km south of Donetsk) and Nyzhnie Lozove (non-government-controlled, 59km north-east of Donetsk). The same UAV also experienced dual GPS signal interference, assessed as caused by jamming, while flying between Opytne (government-controlled, 63km north-east of Donetsk) and Pishchane (non-government-controlled, 26km south of Donetsk).
- On 12 October, four SMM mini-UAVs near Petrivske (non-government-controlled, 41km south of Donetsk) and thee SMM mini-UAV near Bohdanivka (government-controlled, 41km south-west of Donetsk) experienced signal interference, all assessed as caused by probable jamming.
- On the night between 12 and 13 October, an SMM long-range UAV experienced dual GPS signal interference, assessed as caused by jamming, while flying near the disengagement area near Petrivske.
- On the night of 12 and 13 October, an SMM long-range UAV lost its GPS signal due to signal interference, assessed as caused by probably jamming, while flying near Kostiantynivka (government-controlled, 60km north of Donetsk).

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⁷ The interference could have originated from anywhere within the radius of kilometres from the UAVs' position.

Table of weapons

Weapons in violation of the withdrawal lines

Date	No. of weapons	Type of weapons	Location	Source of observation
		Government-control	led areas	
11/10/2019	12	Self-propelled howitzer (2S1 <i>Gvozdika</i> , 122mm)	Railway station in Kostiantynivka (60km north of Donetsk)	Long-range UAV
12/10/2019	12	Self-propelled howitzer (2S1 <i>Gvozdika</i> , 122mm)	Railway station in Kostiantynivka (60km north of Donetsk) (assessed as the same observed above)	Patrol

Beyond withdrawal lines but outside of designated storage sites

Date	No. of weapons	Type of weapons	Location	Source of observation
		Government-controll	led areas	
11/10/2019	1	Surface-to-air missile system (9K33 <i>Osa</i>)	Kalynove (35km north of Donetsk)	Long-range UAV
12/10/2019	6	Tank (T-72)	Near Polkove (65km south of Donetsk)	Patrol
13/10/2019	8	Tank (T-64)	Railway station in Kostiantynivka (60km north of Donetsk)	Patrol
13/10/2019	4	Tank (T-64)	South-west outskirts of Kostiantynivka (60km north of Donetsk)	Patrol

Table of military and military-type presence in the security zone⁸

Date	No. of weapons	Type of weapons	Location	Source of observation			
	Government-controlled areas						
10/10/2019	4	Armoured personnel carrier (BTR-70)		Mini UAV			
10/10/2019	1	Anti-aircraft gun (ZU-23, 23mm) mounted on a truck	Shchastia (20km north of Luhansk)	Mini UAV			
	1	Armoured reconnaissance vehicle (BRDM-2)	Opytne (63km north-east of Donetsk)				
	1	Probable trench digger (PZM-2)					
	1	Trench digger (PZM-2)	Zolote (60km west of Luhansk)				
	2	Armoured combat vehicle	Near Berezove (31km south-west of Donetsk)				
11/10/2010	6	Armoured combat vehicle	Near Slavne (26km south-west of Donetsk)	Long-range			
11/10/2019	1	Armoured personnel carrier (MT-LB)	Near Novomykhailivka (28km south-	UAV			
	1	Infantry fighting vehicle (BMP-1)	west of Donetsk)				
	1	Infantry fighting vehicle	Eastern outskirts of Marinka (23km south-west of Donetsk)				
	1	Armoured combat vehicle	Eastern outskirts of Krasnohorivka (21km west of Donetsk)				
	1	Infantry fighting vehicle	Near Nevelske (18km north-west of Donetsk)				
12/10/2019	1	Armoured personnel carrier (BTR-70)	Novobakhmutivka (28km north of Donetsk)	Patrol			

 $^{^{8}}$ The hardware mentioned in this section is not proscribed by the provisions of the Minsk agreements on the withdrawal of weapons.

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		Non-government-conti	rolled areas	
11/10/2019	4	Armoured combat vehicles	Near Vuhlehirsk (49km north-east of Donetsk)	Long-range UAV
13/10/2019	1	Armoured personnel carrier (MT-LB)	Southern outskirts of Pervomaisk	Patrol
13/10/2019	1	Anti-aircraft gun (ZU-23, 23mm)	(58km west of Luhansk)	Patroi

Table of ceasefire violations as of 13 October 2019^9

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
SMM camera in							
Berezove							
(government-	2-3km ESE	Recorded	4	Projectile	SW to NE	N/K	11-Oct, 18:45
controlled, 31km							
SW of Donetsk)	1.21 G	D 1.1	2		WANTE FOR	37/77	11.0 . 10.01
	1-2km S	Recorded	2	Projectile	WNW to ESE	N/K	11-Oct, 18:31
	1-2km S	Recorded	2	Projectile	WNW to ESE	N/K	11-Oct, 18:32
	2-3km SSE	Recorded	1	Muzzle flash	3.77	N/K	11-Oct, 18:32
	2-3km SSE	Recorded	1	Projectile	NE to SW	N/K	11-Oct, 18:32
	2-3km SSE	Recorded	2	Projectile	WSW to ENE	N/K	11-Oct, 19:06
	2-3km SSE	Recorded	1	Projectile	SW to NE	N/K	11-Oct, 19:14
	2-3km SSE	Recorded	1	Explosion	Impact	N/K	11-Oct, 19:14
SMM camera in	1-2km S	Recorded	3	Projectile	WNW to ESE	N/K	11-Oct, 19:14
Chermalyk	2-3km SSE	Recorded	1	Muzzle flash		N/K	11-Oct, 19:14
(government-	2-3km SSE	Recorded	12	Projectile	SW to NE	N/K	11-Oct, 19:14
controlled, 77km S	3-5km SSE	Recorded	8	Projectile	NNE to SSW	N/K	11-Oct, 21:27
of Donetsk)	5-8km SSE	Recorded	1	Illumination flare		N/K	11-Oct, 22:57
	2-3km SSE	Recorded	1	Projectile	NNE to SSW	N/K	11-Oct, 23:24
	3-5km SSE	Recorded	4	Projectile	NNE to SSW	N/K	12-Oct, 00:29
	3-5km SSE	Recorded	1	Projectile	In vertical flight	N/K	12-Oct, 00:29
	3-5km SSE	Recorded	12	Projectile	SW to NE	N/K	12-Oct, 01:15
	3-5km SSE	Recorded	15	Projectile	SW to NE	N/K	12-Oct, 01:16
	3-5km SSE	Recorded	5	Projectile	SW to NE	N/K	12-Oct, 01:18
	2-3km SSW	Recorded	1	Projectile	WNW to ESE	N/K	11-Oct, 21:58
SMM camera at	0.8-1km S	Recorded	1	Explosion	Undetermined	N/K	11-Oct, 22:19
Donetsk Filtration	0.5-1km S	Recorded	1	Muzzle flash		N/K	11-Oct, 23:58
Station (15km N of	200-500m S	Recorded	1	Muzzle flash		N/K	12-Oct, 01:58
Donetsk)	0.6-1.2km S	Recorded	1	Projectile	WNW to ESE	N/K	12-Oct, 03:16
	0.6-1.2km S	Recorded	1	Projectile	WNW to ESE	N/K	12-Oct, 03:19
SMM camera 1.5km	2-4km ESE	Recorded	1	Explosion		N/K	11-Oct, 22:13
NE of Hnutove (government- controlled, 90km S of Donetsk)	2-4km E	Recorded	1	Illumination flare	In vertical flight	N/K	12-Oct, 00:52
SMM camera in Krasnohorivka	3-5km ESE	Recorded	1	Projectile	In vertical flight	N/K	11-Oct, 21:58
(government- controlled, 21km W of Donetsk)	3-5km ESE	Recorded	1	Explosion	Airburst	N/K	11-Oct, 21:58

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⁹ 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.

SMM camera E of	2-4km NE	Recorded	1 1	Explosion	Undetermined	N/K	12-Oct, 01:14
Lomakyne	2-4km NE	Recorded	1	Explosion	Undetermined	N/K	12-Oct, 01:14
(government-	2-4km NE	Recorded	1	Explosion	Undetermined	N/K	12-Oct, 01:17
controlled, 90km S of Donetsk)	2-4km NE	Recorded	1	Explosion	Undetermined	N/K	12-Oct, 01:32
of Dolletsk)	2-4km ENE	Recorded	1	Projectile	N to S	N/K	11-Oct, 20:44
	2-4km ENE	Recorded	2	Projectile	NW to SE	N/K	11-Oct, 20:45
	2-4km ENE	Recorded	1	Projectile	NW to SE	N/K	11-Oct, 20:46
	1-3km ENE	Recorded	4	Projectile	N to S	N/K	11-Oct, 20:46
	1-3km ENE	Recorded	3	Muzzle flash	11 10 5	N/K	11-Oct, 20:46
	2-4km ENE	Recorded	1	Projectile	NNW to SSE	N/K	11-Oct, 20:47
	2-4km ENE	Recorded	1	Muzzle flash	THIT TO BBE	N/K	11-Oct, 20:47
	1-2km E	Recorded	3	Projectile	N to S	N/K	11-Oct, 20:56
	2-4km ENE	Recorded	1	Muzzle flash	11100	N/K	11-Oct, 21:26
	2-4km ENE	Recorded	3	Projectile	NNW to SSE	N/K	11-Oct, 21:26
	3-5km ENE	Recorded	1	Illumination flare	In vertical flight	N/K	11-Oct, 22:09
0.04	2-4km ENE	Recorded	1	Illumination flare	In vertical flight	N/K	11-Oct, 22:11
SMM camera at	2-4km E	Recorded	2	Projectile	WSW to ENE	N/K	11 Oct 22:22
entry-exit checkpoint in	2-4km E 2-4km E	Recorded	1	Projectile	W to E	N/K N/K	11-Oct, 23:22 11-Oct, 23:22
Maiorsk	3-5km E	Recorded	1	Projectile	N to S	N/K	11-Oct, 23:22 11-Oct, 23:29
(government-				Illumination			
controlled, 45km	3-5km ENE	Recorded	1	flare	NNW to SSE	N/K	11-Oct, 23:32
NE of Donetsk)	3-5km E	Recorded	1	Projectile	SW to NE	N/K	11-Oct, 23:42
	3-5km E	Recorded	1	Projectile	NW to SE	N/K	11-Oct, 23:42
	3-5km E	Recorded	1	Projectile	WSW to ENE	N/K	12-Oct, 00:54
	4-6km E	Recorded	1	Projectile	WSW to ENE	N/K	12-Oct, 00:55
	4-6km E	Recorded	Uncountable	Muzzle flash	MIGNA ENE	N/K	12-Oct, 00:56
	4-6km E	Recorded	l	Projectile	WSW to ENE	N/K	12-Oct, 00:56
	4-6km E	Recorded	1	Projectile	WNW to ESE	N/K	12-Oct, 00:56
	4-6km E 4-6km E	Recorded	1	Explosion	Impact	N/K	12-Oct, 00:56
	3-5km E	Recorded Recorded	1	Projectile Projectile	S to N SSW to NNE	N/K N/K	12-Oct, 01:00
	3-5km E	Recorded	2	Explosion	Undetermined	N/K N/K	12-Oct, 01:02 12-Oct, 01:04
	2-4km E	Recorded	1	Projectile	SW to NE	N/K	12-Oct, 01:39
	1-3km E	Recorded	6	Projectile	NW to SE	N/K	12-Oct, 01:39
	3-5km E	Recorded	1	Explosion	Undetermined	N/K	12-Oct, 04:33
SMM camera in Petrivske (non- government- controlled, 41km S of Donetsk)	0.5-1km NNW	Recorded	1	Projectile	SSW to NNE (assessed as outside the disengagement area)	N/K	9-Oct, 03:07
	3-5km S	Recorded	6	Projectile	W to E	N/K	12-Oct, 01:02
	3-5km S	Recorded	5	Projectile	W to E	N/K	12-Oct, 01:42
	3-5km S	Recorded	1	Projectile	W to E	N/K	12-Oct, 01:46
	3-5km S	Recorded	3	Projectile	W to E	N/K	12-Oct, 02:01
	3-5km S	Recorded	2	Projectile	E to W	N/K	12-Oct, 02:08
	3-5km S	Recorded	1	Projectile	NW to SE	N/K	12-Oct, 02:11
	4-6km S	Recorded	1	Illumination flare		N/K	12-Oct, 02:18
SMM camera at	6-8km S	Recorded	1	Illumination flare		N/K	12-Oct, 02:19
entry-exit	3-5km S	Recorded	5	Projectile	W to E	N/K	12-Oct, 02:25
checkpoint in	3-5km S	Recorded	3	Projectile	W to E	N/K	12-Oct, 02:26
Pyshchevyk	3-5km S	Recorded	3	Projectile	W to E	N/K	12-Oct, 02:27
(government- controlled, 84km S of Donetsk)	3-5km S	Recorded	2	Burst	Approximately 30 rounds, in vertical flight	N/K	12-Oct, 02:27
	3-5km S	Recorded	1	Burst	NE to SW	N/K	12-Oct, 02:41
	3-5km S	Recorded	5	Projectile	NW to SE	N/K	12-Oct, 02:45
	3-5km S	Recorded	1	Explosion		N/K	12-Oct, 03:04
	4-6km SSE	Recorded	1	Explosion		N/K	12-Oct, 03:08
	3-5km SSE	Recorded	3	Projectile	W to E	N/K	12-Oct, 03:14
	3-5km S	Recorded	1	Projectile	N to S	N/K	12-Oct, 03:14
	3-5km S	Recorded	2	Projectile	W to E	N/K	12-Oct, 03:32
		Recorded Recorded Recorded	2 4 8	Projectile Projectile Projectile	W to E W to E W to E	N/K N/K N/K	12-Oct, 03:32 12-Oct, 03:33 12-Oct, 04:11

	3-5km S	Recorded	5	Projectile	W to E	N/K	12-Oct, 04:26
	3-5km S	Recorded	8	Projectile	W to E	N/K N/K	12-Oct, 04:26 12-Oct, 04:33
	3-5km S	Recorded	1	Muzzle flash	WIOL	N/K	12-Oct, 04:36
	3-5km S	Recorded	3	Projectile	W to E	N/K	12-Oct, 04:36
	3-5km S	Recorded	1	Projectile	E to W	N/K	12-Oct, 04:40
	3-5km SSE	Recorded	5	Projectile	W to E	N/K	12-Oct, 04:40
	3-5km SSE	Recorded	19	Projectile	W to E	N/K	12-Oct, 04:41
	3-5km S	Recorded	19	Projectile	W to E	N/K	12-Oct, 04:41 12-Oct, 04:57
	3-5km S	Recorded	1	Projectile	NW to SE	N/K	12-Oct, 04:59
	3-5km S	Recorded	1	Projectile	NW to SE	N/K	12-Oct, 04:39
	3-5km S	Recorded	3	Projectile	W to E	N/K	12-Oct, 05:48
	2-4km N	Recorded	4	Projectile	WNW to ESE	N/K	11-Oct, 18:40
	2-4km N	Recorded	3	Projectile	WSW to ENE	N/K	11-Oct, 18:42
	2-4km N	Recorded	1	Projectile	SW to NE	N/K	11-Oct, 18:56
	2-4km N	Recorded	10	Projectile	SW to NE	N/K	11-Oct, 19:06
	3-5km N	Recorded	1	Projectile	E to W	N/K	11-Oct, 19:00
	3-5km N	Recorded	7	Projectile	E to W	N/K	11-Oct, 20:14
	3-5km N	Recorded	2	Projectile	NNE to SSW	N/K	11-Oct, 20:38
	4-6km N	Recorded	Uncountable	Explosion	TAINE to 55 W	N/K	11-Oct, 20:39
	3-5km N	Recorded	8	Projectile	W to E	N/K	11-Oct, 20:39
	3-5km N	Recorded	2	Projectile	W to E	N/K	11-Oct, 20:39
	3-5km N	Recorded	10	Projectile	W to E	N/K	11-Oct, 20:40
	3-5km N	Recorded	3	Projectile	E to W	N/K	11-Oct, 20:40
			3	Illumination	In vertical		,
	3-5km NE	Recorded	1	flare	flight	N/K	11-Oct, 20:40
	3-5km NNE	Recorded	2	Projectile	E to W	N/K	11-Oct, 20:51
	3-5km N	Recorded	5	Projectile	W to E	N/K	11-Oct, 20:52
	2-4km NE	Recorded	1	Projectile	E to W	N/K	11-Oct, 20:32
	3-5km N	Recorded	1	Projectile	W to E	N/K	11-Oct, 21:53
	3-5km N	Recorded	1	Projectile	W to E	N/K	11-Oct, 21:54
	3-5km N	Recorded	2	Projectile	W to E	N/K	11-Oct, 22:01
	3-5km N	Recorded	3	Projectile	W to E	N/K	11-Oct, 22:02
	4-6km N	Recorded	1	Projectile	E to W	N/K	11-Oct, 22:15
	4-0km 1	Recorded	1	Illumination	In vertical		
SMM camera 1km	4-6km NNE	Recorded	1	flare	flight	N/K	11-Oct, 22:56
SW of Shyrokyne				Illumination	In vertical		
(government-	4-6km NNE	Recorded	1	flare	flight	N/K	11-Oct, 22:57
controlled, 100km S	2.51	D 1.1	4	Illumination	In vertical	37/77	11.0 . 22.55
of Donetsk)	3-5km NNE	Recorded	1	flare	flight	N/K	11-Oct, 23:55
	2.51 NE	D 1.1	1	Illumination	In vertical	NI/IZ	12.0 + 00.01
	3-5km NE	Recorded	1	flare	flight	N/K	12-Oct, 00:01
	3-5km NE	Recorded	1	Projectile	SE to NW	N/K	12-Oct, 00:32
	3-5km N	Recorded	1	Projectile	SW to NE	N/K	12-Oct, 00:34
	3-5km NNE	Recorded	3	Projectile	W to E	N/K	12-Oct, 01:16
	3-5km N	Recorded	2	Projectile	SW to NE	N/K	12-Oct, 01:31
	3-5km NNE	Recorded	1	Projectile	SE to NW	N/K	12-Oct, 01:55
	3-5km N	Recorded	12	Projectile	W to E	N/K	12-Oct, 02:11
	3-5km N	Recorded	22	Projectile	W to E	N/K	12-Oct, 02:13
	3-5km N	Recorded	4	Projectile	E to W	N/K	12-Oct, 02:13
	4-6km NE	Recorded	1	Illumination		N/K	12-Oct, 02:18
	+-UKIII INE	Recorded	1	flare		1 N / IX	12-001, 02:18
	3-5km NE	Recorded	1	Illumination		N/K	12-Oct, 02:19
				flare			·
	3-5km N	Recorded	20	Projectile	SW to NE	N/K	12-Oct, 02:45
	3-5km N	Recorded	2	Projectile	SW to NE	N/K	12-Oct, 02:46
	3-5km N	Recorded	1	Projectile	E to W	N/K	12-Oct, 03:04
	4-6km NNE	Recorded	1	Explosion	Undetermined	N/K	12-Oct, 03:08
	3-5km N	Recorded	1	Projectile	SW to NE	N/K	12-Oct, 04:39
	3-5km N	Recorded	6	Projectile	In vertical	N/K	12-Oct, 04:54
				·	flight		·
	4-6km NNE	Recorded	Uncountable	Explosion	GTT - TT-	N/K	12-Oct, 05:05
	3-5km N	Recorded	1	Projectile	SW to NE	N/K	12-Oct, 05:57
Dokuchaievsk (non-							
government-	2-3km SW	Heard	1	Explosion	Undetermined	N/K	12-Oct, 07:24
controlled, 30km				<u>.</u>			
					i		1
SW of Donetsk)					A 1	C., 11	
	2-3km W	Heard	3	Shot	Assessed as outside the	Small arms	12-Oct, 09:37

government- controlled, 41km S]				disengagement area		
of Donetsk)	2-3km W	Heard	3	Shot	Assessed as outside the disengagement area	Small arms	12-Oct, 09:57
	2-3km SW	Heard	2	Explosion	Undetermined (assessed as inside the disengagement area)	N/K	12-Oct, 12:16- 12:25
	2-3km SW	Heard	16	Burst	Assessed as inside the disengagement area	HMG	12-Oct, 12:16- 12:25
	2-3km SW	Heard	2	Shot	Assessed as inside the disengagement area	HMG	12-Oct, 12:16- 12:25
	2-4km WNW	Heard	7	Burst	Assessed as outside the disengagement area	HMG	12-Oct, 12:28- 12:32
	2-4km WNW	Heard	3	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	12-Oct, 12:37- 12:39
	2-4km WNW	Heard	2	Burst	Assessed as outside the disengagement area	HMG	12-Oct, 12:37- 12:39
	2-4km WNW	Heard	13	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	12-Oct, 12:40- 12:49
	2-4km W	Heard	2	Burst	Assessed as outside the disengagement area	HMG	12-Oct, 12:51- 12:53
	2-4km W	Heard	2	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	12-Oct, 12:53
	2-4km WNW	Heard	6	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	12-Oct, 12:55- 12:58
	2-4km WNW	Heard	3	Burst	Assessed as outside the disengagement area	HMG	12-Oct, 12:58
	700m SSW	Heard	1	Shot	Assessed as outside the disengagement area	Small arms	12-Oct, 15:25
Petrivske (non-government-	700m SSW	Heard	1	Shot	Assessed as outside the disengagement area	Small arms	12-Oct, 15:33
controlled, 41km S of Donetsk)	700mSSW	Heard	1	Shot	Assessed as outside the disengagement area	Small arms	12-Oct, 15:44
	700m SSW	Heard	1	Shot	Assessed as outside the disengagement	Small arms	12-Oct, 15:46

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Staromykhailivka (non-government- controlled, 15km W of Donetsk)	3-5km WSW	Heard	4	Explosion	Undetermined	N/K	12-Oct, 15:35- 15:40
Donetsk central railway station(non-	2-3km NNW	Heard	18	Explosion	Undetermined	N/K	12-Oct, 09:40- 09:52
government- controlled, 6km NW	2-3km NNW	Heard	32	Explosion	Undetermined	N/K	12-Oct, 09:53- 10:05
of Donetsk city centre)	2-3km NNW	Heard	3	Burst		HMG	12-Oct, 09:53- 10:05
2.8km NNW of Luhanske (non- government- controlled, 15km SW of Donetsk)	8-10km NW	Heard	20	Explosion	Undetermined	N/K	12-Oct, 09:45
Oleksandrivka (non- government- controlled, 20km SW of Donetsk)	3-5km NE	Heard	25	Explosion	Undetermined	N/K	12-Oct, 09:50- 10:00
Oleksandrivka (non- government- controlled, 20km SW of Donetsk)	3-5km NE	Heard	9	Burst		HMG	12-Oct, 09:50- 10:00
About 1km E of Kruta Balka (non-	3-4km NE	Heard	2	Shot		Small arms	12-Oct, 10:45
government- controlled, 16km N of Donetsk)	3-4km NE	Heard	12	Burst		HMG	12-Oct, 11:02
About 1km NW of the railway station	1-2km NW	Heard	2	Burst		Small arms	12-Oct, 12:10
in Yasynuvata (non- government- controlled, 16km NE of Donetsk)	1-2km NW	Heard	8	Shot		Small arms	12-Oct, 14:07
,	3km NNW	Heard	2	Shot	Assessed as outside the disengagement area	Small arms	12-Oct, 09:57- 09:58
	2km NW	Heard	2	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	12-Oct, 12:28- 12:35
	2km NW	Heard	3	Burst	Assessed as outside the disengagement area	HMG	12-Oct, 12:28- 12:35
About 1km E of Bohdanivka (government-	2-3km NW	Heard	13	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	12-Oct, 12:37- 12:45
controlled, 41km SW of Donetsk)	2-3km NW	Heard	4	Burst	Assessed as outside the disengagement area	HMG	12-Oct, 12:37- 12:45
	2-3km NW	Heard	7	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	12-Oct, 12:45- 12:55
	2-3km NW	Heard	1	Burst	Assessed as outside the disengagement area	HMG	12-Oct, 12:45- 12:55
	2-3km NW	Heard	9	Explosion	Undetermined (assessed as outside the disengagement	N/K	12-Oct, 12:55- 13:05

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	2-3km NW	Heard	2	Burst	Assessed as outside the disengagement area	HMG	12-Oct, 12:55- 13:05
	4-5km NW	Heard	1	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	12-Oct, 14:12
	4-5km WNW	Heard	1	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	12-Oct, 15:00
2.5km SSE of Lomakyne (government- controlled, 93km S of Donetsk)	3-4km NE	Heard	2	Explosion	Undetermined	N/K	12-Oct, 11:20- 11:25
	5km NW	Heard	1	Explosion	Undetermined	N/K	12-Oct, 10:53
	2-3km NW	Heard	2	Shot		Small arms	12-Oct, 10:53
	3-5km W	Heard	3	Explosion	Undetermined	N/K	12-Oct, 11:16- 11:18
	3-5km W	Heard	18	Explosion	Undetermined	N/K	12-Oct, 11:19- 11:29
	3-5km NW	Heard	2	Burst		Small arms	12-Oct, 11:19- 11:29
3km NE of	3-5km NW	Heard	Uncountable	Shot	Uncountable	Small arms	12-Oct, 11:19- 11:29
Zaichenko (non- government-	3-5km W	Heard	5	Explosion	Undetermined	N/K	12-Oct, 11:31- 11:34
controlled, 93km S of Donetsk)	3-5km W	Heard	21	Shot		Small arms	12-Oct, 11:31- 11:34
	3-5km W	Heard	4	Explosion	Undetermined	N/K	12-Oct, 11:44- 11:57
	3-5km W	Heard	Uncountable	Shot	Uncountable	Small arms	12-Oct, 11:44- 11:57
	500m SSW	Heard	1	Burst		Small arms	12-Oct, 12:05
	3-5km W	Heard	6	Shot		Small arms	12-Oct, 12:21
	3-5km NE	Heard	1	Explosion	Undetermined	N/K	12-Oct, 12:50
	3-5km W	Heard	6	Burst		HMG	11-Oct, 18:53- 18:59
	3-5km W	Heard	4	Explosion	Undetermined	N/K	11-Oct, 18:57- 18:59
	3-5km W	Heard	6	Burst		Small arms	11-Oct, 19:00- 19:03
Horlivka (non-	3-5km W	Heard	4	Explosion	Undetermined	N/K	11-Oct, 19:00- 19:05
government- controlled, 39km	3-5km W	Heard	12	Burst		HMG	11-Oct, 19:00- 19:15
NE of Donetsk)	3-5km W	Heard	2	Explosion	Undetermined	N/K	11-Oct, 19:14- 19:15
	3-5km W	Heard	1	Explosion	Undetermined	N/K	11-Oct, 19:18
	3-5km W	Heard	9	Burst		HMG	11-Oct, 19:18- 19:25
	5-8km NW	Heard	4	Burst		HMG	11-Oct, 19:56
	3-5km W	Heard	1	Explosion	Undetermined	N/K	11-Oct, 20:25
	3-5km W	Heard	1	Explosion	Undetermined	N/K	11-Oct, 20:32
About 7.5km NW	1-2km NW	Heard	3	Burst		Small arms	12-Oct, 11:22
of Horlivka (non- government	1-2km NW	Heard	5	Shot		Small arms	12-Oct, 11:25
controlled, 39 km NE of Donetsk)	1-2km NW	Heard	7	Shot		Small arms	12-Oct, 11:27
	1-2km NW	Heard	12	Burst		HMG	12-Oct, 11:27-

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	1.01	77 1	1.7	D .		Small	12-Oct, 11:27-
	1-2km NW	Heard	15	Burst		arms	11:37
	1 Ol NIW	III	25	C14		Small	12-Oct, 11:27-
	1-2km NW	Heard	35	Shot		arms	11:37
About 500m NE of Kamianka (government- controlled, 20km N of Donetsk)	3-5km SSE	Heard	1	Explosion	Undetermined	N/K	12-Oct, 11:26
	3-4km SE	Heard	25	Burst		HMG	11-Oct, 20:40- 20:44
	3-4km SE	Heard	20	Burst		HMG	11-Oct, 20:45- 20:50
	4-5km S	Heard	1	Explosion	Undetermined	N/K	11-Oct, 20:50
	3-5km SE	Heard	35	Burst		HMG	11-Oct, 21:43- 21:47
Svitlodarsk	3-5km SE	Heard	22	Burst		HMG	11-Oct, 22:14- 22:19
(government- controlled, 57km	4-5km SE	Heard	5	Explosion	Undetermined	N/K	11-Oct, 22:30- 22:33
NE of Donetsk)	4-5km S	Heard	5	Explosion	Undetermined	N/K	11-Oct, 22:36- 22:41
	4-5km S	Heard	8	Explosion	Undetermined	N/K	11-Oct, 22:43- 22:47
	4-5km SE	Heard	4	Explosion	Undetermined	N/K	11-Oct, 22:48- 22:51
	4-5km SE	Heard	1	Explosion	Undetermined	N/K	11-Oct, 22:55
	4-5km SW	Heard	3	Explosion	Undetermined	N/K	12-Oct, 17:32
3.5km W of Kalynove (non-	3-6km W	Heard	7	Burst		HMG	12-Oct, 10:05- 10:12
government	3-6km W	Heard	1	Explosion	Undetermined	N/K	12-Oct, 10:23
controlled, 60km W of Luhansk)	3-6km W	Heard	6	Burst		HMG	12-Oct, 10:23- 10:25
	2-4km SSE	Recorded	2	Projectile	WSW to ENE	N/K	12-Oct, 20:34
	2-4km SSE	Recorded	1	Projectile	WSW to ENE	N/K	12-Oct, 20:47
	3-5km SSE	Recorded	1	Projectile	WSW to ENE	N/K	12-Oct, 20:51
SMM camera in	2-4km SSE	Recorded	1	Projectile	WSW to ENE	N/K	12-Oct, 20:57
Chermalyk	2-3km SSE	Recorded	30	Projectile	WNW to ESE	N/K	12-Oct, 20:59
(government-	2-3km S	Recorded	Uncountable	Projectile	WNW to ESE	N/K	12-Oct, 21:39
controlled, 77km S of Donetsk)	6-8km SSE	Recorded	2	Projectile	In vertical flight	N/K	12-Oct, 23:39
of Bolletsky	3-5km SSE	Recorded	2	Projectile	ENE to WSW	N/K	13-Oct, 03:11
	3-5km SSE	Recorded	1	Projectile	In vertical flight	N/K	13-Oct, 03:26
	3-5km SSE	Recorded	1	Projectile	ENE to WSW	N/K	13-Oct, 03:41
	200-400m SSW	Recorded	1	Explosion	Undetermined	N/K	13-Oct, 00:12
SMM camera at	0.9-1.2km S	Recorded	1	Muzzle flash		N/K	13-Oct, 01:39
Donetsk Filtration	0.9-1.2km S	Recorded	1	Explosion	Impact	N/K	13-Oct, 01:39
Station (15km N of	1-2km S	Recorded	1	Projectile	NW to SE	N/K	13-Oct, 02:06
Donetsk)	2-4km SSE	Recorded	1	Explosion	Undetermined	N/K	13-Oct, 02:06
	0.7-1km S 300-500m S	Recorded Recorded	1 1	Explosion Muzzle flash	Undetermined	N/K N/K	13-Oct, 03:44 13-Oct, 05:36
SMM camera 1.5km NE of Hnutove	5-7km ENE	Recorded	1	Illumination	In vertical	N/K	13-Oct, 03:59
(government- controlled, 90km S of Donetsk)	4-6km E	Recorded	7	flare Projectile	flight SSW to NNE	N/K	13-Oct, 04:46
OI DOHEISK)	1-3km ESE	Recorded	4	Projectile	WSW to ENE	N/K	12-Oct, 23:00
	1-3km ESE	Recorded	1	Projectile	NNE to SSW	N/K	12-Oct, 23:00
	1-3km ESE	Recorded	3	Muzzle flash		N/K	12-Oct, 23:00
SMM camera in	2-4km ESE	Recorded	1	Explosion	Undetermined	N/K	12-Oct, 23:00
Krasnohorivka	1-3km ESE	Recorded	1	Projectile	WNW to ESE	N/K	12-Oct, 23:00
(government- controlled, 21km W	2-4km ESE	Recorded	1	Projectile	WSW to ENE	N/K	12-Oct, 23:01
of Donetsk)	2-4km ESE	Recorded	2	Projectile	W to E	N/K	12-Oct, 23:14
of Donotok)	2-4km ESE	Recorded	1	Projectile	NE to SW	N/K	12-Oct, 23:14
	2-4km ESE	Recorded	1	Explosion		N/K	13-Oct, 01:49
	2-4km ESE	Recorded	1	Projectile	NNE to SSW	N/K	13-Oct, 01:50

1-3 1-3 2-4	3km ESE 3km ESE 3km ENE 4km ENE 4km E 4km E 4km ENE 4km ENE 4km ENE 4km ENE 4km ENE 4km ENE 4km ENE 4km ENE 4km ENE 4km ENE 4km E 5km NNE 5km NNE 5km NNE 4km NNE	Recorded Recorded	1 3 1 1 1 1 1 1 1 1 1 Uncountable 4 1 5 6 4 3 1 4 2 5 2 1	Projectile Projectile	NNW to SSE NNE to SSW SW to NE N to S NNW to SSE N to S NNW to SSE S to N N to S NE to SW In vertical flight N to S WW to SE N to S S to N N to S NW to SE N to S S to N N to S NW to SE N to S NNW to SE	N/K	13-Oct, 01:50 13-Oct, 01:51 12-Oct, 20:09 12-Oct, 22:01 12-Oct, 22:01 12-Oct, 22:01 12-Oct, 22:10 12-Oct, 22:14 12-Oct, 22:18 12-Oct, 22:23 13-Oct, 00:09 13-Oct, 00:49 13-Oct, 00:56 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 04:10 13-Oct, 04:10 13-Oct, 04:11 13-Oct, 04:15
1-3 2-4	3km ENE 4km ENE 4km E 4km E 4km E 4km E 4km ENE 4km ENE 4km E 4km E 4km ENE 4km E 4km E 4km E 4km E 4km E 4km E 4km E 4km E 4km E 4km E 4km E 4km E 4km E 5km NNE 5km NNE	Recorded Recorded	1 1 1 1 1 1 1 1 1 1 Uncountable 4 1 5 6 4 3 1 4 2 5 2 1	Projectile Projectile	SW to NE N to S NNW to SSE N to S NNW to SSE S to N N to S NE to SW In vertical flight N to S NW to SE N to S WNW to SE S to N N to S NW to SE N to S WNW to ESE S to N SW to NE S to N N to S	N/K N/K N/K N/K N/K N/K N/K N/K N/K N/K	12-Oct, 20:09 12-Oct, 22:01 12-Oct, 22:01 12-Oct, 22:08 12-Oct, 22:10 12-Oct, 22:14 12-Oct, 22:18 12-Oct, 22:23 13-Oct, 00:09 13-Oct, 00:56 13-Oct, 00:56 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 04:10 13-Oct, 04:10 13-Oct, 04:11
SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk) 2-4 2-4 2-4 2-4 2-4 2-4 3-5 3-5 3-5 3-5 3-5 3-5 3-5 3-5 3-5 3-5	4km ENE 4km E 4km E 4km E 4km ENE 4km ENE 4km ENE 4km ENE 4km ENE 4km ENE 4km E 4km E 4km E 4km E 4km E 4km E 4km E 4km E 4km E 5km NNE 5km NNE 5km NNE	Recorded Recorded	1 1 1 1 1 1 1 1 Uncountable 4 1 5 6 4 3 1 4 2 5 2 1	Projectile Projectile Projectile Projectile Projectile Projectile Projectile Projectile Projectile Muzzle flash Projectile Projectile Projectile Projectile Projectile Projectile Projectile Projectile Projectile Muzzle flash Projectile Projectile Projectile Projectile Projectile	N to S NNW to SSE N to S NNW to SSE S to N N to S NE to SW In vertical flight N to S NW to SE N to S WNW to SE S to N SW to NE S to N SW to NE S to N N to S	N/K N/K N/K N/K N/K N/K N/K N/K N/K N/K	12-Oct, 22:01 12-Oct, 22:01 12-Oct, 22:08 12-Oct, 22:10 12-Oct, 22:14 12-Oct, 22:18 12-Oct, 22:23 13-Oct, 00:09 13-Oct, 00:49 13-Oct, 00:56 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 04:10 13-Oct, 04:10 13-Oct, 04:11
SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk) 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-	4km E 4km E 4km ENE 4km ENE 4km ENE 4km ENE 4km ENE 4km ENE 4km ENE 4km E 4km E 4km E 4km E 4km E 4km E 4km E 4km E 5km NNE 5km NNE 5km NNE	Recorded Recorded	1 1 1 1 1 1 Uncountable 4 1 5 6 4 3 1 4 2 5 2 1	Projectile Projectile Projectile Projectile Projectile Projectile Projectile Projectile Muzzle flash Projectile Projectile Projectile Projectile Projectile Projectile Projectile Muzzle flash Projectile Projectile Projectile Projectile Projectile Projectile	NNW to SSE N to S NNW to SSE S to N N to S NE to SW In vertical flight N to S NW to SE N to S WNW to SE S to N SW to NE S to N SW to NE S to N N to S	N/K N/K N/K N/K N/K N/K N/K N/K N/K N/K	12-Oct, 22:01 12-Oct, 22:08 12-Oct, 22:10 12-Oct, 22:14 12-Oct, 22:18 12-Oct, 22:23 13-Oct, 00:09 13-Oct, 00:56 13-Oct, 00:56 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 04:10 13-Oct, 04:10 13-Oct, 04:11
SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk) 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-	4km E 4km ENE 4km ENE 4km ENE 4km ENE 4km ENE 4km ENE 4km ENE 4km ENE 4km E 4km E 4km E 4km E 4km E 4km E 5km NNE 5km NNE 5km NNE	Recorded Recorded	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Projectile Projectile Projectile Projectile Projectile Projectile Muzzle flash Projectile Projectile Projectile Projectile Projectile Projectile Projectile Projectile Muzzle flash Projectile Projectile Projectile Projectile Projectile	N to S NNW to SSE S to N N to S NE to SW In vertical flight N to S NW to SE N to S WNW to ESE S to N SW to NE S to N N to S	N/K N/K N/K N/K N/K N/K N/K N/K N/K N/K	12-Oct, 22:08 12-Oct, 22:10 12-Oct, 22:14 12-Oct, 22:18 12-Oct, 22:23 13-Oct, 00:09 13-Oct, 00:56 13-Oct, 02:11 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 04:10 13-Oct, 04:10 13-Oct, 04:11
SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk) 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-	4km ENE 4km ENE 4km ENE 4km ENE 4km ENE 4km ENE 4km ENE 4km ENE 4km E 4km E 4km E 4km E 4km E 4km E 4km E 5km NNE 5km NNE 5km NNE	Recorded Recorded	1 1 1 Uncountable 4 1 5 6 4 3 1 4 2 5 5	Projectile Projectile Projectile Projectile Projectile Muzzle flash Projectile Projectile Projectile Projectile Projectile Projectile Projectile Muzzle flash Projectile Projectile Projectile Projectile Projectile	NNW to SSE S to N N to S NE to SW In vertical flight N to S NW to SE N to S WNW to ESE S to N SW to NE S to N N to S	N/K N/K N/K N/K N/K N/K N/K N/K N/K N/K	12-Oct, 22:10 12-Oct, 22:14 12-Oct, 22:18 12-Oct, 22:23 13-Oct, 00:09 13-Oct, 00:56 13-Oct, 02:11 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 04:10 13-Oct, 04:10 13-Oct, 04:11
SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk) 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-	4km ENE 4km E 4km E 4km E 4km ENE 4km ENE 4km E 4km E 4km E 4km E 4km E 4km E 4km E 4km E 4km E 5km NNE 5km NNE 5km NNE	Recorded Recorded	1 1 Uncountable 4 1 5 6 4 3 1 4 2 5 2 1	Projectile Projectile Projectile Projectile Muzzle flash Projectile Projectile Projectile Projectile Projectile Projectile Projectile Muzzle flash Projectile Projectile Projectile Projectile Projectile	S to N N to S NE to SW In vertical flight N to S NW to SE N to S WNW to ESE S to N SW to NE S to N N to S	N/K N/K N/K N/K N/K N/K N/K N/K N/K N/K	12-Oct, 22:14 12-Oct, 22:18 12-Oct, 22:23 13-Oct, 00:09 13-Oct, 00:56 13-Oct, 02:11 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 04:10 13-Oct, 04:10 13-Oct, 04:11
SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk) 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-	4km E 4km ENE 4km ENE 4km ENE 4km ENE 4km E 4km E 4km E 4km E 4km E 4km E 4km E 4km E 4km E 5km NNE 5km NNE 5km NNE	Recorded Recorded	1 Uncountable 4 1 5 6 4 3 1 4 2 5 2	Projectile Projectile Projectile Muzzle flash Projectile Projectile Projectile Projectile Muzzle flash Projectile Projectile Projectile Projectile Projectile Projectile	N to S NE to SW In vertical flight N to S NW to SE N to S WNW to ESE S to N SW to NE S to N N to S	N/K N/K N/K N/K N/K N/K N/K N/K N/K N/K	12-Oct, 22:18 12-Oct, 22:23 13-Oct, 00:09 13-Oct, 00:56 13-Oct, 02:11 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 04:10 13-Oct, 04:10 13-Oct, 04:11
SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk) 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-	4km ENE 4km E 4km ENE 4km E 4km E 4km E 4km E 4km E 4km E 4km E 4km E 4km E 3km NNE 5km NNE 5km NNE	Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded	Uncountable 4 1 5 6 4 3 1 4 2 5 2 1	Projectile Projectile Muzzle flash Projectile Projectile Projectile Projectile Muzzle flash Projectile Muzzle flash Projectile Projectile Projectile Projectile	NE to SW In vertical flight N to S NW to SE N to S WNW to ESE S to N SW to NE S to N N to S	N/K N/K N/K N/K N/K N/K N/K N/K N/K N/K	12-Oct, 22:23 13-Oct, 00:09 13-Oct, 00:49 13-Oct, 00:56 13-Oct, 02:11 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 04:10 13-Oct, 04:10 13-Oct, 04:11
entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk) 2-2 2-2 2-2 2-4 3-5 3-5 3-5 3-5 3-5 3-5 3-5 3-5 3-5 3-5	4km E 4km ENE 4km ENE 4km E 3km NNE 5km NNE 5km NNE	Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded	4 1 5 6 4 3 1 4 2 5 2 1	Projectile Muzzle flash Projectile Projectile Projectile Projectile Muzzle flash Projectile Projectile Projectile Projectile Projectile Projectile	In vertical flight N to S NW to SE N to S WNW to ESE S to N SW to NE S to N N to S	N/K N/K N/K N/K N/K N/K N/K N/K N/K N/K	13-Oct, 00:09 13-Oct, 00:49 13-Oct, 00:56 13-Oct, 02:11 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 04:10 13-Oct, 04:10 13-Oct, 04:11
checkpoint in Maiorsk (government- controlled, 45km NE of Donetsk) 2-2 2-4 2-4 2-4 2-4 2-4 2-4 2-	4km ENE 4km ENE 4km E 4km E 4km E 4km E 4km E 4km E 4km E 4km E 5km NNE 5km NNE 5km NNE	Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded	1 5 6 4 3 1 4 2 5 2	Muzzle flash Projectile Projectile Projectile Muzzle flash Projectile Projectile Projectile Projectile Projectile Projectile	N to S NW to SE N to S WNW to ESE S to N SW to NE S to N N to S	N/K N/K N/K N/K N/K N/K N/K N/K N/K N/K	13-Oct, 00:49 13-Oct, 00:56 13-Oct, 02:11 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 04:10 13-Oct, 04:10 13-Oct, 04:11
(government-controlled, 45km NE of Donetsk) 2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2	4km ENE 4km E 4km E 4km E 4km E 4km E 4km E 4km E 4km E 4km E 3km NNE 5km NNE 5km NNE	Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded	5 6 4 3 1 4 2 5 2	Projectile Projectile Projectile Projectile Muzzle flash Projectile Projectile Projectile Projectile	NW to SE N to S WNW to ESE S to N SW to NE S to N N to S	N/K N/K N/K N/K N/K N/K N/K N/K N/K N/K	13-Oct, 00:56 13-Oct, 02:11 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 04:10 13-Oct, 04:10 13-Oct, 04:11
controlled, 45km NE of Donetsk) 2-2 2-4 2-4 2-4 2-4 3-5 1-3 3-5 3-5 2-4 SMM camera at	4km E 4km E 4km E 4km E 4km E 4km E 4km E 4km E 5km NNE 5km NNE 5km NNE	Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded	6 4 3 1 4 2 5 2	Projectile Projectile Projectile Muzzle flash Projectile Projectile Projectile Projectile	NW to SE N to S WNW to ESE S to N SW to NE S to N N to S	N/K N/K N/K N/K N/K N/K N/K N/K	13-Oct, 02:11 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 04:10 13-Oct, 04:11
NE of Donetsk) 2-2 2-4 2-4 2-4 2-4 3-5 1-3 3-5 2-4 SMM camera at	4km E 4km E 4km E 4km E 4km E 4km E 4km ENE 5km NNE 3km NNE 5km NNE	Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded	4 3 1 4 2 5 2	Projectile Projectile Muzzle flash Projectile Projectile Projectile Projectile	N to S WNW to ESE S to N SW to NE S to N N to S	N/K N/K N/K N/K N/K N/K	13-Oct, 03:33 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 04:10 13-Oct, 04:10 13-Oct, 04:11
2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4	4km E 4km E 4km E 4km E 4km E 4km ENE 5km NNE 3km NNE 5km NNE 5km NNE	Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded	3 1 4 2 5 2	Projectile Muzzle flash Projectile Projectile Projectile Projectile	S to N SW to NE S to N N to S	N/K N/K N/K N/K N/K	13-Oct, 03:33 13-Oct, 03:33 13-Oct, 03:33 13-Oct, 04:10 13-Oct, 04:10 13-Oct, 04:11
2-4 2-4 3-5 1-3 3-5 2-4 SMM camera at 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4	4km E 4km E 4km E 4km E 4km ENE 5km NNE 3km NNE 5km NNE 5km NNE	Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded	1 4 2 5 2	Projectile Muzzle flash Projectile Projectile Projectile Projectile	S to N SW to NE S to N N to S	N/K N/K N/K N/K N/K	13-Oct, 03:33 13-Oct, 03:33 13-Oct, 04:10 13-Oct, 04:10 13-Oct, 04:11
2-4 2-4 3-5 1-3 3-5 2-4 SMM camera at 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4	4km E 4km E 4km E 4km E 4km ENE 5km NNE 3km NNE 5km NNE 5km NNE	Recorded Recorded Recorded Recorded Recorded Recorded Recorded Recorded	1 4 2 5 2	Muzzle flash Projectile Projectile Projectile Projectile	S to N SW to NE S to N N to S	N/K N/K N/K N/K	13-Oct, 03:33 13-Oct, 04:10 13-Oct, 04:10 13-Oct, 04:11
2-4 2-4 3-5 1-3 3-5 2-4 SMM camera at 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4	4km E 4km E 4km E 4km ENE 5km NNE 3km NNE 5km NNE 5km NNE	Recorded Recorded Recorded Recorded Recorded Recorded	4 2 5 2	Projectile Projectile Projectile Projectile	SW to NE S to N N to S	N/K N/K N/K	13-Oct, 04:10 13-Oct, 04:10 13-Oct, 04:11
2-4 2-4 3-5 1-3 3-5 2-4 2-4 SMM camera at	4km E 4km E 4km ENE 5km NNE 3km NNE 5km NNE 5km NNE	Recorded Recorded Recorded Recorded	2 5 2 1	Projectile Projectile Projectile	SW to NE S to N N to S	N/K N/K	13-Oct, 04:10 13-Oct, 04:11
2-4 3-5 1-3 3-5 3-5 3-5 2-4 2-4 SMM camera at 2-4 2-4 2-4 2-4	4km E 4km ENE 5km NNE 3km NNE 5km NNE 5km NNE	Recorded Recorded Recorded	5 2 1	Projectile Projectile	S to N N to S	N/K	13-Oct, 04:11
2-4 3-5 1-3 3-5 3-5 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4 2-4	-4km ENE -5km NNE -3km NNE -5km NNE -5km NNE	Recorded Recorded	2	Projectile	N to S		
3-5 1-3 3-5 3-5 2-4 2-4 2-4 SMM camera at 2-4	-5km NNE -3km NNE -5km NNE -5km NNE	Recorded Recorded	1			1 1/ 12	
3-5 3-5 2-4 2-4 SMM camera at 2-4	-3km NNE -5km NNE -5km NNE	Recorded			Airburst	N/K	13-Oct, 01:50
3-5 3-5 2-4 2-2 SMM camera at 2-4	-5km NNE -5km NNE		()	Projectile	SW to NE	N/K	13-Oct, 01:30
3-5 2-4 2-4 SMM camera at 2-4	-5km NNE		9 2				
2-4 2-4 SMM camera at 2-4				Projectile	SE to NW	N/K	13-Oct, 03:17
2-2 2-4 2-4 2-4	4km NNE – L	Recorded	1	Projectile	SE to NW	N/K	13-Oct, 03:18
SMM camera at 2-4		Recorded	2	Projectile	WSW to ENE	N/K	13-Oct, 04:37
SMM camera at	-4km NNE	Recorded	5	Projectile	WSW to ENE	N/K	13-Oct, 04:39
anteri avit	-4km NNE	Recorded	4	Projectile	WSW to ENE	N/K	13-Oct, 04:40
entry-exit	-4km NNE	Recorded	5	Projectile	WSW to ENE	N/K	13-Oct, 04:41
abackpoint in	-4km NNE	Recorded	8	Projectile	WSW to ENE	N/K	13-Oct, 04:42
Marinka 2-4	-4km NNE	Recorded	5	Projectile	WSW to ENE	N/K	13-Oct, 04:43
(government-	-4km NNE	Recorded	9	Projectile	WSW to ENE	N/K	13-Oct, 04:44
controlled, 23km	-4km NNE	Recorded	21	Projectile	WSW to ENE	N/K	13-Oct, 04:45
SW of Donetsk)	-4km NNE	Recorded	2	Projectile	WSW to ENE	N/K	13-Oct, 04:58
2-4	-4km NNE	Recorded	3	Projectile	WSW to ENE	N/K	13-Oct, 04:59
	-4km NNE	Recorded	1	Projectile	WSW to ENE	N/K	13-Oct, 05:00
·	-4km NNE	Recorded	6	Projectile	WSW to ENE	N/K	13-Oct, 05:01
	-4km NNE	Recorded	15	Projectile	WSW to ENE	N/K	13-Oct, 05:02
	-4km NNE	Recorded	3	Projectile	WSW to ENE	N/K	13-Oct, 05:03
	-4km NNE	Recorded	1	Projectile	WSW to ENE	N/K	13-Oct, 05:04
	-4km NNE	Recorded	2.	Projectile	WSW to ENE	N/K	13-Oct, 05:05
SMM camera at Oktiabr mine (non- government- controlled, 9km NW of Donetsk city centre) 2-4	4km NE	Recorded	2	Projectile	NW to SE	N/K	13-Oct, 00:27
	-5km S	Recorded	1	Projectile	WNW to ESE	N/K	13-Oct, 01:03
CMM	-5km S	Recorded	1	Projectile	WNW to ESE	N/K	13-Oct, 01:06
SMM camera at 3-5	-5km S	Recorded	1	Projectile	WNW to ESE	N/K	13-Oct, 01:45
entry-exit	-5km S	Recorded	1	Projectile	WNW to ESE	N/K	13-Oct, 04:34
checkpoint in Probabovyls 3-5	-5km S	Recorded	20	Projectile	WNW to ESE	N/K	13-Oct, 04:38
Pysncnevyk 3-4	-5km S	Recorded	1	Burst	WNW to ESE	N/K	13-Oct, 05:09
(government-	-5km S	Recorded	1	Burst	WNW to ESE	N/K	13-Oct, 05:17
controlled, 84km S	-5km S	Recorded	1	Projectile	ENE to WSW	N/K	13-Oct, 05:18
OLIDOHERN)	-5km S	Recorded	1	Burst	WNW to ESE	N/K	13-Oct, 05:18
	-5km S	Recorded	1	Burst	WNW to ESE	N/K	13-Oct, 05:19
	-5km NNE	Recorded	3	Projectile	W to E	N/K	12-Oct, 21:05
SMM camera 1km 3-5	-5km NNE	Recorded	2	Projectile	SW to NE	N/K	12-Oct, 21:05
	-5km N	Recorded	1	Projectile	S to N	N/K	12-Oct, 21:05
	-5km N	Recorded	8	Projectile	W to E	N/K	12-Oct, 21:06
.0	-5km NNE	Recorded	1	Projectile	NNW to SSE	N/K	12-Oct, 21:06
	-5km NNE	Recorded	1	Projectile	WSW to ENE	N/K	12-Oct, 21:06
·	-5km N	Recorded	4	Projectile	W to E	N/K N/K	12-Oct, 21:06 12-Oct, 21:07
	-5km N	Recorded	2	Projectile	W to E	N/K N/K	12-Oct, 21:07 12-Oct, 21:08

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	3-5km N	Recorded Recorded	1 2	Projectile Projectile	SE to NW W to E	N/K	12-Oct, 21:08
	3-5km N 3-5km N	Recorded	3	Projectile	W to E	N/K N/K	12-Oct, 22:19 12-Oct, 22:52
	3-5km N	Recorded	12	Projectile	W to E	N/K	12-Oct, 22:54
	3-5km N	Recorded	5	Projectile	ESE to WNW	N/K	12-Oct, 23:04
	4-7km N	Recorded	1	Projectile	SW to NE	N/K	12-Oct, 23:25
About 3km WSW of Donetsk central railway station(non- government- controlled, 6km NW of Donetsk city centre)	1-2km NW	Heard	1	Explosion	Outgoing	N/K	13-Oct, 13:00
About 800m SSE of Novohryhorivka (non-government- controlled, 61km NE of Donetsk)	2-4km N	Heard	1	Explosion	Undetermined	N/K	13-Oct, 15:05
_ = = = = = = = = = = = = = = = = = = =	4-5km SE	Heard	1	Explosion	Undetermined	N/K	12-Oct, 20:30
	4-5km S	Heard	7	Explosion	Undetermined	N/K	12-Oct, 21:30- 21:34
	4-5km S	Heard	5	Explosion	Undetermined	N/K	12-Oct, 22:31- 22:34
	4-5km SE	Heard	13	Explosion	Undetermined	N/K	12-Oct, 22:42- 22:46
	4-5km SE	Heard	20	Burst		HMG	12-Oct, 22:46- 22:50
Svitlodarsk (government- controlled, 57km NE of Donetsk)	4-5km S	Heard	9	Explosion	Undetermined	N/K	12-Oct, 22:50- 22:53
	4-5km S	Heard	4	Explosion	Undetermined	N/K	12-Oct, 23:01- 23:05
	3-5km SW	Heard	5	Explosion	Undetermined	N/K	13-Oct, 15:26- 15:30
	3-5km WSW	Heard	2	Explosion	Undetermined	N/K	13-Oct, 15:28
	3-5km WSW	Heard	5	Explosion	Undetermined	N/K	13-Oct, 16:10- 16:12
	3-5km WSW	Heard	7	Explosion	Undetermined	N/K	13-Oct, 16:17- 16:19
	3-5km WSW	Heard	4	Explosion	Undetermined	N/K	13-Oct, 16:23
Horlivka (non- government- controlled, 39km NE of Donetsk)	2-4km NW	Heard	2	Burst		HMG	12-Oct, 19:30
	2-4km NW	Heard	21	Burst		HMG	12-Oct, 21:48- 21:52
	2-4km NW	Heard	3	Shot		Small arms	12-Oct, 23:15
	2-4km NW	Heard	8	Burst		HMG	12-Oct, 23:33- 23:37
	2-4km NE	Heard	11	Shot		Small arms	12-Oct, 23:37- 23:42
	2-4km NW	Heard	15	Shot		Small arms	12-Oct, 23:38
	2-4km NE	Heard	4	Burst		HMG	12-Oct, 23:43
	2-4km NW	Heard	12	Shot		Small arms	12-Oct, 23:44
	2-4km NW	Heard	20	Burst		HMG	12-Oct, 23:45- 23:47
	2-4km NW	Heard	3	Explosion	Undetermined	N/K	12-Oct, 23:48- 23:53
	2-4km S	Heard	2	Explosion	Undetermined	N/K	13-Oct, 00:08- 00:09
SMM camera in Zolote (government- controlled, 60km W of Luhansk)	3-5km ENE	Recorded	2	Projectile	SSW to NNE (assessed as outside the disengagement area)	N/K	12-Oct, 21:06
	3-4km ESE	Recorded	1	Muzzle flash	Assessed as outside the disengagement area	N/K	12-Oct, 21:12
	3-5km E	Recorded	1	Projectile	N to S	N/K	12-Oct, 23:23

					(assessed as outside the disengagement area)		
	3-5km E	Recorded	1	Projectile	WNW to ESE (assessed as outside the disengagement area)	N/K	12-Oct, 23:23
E edge of Stanytsia Luhanska (government- controlled, 16km NE of Luhansk)	3-4km S	Heard	1	Explosion	Undetermined (unable to assess whether inside or outside the disengagement area)	N/K	13-Oct, 06:32

Map of Donetsk and Luhansk regions¹⁰



¹⁰ 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: a forward patrol base from which SMM staff has temporarily relocated based on recommendations of security experts from participating States as well as SMM security considerations. The SMM uses the premises during daylight hours and patrols in this settlement during daylight hours, as well).