

Daily Report 1/2020

3 January 2020¹

Summary

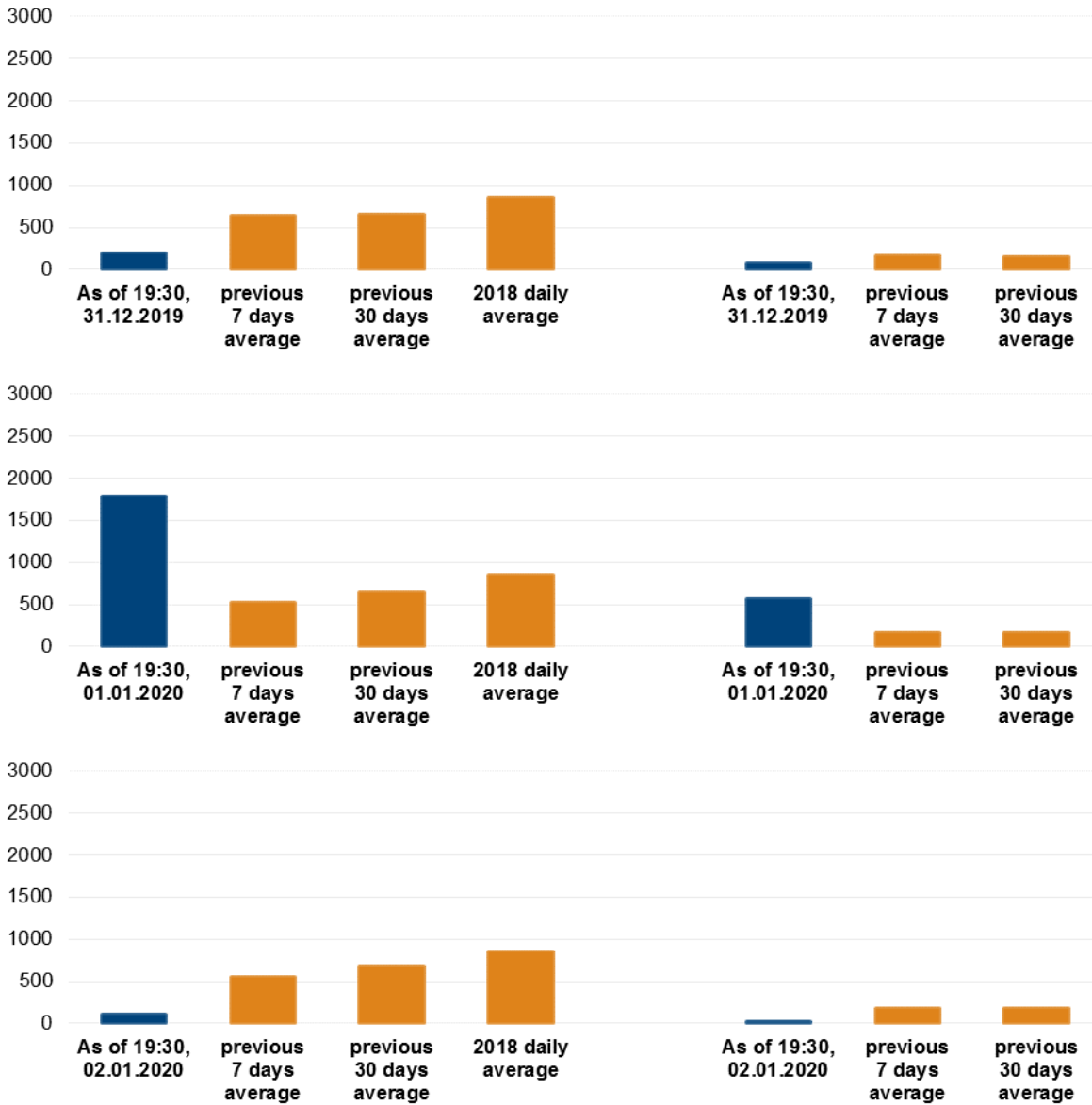
- Compared with the previous reporting period, between the evenings of 30 and 31 December 2019, the SMM recorded fewer ceasefire violations in Donetsk and Luhansk regions.
- Between the evenings of 31 December 2019 and 1 January 2020, the SMM recorded more ceasefire violations in Donetsk and Luhansk regions, compared with the previous 24 hours.
- Between the evenings of 1 and 2 January 2020, the Mission recorded fewer ceasefire violations in Donetsk and Luhansk regions, compared with the previous 24 hours.
- Small-arms fire was assessed as directed at an SMM mini-unmanned aerial vehicle flying over areas in the southern outskirts of non-government-controlled Luhansk city.
- The SMM continued monitoring the security situation at the disengagement areas near Stanytsia Luhanska, Zolote and Petrivske.
- It saw weapons in violation of the withdrawal lines in non-government-controlled areas of Donetsk region.
- The Mission saw anti-tank mines, including some for the first time, near non-government-controlled Pikuzy and government-controlled Vodiane.
- The SMM's freedom of movement continued to be restricted, including at checkpoints and at a weapons storage site of the armed formations in Donetsk region, as well as near border crossing points in non-government-controlled areas of Luhansk region.*
- In Kyiv, Lviv and Dnipro, the SMM monitored peaceful gatherings related to Stepan Bandera.

¹ Based on information from the Monitoring Teams as of 19:30, 2 January 2020. All times are in Eastern European Time. The SMM Daily Report 1/2020 covers the period of 31 December 2019 - 2 January 2020.

Ceasefire violations²

Number of recorded ceasefire violations³

Number of recorded explosions⁴



² For a complete breakdown of ceasefire violations, please see the annexed table. During the reporting period, the SMM camera in the parking lot south of the Stanytsia Luhanska bridge and the SMM camera in Shyrokyne were not operational.

³ Including explosions.

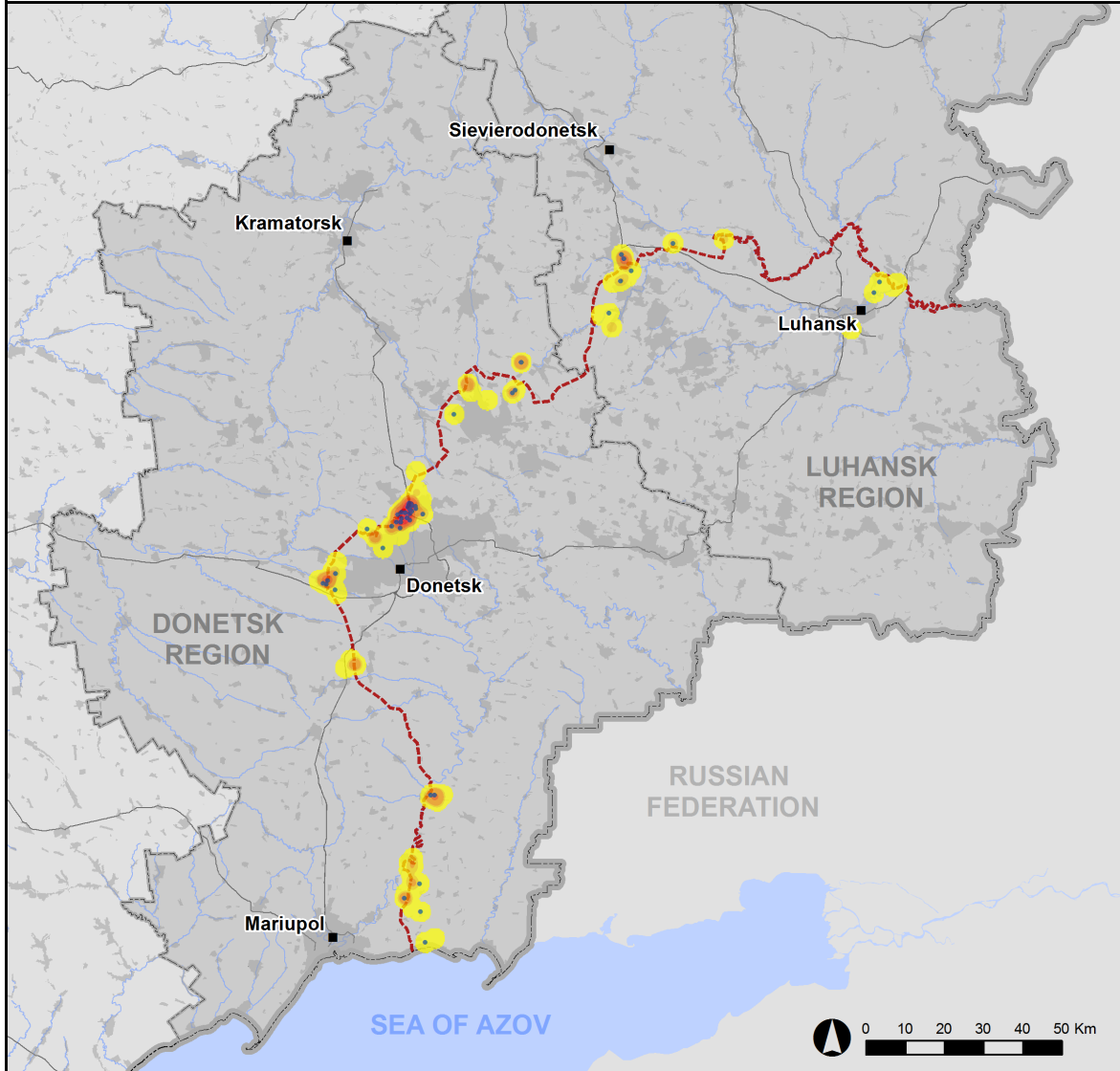
⁴ Including from unidentified weapons.

Map of recorded ceasefire violations

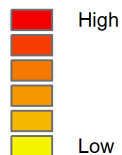


Organization for Security and
Co-operation in Europe
Special Monitoring Mission to Ukraine

Ceasefire violations observed by the SMM 31 December 2019 - 2 January 2020



Ceasefire violation concentration



- Explosion
- Settlement
- Estimated line of contact

Sources: Administrative Boundaries - OCHA; Roads, Rivers - OpenStreetMap; Sea - VLIZ (2005). IHO Sea Areas; Other - OSCE.

Coordinate System: WGS 1984 UTM Zone 37N

This map is provided for illustrative purposes only. Its content is not warranted to be error-free and does not imply endorsement or acceptance by the OSCE SMM.

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Created: 03/01/2020

In Donetsk region, between the evenings of 30 and 31 December 2019, the SMM recorded fewer ceasefire violations, which included, however, more explosions (about 50), compared with the [previous reporting period](#) (40 explosions). The majority of ceasefire violations were recorded in areas east and south-east of Hranitne (government-controlled, 60km south of Donetsk), south-west of Svitlodarsk (government-controlled, 57km north-east of Donetsk), as well as north-east and north-west of Spartak (non-government-controlled, 9km north of Donetsk).

Between the evenings of 31 December 2019 and 1 January 2020, the Mission recorded more ceasefire violations, including more explosions (about 530), compared with the previous 24 hours. The majority of ceasefire violations, including the majority of explosions, were recorded in areas south-east of Avdiivka (government-controlled, 17km north of Donetsk) and at southerly directions of the Donetsk Filtration Station (DFS) (15km north of Donetsk), including about 20 explosions within a 1km radius of the DFS.

Between the evenings of 1 and 2 January, the SMM recorded fewer ceasefire violations, including fewer explosions (six), compared with the previous 24 hours. The majority of ceasefire violations were recorded in areas south-east and south-west of the central railway station in Donetsk city (non-government-controlled, 6km north-west of Donetsk city centre), as well as in areas east and south-east of Hranitne.

In Luhansk region, between the evenings of 30 and 31 December, the SMM recorded fewer ceasefire violations, including fewer explosions (about 20), compared with the [previous reporting period](#) (about 40 explosions). The majority of ceasefire violations were recorded in areas south-west of Stanytsia Luhanska (government-controlled, 16km north-east of Luhansk) and Muratove (government-controlled, 51km north-west of Luhansk).

Between the evenings of 31 December and 1 January, the Mission recorded more ceasefire violations, including 25 explosions, compared with the previous 24 hours. Most ceasefire violations were recorded in areas north-east, east, south and south-east of Zolote (government-controlled, 60km west of Luhansk) and in areas south-west of Stanytsia Luhanska.

Between the evenings of 1 and 2 January, the SMM recorded fewer ceasefire violations (all explosions), compared with the previous 24 hours. All six explosions were recorded in areas west of Stanytsia Luhanska.

Small-arms fire assessed as directed at SMM mini-unmanned aerial vehicle

On 31 December, while conducting an SMM mini-unmanned aerial vehicle (UAV) flight over areas in the southern outskirts of non-government-controlled Luhansk city, the SMM heard eight shots of small-arms fire about 400-500m south-west, assessed as directed at the UAV, which was flying about 400-500m south-west of its position. The SMM landed its UAV safely and left the area.*

Disengagement areas near Stanytsia Luhanska, Zolote and Petrivske⁵

On the evening of 30 December, the SMM camera in Stanytsia Luhanska recorded seven airbursts at an assessed range of 6-8km west-south-west (assessed as outside the disengagement area) and two projectiles in flight at an assessed range of 0.3-1km south-west (unable to be assessed as inside or outside the disengagement area). Between the evening and night of 31 December and 1 January, the SMM cameras on the Stanytsia Luhanska bridge (15km north-east of Luhansk) and at Prince Ihor Monument, south-east of the Stanytsia Luhanska bridge, recorded about 160 illumination flares in vertical flight. On the evening of 1 January, the SMM camera in Stanytsia Luhanska recorded six undetermined explosions at an assessed range of 4-6km west. All aforementioned ceasefire violations were assessed as outside the **disengagement area near Stanytsia Luhanska** but within 5km of its periphery.

On 2 January, inside the Stanytsia Luhanska disengagement area, the SMM saw five workers from government-controlled areas loading by crane foundation slabs of the previously dismantled temporary bypass bridge onto a truck. On 31 December and 1 and 2 January, the SMM saw members of armed formations (wearing armbands with “JCCC” written on them) between the new section of the Stanytsia Luhanska bridge and the checkpoint of the armed formations.

On 31 December, on two separate occasions, the SMM saw Ukrainian Armed Forces personnel enter the **disengagement area near Zolote** onboard a vehicle – a military jeep and a car, respectively – driving towards Katerynivka (government-controlled, 64km west of Luhansk). The SMM saw both vehicles exit the disengagement area, driving back from the direction of Katerynivka. During the day on 2 January, the SMM saw five members of the armed formations (wearing armbands with “JCCC” written on them) near the area’s southern edge.

On the evening and night between 31 December and 1 January, the SMM camera in Zolote recorded about 20 undetermined explosions, about 80 projectiles in flight and about 20 illumination flares in vertical flight at an assessed range of 2-6km north-east, east-north-east, south-east and south (all assessed as outside the disengagement area).

On 1 January, inside the **disengagement area near Petrivske** (non-government-controlled, 41km south of Donetsk), the SMM saw three members of the armed formations, including inside trenches near the area’s north-eastern corner.

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.

The SMM saw five weapons in violation of the withdrawal lines in non-government-controlled areas of Donetsk region (for further details, see the table below).

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

Weapons that the SMM could not verify as withdrawn⁶

At a heavy weapons holding area in a non-government-controlled area of Donetsk region

1 January

The SMM noted that six towed howitzers (2A65 *Msta-B*, 152mm) continued to be missing.

Weapons storage sites*

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

1 January

The SMM noted that 13 tanks (four T-64 and nine T-72) continued to be missing.

Indications of military and military-type presence in the security zone⁷

The SMM observed infantry fighting vehicles, armoured personnel carriers and anti-aircraft guns on both sides of the contact line in Donetsk and Luhansk regions (for further details, see the table below).

Presence of anti-tank mines near Pikuzy and Vodiane

On 30 December, an SMM mid-range UAV spotted approximately 360 anti-tank mines, including some for the first time, in fields north-west, west and south-west of Pikuzy (formerly Kominternove, non-government-controlled, 92km south of Donetsk) (for previous observations see [SMM Daily Report 17 September 2019](#), [SMM Daily Report 4 November 2019](#), [SMM Daily Report 9 December 2019](#)). All aforementioned mines were assessed as belonging to the armed formations.

On the north-eastern edge of Vodiane (government-controlled, 94km south of Donetsk), the UAV [again](#) spotted approximately 250 anti-tank mines in a field on the eastern edge of road T-0519, assessed as belonging to the Ukrainian Armed Forces. About 800m north-east of these mines, the UAV [again](#) spotted six anti-tank mines in a field, about 150m north of the road leading to Pikuzy.

On 2 January, about 3km south-east of Pankivka (non-government-controlled, 16km north of Luhansk), the SMM saw for the first time a mine hazard sign with “Attention, mines” handwritten on it in Cyrillic. The same day, on road T-0508 near Nova Marivka (non-government-controlled, 64km south of Donetsk), the SMM again saw tree trunks on the road and a sign with “Stop, mines” written on it in Cyrillic, preventing the SMM from being able to drive through.*

SMM facilitation of operation of critical civilian infrastructure

On 31 December and on 1 and 2 January, the SMM continued to facilitate the operation of the DFS. On 2 January, the SMM monitored the security situation in areas near the pumping station close to Vasylivka (non-government-controlled, 20km north of Donetsk).

⁶ The SMM visited areas previously holding weapons that could not be verified as withdrawn, as their storage did not comply with the criteria set out in the 16 October 2015 notification from the SMM to the signatories of the Package of Measures on effective monitoring and verification of the withdrawal of heavy weapons.

⁷ The hardware mentioned in this section is not proscribed by the provisions of the Minsk agreements on the withdrawal of weapons.

Border areas outside government control

On 31 December, at a border crossing point near Dovzhanske (84km south-east of Luhansk), the SMM saw a bus with Ukrainian licence plates and approximately 40 passengers on board entering Ukraine. After about ten minutes, an armed member of the armed formations told the SMM to leave the area.*

The same day, while at a pedestrian border crossing point in Novoborovytsi (79km south of Luhansk) for about 20 minutes, the SMM saw no traffic in either direction.

On 31 December, while at a border crossing point near Marynivka (78km east of Donetsk) for about 50 minutes, the SMM saw nine cars (two with Ukrainian and seven with Russian Federation licence plates), two minivans (one with Russian Federation licence plates and one with “DPR” plates), one bus with “DPR” plates, and three pedestrians (two men in their twenties and a woman in her thirties) entering Ukraine. The SMM also saw 15 cars (five with Ukrainian and seven with Russian Federation licence plates, as well as three with “DPR” plates), one bus with “DPR” plates and five pedestrians (one woman and four men aged 50-70) exiting Ukraine. While at a border crossing point near Novoazovsk (102km south-east of Donetsk) for about 20 minutes, the SMM saw no pedestrian or vehicular traffic in either direction.

On 1 January, while at a border crossing point near Ulianivske (61km south-east of Donetsk) for five minutes, the SMM saw no traffic in either direction. On the same day, while at a border crossing point near Uspenka (73km south-east of Donetsk) for 30 minutes, the SMM saw three women in their fifties entering Ukraine.

On 2 January, at a border crossing point near Izvaryne (52km south-east of Luhansk), the SMM saw no pedestrian or vehicular traffic in either direction. After about ten minutes, two members of the armed formations told the SMM to leave the area.*

On the same day, at a border crossing point near Sievernyi (50km south-east of Luhansk), the SMM saw four pedestrians (women, aged 30-40) entering Ukraine. After about ten minutes, a member of the armed formations told the SMM to leave the area.*

On 2 January, while at a border crossing point near Uspenka for about one hour, the SMM saw 21 cars (three with Ukrainian, 14 with Russian Federation licence plates, as well as four with “DPR” plates), one covered cargo truck with Belarusian licence plates, four minibuses (one with Ukrainian and two with Russian Federation licence plates, as well as one with “DPR” plates), and 14 pedestrians (seven women and six men aged 20-50 and a child) entering Ukraine. The SMM also saw 30 cars (five with Ukrainian, 11 with Russian Federation and one with Lithuanian licence plates, as well as 13 with “DPR” plates), two buses with “DPR” plates, and 12 pedestrians (eight men and four women aged 20-50) exiting Ukraine. The same day, while at a border crossing point near Ulianivske for about 20 minutes, the SMM saw no pedestrian or vehicular traffic in either direction.

Events in Kyiv, Lviv and Dnipro commemorated Stepan Bandera

On 2 January, in Kyiv, the SMM saw about 1,000 people (mixed gender and ages) gathered in Shevchenko Park and later marching to *Nezalezhnosti* Square to commemorate Stepan

Bandera's birth. Some of them carried torches, Ukrainian flags, red and black flags, and other flags of political parties and movements, including *Svoboda*. Approximately 75 law enforcement officers were securing the event, which ended peacefully. The SMM observed similar gatherings in Lviv (about 500 people) and Dnipro (about 200 people).

The SMM continued monitoring in Kherson, Odessa, Ivano-Frankivsk, Kharkiv and Chernivtsi.

***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 Joint Centre for Control and Co-ordination 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 31 December, at a border crossing point in Dovzhanske (non-government-controlled, 84km south-east of Luhansk), an armed member of the armed formations told the SMM to leave the area.
- On 1 and 2 January, at a checkpoint about 800m north of Zaichenko (non-government-controlled, 93km south of Donetsk), two armed members of the armed formations [again](#) denied the SMM passage towards Pikuzy (formerly Kominternove, non-government controlled, 92km south of Donetsk) and Sakhanka (non-government-controlled, 97km south of Donetsk), citing “ongoing demining activities”. On both days, the SMM saw civilian cars driving through.
- On 1 January, the SMM could not access a permanent storage site in a non-government-controlled area of Donetsk region because its gate was locked and no one was present to open it.
- On 2 January, at a border crossing point near Izvaryne (non-government-controlled, 52km south-east of Luhansk), two members of the armed formations told the SMM to leave the area.
- On 2 January, at a border crossing point near Sievernyi (non-government-controlled, 50km south-east of Luhansk), a member of the armed formations told the SMM to leave the area.
- On 2 January, at a checkpoint on the eastern edge of Shevchenko (non-government-controlled, 69km south of Donetsk), an armed member of the armed formations [again](#) denied the SMM passage towards Mykolaivka (non-government-controlled, 70km south of Donetsk), citing “ongoing shooting in the area”.
- On 2 January, at a checkpoint in Michurine (non-government-controlled, 61km south of Donetsk), five armed members of the armed formations denied the SMM passage

towards Pervomaiske (non-government-controlled, 59km south of Donetsk), citing “security concerns due to the presence of mines”.

- On 2 January, at a checkpoint on the southern edge of Nova Marivka (non-government-controlled, 64km south of Donetsk), an armed member of the armed formations denied the SMM passage, citing “ongoing military activities”.

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 31 December, while conducting a mini-UAV flight over areas in the southern outskirts of non-government-controlled Luhansk city, the SMM heard eight shots of small-armed fire, assessed as directed at its UAV (see above).
- On 31 December, on two occasions, an SMM mini-UAV flying over areas near Rozdolne (non-government-controlled, 46km south-east of Donetsk) experienced GPS signal interference, assessed as caused by probable jamming.⁸
- On 2 January, an SMM mini-UAV experienced GPS signal interference, assessed as caused by probable jamming, while flying over areas near Bezimenne (non-government-controlled, 100km south of Donetsk).⁹

⁸ The interference could have originated from anywhere within the radius of kilometres from the UAVs’ position.

⁹ Ibid.

Weapons in violation of the withdrawal lines

Date	No. of weapons	Type of weapon	Location	Source of observation
Non-government-controlled areas				
30/12/2019	1	Mortar (type undetermined)	Near Pikuzy (formerly Kominternove, 92km south of Donetsk)	Mid-range UAV
1/1/2020	4	Multiple launch rocket system (BM-21 <i>Grad</i> , 122mm)	Near Novoamvrosiivske (56km east of Donetsk)	Patrol

Table of indications of military and military-type presence in the security zone¹⁰

Date	No.	Type	Location	Source of observation
Government-controlled areas				
30/12/2019	1	Armoured reconnaissance vehicle (BRDM-2)	In Bohdanivka (41km south-west of Donetsk)	Mini-UAV
	3	Infantry fighting vehicle (BMP-1)		
	1	Armoured personnel carrier (MT-LB)		
31/12/2019	3	Self-propelled anti-aircraft system (ZSU-23-4 <i>Shilka</i> , 23mm)	Near Chernenko (86km south of Donetsk) close to residential houses	Patrol
	4	Infantry fighting vehicles (BMP variants)	In Zolote (60km west of Luhansk)	
1/1/2020	2	Anti-aircraft gun (ZU-23, 23mm)	In Kriakivka (38km north-west of Luhansk)	Patrol
	1	Armoured ambulance (MT-LB S)		
	3	Infantry fighting vehicle (BMP variants)	In Zolote (60km west of Luhansk)	Mid-range UAV
	2	Infantry fighting vehicle (BMP-2)	In and near Krasnohorivka (21km west of Donetsk)	
	1	Armoured combat vehicle		
	2	Probable infantry fighting vehicle (BMP variants)	In Novoselivka Druha (23km north of Donetsk) about 25m from residential houses	Mini-UAV
2	Armoured reconnaissance vehicle (BRDM-2)			
2/1/2020	1	Armoured personnel carrier (BTR-70)	In Trokhizbenka (32km north-west of Luhansk)	Patrol
Non-government-controlled areas				
30/12/2019	-	A trench (and four people in camouflage clothing conducting works in it)	Running, from the yard of a house to the most forward position of the armed formations north-west of Pikuzy (formerly Kominternove, 92km south of Donetsk)	Mid-range UAV
	1	Infantry fighting vehicle (BMP variant)	Near Lobacheve (13km east of Luhansk)	Mini-UAV
	5	Armoured combat vehicle		
31/12/2019	1	Anti-aircraft gun (ZU-23, 23mm)	Near Sakhanka (97km south of Donetsk)	Patrol
	1	Infantry fighting vehicle (BMP-2)	In two compounds of the armed formations in non-government-controlled Luhansk city	Mini-UAV
	2	Armoured personnel carrier (MT-LB)		
	1	Armoured recovery vehicle (BTS-4A)		

¹⁰ The hardware mentioned in this section is not proscribed by the provisions of the Minsk agreements on the withdrawal of weapons.

Table of ceasefire violations as of 2 January 2020¹¹

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
SMM camera in Berezove (government-controlled, 31km SW of Donetsk)	1-3km SE	Recorded	1	Illumination flare	In vertical flight	N/K	30-Dec, 19:11
SMM camera in Chermalyk (government-controlled, 77km S of Donetsk)	1-2km SE	Recorded	2	Projectile	WSW to ENE	N/K	30-Dec, 19:01
	4-5km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	30-Dec, 22:02
	2-4km SE	Recorded	2	Projectile	WSW to ENE	N/K	30-Dec, 22:11
	4-5km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 00:00
SMM camera at Donetsk Filtration Station (15km N of Donetsk)	2-4km SE	Recorded	2	Projectile	WSW to ENE	N/K	31-Dec, 01:10
	1-3km S	Recorded	1	Explosion	Undetermined	N/K	30-Dec, 22:51
	1-3km S	Recorded	1	Explosion	Impact	N/K	30-Dec, 22:52
	1-3km S	Recorded	4	Projectile	W to E	N/K	30-Dec, 22:52
	500-800m S	Recorded	6	Muzzle flash		N/K	31-Dec, 01:10
SMM camera in Hranitne (government-controlled, 60km S of Donetsk)	500-800m S	Recorded	10	Muzzle flash		N/K	31-Dec, 01:11
	400-800m S	Recorded	2	Burst	W to E	N/K	31-Dec, 17:58
	3-5km E	Recorded	10	Projectile	In vertical flight	N/K	30-Dec, 18:49
	3-5km E	Recorded	6	Projectile	S to N	N/K	30-Dec, 18:49
	2-4km ESE	Recorded	1	Projectile	SW to NE	N/K	30-Dec, 20:16
	2-4km E	Recorded	1	Burst	SW to NE	N/K	30-Dec, 23:57
	2-4km E	Recorded	3	Projectile	NW to SE	N/K	30-Dec, 23:57
	2-4km ESE	Recorded	2	Projectile	SSW to NNE	N/K	31-Dec, 01:22
	2-4km ESE	Recorded	2	Projectile	S to N	N/K	31-Dec, 01:26
	2-4km ESE	Recorded	1	Projectile	S to N	N/K	31-Dec, 02:36
	2-4km E	Recorded	5	Projectile	In vertical flight	N/K	31-Dec, 03:26
	2-4km E	Recorded	5	Projectile	S to N	N/K	31-Dec, 03:26
	2-4km E	Recorded	4	Projectile	N to S	N/K	31-Dec, 03:26
	2-4km E	Recorded	1	Projectile	SW to NE	N/K	31-Dec, 05:41
	2-4km E	Recorded	4	Projectile	S to N	N/K	31-Dec, 05:41
	2-4km E	Recorded	2	Projectile	N to S	N/K	31-Dec, 05:41
	1-3km E	Recorded	1	Explosion	Undetermined	N/K	31-Dec, 18:07
SMM camera at entry-exit checkpoint in Marinka (government-controlled, 23km SW of Donetsk)	2-4km NNE	Recorded	6	Projectile	SW to NE	N/K	30-Dec, 22:34
SMM camera at Oktiabr mine (non-government-controlled, 9km NW of Donetsk city centre)	4-6km ENE	Recorded	1	Illumination flare	In vertical flight	N/K	30-Dec, 20:58
	4-6km ENE	Recorded	1	Explosion	Undetermined	N/K	30-Dec, 20:59
	4-6km ENE	Recorded	1	Illumination flare	In vertical flight	N/K	30-Dec, 21:05
SE part of Avdiivka (government-controlled, 17km N of Donetsk)	1.5-2km SSE	Heard	5	Burst		Small arms	31-Dec, 09:15

¹¹ 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.

About 1km N of central railway station in Donetsk city (non-government-controlled, 6km NW of Donetsk city centre)	2km N	Heard	1	Shot		Small arms	31-Dec, 09:45
	1-2km E	Heard	2	Shot		Small arms	31-Dec, 09:47
About 2km SE of Spartak (non-government-controlled, 9km N of Donetsk)	2-3km NNE	Heard	15	Explosion	Undetermined	N/K	31-Dec, 12:14
	2-3km NNE	Heard	3	Burst		HMG	31-Dec, 12:14
	3km NNW	Heard	6	Explosion	Undetermined	N/K	31-Dec, 12:36
Oleksandrivka (non-government-controlled, 20km SW of Donetsk)	1-2km WNW	Heard	1	Explosion	Undetermined	N/K	31-Dec, 12:01
Yasynuvata Railway station (non-government-controlled, 16km NE of Donetsk)	3-4km W	Heard	3	Burst		Small arms	31-Dec, 12:49
	3-4km W	Heard	1	Shot		Small arms	31-Dec, 12:49
About 1km NW of the railway station in Yasynuvata (non-government-controlled, 16km NE of Donetsk)	2-3km SSE	Heard	5	Burst		Small arms	31-Dec, 09:17
	2-3km SSE	Heard	1	Burst		Small arms	31-Dec, 09:28
	2-4km SSE	Heard	10	Explosion	Undetermined	N/K	31-Dec, 09:48
	2km SW	Heard	1	Burst		Small arms	31-Dec, 10:29
Kulykove (non-government-controlled, 87km S of Donetsk)	3-4km NW	Heard	3	Explosion	Undetermined	N/K	31-Dec, 12:52
Svitlodarsk (government-controlled, 57km NE of Donetsk)	5-7km SW	Heard	3	Explosion	Undetermined	N/K	31-Dec, 12:49
	6-8km SW	Heard	19	Explosion	Undetermined	N/K	31-Dec, 14:53-14:55
Kalynove (non-government-controlled, 60km W of Luhansk)	3-5km W	Heard	1	Burst		HMG	31-Dec, 09:10
S outskirts of non-government-controlled Luhansk city	400-500m SW	Heard	8	Shot	Assessed as aimed at an SMM mini-UAV	Small arms	31-Dec, 11:17-11:18
2km S of Muratove (government-controlled, 51km NW of Luhansk)	5-7km SSW	Heard	11	Explosion	Undetermined	N/K	31-Dec, 13:23-13:30
SMM camera in Stanytsia Luhanska (government-controlled, 16km NE of Luhansk)	6-8km WSW	Recorded	7	Airburst	Assessed as outside the disengagement area	N/K	30-Dec, 19:28
	0.3-1km SW	Recorded	2	Projectile	NNE to SSW (unable to be assessed inside or outside the disengagement area)	N/K	30-Dec, 22:55
SMM camera in Avdiivka (government-controlled, 17km N of Donetsk)	4-6km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 20:24
	3-5km SE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 21:19
	4-6km SE	Recorded	2	Explosion	Undetermined	N/K	31-Dec, 21:27

4-6km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 21:27
2-4km SE	Recorded	20	Projectile	WSW to ENE	N/K	31-Dec, 21:30
4-6km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 21:58
4-6km SE	Recorded	2	Explosion	Undetermined	N/K	31-Dec, 21:58
4-6km SE	Recorded	6	Explosion	Undetermined	N/K	31-Dec, 22:14
4-6km SE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 22:59
2-4km ESE	Recorded	1	Burst	In vertical flight	N/K	31-Dec, 23:00
4-6km SE	Recorded	4	Explosion	Undetermined	N/K	31-Dec, 23:00
4-6km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:01
4-6km ESE	Recorded	3	Projectile	In vertical flight	N/K	31-Dec, 23:01
2-4km SE	Recorded	2	Burst	Approximately	N/K	31-Dec, 23:01
2-4km ESE	Recorded	1	Burst	Approximately	N/K	31-Dec, 23:01
4-6km SE	Recorded	7	Explosion	Undetermined	N/K	31-Dec, 23:01
2-4km SE	Recorded	5	Explosion	Undetermined	N/K	31-Dec, 23:02
2-4km SSE	Recorded	1	Burst	In vertical flight	N/K	31-Dec, 23:02
2-4km SE	Recorded	1	Burst	In vertical flight	N/K	31-Dec, 23:02
4-6km ESE	Recorded	1	Burst	SW to NE	N/K	31-Dec, 23:02
2-4km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:02
4-6km ESE	Recorded	3	Illumination flare	In vertical flight	N/K	31-Dec, 23:03
2-4km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:03
2-4km SE	Recorded	2	Projectile	In vertical flight	N/K	31-Dec, 23:03
2-4km ESE	Recorded	4	Projectile	In vertical flight	N/K	31-Dec, 23:03
2-4km SE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:03
2-4km SE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:04
2-4km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:04
2-4km SSE	Recorded	3	Illumination flare	In vertical flight	N/K	31-Dec, 23:04
2-4km SSE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:05
4-6km SSE	Recorded	3	Burst	In vertical flight	N/K	31-Dec, 23:05
2-4km ESE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:05
4-6km SE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:06
2-4km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:06
2-4km SSE	Recorded	1	Burst	In vertical flight	N/K	31-Dec, 23:06
3-5km SSE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:06
2-4km SSE	Recorded	6	Explosion	Undetermined	N/K	31-Dec, 23:06
4-6km SE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:07
4-6km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:07
2-4km SSE	Recorded	4	Illumination flare	In vertical flight	N/K	31-Dec, 23:07
2-4km SSE	Recorded	11	Projectile	In vertical flight	N/K	31-Dec, 23:07
2-4km SSE	Recorded	8	Illumination flare	In vertical flight	N/K	31-Dec, 23:08
2-4km ESE	Recorded	3	Illumination flare	In vertical flight	N/K	31-Dec, 23:08

2-4km SSE	Recorded	2	Projectile	In vertical flight	N/K	31-Dec, 23:08
4-6km SSE	Recorded	2	Burst	In vertical flight	N/K	31-Dec, 23:09
4-6km SE	Recorded	3	Illumination flare	In vertical flight	N/K	31-Dec, 23:09
4-6km SE	Recorded	10	Explosion	Undetermined	N/K	31-Dec, 23:09
2-4km SSE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:10
2-4km SE	Recorded	2	Projectile	In vertical flight	N/K	31-Dec, 23:10
4-6km SSE	Recorded	2	Burst	In vertical flight	N/K	31-Dec, 23:10
4-6km SE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:10
4-6km SE	Recorded	12	Explosion	Undetermined	N/K	31-Dec, 23:10
4-6km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:11
4-6km SSE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:11
4-6km SE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:11
4-6km SE	Recorded	8	Explosion	Undetermined	N/K	31-Dec, 23:11
4-6km SE	Recorded	4	Illumination flare	In vertical flight	N/K	31-Dec, 23:12
4-6km ESE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:12
4-6km SSE	Recorded	4	Illumination flare	In vertical flight	N/K	31-Dec, 23:12
2-4km SSE	Recorded	3	Projectile	In vertical flight	N/K	31-Dec, 23:12
4-6km SE	Recorded	5	Explosion	Undetermined	N/K	31-Dec, 23:12
4-6km SSE	Recorded	4	Illumination flare	In vertical flight	N/K	31-Dec, 23:13
4-6km ESE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:13
4-6km SSE	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 23:13
4-6km SSE	Recorded	8	Explosion	Undetermined	N/K	31-Dec, 23:13
4-6km SSE	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 23:14
4-6km SSE	Recorded	12	Explosion	Undetermined	N/K	31-Dec, 23:14
4-6km SSE	Recorded	3	Illumination flare	In vertical flight	N/K	31-Dec, 23:14
4-6km SE	Recorded	5	Explosion	Undetermined	N/K	31-Dec, 23:14
4-6km SE	Recorded	3	Illumination flare	In vertical flight	N/K	31-Dec, 23:15
4-6km ESE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:15
4-6km SSE	Recorded	6	Explosion	Undetermined	N/K	31-Dec, 23:15
4-6km SE	Recorded	4	Explosion	Undetermined	N/K	31-Dec, 23:15
4-6km SSE	Recorded	3	Illumination flare	In vertical flight	N/K	31-Dec, 23:16
4-6km SE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:16
4-6km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:16
4-6km SE	Recorded	10	Explosion	Undetermined	N/K	31-Dec, 23:16
4-6km SSE	Recorded	12	Explosion	Undetermined	N/K	31-Dec, 23:16
4-6km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:17
4-6km SE	Recorded	6	Illumination flare	In vertical flight	N/K	31-Dec, 23:17
4-6km SE	Recorded	11	Explosion	Undetermined	N/K	31-Dec, 23:17
4-6km SE	Recorded	4	Illumination flare	In vertical flight	N/K	31-Dec, 23:18
4-6km SSE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:18

4-6km SSE	Recorded	8	Explosion	Undetermined	N/K	31-Dec, 23:18
4-6km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:19
4-6km SSE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:19
4-6km SE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:19
4-6km SE	Recorded	12	Explosion	Undetermined	N/K	31-Dec, 23:19
4-6km SE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:20
4-6km SSE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:20
4-6km SSE	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 23:20
4-6km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:21
4-6km SE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:21
4-6km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:21
4-6km SSE	Recorded	4	Explosion	Undetermined	N/K	31-Dec, 23:21
4-6km SSE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:22
4-6km SE	Recorded	6	Explosion	Undetermined	N/K	31-Dec, 23:22
4-6km SSE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:23
4-6km SE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:23
4-6km SSE	Recorded	3	Explosion	Undetermined	N/K	31-Dec, 23:23
4-6km SE	Recorded	5	Explosion	Undetermined	N/K	31-Dec, 23:23
4-6km SSE	Recorded	3	Illumination flare	In vertical flight	N/K	31-Dec, 23:24
4-6km SE	Recorded	15	Explosion	Undetermined	N/K	31-Dec, 23:24
4-6km SSE	Recorded	10	Explosion	Undetermined	N/K	31-Dec, 23:24
2-4km SE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:25
2-4km SE	Recorded	3	Projectile	NE to SW	N/K	31-Dec, 23:25
4-6km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:25
4-6km SSE	Recorded	16	Explosion	Undetermined	N/K	31-Dec, 23:25
4-6km SSE	Recorded	24	Explosion	Undetermined	N/K	31-Dec, 23:26
4-6km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:26
4-6km SE	Recorded	4	Explosion	Undetermined	N/K	31-Dec, 23:26
4-6km SSE	Recorded	10	Explosion	Undetermined	N/K	31-Dec, 23:27
4-6km SE	Recorded	6	Explosion	Undetermined	N/K	31-Dec, 23:27
4-6km SSE	Recorded	11	Explosion	Undetermined	N/K	31-Dec, 23:29
4-6km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:29
4-6km SE	Recorded	3	Explosion	Undetermined	N/K	31-Dec, 23:29
4-6km SSE	Recorded	8	Explosion	Undetermined	N/K	31-Dec, 23:30
4-6km SE	Recorded	3	Explosion	Undetermined	N/K	31-Dec, 23:30
2-4km SE	Recorded	1	Projectile	WSW to ENE	N/K	31-Dec, 23:30
2-4km SSE	Recorded	2	Explosion	Undetermined	N/K	31-Dec, 23:30
4-6km ESE	Recorded	3	Explosion	Undetermined	N/K	31-Dec, 23:30
4-6km SE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:31
4-6km SSE	Recorded	7	Explosion	Undetermined	N/K	31-Dec, 23:31
4-6km ESE	Recorded	5	Explosion	Undetermined	N/K	31-Dec, 23:31
4-6km SE	Recorded	3	Explosion	Undetermined	N/K	31-Dec, 23:31
4-6km SSE	Recorded	8	Explosion	Undetermined	N/K	31-Dec, 23:32

4-6km SE	Recorded	3	Illumination flare	In vertical flight	N/K	31-Dec, 23:32
4-6km SSE	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 23:32
4-6km ESE	Recorded	2	Explosion	Undetermined	N/K	31-Dec, 23:32
4-6km SE	Recorded	4	Illumination flare	In vertical flight	N/K	31-Dec, 23:33
4-6km SSE	Recorded	15	Explosion	Undetermined	N/K	31-Dec, 23:33
4-6km SE	Recorded	12	Explosion	Undetermined	N/K	31-Dec, 23:33
4-6km SE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:34
4-6km SE	Recorded	4	Explosion	Undetermined	N/K	31-Dec, 23:34
4-6km SSE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:34
4-6km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:35
4-6km SE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:35
4-6km SE	Recorded	18	Illumination flare	In vertical flight	N/K	31-Dec, 23:35
4-6km SSE	Recorded	12	Explosion	Undetermined	N/K	31-Dec, 23:35
4-6km SE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:36
4-6km SE	Recorded	6	Explosion	Undetermined	N/K	31-Dec, 23:36
4-6km SSE	Recorded	4	Explosion	Undetermined	N/K	31-Dec, 23:36
4-6km SE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:37
4-6km SE	Recorded	9	Explosion	Undetermined	N/K	31-Dec, 23:37
4-6km SSE	Recorded	6	Explosion	Undetermined	N/K	31-Dec, 23:37
4-6km SSE	Recorded	1	Illumination flare	In vertical flight.	N/K	31-Dec, 23:38
4-6km SE	Recorded	1	Explosion	Undetermined	N/K	31-Dec, 23:38
4-6km SSE	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 23:39
4-6km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:39
4-6km ESE	Recorded	2	Explosion	Undetermined	N/K	31-Dec, 23:40
4-6km SE	Recorded	19	Projectile	SW to NE	N/K	31-Dec, 23:41
4-6km SE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:41
4-6km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:49
4-6km SE	Recorded	4	Explosion	Undetermined	N/K	31-Dec, 23:49
4-6km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:50
4-6km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:51
4-6km SE	Recorded	4	Explosion	Undetermined	N/K	31-Dec, 23:51
4-6km SE	Recorded	4	Burst	In vertical flight. Approximately 100 rounds.	N/K	31-Dec, 23:53
4-6km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:55
4-6km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:57
4-6km SSE	Recorded	3	Explosion	Undetermined	N/K	31-Dec, 23:57
2-4km SE	Recorded	1	Burst	In vertical flight	N/K	1-Jan, 00:15
2-4km SE	Recorded	1	Explosion	Airburst	N/K	1-Jan, 00:16
2-4km SE	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:16
2-4km SE	Recorded	2	Projectile	In vertical flight	N/K	1-Jan, 00:17
2-4km SSE	Recorded	1	Projectile	In vertical flight	N/K	1-Jan, 00:17
4-6km SSE	Recorded	1	Airburst		N/K	1-Jan, 00:17

2-4km SE	Recorded	1	Projectile	In vertical flight	N/K	1-Jan, 00:18
2-4km SE	Recorded	1	Projectile	NE to SW	N/K	1-Jan, 00:18
2-4km SE	Recorded	2	Airburst		N/K	1-Jan, 00:18
2-4km ESE	Recorded	11	Projectile	NE to SW	N/K	1-Jan, 00:23
2-4km SE	Recorded	2	Explosion	Airburst	N/K	1-Jan, 00:23
2-4km SSE	Recorded	12	Projectile	In vertical flight	N/K	1-Jan, 00:27
4-6km SSE	Recorded	2	Explosion	Undetermined	N/K	1-Jan, 00:27
2-4km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 01:10
2-4km SE	Recorded	15	Projectile	SW to NE	N/K	1-Jan, 01:10
2-4km ESE	Recorded	2	Illumination flare	In vertical flight	N/K	1-Jan, 01:11
2-4km ESE	Recorded	5	Projectile	NE to SW	N/K	1-Jan, 01:11
2-4km SE	Recorded	2	Burst		N/K	1-Jan, 00:00
2-4km ESE	Recorded	2	Illumination flare	In vertical flight	N/K	1-Jan, 00:00
4-6km SE	Recorded	2	Explosion	Undetermined	N/K	1-Jan, 00:01
2-4km SE	Recorded	1	Burst		N/K	1-Jan, 00:01
2-4km SSE	Recorded	1	Burst		N/K	1-Jan, 00:01
2-4km SE	Recorded	1	Projectile	NNE to SSW	N/K	1-Jan, 00:01
2-4km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:02
2-4km ESE	Recorded	10	Projectile	SW to NE	N/K	1-Jan, 00:02
2-4km ESE	Recorded	8	Projectile	NE to SW	N/K	1-Jan, 00:02
2-4km SSE	Recorded	1	Burst		N/K	1-Jan, 00:02
4-6km SE	Recorded	8	Explosion	Undetermined	N/K	1-Jan, 00:02
2-4km ESE	Recorded	5	Projectile	NE to SW	N/K	1-Jan, 00:03
2-4km SSE	Recorded	1	Projectile	In vertical flight	N/K	1-Jan, 00:03
4-6km SE	Recorded	5	Explosion	Undetermined	N/K	1-Jan, 00:03
2-4km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:04
2-4km ESE	Recorded	1	Projectile	NE to SW	N/K	1-Jan, 00:04
2-4km SE	Recorded	1	Explosion	Undetermined	N/K	1-Jan, 00:05
2-4km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:05
2-4km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:06
4-6km SE	Recorded	2	Explosion	Undetermined	N/K	1-Jan, 00:06
2-4km SSE	Recorded	14	Projectile	In vertical flight	N/K	1-Jan, 00:07
4-6km ESE	Recorded	3	Illumination flare	In vertical flight	N/K	1-Jan, 00:07
4-6km SE	Recorded	3	Explosion	Undetermined	N/K	1-Jan, 00:07
2-4km SE	Recorded	1	Burst		N/K	1-Jan, 00:08
4-6km ESE	Recorded	2	Explosion	Undetermined	N/K	1-Jan, 00:08
4-6km SE	Recorded	4	Explosion	Undetermined	N/K	1-Jan, 00:08
4-6km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:08
2-4km SE	Recorded	2	Illumination flare	In vertical flight	N/K	1-Jan, 00:09
4-6km SSE	Recorded	2	Explosion	Undetermined	N/K	1-Jan, 00:09
2-4km ESE	Recorded	2	Illumination flare	In vertical flight	N/K	1-Jan, 00:10
2-4km SE	Recorded	1	Burst		N/K	1-Jan, 00:10
2-4km SE	Recorded	2	Explosion	Undetermined	N/K	1-Jan, 00:10
2-4km SE	Recorded	1	Projectile	WSW to ENE	N/K	1-Jan, 00:10
4-6km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:11
2-4km SE	Recorded	5	Projectile	SW to NE	N/K	1-Jan, 00:11
2-4km SE	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:12

	2-4km SE	Recorded	3	Projectile	WSW to ENE	N/K	1-Jan, 00:12
	4-6km SSE	Recorded	2	Explosion	Undetermined	N/K	1-Jan, 00:12
	4-6km SSE	Recorded	4	Explosion	Undetermined	N/K	1-Jan, 00:13
	4-6km SE	Recorded	2	Explosion	Undetermined	N/K	1-Jan, 00:14
	4-6km ESE	Recorded	2	Projectile	NE to SW	N/K	1-Jan, 00:14
	4-6km SSE	Recorded	6	Explosion	Undetermined	N/K	1-Jan, 00:14
SMM camera in Berezove (government-controlled, 31km SW of Donetsk)	3-4km S	Recorded	5	Projectile	In vertical flight	N/K	31-Dec, 23:02
	3-4km SE	Recorded	6	Projectile	SW to NE	N/K	31-Dec, 23:03
	3-4km SE	Recorded	11	Projectile	In vertical flight	N/K	31-Dec, 23:03
	3-4km SE	Recorded	3	Burst	In vertical flight	N/K	31-Dec, 23:04
	3-4km SE	Recorded	3	Projectile	In vertical flight	N/K	31-Dec, 23:04
	3-4km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:04
SMM camera in Chermalyk (government-controlled, 77km S of Donetsk)	4-5km SE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 22:49
	4-5km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:22
	2-4km SE	Recorded	4	Projectile	WSW to ENE	N/K	31-Dec, 23:26
	2-4km SSE	Recorded	2	Projectile	NNE to SSW	N/K	1-Jan, 00:10
	2-4km SE	Recorded	2	Projectile	NNE to SSW	N/K	1-Jan, 00:46
	2-4km SE	Recorded	1	Burst	NNE to SSW	N/K	1-Jan, 00:54
SMM camera at Donetsk Filtration Station (15km N of Donetsk)	400-800m S	Recorded	2	Burst	W to E	N/K	31-Dec, 17:58
	4-6km S	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 19:24
	0.5-1km S	Recorded	1	Explosion	Undetermined	N/K	31-Dec, 20:01
	300-800m SSW	Recorded	1	Projectile	NNW to SSE	N/K	31-Dec, 20:02
	300-800m S	Recorded	1	Explosion	Undetermined	N/K	31-Dec, 21:19
	0.8-1.5km S	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 21:28
	1-2km SSW	Recorded	1	Projectile	N to S	N/K	31-Dec, 21:30
	1-2km SSW	Recorded	4	Projectile	NW to SE	N/K	31-Dec, 21:30
	1-2km SSW	Recorded	1	Illumination flare	In vertical flight (also recorded by SMM camera in Avdiivka)	N/K	31-Dec, 22:12
	1-2km S	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 22:24
	1-2km SSE	Recorded	1	Illumination flare	In vertical flight (also recorded by SMM camera in Avdiivka)	N/K	31-Dec, 22:42
	2-4km SSW	Recorded	1	Burst	In vertical flight	N/K	31-Dec, 22:57
	0.5-1km S	Recorded	1	Muzzle flash		N/K	31-Dec, 22:57
	0.5-1km S	Recorded	1	Explosion	Impact	N/K	31-Dec, 22:57
	0.5-1km S	Recorded	4	Projectile	NW to SE	N/K	31-Dec, 22:57
	0.5-1km SSE	Recorded	1	Explosion	Undetermined	N/K	31-Dec, 22:57
	0.5-1km S	Recorded	4	Explosion	Undetermined	N/K	31-Dec, 22:58
	0.5-1km S	Recorded	6	Projectile	NW to SE	N/K	31-Dec, 22:58
	300-800m S	Recorded	4	Muzzle flash		N/K	31-Dec, 22:59
	0.5-1km SSE	Recorded	4	Explosion	Undetermined	N/K	31-Dec, 22:59
	0.5-1km S	Recorded	6	Projectile	NW to SE	N/K	31-Dec, 22:59
	300-800m S	Recorded	4	Muzzle flash		N/K	31-Dec, 23:00
	0.8-1.5km S	Recorded	1	Burst	ESE to WNW	N/K	31-Dec, 23:00
	0.8-1.5km S	Recorded	4	Illumination flare	In vertical flight	N/K	31-Dec, 23:01
	300-800m S	Recorded	3	Muzzle flash		N/K	31-Dec, 23:01
	0.8-1.5km S	Recorded	3	Projectile	In vertical flight	N/K	31-Dec, 23:01
	0.8-1.5km S	Recorded	3	Burst	In vertical flight	N/K	31-Dec, 23:01
	300-800m S	Recorded	4	Muzzle flash		N/K	31-Dec, 23:02

2-4km SSW	Recorded	1	Burst	Also recorded by SMM camera at Oktiabr mine	N/K	31-Dec, 23:02
1-2km S	Recorded	8	Projectile	ESE to WNW	N/K	31-Dec, 23:02
0.8-1.5km S	Recorded	4	Projectile	NW to SE	N/K	31-Dec, 23:02
2-4km SSW	Recorded	1	Illumination flare	In vertical flight (also recorded by SMM camera at Oktiabr mine)	N/K	31-Dec, 23:03
2-4km S	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:03
2-4km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:03
100-200m SSW	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:03
100-500m S	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:03
1-2km SSW	Recorded	3	Projectile	In vertical flight	N/K	31-Dec, 23:03
0.8-1.5km S	Recorded	2	Projectile	NW to SE	N/K	31-Dec, 23:03
1-2km S	Recorded	4	Projectile	SE to NW	N/K	31-Dec, 23:03
2-4km S	Recorded	3	Illumination flare	In vertical flight	N/K	31-Dec, 23:04
2-4km SSW	Recorded	3	Illumination flare	In vertical flight	N/K	31-Dec, 23:04
2-4km SSW	Recorded	18	Projectile	In vertical flight	N/K	31-Dec, 23:04
2-4km SSE	Recorded	3	Illumination flare	In vertical flight	N/K	31-Dec, 23:05
2-4km S	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:05
2-4km SSW	Recorded	7	Illumination flare	In vertical flight	N/K	31-Dec, 23:05
2-4km S	Recorded	2	Explosion	Undetermined	N/K	31-Dec, 23:05
2-4km S	Recorded	3	Burst	In vertical flight	N/K	31-Dec, 23:05
2-4km SSW	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 23:05
2-4km SSW	Recorded	3	Illumination flare	In vertical flight	N/K	31-Dec, 23:06
2-4km SSW	Recorded	1	Burst	In vertical flight	N/K	31-Dec, 23:06
300-500m SSW	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:06
2-4km S	Recorded	4	Illumination flare	In vertical flight	N/K	31-Dec, 23:07
2-4km SSW	Recorded	3	Illumination flare	In vertical flight	N/K	31-Dec, 23:07
2-4km SSW	Recorded	15	Projectile	In vertical flight	N/K	31-Dec, 23:07
2-4km SSW	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:08
2-4km S	Recorded	3	Illumination flare	In vertical flight	N/K	31-Dec, 23:08
2-4km SSE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:08
2-4km SSW	Recorded	15	Projectile	In vertical flight	N/K	31-Dec, 23:08
2-4km SSW	Recorded	1	Burst	In vertical flight	N/K	31-Dec, 23:08
300-500m S	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:09
1-2km S	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:09
2-4km SSE	Recorded	1	Burst	In vertical flight	N/K	31-Dec, 23:09
2-4km SSW	Recorded	2	Burst	In vertical flight	N/K	31-Dec, 23:09
300-800m S	Recorded	2	Muzzle flash		N/K	31-Dec, 23:09
2-4km SSW	Recorded	2	Burst	In vertical flight	N/K	31-Dec, 23:10
300-500m SSW	Recorded	1	Explosion	Outgoing	N/K	31-Dec, 23:10

300-500m SSW	Recorded	1	Projectile	NNW to SSE (subsequent to the previous event)	N/K	31-Dec, 23:10
500-800m SSE	Recorded	1	Explosion	Impact (subsequent to the previous event)	N/K	31-Dec, 23:10
1-2km S	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:10
2-4km S	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:11
2-4km SSE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:12
2-4km SSW	Recorded	5	Projectile	In vertical flight	N/K	31-Dec, 23:12
2-4km SSE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:13
2-4km S	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:13
2-4km SSW	Recorded	3	Projectile	In vertical flight	N/K	31-Dec, 23:13
2-4km SSW	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 23:14
300-600m SSW	Recorded	1	Muzzle flash		N/K	31-Dec, 23:15
300-700m SSW	Recorded	1	Projectile	NNW to SSE	N/K	31-Dec, 23:15
1-2km SSW	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:15
2-4km SSW	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:16
1-2km S	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 23:16
300-600m SSW	Recorded	2	Muzzle flash		N/K	31-Dec, 23:17
500-800m S	Recorded	1	Explosion	Impact	N/K	31-Dec, 23:17
1-2km S	Recorded	3	Projectile	SSE to NNW	N/K	31-Dec, 23:17
2-4km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:18
2-4km SSE	Recorded	1	Burst	In vertical flight	N/K	31-Dec, 23:18
2-4km S	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:18
2-4km S	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:20
2-4km SSW	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 23:20
2-4km SSW	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:21
500-800m S	Recorded	3	Muzzle flash		N/K	31-Dec, 23:21
2-4km S	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 23:21
1-2km S	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:22
2-4km SSW	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 23:22
2-4km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:22
2-4km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:25
2-4km SSW	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:25
300-600m SSW	Recorded	1	Muzzle flash		N/K	31-Dec, 23:26
2-4km SSW	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 23:26
2-4km S	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:26
2-4km SSW	Recorded	2	Projectile	In vertical flight	N/K	31-Dec, 23:27
2-4km SSW	Recorded	2	Projectile	In vertical flight	N/K	31-Dec, 23:28
1-2km SSW	Recorded	1	Projectile	NW to SE	N/K	31-Dec, 23:30
2-4km SSW	Recorded	2	Projectile	In vertical flight	N/K	31-Dec, 23:30
2-4km SSW	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:31
2-4km SSW	Recorded	3	Explosion	Undetermined	N/K	31-Dec, 23:31

2-4km SSW	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 23:31
2-4km S	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:32
2-4km SSW	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 23:32
2-4km SSW	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 23:33
2-4km SSW	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 23:34
2-4km SSW	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:34
2-4km SSW	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:37
2-4km S	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:38
2-4km SSW	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 23:39
2-4km SSW	Recorded	1	Projectile	ESE to WNW	N/K	31-Dec, 23:41
1-2km SSW	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 23:42
2-4km S	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:43
2-4km SSW	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 23:43
2-4km SSW	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 23:45
2-4km SSE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:47
2-4km S	Recorded	3	Burst	In vertical flight	N/K	31-Dec, 23:53
2-4km S	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:53
2-4km S	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:54
2-4km S	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:55
1-2km SSW	Recorded	2	Illumination flare	In vertical flight	N/K	1-Jan, 00:00
1-2km SSW	Recorded	1	Burst	In vertical flight	N/K	1-Jan, 00:00
2-4km SSW	Recorded	2	Burst	In vertical flight	N/K	1-Jan, 00:01
2-4km SSW	Recorded	1	Muzzle flash		N/K	1-Jan, 00:01
300-600m SSW	Recorded	2	Projectile	N to S	N/K	1-Jan, 00:01
300-600m SSW	Recorded	1	Projectile	NW to SE	N/K	1-Jan, 00:01
500-800m S	Recorded	1	Explosion	Impact (subsequent to the previous event)	N/K	1-Jan, 00:01
1-2km SSW	Recorded	1	Projectile	WNW to ESE	N/K	1-Jan, 00:01
2-4km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:02
0.8-1.5km S	Recorded	3	Burst	In vertical flight	N/K	1-Jan, 00:02
300-800m SSW	Recorded	10	Projectile	NW to SE	N/K	1-Jan, 00:02
0.5-1km S	Recorded	1	Explosion	Impact	N/K	1-Jan, 00:02
0.5-1km S	Recorded	1	Explosion	Undetermined	N/K	1-Jan, 00:02
300-600m SSW	Recorded	7	Muzzle flash		N/K	1-Jan, 00:02
2-4km SSW	Recorded	3	Burst	In vertical flight	N/K	1-Jan, 00:02
0.8-1.5km S	Recorded	1	Explosion	Outgoing	N/K	1-Jan, 00:03
0.8-1.5km S	Recorded	11	Projectile	Subsequent to the previous event	N/K	1-Jan, 00:03
0.8-1.5km S	Recorded	1	Explosion	Impact (subsequent to the previous event)	N/K	1-Jan, 00:03
300-600m SSW	Recorded	7	Muzzle flash		N/K	1-Jan, 00:03
2-4km SSW	Recorded	1	Projectile	In vertical flight	N/K	1-Jan, 00:03
500-800m S	Recorded	1	Explosion	Outgoing	N/K	1-Jan, 03:10
2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	1-Jan, 03:33
2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	1-Jan, 04:03
0.8-1.5km S	Recorded	15	Projectile	WNW to ESE	N/K	1-Jan, 00:04

0.8-1.5km S	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:04
0.8-1.5km S	Recorded	4	Projectile	ESE to WNW	N/K	1-Jan, 00:04
0.5-1km S	Recorded	9	Projectile	WNW to ESE	N/K	1-Jan, 00:05
0.5-1km S	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:06
0.5-1km SSE	Recorded	1	Explosion	Undetermined	N/K	1-Jan, 00:06
0.8-1.2km SSW	Recorded	1	Explosion	Undetermined	N/K	1-Jan, 00:06
0.5-1km S	Recorded	4	Illumination flare	In vertical flight	N/K	1-Jan, 00:07
2-4km SSW	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:07
2-4km SSW	Recorded	12	Projectile	In vertical flight	N/K	1-Jan, 00:07
300-600m SSW	Recorded	5	Muzzle flash		N/K	1-Jan, 00:07
0.8-1.5km SSE	Recorded	1	Explosion	Undetermined	N/K	1-Jan, 00:07
500-800m S	Recorded	1	Explosion	Undetermined	N/K	1-Jan, 00:08
500-800m S	Recorded	1	Projectile	WNW to ESE	N/K	1-Jan, 00:08
500-800m S	Recorded	1	Explosion	Impact (subsequent to the previous event)	N/K	1-Jan, 00:08
300-600m SSW	Recorded	2	Muzzle flash		N/K	1-Jan, 00:08
2-4km S	Recorded	2	Projectile	In vertical flight	N/K	1-Jan, 00:08
0.8-1.2km S	Recorded	10	Projectile	In vertical flight	N/K	1-Jan, 00:09
0.5-1km SSW	Recorded	3	Explosion	Undetermined	N/K	1-Jan, 00:10
2-4km SW	Recorded	10	Projectile	In vertical flight	N/K	1-Jan, 00:10
2-4km S	Recorded	2	Explosion	Airburst	N/K	1-Jan, 00:10
N/K S	Recorded	1	Projectile	In vertical flight	N/K	1-Jan, 00:10
2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	1-Jan, 00:11
2-4km SSW	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:12
2-4km SSW	Recorded	3	Projectile	In vertical flight	N/K	1-Jan, 00:12
300-600m SSW	Recorded	1	Projectile	In vertical flight	N/K	1-Jan, 00:12
1-2km SSW	Recorded	1	Explosion	Airburst	N/K	1-Jan, 00:14
300-600m SSW	Recorded	5	Muzzle flash		N/K	1-Jan, 00:14
300-600m SSW	Recorded	4	Projectile	In vertical flight	N/K	1-Jan, 00:14
300-600m SSW	Recorded	3	Muzzle flash		N/K	1-Jan, 00:15
300-600m SSW	Recorded	2	Projectile	In vertical flight	N/K	1-Jan, 00:15
2-4km SSW	Recorded	1	Projectile	In vertical flight	N/K	1-Jan, 00:15
2-3km SSW	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:16
2-4km SSW	Recorded	3	Projectile	In vertical flight	N/K	1-Jan, 00:17
1-2km SSW	Recorded	1	Projectile	In vertical flight	N/K	1-Jan, 00:18
1-2km SSW	Recorded	1	Explosion	Undetermined	N/K	1-Jan, 00:18
1-2km SSW	Recorded	1	Projectile	In vertical flight	N/K	1-Jan, 00:18
0.5-1km S	Recorded	6	Projectile	NW to SE	N/K	1-Jan, 00:23
0.5-1km SSE	Recorded	1	Explosion	Impact	N/K	1-Jan, 00:28
0.8-1.5km S	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 01:10
0.5-1km SSW	Recorded	9	Projectile	In vertical flight	N/K	1-Jan, 01:10
0.5-1km S	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 01:11
0.5-1km S	Recorded	12	Projectile	NW to SE	N/K	1-Jan, 01:11
0.5-1km S	Recorded	5	Projectile	In vertical flight	N/K	1-Jan, 01:22
0.5-1km S	Recorded	1	Projectile	WNW to ESE	N/K	1-Jan, 03:10
0.5-1km S	Recorded	1	Explosion	Impact (subsequent to the previous event)	N/K	1-Jan, 03:10
0.8-1.5km S	Recorded	1	Explosion	Undetermined	N/K	1-Jan, 03:10
1-2km S	Recorded	10	Projectile	NW to SE	N/K	1-Jan, 16:45
0.5-1km SW	Recorded	2	Projectile	W to E	N/K	1-Jan, 16:46

	500-800m SSW	Recorded	2	Explosion	Undetermined	N/K	1-Jan, 18:18
SMM camera 1.5km NE of Hnutove (government-controlled, 90km S of Donetsk)	2-4km E	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:05
	2-4km E	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:07
	2-4km ESE	Recorded	2	Burst	In vertical flight	N/K	31-Dec, 23:08
	2-4km ESE	Recorded	1	Burst	In vertical flight	N/K	31-Dec, 23:32
	2-4km ESE	Recorded	10	Projectile	In vertical flight	N/K	31-Dec, 23:46
	2-4km ESE	Recorded	1	Projectile	SSW to NNE	N/K	31-Dec, 00:03
	2-4km ESE	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 00:05
	2-4km ESE	Recorded	1	Projectile	SSW to NNE	N/K	31-Dec, 00:08
	2-4km ESE	Recorded	1	Explosion	Undetermined	N/K	31-Dec, 00:10
	2-4km ESE	Recorded	1	Projectile	NNE to SSW	N/K	31-Dec, 00:10
	2-4km E	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 00:46
	2-4km ESE	Recorded	8	Projectile	N to S	N/K	31-Dec, 00:55
	2-4km ENE	Recorded	1	Burst	In vertical flight	N/K	31-Dec, 23:10
	SMM camera at entry-exit checkpoint in Hnutove (government-controlled, 84km S of Donetsk)	2-4km ENE	Recorded	10	Projectile	In vertical flight	N/K
2-4km E		Recorded	5	Projectile	In vertical flight	N/K	31-Dec, 23:14
2-4km ENE		Recorded	1	Projectile	NNW to SSE	N/K	31-Dec, 23:44
2-4km ESE		Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:59
2-4km ESE		Recorded	1	Projectile	NNW to SSE	N/K	1-Jan, 00:06
2-4km ESE		Recorded	1	Projectile	In vertical flight	N/K	1-Jan, 00:08
SMM camera in Hranitne (government-controlled, 60km S of Donetsk)	1-3km E	Recorded	1	Explosion	Undetermined	N/K	31-Dec, 18:07
	2-4km E	Recorded	1	Projectile	S to N	N/K	31-Dec, 21:09
	2-4km ESE	Recorded	1	Projectile	SW to NE	N/K	31-Dec, 21:10
	2-4km E	Recorded	1	Explosion	Undetermined	N/K	31-Dec, 21:32
	2-4km ESE	Recorded	1	Projectile	N to S	N/K	31-Dec, 21:44
	2-4km E	Recorded	1	Projectile	S to N	N/K	31-Dec, 21:44
	3-5km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:12
	1-3km ESE	Recorded	2	Projectile	In vertical flight	N/K	31-Dec, 23:14
	3-5km ESE	Recorded	18	Projectile	In vertical flight	N/K	31-Dec, 23:15
	1-3km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:20
	1-3km ESE	Recorded	6	Burst	In vertical flight.	N/K	31-Dec, 23:24
	2-4km ESE	Recorded	1	Projectile	NNE to SSW	N/K	1-Jan, 03:22
	2-4km E	Recorded	1	Explosion	Undetermined	N/K	1-Jan, 03:39
	2-4km E	Recorded	2	Projectile	S to N	N/K	1-Jan, 03:39
	2-4km E	Recorded	1	Projectile	NW to SE	N/K	1-Jan, 03:39
	2-4km E	Recorded	1	Projectile	S to N	N/K	1-Jan, 04:26
	4-6km E	Recorded	1	Projectile	NNW to SSE	N/K	1-Jan, 17:09
SMM camera in Krasnohorivka (government-controlled, 21km W of Donetsk)	2-4km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:07
	2-4km E	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:08
	2-4km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:14
	2-4km SE	Recorded	1	Burst	In vertical flight	N/K	1-Jan, 00:09
	2-4km SE	Recorded	5	Projectile	In vertical flight	N/K	1-Jan, 00:11
	2-4km E	Recorded	2	Projectile	In vertical flight	N/K	1-Jan, 00:18
	3-5km SE	Recorded	5	Explosion	Undetermined	N/K	1-Jan, 16:54
	3-5km SE	Recorded	2	Explosion	Undetermined	N/K	1-Jan, 16:56
SMM camera at entry-exit checkpoint in Maiorsk (government-	1-3km ENE	Recorded	20	Projectile	NW to SE	N/K	31-Dec, 20:32
	1-3km ENE	Recorded	3	Projectile	NW to SE	N/K	31-Dec, 20:37
	1-3km E	Recorded	1	Burst	In vertical flight	N/K	31-Dec, 23:04
	1-3km ENE	Recorded	16	Projectile	NW to SE	HMG	31-Dec, 23:12
	1-3km ENE	Recorded	1	Projectile	NW to SE	N/K	31-Dec, 23:41

controlled, 45km NE of Donetsk)	1-3km E	Recorded	1	Burst	In vertical flight	N/K	1-Jan, 00:30
	2-4km E	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:38
	2-4km ESE	Recorded	1	Burst	In vertical flight	N/K	1-Jan, 00:50
	2-4km ESE	Recorded	1	Burst	In vertical flight	N/K	1-Jan, 01:13
	2-4km ESE	Recorded	1	Projectile	In vertical flight	N/K	1-Jan, 01:27
SMM camera at entry-exit checkpoint in Marinka (government-controlled, 23km SW of Donetsk)	1-3km NNW	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 20:38
	2-4km NNE	Recorded	1	Explosion	Undetermined	N/K	31-Dec, 21:37
	2-4km NNE	Recorded	1	Burst	Also recorded by SMM camera in Krasnohorivka	N/K	31-Dec, 23:02
	2-4km NNE	Recorded	3	Projectile	Also recorded by SMM camera in Krasnohorivka	N/K	31-Dec, 23:02
	2-4km NNE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:02
	2-4km NNE	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 23:03
	2-4km NNE	Recorded	7	Burst	Also recorded by SMM camera in Krasnohorivka	N/K	31-Dec, 23:05
	2-4km NNE	Recorded	5	Projectile	Also recorded by SMM camera in Krasnohorivka	N/K	31-Dec, 23:05
	2-4km NNE	Recorded	1	Burst	Also recorded by SMM camera in Krasnohorivka	N/K	31-Dec, 23:06
	2-4km NNE	Recorded	1	Burst	Also recorded by SMM camera in Krasnohorivka	N/K	31-Dec, 23:11
	2-4km NNE	Recorded	3	Illumination flare	In vertical flight	N/K	31-Dec, 23:12
	2-4km N	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:13
	2-4km NNE	Recorded	1	Burst	Also recorded by SMM camera in Krasnohorivka	N/K	31-Dec, 23:32
	2-4km NNE	Recorded	1	Burst	Also recorded by SMM camera in Krasnohorivka	N/K	31-Dec, 23:33
	2-4km NNE	Recorded	2	Burst	Also recorded by SMM camera in Krasnohorivka	N/K	31-Dec, 23:35
	2-4km NNE	Recorded	2	Burst	Also recorded by SMM camera in Krasnohorivka	N/K	31-Dec, 23:42
	2-4km NNE	Recorded	1	Burst	Also recorded by SMM camera in Krasnohorivka	N/K	31-Dec, 23:45
	2-4km N	Recorded	7	Burst	Also recorded by SMM camera in Krasnohorivka	N/K	31-Dec, 23:47
	2-4km NNE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:59
	2-4km NNE	Recorded	2	Burst	In vertical flight.	N/K	1-Jan, 00:00
	2-4km NNE	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:00
	2-4km NNE	Recorded	1	Burst	In vertical flight	N/K	1-Jan, 00:01
	2-4km N	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:01
	2-4km NNE	Recorded	4	Projectile	In vertical flight	N/K	1-Jan, 00:01
2-4km NNE	Recorded	5	Projectile	In vertical flight	N/K	1-Jan, 00:03	

	2-4km N	Recorded	1	Projectile	In vertical flight	N/K	1-Jan, 00:03
	2-4km NNE	Recorded	5	Illumination flare	In vertical flight	N/K	1-Jan, 00:03
	2-4km NNE	Recorded	18	Projectile	W to E	N/K	1-Jan, 00:04
	2-4km NNE	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:04
	2-4km NNE	Recorded	3	Projectile	In vertical flight	N/K	1-Jan, 00:04
	2-4km NNE	Recorded	3	Burst	In vertical flight	N/K	1-Jan, 00:05
	2-4km N	Recorded	4	Illumination flare	In vertical flight	N/K	1-Jan, 00:05
	2-4km N	Recorded	22	Projectile	In vertical flight	N/K	1-Jan, 00:05
	2-4km N	Recorded	1	Burst	In vertical flight	N/K	1-Jan, 00:06
	2-4km NNW	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:06
	3-5km NNE	Recorded	1	Projectile	SW to NE	N/K	1-Jan, 00:06
	3-5km NNE	Recorded	1	Projectile	SW to NE	N/K	1-Jan, 00:07
	2-4km NNE	Recorded	1	Projectile	SW to NE	N/K	1-Jan, 00:08
	3-5km NNE	Recorded	3	Illumination flare	In vertical flight	N/K	1-Jan, 00:08
	2-4km N	Recorded	2	Illumination flare	In vertical flight	N/K	1-Jan, 00:12
	2-4km N	Recorded	3	Illumination flare	In vertical flight	N/K	1-Jan, 00:13
	2-4km NNE	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:13
	2-4km NNE	Recorded	1	Burst	In vertical flight	N/K	1-Jan, 00:13
	2-4km N	Recorded	3	Illumination flare	In vertical flight	N/K	1-Jan, 00:14
	2-4km NNE	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:15
	2-4km NNE	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:16
	2-4km NNE	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:17
	2-4km NNE	Recorded	1	Illumination flare	In vertical flight	N/K	1-Jan, 00:19
	3-5km NNE	Recorded	12	Projectile	NE to SW	N/K	1-Jan, 00:19
	2-4km NNE	Recorded	1	Burst	In vertical flight	N/K	1-Jan, 00:35
	2-4km NNE	Recorded	1	Burst	In vertical flight	N/K	1-Jan, 00:39
SMM camera at Oktiabr mine (non-government-controlled, 9km NW of Donetsk city centre)	2-4km NE	Recorded	6	Projectile	WNW to ESE	N/K	1-Jan, 00:00
	4-6km NE	Recorded	2	Burst	In vertical flight	N/K	1-Jan, 00:00
	4-6km NE	Recorded	2	Illumination flare	In vertical flight	N/K	1-Jan, 00:00
	4-6km NE	Recorded	3	Burst	In vertical flight	N/K	1-Jan, 00:01
	4-6km NE	Recorded	1	Projectile	WNW to ESE	N/K	1-Jan, 00:01
	4-6km NE	Recorded	1	Explosion	Impact (subsequent to the previous event)	N/K	1-Jan, 00:01
	4-6km NE	Recorded	2	Burst	In vertical flight	N/K	1-Jan, 00:04
	2-4km NE	Recorded	9	Projectile	WNW to ESE	N/K	1-Jan, 00:04
	2-4km NE	Recorded	1	Burst	In vertical flight.	N/K	31-Dec, 23:02
	4-6km NE	Recorded	2	Projectile	In vertical flight.	N/K	31-Dec, 23:03
	4-6km NE	Recorded	2	Illumination flare	In vertical flight	N/K	31-Dec, 23:03
	4-6km NE	Recorded	3	Burst	In vertical flight	N/K	31-Dec, 23:04
	4-6km NE	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:04
	4-6km NE	Recorded	1	Burst	In vertical flight	N/K	31-Dec, 23:05
	4-6km NE	Recorded	1	Projectile	In vertical flight	N/K	31-Dec, 23:05
	4-6km NE	Recorded	2	Burst	In vertical flight	N/K	31-Dec, 23:06
	4-6km NE	Recorded	1	Burst	In vertical flight	N/K	31-Dec, 23:07

	4-6km NE	Recorded	2	Burst	In vertical flight	N/K	31-Dec, 23:08
	4-6km NE	Recorded	2	Burst	In vertical flight	N/K	31-Dec, 23:09
	4-6km NE	Recorded	2	Burst	In vertical flight	N/K	31-Dec, 23:10
	2-4km NE	Recorded	2	Projectile	WNW to ESE	N/K	31-Dec, 23:11
	4-6km NE	Recorded	4	Burst	In vertical flight	N/K	31-Dec, 23:13
	4-6km NE	Recorded	7	Burst	In vertical flight	N/K	31-Dec, 23:53
Central railway station in Donetsk city (non-government-controlled, 6km NW of Donetsk city centre)	2km N	Heard	4	Burst		HMG	1-Jan, 11:42
	3km SW	Heard	1	Explosion	Undetermined	N/K	1-Jan, 11:47
	3-4km N	Heard	1	Explosion	Undetermined	N/K	1-Jan, 12:08
Trudivski area of Donetsk city's Petrovskiy District (non-government-controlled, 15km SW of Donetsk city centre)	2km W	Heard	1	Shot		Small arms	1-Jan, 09:37
	2km W	Heard	1	Shot		Small arms	1-Jan, 09:42
Railway station in Yasynuvata (non-government-controlled, 16km NE of Donetsk)	1.5km W	Heard	7	Explosion	Undetermined	N/K	1-Jan, 12:50-12:55
	2km W	Heard	3	Shot		Small arms	1-Jan, 12:50-12:55
	1.5km WSW	Heard	2	Explosion	Undetermined	N/K	1-Jan, 12:58-12:59
	2-3km WSW	Heard	3	Burst		Small arms	1-Jan, 12:58-12:59
	1-2km W	Heard	1	Burst		Small arms	1-Jan, 13:16
	1-2km N	Heard	1	Shot		Small arms	1-Jan, 13:25
About 1km N of Zaichenko (non-government-controlled, 93km S of Donetsk)	N/K W	Heard	1	Explosion	Undetermined	N/K	1-Jan, 11:38
Svitlodarsk (government-controlled, 57km NE of Donetsk)	3-5km NW	Heard	4	Explosion	Undetermined	N/K	31-Dec, 22:52
	3-5km NW	Heard	3	Burst		HMG	31-Dec, 22:52
	3-5km NW	Heard	3	Explosion	Undetermined	N/K	31-Dec, 22:59
	3-5km NW	Heard	2	Explosion	Undetermined	N/K	31-Dec, 23:05
	3-5km NW	Heard	4	Burst		HMG	31-Dec, 23:05
	3-5km NW	Heard	20	Burst		HMG	31-Dec, 23:59
	3-5km NW	Heard	8	Explosion	Undetermined	N/K	31-Dec, 23:59
	3-5km NW	Heard	2	Explosion	Undetermined	N/K	1-Jan, 15:04
	3-5km NW	Heard	3	Burst		Small arms	1-Jan, 15:04
Kadiivka (formerly Stakhanov, non-government-controlled, 50km W of Luhansk)	10-15km W	Heard	3	Explosion	Undetermined	N/K	31-Dec, 21:05-21:10
SE edge of Kalynove (non-government controlled, 60km W of Luhansk)	2-4km WSW	Heard	12	Burst		HMG	1-Jan, 10:13-10:15
N edge of disengagement area near Zolote (government-controlled, 60km W of Luhansk)	2-4km NNE	Heard	1	Burst	Assessed as outside the disengagement area	HMG	1-Jan, 12:55

SMM camera at Prince Ihor Monument SE of Stanytsia Luhanska bridge (15km NE of Luhansk)	2-3km WNW	Recorded	1	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:01
	2-3km WNW	Recorded	1	Burst	Assessed as outside the disengagement area	N/K	31-Dec, 23:35
SMM camera on Stanytsia Luhanska bridge (15km NE of Luhansk)	7-9km SW	Recorded	5	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:02
	7-9km SW	Recorded	13	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:03
	7-9km SW	Recorded	8	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:04
	7-9km SW	Recorded	8	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:05
	7-9km SW	Recorded	4	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:06
	7-9km SW	Recorded	6	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:07
	7-9km SW	Recorded	9	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:08
	7-9km SW	Recorded	7	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:09
	7-9km SW	Recorded	8	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:10
	7-9km SW	Recorded	5	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:12
	7-9km SW	Recorded	2	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:13

7-9km SW	Recorded	5	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:14
7-9km SW	Recorded	6	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:15
7-9km SW	Recorded	3	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:16
7-9km SW	Recorded	5	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:17
7-9km SW	Recorded	1	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:18
7-9km SW	Recorded	4	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:19
7-9km SW	Recorded	6	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:20
7-9km SW	Recorded	7	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:21
7-9km SW	Recorded	4	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:22
7-9km SW	Recorded	2	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:24
7-9km SW	Recorded	1	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:25
7-9km SW	Recorded	1	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:26
7-9km SW	Recorded	1	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:28

7-9km SW	Recorded	4	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:31
7-9km SW	Recorded	2	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:32
7-9km SW	Recorded	1	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:33
7-9km SW	Recorded	2	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:34
7-9km SW	Recorded	2	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:37
7-9km SW	Recorded	2	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:38
7-9km SW	Recorded	5	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:39
7-9km SW	Recorded	2	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:40
7-9km SW	Recorded	2	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:41
7-9km SW	Recorded	1	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:48
7-9km SW	Recorded	2	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:45
7-9km SW	Recorded	3	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:57
7-9km SW	Recorded	1	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 23:58

	7-9km SW	Recorded	1	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	1-Jan, 00:01
	7-9km SW	Recorded	1	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	1-Jan, 00:05
	7-9km SW	Recorded	1	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	1-Jan, 00:06
SMM camera in Zolote (government-controlled, 60km W of Luhansk)	4-6km SSE	Recorded	6	Explosion	In vertical flight (assessed as outside the disengagement area)	N/K	31-Dec, 20:52
	4-6km SSE	Recorded	6	Explosion	Undetermined (assessed as outside of the disengagement area)	N/K	31-Dec, 20:59
	4-6km SE	Recorded	1	Illumination flare	In vertical flight (assessed as outside of the disengagement area)	N/K	31-Dec, 21:26
	4-6km ESE	Recorded	1	Explosion	Undetermined (assessed as outside of the disengagement area)	N/K	31-Dec, 22:20
	4-6km S	Recorded	2	Burst	In vertical flight (assessed as outside of the disengagement area)	N/K	31-Dec, 23:00
	2-4km ENE	Recorded	1	Explosion	Undetermined (assessed as outside of the disengagement area)	N/K	31-Dec, 23:04
	2-4km ENE	Recorded	2	Projectile	NW to SE (assessed as outside of the disengagement area)	N/K	31-Dec, 23:04
	2-4km ENE	Recorded	4	Projectile	NW to SE (assessed as outside of the disengagement area)	N/K	31-Dec, 23:04
	2-4km ENE	Recorded	3	Projectile	NW to SE (assessed as outside of the disengagement area)	N/K	31-Dec, 23:05
	2-4km ENE	Recorded	1	Explosion	Undetermined (assessed as outside of the disengagement area)	N/K	31-Dec, 23:05

	2-4km ENE	Recorded	9	Projectile	W to E (assessed as outside of the disengagement area)	N/K	31-Dec, 23:05
	2-4km NE	Recorded	1	Burst	In vertical flight (assessed as outside of the disengagement area)	N/K	31-Dec, 23:05
	2-4km ENE	Recorded	7	Projectile	In vertical flight (assessed as outside of the disengagement area)	N/K	31-Dec, 23:05
	2-4km E	Recorded	1	Projectile	In vertical flight (assessed as outside of the disengagement area)	N/K	31-Dec, 23:06
	2-4km E	Recorded	1	Burst	In vertical flight (assessed as outside of the disengagement area)	N/K	31-Dec, 23:06
	2-4km E	Recorded	1	Projectile	In vertical flight (assessed as outside of the disengagement area)	N/K	31-Dec, 23:06
	4-6km SE	Recorded	1	Illumination flare	In vertical flight (assessed as outside of the disengagement area)	N/K	31-Dec, 23:08
	4-6km SE	Recorded	1	Illumination flare	In vertical flight (assessed as outside of the disengagement area)	N/K	31-Dec, 23:12
	2-4km E	Recorded	8	Projectile	SW to NE (assessed as outside of the disengagement area)	N/K	31-Dec, 23:13
	2-4km ENE	Recorded	4	Explosion	Undetermined (assessed as outside of the disengagement area)	N/K	31-Dec, 23:13
	4-6km SE	Recorded	1	Illumination flare	In vertical flight (assessed as outside of the disengagement area)	N/K	31-Dec, 23:30
	4-6km SE	Recorded	1	Illumination flare	In vertical flight (assessed as outside of the disengagement area)	N/K	31-Dec, 23:35
	2-4km NE	Recorded	1	Explosion	Undetermined (assessed as outside of the disengagement area)	N/K	31-Dec, 23:41

	2-4km NE	Recorded	2	Explosion	Undetermined (assessed as outside of the disengagement area)	N/K	31-Dec, 23:42
	2-4km E	Recorded	1	Illumination flare	In vertical flight (assessed as outside of the disengagement area)	N/K	31-Dec, 23:49
	4-6km SE	Recorded	1	Illumination flare	In vertical flight (assessed as outside of the disengagement area)	N/K	31-Dec, 23:55
	2-4km ENE	Recorded	1	Illumination flare	In vertical flight (assessed as outside of the disengagement area)	N/K	31-Dec, 23:59
	2-4km ENE	Recorded	4	Illumination flare	In vertical flight (assessed as outside of the disengagement area)	N/K	1-Jan, 00:00
	2-4km ENE	Recorded	25	Projectile	In vertical flight (assessed as outside of the disengagement area)	N/K	1-Jan, 00:00
	2-4km ENE	Recorded	6	Projectile	NW to SE (assessed as outside of the disengagement area)	N/K	1-Jan, 00:00
	2-4km E	Recorded	9	Projectile	In vertical flight (assessed as outside of the disengagement area)	N/K	1-Jan, 00:00
	2-4km ENE	Recorded	2	Projectile	NW to SE (assessed as outside of the disengagement area)	N/K	1-Jan, 00:01
	2-4km E	Recorded	6	Projectile	In vertical flight (assessed as outside of the disengagement area)	N/K	1-Jan, 00:01
	2-4km ESE	Recorded	1	Projectile	In vertical flight (assessed as outside of the disengagement area)	N/K	1-Jan, 00:01
	2-4km E	Recorded	2	Illumination flare	In vertical flight (assessed as outside of the disengagement area)	N/K	1-Jan, 00:01
	2-4km ENE	Recorded	1	Illumination flare	In vertical flight (assessed as outside of the disengagement area)	N/K	1-Jan, 00:09

	3-5km ESE	Recorded	1	Illumination flare	In vertical flight (assessed as outside of the disengagement area)	N/K	1-Jan, 17:51
SMM camera in Kriakivka (government-controlled, 38km NW of Luhansk)	4-5km SSW	Recorded	4	Burst	In vertical flight.	N/K	31-Dec, 23:00
	4-5km SSW	Recorded	3	Illumination flare	In vertical flight	N/K	31-Dec, 23:00
	4-5km SSW	Recorded	1	Illumination flare	In vertical flight	N/K	31-Dec, 23:01
	4-5km SSW	Recorded	6	Burst	In vertical flight.	N/K	31-Dec, 23:01
SMM camera in Chermalyk (government-controlled, 77km S of Donetsk)	1-3km E	Recorded	4	Burst	NNW to SSE	N/K	1-Jan, 20:38
	1-3km E	Recorded	5	Projectile	NNW to SSE	N/K	1-Jan, 20:39
SMM camera at Donetsk Filtration Station (15km N of Donetsk)	0.5-1km SSE	Recorded	1	Projectile	E to W	N/K	1-Jan, 21:10
	0.5-1km SSE	Recorded	2	Muzzle flash		N/K	1-Jan, 21:10
	1-3km SSW	Recorded	1	Illumination flare	In vertical flight	N/K	2-Jan, 17:38
SMM camera 1.5km NE of Hnutove (government-controlled, 90km S of Donetsk)	3-5km ESE	Recorded	1	Projectile	NNE to SSW	N/K	2-Jan, 01:11
	3-5km ESE	Recorded	1	Projectile	NNE to SSW	N/K	2-Jan, 01:12
	3-5km ESE	Recorded	2	Projectile	SW to NE	N/K	2-Jan, 01:12
	3-5km ESE	Recorded	1	Projectile	In vertical flight	N/K	2-Jan, 01:13
	3-5km ESE	Recorded	1	Projectile	SW to NE	N/K	2-Jan, 01:13
SMM camera in Hranitne (government-controlled, 60km S of Donetsk)	1-3km ESE	Recorded	6	Projectile	WNW to ESE	N/K	2-Jan, 00:30
	1-3km E	Recorded	6	Projectile	SSW to NNE	N/K	2-Jan, 00:30
	1-3km E	Recorded	3	Projectile	SSW to NNE	N/K	2-Jan, 00:31
	2-4km E	Recorded	1	Explosion	Undetermined	N/K	2-Jan, 00:54
SMM camera at entry-exit checkpoint in Marinka (government-controlled, 23km SW of Donetsk)	1-3km NNE	Recorded	1	Muzzle flash		N/K	1-Jan, 22:29
	1-3km NNE	Recorded	1	Projectile	WSW to ENE	N/K	1-Jan, 22:29
	1-3km N	Recorded	1	Explosion	Undetermined	N/K	1-Jan, 22:30
	1-3km NNE	Recorded	1	Explosion	Airburst	N/K	1-Jan, 22:30
About 3km SW of central railway station in Donetsk city (non-government-controlled, 6 km NW of Donetsk city centre)	1-2km NW	Heard	5	Burst		Small arms	2-Jan, 11:40
	1-2km NW	Heard	7	Shot		Small arms	2-Jan, 11:45
	1-3km NW	Heard	5	Shot		Small arms	2-Jan, 11:47
	1-3km NW	Heard	3	Burst		HMG	2-Jan, 11:48
	1-2km NW	Heard	10	Shot		Small arms	2-Jan, 11:50
	4-5km NW	Heard	1	Explosion	Undetermined	N/K	2-Jan, 11:59
About 1km NW of the railway station in Yasynuvata (non-government-controlled, 16 km NE of Donetsk)	2-3km NNW	Heard	3	Shot		Small arms	2-Jan, 09:05
Railway station in Yasynuvata (non-government-controlled, 16 km NE of Donetsk)	1km W	Heard	1	Shot		Small arms	2-Jan, 13:23
About 1km E of Kruta Balka (non-government-controlled, 16 km N of Donetsk)	1-2km NNW	Heard	6	Shot		Small arms	2-Jan, 11:20

Oleksandrivka (non-government-controlled, 20 km SW of Donetsk)	1km WSW	Heard	1	Shot		Small arms	2-Jan, 13:20
Novotroitske (government-controlled, 36km SW of Donetsk)	3-4km NE	Heard	5	Burst		Small arms	2-Jan, 11:00-11:01
About 1km N of Zaichenko (non-government-controlled, 93km S of Donetsk)	2-3km WNW	Heard	2	Shot		Small arms	2-Jan, 11:10
2km E of Bezimenne (non-government-controlled, 100km S of Donetsk)	1-3km N	Heard	1	Shot		Small arms	2-Jan, 12:17
	2-3km WNW	Heard	6	Shot		Small arms	2-Jan, 12:34-12:50
	2-3km WNW	Heard	1	Explosion	Undetermined	N/K	2-Jan, 12:34-12:50
About 5km N Horlivka (non-government-controlled, 39 km NE of Donetsk)	2-3km NE	Heard	3	Burst		HMG	2-Jan, 09:22
Horlivka (non-government-controlled, 39km NE of Donetsk)	4-6km NW	Heard	1	Explosion	Undetermined	N/K	2-Jan, 16:35
About 500m NE of Kamianka (government-controlled, 20km N of Donetsk)	3-5km NE	Heard	3	Shot		Small arms	2-Jan, 11:03
SMM camera in Stanytsia Luhanska (government-controlled, 16km NE of Luhansk)	4-6km W	Recorded	6	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	1-Jan, 22:47

Map of Donetsk and Luhansk regions¹²



¹² 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).