

DPRK MILITARY ACTIVITIES as reported by the DPRK, Japan, and the ROK 25 September to 14 November 2022									
Date	Time [KST]	Launch location	Type	Number	Flight path	Source	Notes/DPRK statements	Additional DPRK military activities	US, ROK, and Japan military activities
September 25	6:53 AM	Around Taechon, North Pyongan Province	SRBM (Underwater-launched ballistic missile based on the KN-23)	1	650/600 km distance, 50/60 km apogee, Mach 5, toward the East Sea (aka. Sea of Japan)	Japan and ROK	KCNA: "A ballistic missile launching drill under the simulation of loading tactical nuclear warheads at a silo under a reservoir."		26 - 29 September: US-ROK joint naval exercise kicks off, including the nuclear-powered USS Ronald Reagan carrier, nuclear-powered USS Annapolis submarine, and 7,600-ton Aegis destroyer Seoseo Ryu Sung-nyong. 30 September: US-ROK-Japan hold trilateral Anti-Submarine Drills, including ROK Mumsu the Great destroyer, the USS Ronald Reagan aircraft carrier, and Japan's Asahi-class destroyer. 4 October: The ROK hosts Annual Minesweeping Exercises with 10 nations. Two ROK fighters fire two JADAM precision bombs at the Jikdo firing range. Four US F-16+ 4 ROK F-15K fighters fly "strike package" as show of force. US and the ROK fire IRBM's in response to DPRK's IRBM launch. One ROK missile fails. 5 October: US-Japan hold anti-Submarine and Carrier Exercise in Okinawa. ROK and the United States fire four ground-to-ground missiles into the East Sea (one additional ROK missile failed and crashed 1 km away from launch site). US Reagan redeployed to ROK waters following DPRK IRBM launch over Japanese territory. 6 October: Approximately 30 ROK fighter jets scramble as DPRK warplanes move south of the Special Reconnaissance Line. US-ROK-Japan launch Naval Anti-Missile Exercise in response to DPRK IRBM to train detection, tracking and interception of DPRK ballistic missiles. 7 October: US-ROK kick off two-day naval exercise in the East Sea to "reinforce the allies' operational capabilities against North Korean provocations", including nuclear-powered USS Ronald Reagan, a Ticonderoga-class guided-missile cruiser, and an Arleigh Burke-class guided missile destroyer. 8 October: ROK Air Force scrambles F-35A fighters (in the first known deployment) in response to DPRK combined air attack drill, but do not immediately report the event as the DPRK planes remain north of the Special Reconnaissance Line. 10 October: US-Japan conduct HIMARS and MLRS Drills in Hokkaido, in order to increase deterrence in Taiwan situation.
September 28	6:10 PM and 6:17 PM	Near west coast of DPRK	SRBM (KN-23 or its variants)	2	300/360 km and 350/360 km distance, respectively, 30/50 km apogee, Mach 6, landed in the East Sea (aka. Sea of Japan)	Japan and ROK	KCNA: "At the ballistic missile launching drill simulating the loading of tactical nuclear warheads which was staged on September 28 for the purpose of neutralizing the airports in the operation zones of south Korea, the stability of overall system related with the operation of warheads was proved."		
September 29	8:47 PM and 8:53 PM	Sunchon, South Pyongan	SRBM (KN-23 or its variants)	2	300/350 km distance, 50 km apogee, Mach 5, toward the East Sea (aka. Sea of Japan)	Japan and ROK	KCNA: "Various types of tactical ballistic missiles that were launched on September 29 and October 1 hit the set targets with the combination of air explosion and direct precision and dispersion strike, proving the accuracy and might of our weapon systems."		
October 1	6:46 AM and 7:03 AM	Near west coast of DPRK	SRBM (KN-23 or its variants)	2	350 km and 350/400 km distance, respectively, 30/50 km apogee, Mach 6, toward the East Sea (aka. Sea of Japan)	Japan and ROK	KCNA: "Various types of tactical ballistic missiles that were launched on September 29 and October 1 hit the set targets with the combination of air explosion and direct precision and dispersion strike, proving the accuracy and might of our weapon systems."	6 October: The Korean People's Army (KPA) fly eight fighter jets and four bombers north of the inter-Korean air boundary at around 2 PM KST, conducting air-to-surface firing drills. KCNA further states that the exercise included long-range artillery sub-units on the western front.	
October 4	7:23 AM	Muyong-ri	Claimed to be 'new-type' IRBM	1	4,500/4,800 km distance, 970/1000 km apogee, Mach 17, flew over Japan	Japan and ROK	KCNA: "The Central Military Commission of the Workers' Party of Korea adopted a decision to send more powerful and clear warning to the enemies on October 4 and took a measure to hit the set water area in the Pacific 4500 kilometers across the Japanese islands with new-type ground-to-ground intermediate-range ballistic missile."	6 October: KPA air force strike drill. KCNA: "Combined air attack drill" with "150 fighter plans", test-firing "new-type air weapon systems" Long-range artillery drills in the eastern front.	
October 6	6:01 AM and 6:23 AM	Samsok area in Pyongyang	SRBM (KN-23 and KN-25)	2	350 km and 800 km distance, respectively, 100/80 km and 50/60 km apogee, respectively, toward the East Sea (aka. Sea of Japan)	Japan and ROK	KCNA: "The striking drills of super-large multiple rocket launchers and tactical ballistic missiles for verifying the might of functional warheads were conducted in simulation of striking the enemies' main military command facilities."		
October 9	1:48 AM and 1:58 AM	Munchon area in Gangwon Province	SRBM (KN-25)	2	350 km distance, 90/100 km apogee, toward the East Sea (aka. Sea of Japan)	Japan and ROK	KCNA: "The firing drill of the super-large multiple rocket launchers was waged in simulating the strike of the enemies' main ports."		
October 12	around 2 AM	Kaechon, South Pyongan Province	"Strategic cruise missile"	2	2,000 km distance, 0.57 Mach, cruising over the West Sea (the Yellow Sea)	DPRK and ROK	KCNA: "The test firing was conducted with the purpose of further enhancing the combat performance and power of long-range strategic cruise missiles operationally deployed to the tactical nuclear operation units."	14 October: 10 KPA air force planes detected south of the special reconnaissance line, about 25 km north of the Military Demarcation Line in the central region and about 12 km north of the Northern Limit Line (NLL) in the Yellow Sea. 1:20-1:25 AM KST - 130 Artillery shots fired from Majang-dong, South Hwanghae province, into Yellow Sea inside western buffer zone north of the NLL. 2:57-3:07 AM KST - 40 Artillery shots fired from Gusuop-ri, Kangwon Province, into East Sea inside eastern buffer zone north of the NLL. 5:00-6:30 PM KST - 80 Artillery shots fired from Changjin, Kangwon province into East Sea inside eastern buffer zone north of the NLL. 5:20-7:00 PM KST - 80 Artillery shots fired from Haeju Bay, South Hwanghae province into Yellow Sea inside western buffer zone north of the NLL. 5:20-7:00 PM KST - 210 Artillery shots fired from Changan Cape, South Hwanghae Province into Yellow Sea inside western buffer zone north of the NLL. 18 October: 10:00 PM KST - The DPRK fires 100 artillery rounds into Yellow Sea, landing within western buffer zones north of the NLL. 11:00 PM KST - The DPRK fires 150 artillery rounds into East Sea, landing within eastern buffer zone north of the NLL. 19 October: Starting at 12:30 PM KST, the DPRK fires 100 artillery shells from Yonan County, South Hwanghae Province. The shells land in the western buffer zone. The DPRK states the shellings is in response to Hognuk exercise. 24 October: A DPRK ship crosses NLL in Yellow Sea island of Baengnyeong at 03:42 AM KST; the ROK issues a warning message and fires warning shots. The DPRK announces that an ROK warship has violated the western sea boundary and opens warning fire in response.	14 October: ROK artillery fire off the coast of Chollwon County, Kangwon Province, DPRK. The ROK scrambles military aircraft, including F-35A fighter jets, in response to 10 KPA air force planes detected south of the special reconnaissance line. 17 October: ROK Hognuk Exercises commence. 18 October: USFK soldiers from the 2nd Battalion, 18th Field Artillery Regiment (1AR) and 210th Field Artillery Brigade conduct "routine" artillery live-fire training near Pochon, 4 km north of Seoul, which included firing multiple launch rocket systems (date according to KCNA, no date specified by USFK). 24 October: DPRK ship crosses NLL in Yellow Sea island of Baengnyeong at 3:42 a.m., ROK issues warning message and fires warning shots. US-ROK naval exercises from 24 to 27 October in the West Sea (Yellow Sea). 31 October: ROK-US "Vigilant Storm" large-scale joint air drills kick off. 240 aircraft mobilized, including advanced stealth jets.
October 14	1:48 AM	Sunan area, Pyongyang	SRBM	1	650/700 km distance, 50 km apogee, Mach 6 Toward the East Sea (aka. Sea of Japan)	Japan and ROK	No DPRK statement		
October 28	11:58 AM and 12:18 PM	Thongchon County on the east coast, which lies around 35 miles (60 km) from the inter-Korean border	SRBM	2	230 km distance, 24 km apogee, Mach 5, Toward the East Sea (aka. Sea of Japan)	Japan and ROK	No DPRK statement		
November 2	6:51 AM	Chongju and Phyngun-gun, North Pyongan Province	SRBM	4	Toward the West Sea (aka. Yellow Sea)	DPRK and ROK	KCNA: "Tactical ballistic missiles loaded with dispersion warheads and underground infiltration warheads"		2 November: ROK F-15K and KF-16 warplanes fire three precision strike air-to-surface SLAM-ER missiles into high seas north of the NLL in response to DPRK missiles. ROK issues air raid warning for Ulleung Island. 4 November: ROK Air Force mobilizes some 80 fighter jets, including F-35As "in line with full response posture", in response to DPRK conducting more than 160 military aircraft activities over DPRK. 5 November: US-ROK Vigilant Storm exercise extends to 5 November from its original ending date on 4 November in response to the DPRK's ICBM launch. The final day exercise includes two U.S. B-1B Lancer strategic bombers, F16, and South Korea F-35A stealth fighter jets. 7 November: ROK annual computer-simulated Taegeukg drills kick off, focusing on strengthening crisis management capabilities, the ability to transition into wartime and train operational capabilities against various threats, including those from DPRK nuclear and missile programs.
	6:51 AM	Wonsan, Kangwon Province	SRBM*	2 or 3	100 km/150 km distance, 150 km/200 km apogee, "Irregular trajectories" "One of the three SRBM's fell into high seas 28 kilometers south of the NLL, in an area 57 km east of the South's eastern city of Sokcho and 167km northwest of Ulleung Island near Dokdo."	Japan and ROK	"On 9 November, the ROK military announced that it had salvaged at least one of those missiles which fell to the south of the NLL. This missile was identified as a ground-to-air missile SA-5 (aka. S-200) which the ROK Joint Chief of Staff assessed to have been fired by the DPRK as a ground-to-ground missile with a ballistic trajectory."	No DPRK statement	
	9:12 AM	Nakwon, Chonggyong and Simpo, South Hamgyong Province, Onchon, Hwajin-ri, and Kwail region, South Hwanghae Province	"Presumed to be SRBM and SAMs"	10+*	Toward the East Sea (aka. Sea of Japan) and West Sea (aka. Yellow Sea)	ROK	"Some of the SRBM's possibly are SA-5 (Soviet S-200) SAMs that flew in ballistic trajectories."	No DPRK statement	
	4:00 - 4:34 PM	East coast	"Possible ballistic missile"	1*	Apogee 50 km	Japan	"Possibly overlaps with one of the missiles reported by the ROK in the next row."	No DPRK statement	
	4:30 - 5:10 PM	Information not available	"Missiles, possibly including suspected surface-to-air missiles"	6*	Toward the East Sea (aka. Sea of Japan) and West Sea (aka. Yellow Sea)	ROK	"Some of which possibly involved SA-5 (aka. S-200) that had been converted into ground-to-ground missiles."	2 November: The DPRK fires 100 artillery shells from Kosong County, Kangwon Province, into the eastern buffer zone at around 1:27 PM KST. 3 November: The DPRK fires 80 artillery shells from the Geumgang area of Gangwon Province at 11:28 PM KST, landing inside eastern buffer zone. KCNA stated that 46 multiple rocket launcher rounds were fired.	
	"Morning and afternoon"	East and west coastal areas	"Ground-to-air missiles"	23*	N/A	DPRK	"Some of which possibly overlap with the surface-to-air missiles reported by the ROK."	No DPRK statement	
November 3	"Afternoon"	North Hamgyong Province	"Strategic cruise missiles"	2*	Landed in "the open sea around 80 km off the coast of Ulsan City of south Korea (35°29' S, 126°16' latitude and 130°19' 39.8' longitude)"	DPRK	"The ROK disputed the DPRK's claim, saying the launches never happened." KCNA: "Strategic cruise missiles"		4 November: ROK defense forces detect more than 180 DPRK military aircraft activities over DPRK inland areas as well as off the western and eastern coasts without approaching close to the inter-Korean border, around 11 AM and 3 PM KST. The bombers conduct air-to-ground firing. 5 November: US-ROK Vigilant Storm exercise extends to 5 November from its original ending date on 4 November in response to the DPRK's ICBM launch. The final day exercise includes two U.S. B-1B Lancer strategic bombers, F16, and South Korea F-35A stealth fighter jets. 7 November: ROK annual computer-simulated Taegeukg drills kick off, focusing on strengthening crisis management capabilities, the ability to transition into wartime and train operational capabilities against various threats, including those from DPRK nuclear and missile programs.
	7:40 AM	Sunan area	ICBM*	1	750/760 km distance, 1920/2000 km apogee, Mach 15, toward the East Sea (aka. Sea of Japan)	DPRK, Japan and ROK	"The ROK assessed the missile to be a failed Hwasong-17 ICBM."		
	8:30 AM - 9:50 PM	Gaechon area, South Pyongan Province Goksan area, North Hwanghae Province	SRBM	5	300/350 km distance, 50/70 km apogee, Mach 5 towards East Sea (aka. Sea of Japan) 480/500 km distance, 130/150 km apogee, Mach 6	DPRK, Japan and ROK	KCNA: "Super-large multiple launch missiles", "tactical ballistic missiles of various missions"		
November 5	11:32 AM - 11:59 AM	Tongrim County	SRBM	4	130 km distance, 20 km apogee, Mach 5, toward an island in the West Sea (aka. Yellow Sea)	DPRK and ROK	KCNA: "Two tactical ballistic missiles loaded with dispersion warheads" and "two super-large multiple launch missiles"		
November 8	3:31 PM	South Pyongan Province	SRBM	1	250/290 km distance, 30/below 50 km apogee, Mach 6 Toward the East Sea (aka. Sea of Japan)	Japan and ROK	No DPRK statement	No additional military activities since 9 November to 14 November	10 November: Final day of the annual ROK computer-simulated Taegeukg exercise.