

## **Status of MW frequency recording in OSCAR/Space**

HLPP reference: 2.2.1

The OSCAR/Space database provides, inter alia, information on the frequencies utilised by MW instruments for Earth observation. Detailed information is reported since the early stage of the database within the Instrument descriptive pages.

In addition, since a few years, compact information related to frequency protection issues is being added to the satellite descriptive pages.

This document provides information about MW frequencies recording in OSCAR/Space. The latest table of MW frequencies used by Earth observation sensors is provided in support of considerations for RF protection.

**Action proposed:** CGMS to take note of the information provided in this working paper.

## Status of MW frequency recording in OSCAR/Space

Information on microwave (MW) frequencies used for Earth Observation (EO) is recorded in OSCAR/Space (see <https://www.wmo-sat.info/oscar/spacecapabilities>) since a few years. The information appears in more sections, with different degree of detail to serve different purposes.

The most detailed presentation is in the *Instrument page*. Following a descriptive table, the frequencies are recorded in a “Detailed characteristics” table. Example:

ATMS (Advanced technology Microwave Sounder) - channel frequencies

No.	Central frequency (GHz)	Bandwidth (MHz)	Polarisation	NEAT
1	23.800	270	QV	0.90 K
2	31.400	180	QV	0.90 K
3	50.300	180	QH	1.20 K
4	51.760	400	QH	0.75 K
5	52.800	400	QH	0.75 K
6	53.596 ± 0.115	170	QH	0.75 K
7	54.400	400	QH	0.75 K
8	54.940	400	QH	0.75 K
9	55.500	330	QH	0.75 K
10	f <sub>0</sub> = 57.290344	330	QH	0.75 K
11	f <sub>0</sub> ± 0.217	78	QH	1.20 K
12	f <sub>0</sub> ± 0.3222 ± 0.048	36	QH	1.20 K
13	f <sub>0</sub> ± 0.3222 ± 0.022	16	QH	1.50 K
14	f <sub>0</sub> ± 0.3222 ± 0.010	8	QH	2.40 K
15	f <sub>0</sub> ± 0.3222 ± 0.0045	3	QH	3.60 K
16	89.5	5000	QV	0.50 K
17	165.5	3000	QH	0.60 K
18	183.31 ± 7.0	2000	QH	0.80 K
19	183.31 ± 4.5	2000	QH	0.80 K
20	183.31 ± 3.0	1000	QH	0.80 K
21	183.31 ± 1.8	1000	QH	0.80 K
22	183.31 ± 1.0	500	QH	0.90 K

This type of information is present in OSCAR/Space since its entering into operations (2012). More recently (in 2017, revised and updated in November 2019), a presentation of the MW frequencies was introduced in a format dictated by the purpose of frequency protection. This presentation is provided in the *Satellite table*, in the final section *Telecommunication frequency or microwave sensing channel information*, after activation of the key “Show expert details”. Example:

ATMS (Advanced technology Microwave Sounder) - frequency bands to protect

Service	Mode	Frequency	Bandwidth	Polarisation	D/A	Comments
ATMS	passive	23800 MHz	270000 kHz	QV	A	Water vapour channel
ATMS	passive	31400 MHz	180000 kHz	QV	A	Window channel
ATMS	passive	50299 - 57660 MHz		QH	A	Oxygen band, 13 channels
ATMS	passive	89500 MHz	5000000 kHz	QV	A	Window channel
ATMS	passive	165500 MHz	3000000 kHz	QH	A	Weak water vapour channel
ATMS	passive	175310 - 191310 MHz		QH	A	Water vapour band, 5 channels

The same information can be accessed at the *List of all radio frequencies*, ordered by satellite.

If the User wishes to identify all the past, current or planned satellites performing MW observations, the easiest mode is to access the *Gap analysis by mission* and select the mission “MW imagery” or “MW temperature/humidity sounding from LEO”. A set of filters enable to select the satellites performing observations in the ranges 1-2, 4-8, 8-12, 12-20, 20-26, 26-40, 50-70, 70-110, 110-130, 170-200 and >200 GHz.

The latest issue of the table of frequencies to be protected is provided in Appendix, covering MW instruments flown on all operational and major R&D satellites from ~2000 to ~2030.

APPENDIX

FREQUENCIES USED BY CURRENT AND PLANNED SATELLITES FOR EARTH OBSERVATION BY MICROWAVES

Note: the same template defined for satellite-ground links is used, with some adaptation:

- *Direction or mode* is replaced by *Sensing mode*: active or passive
- the *Emission designator*, not applicable to EO, is omitted
- *Data rate or Baseband*, not applicable to a natural emitting or reflecting source, is omitted
- *D/A*, invariably set to *A* (Analog) since it refers to radiation from a natural source, is omitted
- for sounding channels, the two ends of the frequency range are indicated, as well as the total band to protect; the number of channels in the band is recorded under *Comments*, that also reports indication of the nature of the channel or band
- for active systems (altimeters, scatterometers and SAR) bandwidth and polarisation are not recorded

Satellite	Agency	Launch	EO	Instrument	Sensing mode	Frequency	Bandwidth	Polarisation	Comments
NOAA-15	NOAA	13/05/1998	≥2020	AMSU-A	passive	23800 MHz	270000 kHz	V	Water vapour channel
NOAA-15	NOAA	13/05/1998	≥2020	AMSU-A	passive	31400 MHz	180000 kHz	V	Window channel
NOAA-15	NOAA	13/05/1998	≥2020	AMSU-A	passive	50120-57620 MHz	7500000 kHz	H or V	Oxygen band, 12 channels
NOAA-15	NOAA	13/05/1998	≥2020	AMSU-A	passive	89000 MHz	6000000 kHz	V	Window channel
NOAA-15	NOAA	13/05/1998	≥2020	AMSU-B	passive	89000 MHz	1000000 kHz	V	Window channel
NOAA-15	NOAA	13/05/1998	≥2020	AMSU-B	passive	150000 MHz	1000000 kHz	V	Weak water vapour channel
NOAA-15	NOAA	13/05/1998	≥2020	AMSU-B	passive	175310-191310 MHz	16000000 kHz	V	Water vapour band, 3 channels
NOAA-18	NOAA	20/05/2005	≥2020	AMSU-A	passive	23800 MHz	270000 kHz	V	Water vapour channel
NOAA-18	NOAA	20/05/2005	≥2020	AMSU-A	passive	31400 MHz	180000 kHz	V	Window channel
NOAA-18	NOAA	20/05/2005	≥2020	AMSU-A	passive	50120-57620 MHz	7500000 kHz	H or V	Oxygen band, 12 channels
NOAA-18	NOAA	20/05/2005	≥2020	AMSU-A	passive	89000 MHz	6000000 kHz	V	Window channel
NOAA-18	NOAA	20/05/2005	≥2020	MHS	passive	89000 MHz	2800000 kHz	V	Window channel
NOAA-18	NOAA	20/05/2005	≥2020	MHS	passive	157000 MHz	2800000 kHz	V	Weak water vapour channel
NOAA-18	NOAA	20/05/2005	≥2020	MHS	passive	179310-191310 MHz	12000000 kHz	H or V	Water vapour band, 3 channels
NOAA-19	NOAA	06/02/2009	≥2020	AMSU-A	passive	23800 MHz	270000 kHz	V	Water vapour channel
NOAA-19	NOAA	06/02/2009	≥2020	AMSU-A	passive	31400 MHz	180000 kHz	V	Window channel
NOAA-19	NOAA	06/02/2009	≥2020	AMSU-A	passive	89000 MHz	6000000 kHz	V	Window channel
NOAA-19	NOAA	06/02/2009	≥2020	AMSU-A	passive	50120-57620 MHz	7500000 kHz	H or V	Oxygen band, 12 channels
NOAA-19	NOAA	06/02/2009	≥2020	MHS	passive	89000 MHz	2800000 kHz	V	Window channel
NOAA-19	NOAA	06/02/2009	≥2020	MHS	passive	157000 MHz	2800000 kHz	V	Weak water vapour channel
NOAA-19	NOAA	06/02/2009	≥2020	MHS	passive	179310-191310 MHz	12000000 kHz	H or V	Water vapour band, 3 channels
SNPP	NOAA	28/10/2011	≥2020	ATMS	passive	23800 MHz	270000 kHz	QV	Water vapour channel
SNPP	NOAA	28/10/2011	≥2020	ATMS	passive	31400 MHz	180000 kHz	QV	Window channel
SNPP	NOAA	28/10/2011	≥2020	ATMS	passive	50299-57660 MHz	7361000 kHz	QH	Oxygen band, 13 channels
SNPP	NOAA	28/10/2011	≥2020	ATMS	passive	89500 MHz	5000000 kHz	QV	Window channel
SNPP	NOAA	28/10/2011	≥2020	ATMS	passive	165500 MHz	3000000 kHz	QH	Weak water vapour channel
SNPP	NOAA	28/10/2011	≥2020	ATMS	passive	175310-191310 MHz	16000000 kHz	QH	Water vapour band, 5 channels

Satellite	Agency	Launch	EOl	Instrument	Sensing mode	Frequency	Bandwidth	Polarisation	Comments
NOAA-20	NOAA	18/11/2017	≥2024	ATMS	passive	23800 MHz	270000 kHz	QV	Water vapour channel
NOAA-20	NOAA	18/11/2017	≥2024	ATMS	passive	31400 MHz	180000 kHz	QV	Window channel
NOAA-20	NOAA	18/11/2017	≥2024	ATMS	passive	50299-57660 MHz	7361000 kHz	QH	Oxygen band, 13 channels
NOAA-20	NOAA	18/11/2017	≥2024	ATMS	passive	89500 MHz	5000000 kHz	QV	Window channel
NOAA-20	NOAA	18/11/2017	≥2024	ATMS	passive	165500 MHz	3000000 kHz	QH	Weak water vapour channel
NOAA-20	NOAA	18/11/2017	≥2024	ATMS	passive	175310-191310 MHz	16000000 kHz	QH	Water vapour band, 5 channels
JPSS-2	NOAA	≥2022	≥2029	ATMS	passive	23800 MHz	270000 kHz	QV	Water vapour channel
JPSS-2	NOAA	≥2022	≥2029	ATMS	passive	31400 MHz	180000 kHz	QV	Window channel
JPSS-2	NOAA	≥2022	≥2029	ATMS	passive	50299-57660 MHz	7361000 kHz	QH	Oxygen band, 13 channels
JPSS-2	NOAA	≥2022	≥2029	ATMS	passive	89500 MHz	5000000 kHz	QV	Window channel
JPSS-2	NOAA	≥2022	≥2029	ATMS	passive	165500 MHz	3000000 kHz	QH	Weak water vapour channel
JPSS-2	NOAA	≥2022	≥2029	ATMS	passive	175310-191310 MHz	16000000 kHz	QH	Water vapour band, 5 channels
JPSS-3	NOAA	≥2026	≥2033	ATMS	passive	23800 MHz	270000 kHz	QV	Water vapour channel
JPSS-3	NOAA	≥2026	≥2033	ATMS	passive	31400 MHz	180000 kHz	QV	Window channel
JPSS-3	NOAA	≥2026	≥2033	ATMS	passive	50299-57660 MHz	7361000 kHz	QH	Oxygen band, 13 channels
JPSS-3	NOAA	≥2026	≥2033	ATMS	passive	89500 MHz	5000000 kHz	QV	Window channel
JPSS-3	NOAA	≥2026	≥2033	ATMS	passive	165500 MHz	3000000 kHz	QH	Weak water vapour channel
JPSS-3	NOAA	≥2026	≥2033	ATMS	passive	175310-191310 MHz	16000000 kHz	QH	Water vapour band, 5 channels
JPSS-4	NOAA	≥2031	≥2038	ATMS	passive	23800 MHz	270000 kHz	QV	Water vapour channel
JPSS-4	NOAA	≥2031	≥2038	ATMS	passive	31400 MHz	180000 kHz	QV	Window channel
JPSS-4	NOAA	≥2031	≥2038	ATMS	passive	50299-57660 MHz	7361000 kHz	QH	Oxygen band, 13 channels
JPSS-4	NOAA	≥2031	≥2038	ATMS	passive	89500 MHz	5000000 kHz	QV	Window channel
JPSS-4	NOAA	≥2031	≥2038	ATMS	passive	165500 MHz	3000000 kHz	QH	Weak water vapour channel
JPSS-4	NOAA	≥2031	≥2038	ATMS	passive	175310-191310 MHz	16000000 kHz	QH	Water vapour band, 5 channels
Metop-A	EUMETSAT	19/10/2006	≥2021	AMSU-A	passive	23800 MHz	270000 kHz	V	Water vapour channel
Metop-A	EUMETSAT	19/10/2006	≥2021	AMSU-A	passive	31400 MHz	180000 kHz	V	Window channel
Metop-A	EUMETSAT	19/10/2006	≥2021	AMSU-A	passive	50120-57620 MHz	7500000 kHz	H or V	Oxygen band, 12 channels
Metop-A	EUMETSAT	19/10/2006	≥2021	AMSU-A	passive	89000 MHz	6000000 kHz	V	Window channel
Metop-A	EUMETSAT	19/10/2006	≥2021	MHS	passive	89000 MHz	2800000 kHz	V	Window channel
Metop-A	EUMETSAT	19/10/2006	≥2021	MHS	passive	157000 MHz	2800000 kHz	V	Weak water vapour channel
Metop-A	EUMETSAT	19/10/2006	≥2021	MHS	passive	179310-191310 MHz	12000000 kHz	H or V	Water vapour band, 3 channels
Metop-A	EUMETSAT	19/10/2006	≥2021	ASCAT	active	5255 MHz			C-band scatterometer
Metop-B	EUMETSAT	17/09/2012	≥2024	AMSU-A	passive	23800 MHz	270000 kHz	V	Water vapour channel
Metop-B	EUMETSAT	17/09/2012	≥2024	AMSU-A	passive	31400 MHz	180000 kHz	V	Window channel
Metop-B	EUMETSAT	17/09/2012	≥2024	AMSU-A	passive	50120-57620 MHz	7500000 kHz	H or V	Oxygen band, 12 channels
Metop-B	EUMETSAT	17/09/2012	≥2024	AMSU-A	passive	89000 MHz	6000000 kHz	V	Window channel
Metop-B	EUMETSAT	17/09/2012	≥2024	MHS	passive	89000 MHz	2800000 kHz	V	Window channel
Metop-B	EUMETSAT	17/09/2012	≥2024	MHS	passive	157000 MHz	2800000 kHz	V	Weak water vapour channel
Metop-B	EUMETSAT	17/09/2012	≥2024	MHS	passive	179310-191310 MHz	12000000 kHz	H or V	Water vapour band, 3 channels
Metop-B	EUMETSAT	17/09/2012	≥2024	ASCAT	active	5255 MHz			C-band scatterometer
Metop-C	EUMETSAT	07/11/2018	≥2025	AMSU-A	passive	23800 MHz	270000 kHz	V	Water vapour channel
Metop-C	EUMETSAT	07/11/2018	≥2025	AMSU-A	passive	31400 MHz	180000 kHz	V	Window channel
Metop-C	EUMETSAT	07/11/2018	≥2025	AMSU-A	passive	50120-57620 MHz	7500000 kHz	H or V	Oxygen band, 12 channels
Metop-C	EUMETSAT	07/11/2018	≥2025	AMSU-A	passive	89000 MHz	6000000 kHz	V	Window channel

Satellite	Agency	Launch	EOl	Instrument	Sensing mode	Frequency	Bandwidth	Polarisation	Comments
Metop-C	EUMETSAT	07/11/2018	≥2025	MHS	passive	89000 MHz	2800000 kHz	V	Window channel
Metop-C	EUMETSAT	07/11/2018	≥2025	MHS	passive	157000 MHz	2800000 kHz	V	Weak water vapour channel
Metop-C	EUMETSAT	07/11/2018	≥2025	MHS	passive	179310-191310 MHz	12000000 kHz	H or V	Water vapour band, 3 channels
Metop-C	EUMETSAT	07/11/2018	≥2025	ASCAT	active	5255 MHz			C-band scatterometer
EPS-SG-A1	EUMETSAT	≥2022	≥2029	MWS	passive	23800 MHz	270000 kHz	H or V	Water vapour channel
EPS-SG-A1	EUMETSAT	≥2022	≥2029	MWS	passive	31400 MHz	180000 kHz	H or V	Window channel
EPS-SG-A1	EUMETSAT	≥2022	≥2029	MWS	passive	50120-57620 MHz	7500000 kHz	H or V	Oxygen band, 14 channels
EPS-SG-A1	EUMETSAT	≥2022	≥2029	MWS	passive	89000 MHz	4000000 kHz	H or V	Window channel
EPS-SG-A1	EUMETSAT	≥2022	≥2029	MWS	passive	165500 MHz	3000000 kHz	H or V	Weak water vapour channel
EPS-SG-A1	EUMETSAT	≥2022	≥2029	MWS	passive	175310-191310 MHz	16000000 kHz	H or V	Water vapour band, 5 channels
EPS-SG-A1	EUMETSAT	≥2022	≥2029	MWS	passive	229000 MHz	2000000 kHz	H or V	Window channel
EPS-SG-A2	EUMETSAT	≥2029	≥2036	MWS	passive	23800 MHz	270000 kHz	H or V	Water vapour channel
EPS-SG-A2	EUMETSAT	≥2029	≥2036	MWS	passive	31400 MHz	180000 kHz	H or V	Window channel
EPS-SG-A2	EUMETSAT	≥2029	≥2036	MWS	passive	50120-57620 MHz	7500000 kHz	H or V	Oxygen band, 14 channels
EPS-SG-A2	EUMETSAT	≥2029	≥2036	MWS	passive	89000 MHz	4000000 kHz	H or V	Window channel
EPS-SG-A2	EUMETSAT	≥2029	≥2036	MWS	passive	165500 MHz	3000000 kHz	H or V	Weak water vapour channel
EPS-SG-A2	EUMETSAT	≥2029	≥2036	MWS	passive	175310-191310 MHz	16000000 kHz	H or V	Water vapour band, 5 channels
EPS-SG-A2	EUMETSAT	≥2029	≥2036	MWS	passive	229000 MHz	2000000 kHz	H or V	Window channel
EPS-SG-A3	EUMETSAT	≥2036	≥2043	MWS	passive	23800 MHz	270000 kHz	H or V	Water vapour channel
EPS-SG-A3	EUMETSAT	≥2036	≥2043	MWS	passive	31400 MHz	180000 kHz	H or V	Window channel
EPS-SG-A3	EUMETSAT	≥2036	≥2043	MWS	passive	50120-57620 MHz	7500000 kHz	H or V	Oxygen band, 14 channels
EPS-SG-A3	EUMETSAT	≥2036	≥2043	MWS	passive	89000 MHz	4000000 kHz	H or V	Window channel
EPS-SG-A3	EUMETSAT	≥2036	≥2043	MWS	passive	165500 MHz	3000000 kHz	H or V	Weak water vapour channel
EPS-SG-A3	EUMETSAT	≥2036	≥2043	MWS	passive	175310-191310 MHz	16000000 kHz	H or V	Water vapour band, 5 channels
EPS-SG-A3	EUMETSAT	≥2036	≥2043	MWS	passive	229000 MHz	2000000 kHz	H or V	Window channel
EPS-SG-B1	EUMETSAT	≥2023	≥2030	MWI	passive	18700 MHz	200000 kHz	H&V	Window channel
EPS-SG-B1	EUMETSAT	≥2023	≥2030	MWI	passive	23800 MHz	400000 kHz	H&V	Water vapour channel
EPS-SG-B1	EUMETSAT	≥2023	≥2030	MWI	passive	31400 MHz	100000 kHz	H&V	Window channel
EPS-SG-B1	EUMETSAT	≥2023	≥2030	MWI	passive	50100-53950 MHz	3850000 kHz	H&V	Oxygen band, 4 channels
EPS-SG-B1	EUMETSAT	≥2023	≥2030	MWI	passive	89000 MHz	4000000 kHz	H&V	Window channel
EPS-SG-B1	EUMETSAT	≥2023	≥2030	MWI	passive	115300-122000 MHz	6700000 kHz	V	Oxygen band, 4 channels
EPS-SG-B1	EUMETSAT	≥2023	≥2030	MWI	passive	165500 MHz	2900000 kHz	V	Weak water vapour channel
EPS-SG-B1	EUMETSAT	≥2023	≥2030	MWI	passive	175310-191310 MHz	16000000 kHz	V	Water vapour band, 5 channels
EPS-SG-B1	EUMETSAT	≥2023	≥2030	ICI	passive	175310-191310 MHz	16000000 kHz	V	Water vapour band, 3 channels
EPS-SG-B1	EUMETSAT	≥2023	≥2030	ICI	passive	243200 MHz	8000000 kHz	H&V	Window channel
EPS-SG-B1	EUMETSAT	≥2023	≥2030	ICI	passive	314150-336150 MHz	22000000 kHz	V	Water vapour band, 3 channels
EPS-SG-B1	EUMETSAT	≥2023	≥2030	ICI	passive	439300-456700 MHz	17400000 kHz	V	Water vapour band, 3 channels
EPS-SG-B1	EUMETSAT	≥2023	≥2030	ICI	passive	664000 MHz	34000000 kHz	H&V	Window channel
EPS-SG-B1	EUMETSAT	≥2023	≥2030	SCA	active	5300 MHz			C-band scatterometer
EPS-SG-B2	EUMETSAT	≥2030	≥2037	MWI	passive	18700 MHz	200000 kHz	H&V	Window channel
EPS-SG-B2	EUMETSAT	≥2030	≥2037	MWI	passive	23800 MHz	400000 kHz	H&V	Water vapour channel
EPS-SG-B2	EUMETSAT	≥2030	≥2037	MWI	passive	31400 MHz	100000 kHz	H&V	Window channel
EPS-SG-B2	EUMETSAT	≥2030	≥2037	MWI	passive	50100-53950 MHz	3850000 kHz	H&V	Oxygen band, 4 channels
EPS-SG-B2	EUMETSAT	≥2030	≥2037	MWI	passive	89000 MHz	4000000 kHz	H&V	Window channel



Satellite	Agency	Launch	EOl	Instrument	Sensing mode	Frequency	Bandwidth	Polarisation	Comments
EPS-SG-B2	EUMETSAT	≥2030	≥2037	MWI	passive	115300-122000 MHz	6700000 kHz	V	Oxygen band, 4 channels
EPS-SG-B2	EUMETSAT	≥2030	≥2037	MWI	passive	165500 MHz	2900000 kHz	V	Weak water vapour channel
EPS-SG-B2	EUMETSAT	≥2030	≥2037	MWI	passive	175310-191310 MHz	16000000 kHz	V	Water vapour band, 5 channels
EPS-SG-B2	EUMETSAT	≥2030	≥2037	ICI	passive	175310-191310 MHz	16000000 kHz	V	Water vapour band, 3 channels
EPS-SG-B2	EUMETSAT	≥2030	≥2037	ICI	passive	243200 MHz	8000000 kHz	H&V	Window channel
EPS-SG-B2	EUMETSAT	≥2030	≥2037	ICI	passive	314150-336150 MHz	22000000 kHz	V	Water vapour band, 3 channels
EPS-SG-B2	EUMETSAT	≥2030	≥2037	ICI	passive	439300-456700 MHz	17400000 kHz	V	Water vapour band, 3 channels
EPS-SG-B2	EUMETSAT	≥2030	≥2037	ICI	passive	664000 MHz	34000000 kHz	H&V	Window channel
EPS-SG-B2	EUMETSAT	≥2030	≥2037	SCA	active	5300 MHz			C-band scatterometer
EPS-SG-B3	EUMETSAT	≥2037	≥2044	MWI	passive	18700 MHz	2000000 kHz	H&V	Window channel
EPS-SG-B3	EUMETSAT	≥2037	≥2044	MWI	passive	23800 MHz	4000000 kHz	H&V	Water vapour channel
EPS-SG-B3	EUMETSAT	≥2037	≥2044	MWI	passive	31400 MHz	10000000 kHz	H&V	Window channel
EPS-SG-B3	EUMETSAT	≥2037	≥2044	MWI	passive	50100-53950 MHz	38500000 kHz	H&V	Oxygen band, 4 channels
EPS-SG-B3	EUMETSAT	≥2037	≥2044	MWI	passive	89000 MHz	40000000 kHz	H&V	Window channel
EPS-SG-B3	EUMETSAT	≥2037	≥2044	MWI	passive	115300-122000 MHz	6700000 kHz	V	Oxygen band, 4 channels
EPS-SG-B3	EUMETSAT	≥2037	≥2044	MWI	passive	165500 MHz	29000000 kHz	V	Weak water vapour channel
EPS-SG-B3	EUMETSAT	≥2037	≥2044	MWI	passive	175310-191310 MHz	160000000 kHz	V	Water vapour band, 5 channels
EPS-SG-B3	EUMETSAT	≥2037	≥2044	ICI	passive	175310-191310 MHz	160000000 kHz	V	Water vapour band, 3 channels
EPS-SG-B3	EUMETSAT	≥2037	≥2044	ICI	passive	243200 MHz	80000000 kHz	H&V	Window channel
EPS-SG-B3	EUMETSAT	≥2037	≥2044	ICI	passive	314150-336150 MHz	220000000 kHz	V	Water vapour band, 3 channels
EPS-SG-B3	EUMETSAT	≥2037	≥2044	ICI	passive	439300-456700 MHz	174000000 kHz	V	Water vapour band, 3 channels
EPS-SG-B3	EUMETSAT	≥2037	≥2044	ICI	passive	664000 MHz	340000000 kHz	H&V	Window channel
EPS-SG-B3	EUMETSAT	≥2037	≥2044	SCA	active	5300 MHz			C-band scatterometer
Meteor-M N2	RosHydroMet	08/07/2014	≥2020	MTVZA-GY	passive	10600 MHz	1000000 kHz	H&V	Window channel
Meteor-M N2	RosHydroMet	08/07/2014	≥2020	MTVZA-GY	passive	18700 MHz	2000000 kHz	H&V	Window channel
Meteor-M N2	RosHydroMet	08/07/2014	≥2020	MTVZA-GY	passive	23800 MHz	4000000 kHz	H&V	Water vapour channel
Meteor-M N2	RosHydroMet	08/07/2014	≥2020	MTVZA-GY	passive	31500 MHz	40000000 kHz	H&V	Window channel
Meteor-M N2	RosHydroMet	08/07/2014	≥2020	MTVZA-GY	passive	36700 MHz	40000000 kHz	H&V	Window channel
Meteor-M N2	RosHydroMet	08/07/2014	≥2020	MTVZA-GY	passive	42000 MHz	40000000 kHz	H&V	Window channel
Meteor-M N2	RosHydroMet	08/07/2014	≥2020	MTVZA-GY	passive	48000 MHz	40000000 kHz	H&V	Window channel
Meteor-M N2	RosHydroMet	08/07/2014	≥2020	MTVZA-GY	passive	52800-57713 MHz	49130000 kHz	H or V	Oxygen band, 10 channels
Meteor-M N2	RosHydroMet	08/07/2014	≥2020	MTVZA-GY	passive	91655 MHz	25000000 kHz	H&V	Window channel
Meteor-M N2	RosHydroMet	08/07/2014	≥2020	MTVZA-GY	passive	175560-191060 MHz	155000000 kHz	V	Water vapour band, 3 channels
Meteor-M N2	RosHydroMet	08/07/2014	≥2020	Severjanin-M	active	9623 MHz			X-band SAR1
Meteor-M N2-2	RosHydroMet	05/07/2019	≥2024	MTVZA-GY	passive	10600 MHz	1000000 kHz	H&V	Window channel
Meteor-M N2-2	RosHydroMet	05/07/2019	≥2024	MTVZA-GY	passive	18700 MHz	2000000 kHz	H&V	Window channel
Meteor-M N2-2	RosHydroMet	05/07/2019	≥2024	MTVZA-GY	passive	23800 MHz	4000000 kHz	H&V	Water vapour channel
Meteor-M N2-2	RosHydroMet	05/07/2019	≥2024	MTVZA-GY	passive	31500 MHz	40000000 kHz	H&V	Window channel
Meteor-M N2-2	RosHydroMet	05/07/2019	≥2024	MTVZA-GY	passive	36700 MHz	40000000 kHz	H&V	Window channel
Meteor-M N2-2	RosHydroMet	05/07/2019	≥2024	MTVZA-GY	passive	42000 MHz	40000000 kHz	H&V	Window channel
Meteor-M N2-2	RosHydroMet	05/07/2019	≥2024	MTVZA-GY	passive	48000 MHz	40000000 kHz	H&V	Window channel
Meteor-M N2-2	RosHydroMet	05/07/2019	≥2024	MTVZA-GY	passive	52800-57713 MHz	49130000 kHz	H or V	Oxygen band, 10 channels
Meteor-M N2-2	RosHydroMet	05/07/2019	≥2024	MTVZA-GY	passive	91655 MHz	25000000 kHz	H&V	Window channel
Meteor-M N2-2	RosHydroMet	05/07/2019	≥2024	MTVZA-GY	passive	175560-191060 MHz	155000000 kHz	V	Water vapour band, 3 channels

Satellite	Agency	Launch	EOI	Instrument	Sensing mode	Frequency	Bandwidth	Polarisation	Comments
Meteor-M N2-2	RosHydroMet	05/07/2019	≥2024	MeteoSAR	active	9623 MHz			X-band SAR
Meteor-M N2-3	RosHydroMet	≥2020	≥2025	MTVZA-GY	passive	10600 MHz	100000 kHz	H&V	Window channel
Meteor-M N2-3	RosHydroMet	≥2020	≥2025	MTVZA-GY	passive	18700 MHz	200000 kHz	H&V	Window channel
Meteor-M N2-3	RosHydroMet	≥2020	≥2025	MTVZA-GY	passive	23800 MHz	400000 kHz	H&V	Water vapour channel
Meteor-M N2-3	RosHydroMet	≥2020	≥2025	MTVZA-GY	passive	31500 MHz	400000 kHz	H&V	Window channel
Meteor-M N2-3	RosHydroMet	≥2020	≥2025	MTVZA-GY	passive	36700 MHz	400000 kHz	H&V	Window channel
Meteor-M N2-3	RosHydroMet	≥2020	≥2025	MTVZA-GY	passive	42000 MHz	400000 kHz	H&V	Window channel
Meteor-M N2-3	RosHydroMet	≥2020	≥2025	MTVZA-GY	passive	48000 MHz	400000 kHz	H&V	Window channel
Meteor-M N2-3	RosHydroMet	≥2020	≥2025	MTVZA-GY	passive	52800-57713 MHz	4913000 kHz	H or V	Oxygen band, 10 channels
Meteor-M N2-3	RosHydroMet	≥2020	≥2025	MTVZA-GY	passive	91655 MHz	2500000 kHz	H&V	Window channel
Meteor-M N2-3	RosHydroMet	≥2020	≥2025	MTVZA-GY	passive	175560-191060 MHz	15500000 kHz	V	Water vapour band, 3 channels
Meteor-M N2-3	RosHydroMet	≥2020	≥2025	MeteoSAR	active	9623 MHz			X-band SAR
Meteor-M N2-4	RosHydroMet	≥2021	≥2026	MTVZA-GY	passive	10600 MHz	100000 kHz	H&V	Window channel
Meteor-M N2-4	RosHydroMet	≥2021	≥2026	MTVZA-GY	passive	18700 MHz	200000 kHz	H&V	Window channel
Meteor-M N2-4	RosHydroMet	≥2021	≥2026	MTVZA-GY	passive	23800 MHz	400000 kHz	H&V	Water vapour channel
Meteor-M N2-4	RosHydroMet	≥2021	≥2026	MTVZA-GY	passive	31500 MHz	400000 kHz	H&V	Window channel
Meteor-M N2-4	RosHydroMet	≥2021	≥2026	MTVZA-GY	passive	36700 MHz	400000 kHz	H&V	Window channel
Meteor-M N2-4	RosHydroMet	≥2021	≥2026	MTVZA-GY	passive	42000 MHz	400000 kHz	H&V	Window channel
Meteor-M N2-4	RosHydroMet	≥2021	≥2026	MTVZA-GY	passive	48000 MHz	400000 kHz	H&V	Window channel
Meteor-M N2-4	RosHydroMet	≥2021	≥2026	MTVZA-GY	passive	52800-57713 MHz	4913000 kHz	H or V	Oxygen band, 10 channels
Meteor-M N2-4	RosHydroMet	≥2021	≥2026	MTVZA-GY	passive	91655 MHz	2500000 kHz	H&V	Window channel
Meteor-M N2-4	RosHydroMet	≥2021	≥2026	MTVZA-GY	passive	175560-191060 MHz	15500000 kHz	V	Water vapour band, 3 channels
Meteor-M N2-4	RosHydroMet	≥2021	≥2026	MeteoSAR	active	9623 MHz			X-band SAR
Meteor-M N2-5	RosHydroMet	≥2023	≥2028	MTVZA-GY	passive	10600 MHz	100000 kHz	H&V	Window channel
Meteor-M N2-5	RosHydroMet	≥2023	≥2028	MTVZA-GY	passive	18700 MHz	200000 kHz	H&V	Window channel
Meteor-M N2-5	RosHydroMet	≥2023	≥2028	MTVZA-GY	passive	23800 MHz	400000 kHz	H&V	Water vapour channel
Meteor-M N2-5	RosHydroMet	≥2023	≥2028	MTVZA-GY	passive	31500 MHz	400000 kHz	H&V	Window channel
Meteor-M N2-5	RosHydroMet	≥2023	≥2028	MTVZA-GY	passive	36700 MHz	400000 kHz	H&V	Window channel
Meteor-M N2-5	RosHydroMet	≥2023	≥2028	MTVZA-GY	passive	42000 MHz	400000 kHz	H&V	Window channel
Meteor-M N2-5	RosHydroMet	≥2023	≥2028	MTVZA-GY	passive	48000 MHz	400000 kHz	H&V	Window channel
Meteor-M N2-5	RosHydroMet	≥2023	≥2028	MTVZA-GY	passive	52800-57713 MHz	4913000 kHz	H or V	Oxygen band, 10 channels
Meteor-M N2-5	RosHydroMet	≥2023	≥2028	MTVZA-GY	passive	91655 MHz	2500000 kHz	H&V	Window channel
Meteor-M N2-5	RosHydroMet	≥2023	≥2028	MTVZA-GY	passive	175560-191060 MHz	15500000 kHz	V	Water vapour band, 3 channels
Meteor-M N2-5	RosHydroMet	≥2023	≥2028	MeteoSAR	active	9623 MHz			X-band SAR
Meteor-M N2-6	RosHydroMet	≥2024	≥2029	MTVZA-GY	passive	10600 MHz	100000 kHz	H&V	Window channel
Meteor-M N2-6	RosHydroMet	≥2024	≥2029	MTVZA-GY	passive	18700 MHz	200000 kHz	H&V	Window channel
Meteor-M N2-6	RosHydroMet	≥2024	≥2029	MTVZA-GY	passive	23800 MHz	400000 kHz	H&V	Water vapour channel
Meteor-M N2-6	RosHydroMet	≥2024	≥2029	MTVZA-GY	passive	31500 MHz	400000 kHz	H&V	Window channel
Meteor-M N2-6	RosHydroMet	≥2024	≥2029	MTVZA-GY	passive	36700 MHz	400000 kHz	H&V	Window channel
Meteor-M N2-6	RosHydroMet	≥2024	≥2029	MTVZA-GY	passive	42000 MHz	400000 kHz	H&V	Window channel
Meteor-M N2-6	RosHydroMet	≥2024	≥2029	MTVZA-GY	passive	48000 MHz	400000 kHz	H&V	Window channel
Meteor-M N2-6	RosHydroMet	≥2024	≥2029	MTVZA-GY	passive	52800-57713 MHz	4913000 kHz	H or V	Oxygen band, 10 channels
Meteor-M N2-6	RosHydroMet	≥2024	≥2029	MTVZA-GY	passive	91655 MHz	2500000 kHz	H&V	Window channel
Meteor-M N2-6	RosHydroMet	≥2024	≥2029	MTVZA-GY	passive	175560-191060 MHz	15500000 kHz	V	Water vapour band, 3 channels

Satellite	Agency	Launch	EOI	Instrument	Sensing mode	Frequency	Bandwidth	Polarisation	Comments
Meteor-M N2-6	RosHydroMet	≥2024	≥2029	MeteoSAR	active	9623 MHz			X-band SAR
Meteor-MP N1	RosHydroMet	≥2025	≥2032	MTVZA-GY-MP	passive	6900 MHz	400000 kHz	H&V	Window channel
Meteor-MP N1	RosHydroMet	≥2025	≥2032	MTVZA-GY-MP	passive	10600 MHz	1000000 kHz	H&V	Window channel
Meteor-MP N1	RosHydroMet	≥2025	≥2032	MTVZA-GY-MP	passive	18700 MHz	200000 kHz	H&V	Window channel
Meteor-MP N1	RosHydroMet	≥2025	≥2032	MTVZA-GY-MP	passive	23800 MHz	400000 kHz	H&V	Water vapour channel
Meteor-MP N1	RosHydroMet	≥2025	≥2032	MTVZA-GY-MP	passive	31500 MHz	400000 kHz	H&V	Window channel
Meteor-MP N1	RosHydroMet	≥2025	≥2032	MTVZA-GY-MP	passive	36700 MHz	400000 kHz	H&V	Window channel
Meteor-MP N1	RosHydroMet	≥2025	≥2032	MTVZA-GY-MP	passive	51900-57713 MHz	5813000 kHz	H or V	Oxygen band, 11 channels
Meteor-MP N1	RosHydroMet	≥2025	≥2032	MTVZA-GY-MP	passive	91655 MHz	2500000 kHz	H&V	Window channel
Meteor-MP N1	RosHydroMet	≥2025	≥2032	MTVZA-GY-MP	passive	175560-191060 MHz	15500000 kHz	V	Water vapour band, 3 channels
Meteor-MP N1	RosHydroMet	≥2025	≥2032	BRLK "Briz"	active	9623 MHz			X-band SAR
Meteor-MP N2	RosHydroMet	≥2026	≥2033	MTVZA-GY-MP	passive	6900 MHz	400000 kHz	H&V	Window channel
Meteor-MP N2	RosHydroMet	≥2026	≥2033	MTVZA-GY-MP	passive	10600 MHz	1000000 kHz	H&V	Window channel
Meteor-MP N2	RosHydroMet	≥2026	≥2033	MTVZA-GY-MP	passive	18700 MHz	200000 kHz	H&V	Window channel
Meteor-MP N2	RosHydroMet	≥2026	≥2033	MTVZA-GY-MP	passive	23800 MHz	400000 kHz	H&V	Water vapour channel
Meteor-MP N2	RosHydroMet	≥2026	≥2033	MTVZA-GY-MP	passive	31500 MHz	400000 kHz	H&V	Window channel
Meteor-MP N2	RosHydroMet	≥2026	≥2033	MTVZA-GY-MP	passive	36700 MHz	400000 kHz	H&V	Window channel
Meteor-MP N2	RosHydroMet	≥2026	≥2033	MTVZA-GY-MP	passive	51900-57713 MHz	5813000 kHz	H or V	Oxygen band, 11 channels
Meteor-MP N2	RosHydroMet	≥2026	≥2033	MTVZA-GY-MP	passive	91655 MHz	2500000 kHz	H&V	Window channel
Meteor-MP N2	RosHydroMet	≥2026	≥2033	MTVZA-GY-MP	passive	175560-191060 MHz	15500000 kHz	V	Water vapour band, 3 channels
Meteor-MP N2	RosHydroMet	≥2026	≥2033	BRLK "Briz"	active	9623 MHz			X-band SAR
FY-3B	CMA	04/11/2010	≥2020	MWRI	passive	10650 MHz	180000 kHz	H&V	Window channel
FY-3B	CMA	04/11/2010	≥2020	MWRI	passive	18700 MHz	200000 kHz	H&V	Window channel
FY-3B	CMA	04/11/2010	≥2020	MWRI	passive	23800 MHz	400000 kHz	H&V	Water vapour channel
FY-3B	CMA	04/11/2010	≥2020	MWRI	passive	36500 MHz	400000 kHz	H&V	Window channel
FY-3B	CMA	04/11/2010	≥2020	MWRI	passive	89000 MHz	3000000 kHz	H&V	Window channel
FY-3B	CMA	04/11/2010	≥2020	MWTS-1	passive	50210-57455 MHz	7245000 kHz	H or V	Oxygen band, 4 channels
FY-3B	CMA	04/11/2010	≥2020	MWHS-1	passive	150000 MHz	1000000 kHz	H&V	Weak water vapour channel
FY-3B	CMA	04/11/2010	≥2020	MWHS-1	passive	175310-191310 MHz	16000000 kHz	V	Water vapour band, 3 channels
FY-3C	CMA	23/09/2013	≥2020	MWRI	passive	10650 MHz	180000 kHz	H&V	Window channel
FY-3C	CMA	23/09/2013	≥2020	MWRI	passive	18700 MHz	200000 kHz	H&V	Window channel
FY-3C	CMA	23/09/2013	≥2020	MWRI	passive	23800 MHz	400000 kHz	H&V	Water vapour channel
FY-3C	CMA	23/09/2013	≥2020	MWRI	passive	36500 MHz	400000 kHz	H&V	Window channel
FY-3C	CMA	23/09/2013	≥2020	MWRI	passive	89000 MHz	3000000 kHz	H&V	Window channel
FY-3C	CMA	23/09/2013	≥2020	MWTS-2	passive	50210-57455 MHz	7245000 kHz	H or V	Oxygen band, 13 channels
FY-3C	CMA	23/09/2013	≥2020	MWHS-2	passive	89000 MHz	1500000 kHz	H&V	Window channel
FY-3C	CMA	23/09/2013	≥2020	MWHS-2	passive	112750-124750 MHz	12000000 kHz	H	Oxygen band, 8 channels
FY-3C	CMA	23/09/2013	≥2020	MWHS-2	passive	150000 MHz	1500000 kHz	V	Weak water vapour channel
FY-3C	CMA	23/09/2013	≥2020	MWHS-2	passive	175310-191310 MHz	16000000 kHz	H	Water vapour band, 5 channels
FY-3D	CMA	14/11/2017	≥2022	MWRI	passive	10650 MHz	180000 kHz	H&V	Window channel
FY-3D	CMA	14/11/2017	≥2022	MWRI	passive	18700 MHz	200000 kHz	H&V	Window channel
FY-3D	CMA	14/11/2017	≥2022	MWRI	passive	23800 MHz	400000 kHz	H&V	Water vapour channel
FY-3D	CMA	14/11/2017	≥2022	MWRI	passive	36500 MHz	400000 kHz	H&V	Window channel
FY-3D	CMA	14/11/2017	≥2022	MWRI	passive	89000 MHz	3000000 kHz	H&V	Window channel



Satellite	Agency	Launch	EOI	Instrument	Sensing mode	Frequency	Bandwidth	Polarisation	Comments
FY-3D	CMA	14/11/2017	≥2022	MWTS-2	passive	50210-57455 MHz	7245000 kHz	H or V	Oxygen band, 13 channels
FY-3D	CMA	14/11/2017	≥2022	MWHS-2	passive	89000 MHz	1500000 kHz	V	Window channel
FY-3D	CMA	14/11/2017	≥2022	MWHS-2	passive	112750-124750 MHz	12000000 kHz	H	Oxygen band, 8 channels
FY-3D	CMA	14/11/2017	≥2022	MWHS-2	passive	150000 MHz	1500000 kHz	V	Weak water vapour channel
FY-3D	CMA	14/11/2017	≥2022	MWHS-2	passive	175310-191310 MHz	16000000 kHz	H	Water vapour band, 5 channels
FY-3E	CMA	≥2020	≥2025	MWTS-2	passive	50210-57455 MHz	7245000 kHz	H or V	Oxygen band, 13 channels
FY-3E	CMA	≥2020	≥2025	MWHS-2	passive	89000 MHz	1500000 kHz	V	Window channel
FY-3E	CMA	≥2020	≥2025	MWHS-2	passive	112750-124750 MHz	12000000 kHz	H	Oxygen band, 8 channels
FY-3E	CMA	≥2020	≥2025	MWHS-2	passive	150000 MHz	1500000 kHz	V	Weak water vapour channel
FY-3E	CMA	≥2020	≥2025	MWHS-2	passive	175310-191310 MHz	16000000 kHz	H	Water vapour band, 5 channels
FY-3E	CMA	≥2020	≥2025	WindRad	active	5300 MHz			C-band scatterometer
FY-3E	CMA	≥2020	≥2025	WindRad	active	13265 MHz			Ku-band scatterometer
FY-3F	CMA	≥2021	≥2026	MWRI	passive	10650 MHz	180000 kHz	H&V	Window channel
FY-3F	CMA	≥2021	≥2026	MWRI	passive	18700 MHz	200000 kHz	H&V	Window channel
FY-3F	CMA	≥2021	≥2026	MWRI	passive	23800 MHz	400000 kHz	H&V	Water vapour channel
FY-3F	CMA	≥2021	≥2026	MWRI	passive	36500 MHz	400000 kHz	H&V	Window channel
FY-3F	CMA	≥2021	≥2026	MWRI	passive	89000 MHz	3000000 kHz	H&V	Window channel
FY-3F	CMA	≥2021	≥2026	MWTS-3	passive	23800 MHz	270000 kHz	H&V	Water vapour channel
FY-3F	CMA	≥2021	≥2026	MWTS-3	passive	31400 MHz	180000 kHz	H&V	Window channel
FY-3F	CMA	≥2021	≥2026	MWTS-3	passive	50210-57455 MHz	7245000 kHz	H or V	Oxygen band, 13 channels
FY-3F	CMA	≥2021	≥2026	MWHS-2	passive	89000 MHz	1500000 kHz	V	Window channel
FY-3F	CMA	≥2021	≥2026	MWHS-2	passive	112750-124750 MHz	12000000 kHz	H	Oxygen band, 8 channels
FY-3F	CMA	≥2021	≥2026	MWHS-2	passive	150000 MHz	1500000 kHz	V	Weak water vapour channel
FY-3F	CMA	≥2021	≥2026	MWHS-2	passive	175310-191310 MHz	16000000 kHz	H	Water vapour band, 5 channels
FY-3G	CMA	≥2022	≥2027	MWRI	passive	10650 MHz	180000 kHz	H&V	Window channel
FY-3G	CMA	≥2022	≥2027	MWRI	passive	18700 MHz	200000 kHz	H&V	Window channel
FY-3G	CMA	≥2022	≥2027	MWRI	passive	23800 MHz	400000 kHz	H&V	Water vapour channel
FY-3G	CMA	≥2022	≥2027	MWRI	passive	36500 MHz	400000 kHz	H&V	Window channel
FY-3G	CMA	≥2022	≥2027	MWRI	passive	89000 MHz	3000000 kHz	H&V	Window channel
FY-3G	CMA	≥2022	≥2027	MWTS-3	passive	23800 MHz	270000 kHz	H or V	Window channel
FY-3G	CMA	≥2022	≥2027	MWTS-3	passive	31400 MHz	180000 kHz	H or V	Water vapour channel
FY-3G	CMA	≥2022	≥2027	MWTS-3	passive	50210-57455 MHz	7245000 kHz	H or V	Oxygen band, 13 channels
FY-3G	CMA	≥2022	≥2027	MWHS-2	passive	89000 MHz	1500000 kHz	V	Window channel
FY-3G	CMA	≥2022	≥2027	MWHS-2	passive	112750-124750 MHz	12000000 kHz	H	Oxygen band, 8 channels
FY-3G	CMA	≥2022	≥2027	MWHS-2	passive	150000 MHz	1500000 kHz	V	Weak water vapour channel
FY-3G	CMA	≥2022	≥2027	MWHS-2	passive	175310-191310 MHz	16000000 kHz	H	Water vapour band, 5 channels
FY-3H	CMA	≥2024	≥2029	MWTS-3	passive	23800 MHz	270000 kHz	H or V	Water vapour channel
FY-3H	CMA	≥2024	≥2029	MWTS-3	passive	31400 MHz	180000 kHz	H or V	Window channel
FY-3H	CMA	≥2024	≥2029	MWTS-3	passive	50210-57455 MHz	7245000 kHz	H or V	Oxygen band, 13 channels
FY-3H	CMA	≥2024	≥2029	MWHS-2	passive	89000 MHz	1500000 kHz	V	Window channel
FY-3H	CMA	≥2024	≥2029	MWHS-2	passive	112750-124750 MHz	12000000 kHz	H	Oxygen band, 8 channels
FY-3H	CMA	≥2024	≥2029	MWHS-2	passive	150000 MHz	1500000 kHz	V	Weak water vapour channel
FY-3H	CMA	≥2024	≥2029	MWHS-2	passive	175310-191310 MHz	16000000 kHz	H	Water vapour band, 5 channels
FY-3H	CMA	≥2024	≥2029	WindRad	active	13265 MHz			Ku-band scatterometer

Satellite	Agency	Launch	EOl	Instrument	Sensing mode	Frequency	Bandwidth	Polarisation	Comments
FY-3H	CMA	≥2024	≥2029	WindRad	active	5300 MHz			C-band scatterometer
FY-3RM-1	CMA	≥2020	≥2025	MWRI	passive	10650 MHz	180000 kHz	H&V	Window channel
FY-3RM-1	CMA	≥2020	≥2025	MWRI	passive	18700 MHz	200000 kHz	H&V	Window channel
FY-3RM-1	CMA	≥2020	≥2025	MWRI	passive	23800 MHz	400000 kHz	H&V	Water vapour channel
FY-3RM-1	CMA	≥2020	≥2025	MWRI	passive	36500 MHz	400000 kHz	H&V	Window channel
FY-3RM-1	CMA	≥2020	≥2025	MWRI	passive	89000 MHz	3000000 kHz	H&V	Window channel
FY-3RM-1	CMA	≥2020	≥2025	MWTS-3	passive	23800 MHz	270000 kHz	H or V	Water vapour channel
FY-3RM-1	CMA	≥2020	≥2025	MWTS-3	passive	31400 MHz	180000 kHz	H or V	Window channel
FY-3RM-1	CMA	≥2020	≥2025	MWTS-3	passive	50210-57455 MHz	7245000 kHz	H or V	Oxygen band, 13 channels
FY-3RM-1	CMA	≥2020	≥2025	MWHS-2	passive	89000 MHz	1500000 kHz	V	Window channel
FY-3RM-1	CMA	≥2020	≥2025	MWHS-2	passive	112750-124750 MHz	12000000 kHz	H	Oxygen band, 8 channels
FY-3RM-1	CMA	≥2020	≥2025	MWHS-2	passive	150000 MHz	1500000 kHz	V	Weak water vapour channel
FY-3RM-1	CMA	≥2020	≥2025	MWHS-2	passive	175310-191310 MHz	16000000 kHz	H	Water vapour band, 5 channels
FY-3RM-1	CMA	≥2020	≥2025	Rainradar	active	13600 MHz			Ku-band precipitation radar
FY-3RM-1	CMA	≥2020	≥2025	Rainradar	active	35550 MHz			Ka-band precipitation radar
FY-3RM-2	CMA	≥2023	≥2028	MWRI	passive	10650 MHz	180000 kHz	H&V	Window channel
FY-3RM-2	CMA	≥2023	≥2028	MWRI	passive	18700 MHz	200000 kHz	H&V	Window channel
FY-3RM-2	CMA	≥2023	≥2028	MWRI	passive	23800 MHz	400000 kHz	H&V	Water vapour channel
FY-3RM-2	CMA	≥2023	≥2028	MWRI	passive	36500 MHz	400000 kHz	H&V	Window channel
FY-3RM-2	CMA	≥2023	≥2028	MWRI	passive	89000 MHz	3000000 kHz	H&V	Window channel
FY-3RM-2	CMA	≥2023	≥2028	MWTS-3	passive	23800 MHz	270000 kHz	H or V	Water vapour channel
FY-3RM-2	CMA	≥2023	≥2028	MWTS-3	passive	31400 MHz	180000 kHz	H or V	Window channel
FY-3RM-2	CMA	≥2023	≥2028	MWTS-3	passive	50210-57455 MHz	7245000 kHz	H or V	Oxygen band, 13 channels
FY-3RM-2	CMA	≥2023	≥2028	MWHS-2	passive	89000 MHz	1500000 kHz	V	Window channel
FY-3RM-2	CMA	≥2023	≥2028	MWHS-2	passive	112750-124750 MHz	12000000 kHz	H	Oxygen band, 8 channels
FY-3RM-2	CMA	≥2023	≥2028	MWHS-2	passive	150000 MHz	1500000 kHz	V	Weak water vapour channel
FY-3RM-2	CMA	≥2023	≥2028	MWHS-2	passive	175310-191310 MHz	16000000 kHz	H	Water vapour band, 5 channels
FY-3RM-2	CMA	≥2023	≥2028	Rainradar	active	35550 MHz			Ka-band precipitation radar
FY-3RM-2	CMA	≥2023	≥2028	Rainradar	active	13600 MHz			Ku-band precipitation radar
Coriolis	DoD	06/01/2003	≥2020	WindSat	passive	6800 MHz	125000 kHz	H&V	Window channel
Coriolis	DoD	06/01/2003	≥2020	WindSat	passive	10700 MHz	300000 kHz	V+H+P+M+L+R	Window channel
Coriolis	DoD	06/01/2003	≥2020	WindSat	passive	18700 MHz	750000 kHz	V+H+P+M+L+R	Window channel
Coriolis	DoD	06/01/2003	≥2020	WindSat	passive	23800 MHz	500000 kHz	H&V	Water vapour channel
Coriolis	DoD	06/01/2003	≥2020	WindSat	passive	37000 MHz	2000000 kHz	V+H+P+M+L+R	Window channel
Aqua	NASA	04/05/2002	≥2020	AMSR-E	passive	6925 MHz	350000 kHz	H&V	Window channel
Aqua	NASA	04/05/2002	≥2020	AMSR-E	passive	10650 MHz	100000 kHz	H&V	Window channel
Aqua	NASA	04/05/2002	≥2020	AMSR-E	passive	18700 MHz	200000 kHz	H&V	Window channel
Aqua	NASA	04/05/2002	≥2020	AMSR-E	passive	23800 MHz	400000 kHz	H&V	Water vapour channel
Aqua	NASA	04/05/2002	≥2020	AMSR-E	passive	36500 MHz	1000000 kHz	H&V	Window channel
Aqua	NASA	04/05/2002	≥2020	AMSR-E	passive	89000 MHz	3000000 kHz	H&V	Window channel
Aqua	NASA	04/05/2002	≥2020	AMSU-A	passive	23800 MHz	270000 kHz	V	Water vapour channel
Aqua	NASA	04/05/2002	≥2020	AMSU-A	passive	31400 MHz	180000 kHz	V	Window channel
Aqua	NASA	04/05/2002	≥2020	AMSU-A	passive	50120-57620 MHz	7500000 kHz	H or V	Oxygen band, 12 channels
Aqua	NASA	04/05/2002	≥2020	AMSU-A	passive	89000 MHz	6000000 kHz	V	Window channel

Satellite	Agency	Launch	EoL	Instrument	Sensing mode	Frequency	Bandwidth	Polarisation	Comments
Aqua	NASA	04/05/2002	≥2020	HSB	passive	150000 MHz	1000000 kHz	V	Weak water vapour channel
Aqua	NASA	04/05/2002	≥2020	HSB	passive	175310-191310 MHz	16000000 kHz	V	Water vapour band, 3 channels
Aura	NASA	15/07/2004	≥2020	MLS	passive	112150-123850 MHz	11700000 kHz		9 sub-bands, for temperature and pressure
Aura	NASA	15/07/2004	≥2020	MLS	passive	186100-193900 MHz	7800000 kHz		6 sub-bands, mainly for H2O and HNO3
Aura	NASA	15/07/2004	≥2020	MLS	passive	235450-244550 MHz	9100000 kHz		7 sub-bands, mainly for O3 and CO
Aura	NASA	15/07/2004	≥2020	MLS	passive	634150-645850 MHz	11700000 kHz		9 sub-bands, mainly for N2O, HCl, ClO, HOCl, BrO, HO2 and SO2
Aura	NASA	15/07/2004	≥2020	MLS	passive	2496750-2503250 MHz	6500000 kHz		5 sub-bands, mainly for OH
GPM Core Obs.	NASA	27/02/2014	≥2020	GMI	passive	10650 MHz	100000 kHz	H&V	Window channel
GPM Core Obs.	NASA	27/02/2014	≥2020	GMI	passive	18700 MHz	200000 kHz	H&V	Window channel
GPM Core Obs.	NASA	27/02/2014	≥2020	GMI	passive	23800 MHz	400000 kHz	V	Water vapour channel
GPM Core Obs.	NASA	27/02/2014	≥2020	GMI	passive	36500 MHz	1000000 kHz	H&V	Window channel
GPM Core Obs.	NASA	27/02/2014	≥2020	GMI	passive	89000 MHz	6000000 kHz	H&V	Window channel
GPM Core Obs.	NASA	27/02/2014	≥2020	GMI	passive	166000 MHz	4000000 kHz	H&V	Weak water vapour channel
GPM Core Obs.	NASA	27/02/2014	≥2020	GMI	passive	175310-191310 MHz	16000000 kHz	V	Water vapour band, 2 channels
GPM Core Obs.	NASA	27/02/2014	≥2020	DPR	active	13600 MHz			Ku-band precipitation radar
GPM Core Obs.	NASA	27/02/2014	≥2020	DPR	active	35550 MHz			Ka-band precipitation radar
CloudSat	NASA	28/04/2006	≥2020	CPR	active	94050 MHz			W-band precipitation radar
ISS RainCube	NASA	21/05/2018	≥2021	RainCube	active	35750 MHz			Ka-band precipitation radar
ISS COWVR	NASA	≥2021	≥2024	COWVR	passive	18700 MHz	780000 kHz	V+H+P+M+L+R	Window channel
ISS COWVR	NASA	≥2021	≥2024	COWVR	passive	23800 MHz	475000 kHz	V+H+P+M+L+R	Water vapour channel
ISS COWVR	NASA	≥2021	≥2024	COWVR	passive	39900 MHz	1975000 kHz	V+H+P+M+L+R	Window channel
JASON-3	NASA	17/01/2016	≥2021	Poseidon-3B	active	5300 MHz			C-band radar altimeter
JASON-3	NASA	17/01/2016	≥2021	Poseidon-3B	active	13575 MHz			Ku-band radar altimeter
JASON-3	NASA	17/01/2016	≥2021	AMR	passive	18700 MHz	200000 kHz		Window channel (supporting altimeter)
JASON-3	NASA	17/01/2016	≥2021	AMR	passive	23800 MHz	400000 kHz		Water vapour channel (supporting altimeter)
JASON-3	NASA	17/01/2016	≥2021	AMR	passive	34000 MHz	400000 kHz		Window channel (supporting altimeter)
JASON-CS-A	NASA	≥2020	≥2027	SRAL	active	5300 MHz			C-band radar altimeter
JASON-CS-A	NASA	≥2020	≥2027	SRAL	active	13580 MHz			Ku-band radar altimeter
JASON-CS-A	NASA	≥2020	≥2027	AMR-C	passive	18700 MHz	200000 kHz		Window channel
JASON-CS-A	NASA	≥2020	≥2027	AMR-C	passive	23800 MHz	400000 kHz		Water vapour channel
JASON-CS-A	NASA	≥2020	≥2027	AMR-C	passive	34000 MHz	400000 kHz		Window channel
JASON-CS-B	NASA	≥2025	≥2032	SRAL	active	5300 MHz			C-band radar altimeter
JASON-CS-B	NASA	≥2025	≥2032	SRAL	active	13580 MHz			Ku-band radar altimeter
JASON-CS-B	NASA	≥2025	≥2032	AMR-C	passive	18700 MHz	200000 kHz		Window channel
JASON-CS-B	NASA	≥2025	≥2032	AMR-C	passive	23800 MHz	400000 kHz		Water vapour channel
JASON-CS-B	NASA	≥2025	≥2032	AMR-C	passive	34000 MHz	400000 kHz		Window channel
SWOT	NASA	≥2021	≥2024	KaRIN	active	35500 MHz			Ka-band radar altimeter
SWOT	NASA	≥2021	≥2024	Altimeter	active	5300 MHz			C-band radar altimeter
SWOT	NASA	≥2021	≥2024	Altimeter	active	13580 MHz			Ku-band radar altimeter
SWOT	NASA	≥2021	≥2024	MW radiometer	passive	18700 MHz	200000 kHz		Window channel (supporting altimeters)
SWOT	NASA	≥2021	≥2024	MW radiometer	passive	23800 MHz	400000 kHz		Water vapour channel (supporting altimeters)
SWOT	NASA	≥2021	≥2024	MW radiometer	passive	34000 MHz	400000 kHz		Window channel (supporting altimeters)
NI-SAR	NASA	≥2022	≥2027	SAR-L	active	1260 MHz			L-band SAR
NI-SAR	NASA	≥2022	≥2027	SAR-S	active	3200 MHz			S-band SAR

Satellite	Agency	Launch	EOl	Instrument	Sensing mode	Frequency	Bandwidth	Polarisation	Comments
Sentinel-1A	ESA	03/04/2014	≥2021	SAR-C	active	5405 MHz			C-band SAR
Sentinel-1B	ESA	25/04/2016	≥2023	SAR-C	active	5405 MHz			C-band SAR
Sentinel-1C	ESA	≥2022	≥2029	SAR-C	active	5405 MHz			C-band SAR
Sentinel-1D	ESA	≥2023	≥2030	SAR-C	active	5405 MHz			C-band SAR
Sentinel-3A	ESA	16/02/2016	≥2023	SRAL	active	5410 MHz			C-band radar altimeter
Sentinel-3A	ESA	16/02/2016	≥2023	SRAL	active	13575 MHz			Ku-band radar altimeter
Sentinel-3A	ESA	16/02/2016	≥2023	MWR	passive	23800 MHz	200000 kHz		Water vapour channel (supporting altimeter)
Sentinel-3A	ESA	16/02/2016	≥2023	MWR	passive	36500 MHz	200000 kHz		Window channel (supporting altimeter)
Sentinel-3B	ESA	25/04/2018	≥2025	SRAL	active	5410 MHz			C-band radar altimeter
Sentinel-3B	ESA	25/04/2018	≥2025	SRAL	active	13575 MHz			Ku-band radar altimeter
Sentinel-3B	ESA	25/04/2018	≥2025	MWR	passive	23800 MHz	200000 kHz		Water vapour channel (supporting altimeter)
Sentinel-3B	ESA	25/04/2018	≥2025	MWR	passive	36500 MHz	200000 kHz		Window channel (supporting altimeter)
Sentinel-3C	ESA	≥2023	≥2030	SRAL	active	5410 MHz			C-band radar altimeter
Sentinel-3C	ESA	≥2023	≥2030	SRAL	active	13575 MHz			Ku-band radar altimeter
Sentinel-3C	ESA	≥2023	≥2030	MWR	passive	23800 MHz	200000 kHz		Water vapour channel (supporting altimeter)
Sentinel-3C	ESA	≥2023	≥2030	MWR	passive	36500 MHz	200000 kHz		Window channel (supporting altimeter)
Sentinel-3D	ESA	≥2025	≥2032	SRAL	active	5410 MHz			C-band radar altimeter
Sentinel-3D	ESA	≥2025	≥2032	SRAL	active	13575 MHz			Ku-band radar altimeter
Sentinel-3D	ESA	≥2025	≥2032	MWR	passive	23800 MHz	200000 kHz		Water vapour channel (supporting altimeter)
Sentinel-3D	ESA	≥2025	≥2032	MWR	passive	36500 MHz	200000 kHz		Window channel (supporting altimeter)
SMOS	ESA	02/11/2009	≥2020	MIRAS	passive	1413.5 MHz	27000 kHz	H&V	L-band synthetic aperture radiometer
CryoSat-2	ESA	08/04/2010	≥2020	SIRAL	active	13560 MHz			Ku-band radar altimeter
EarthCARE	ESA	≥2021	≥2024	CPR	active	94050 MHz			W-band precipitation radar
BIOMASS	ESA	≥2022	≥2027	SAR-P	active	435 MHz			P-band SAR
OceanSat-2	ISRO	23/09/2009	≥2020	OSCAT	active	13515 MHz			Ku-band scatterometer
ScatSat-1	ISRO	26/09/2016	≥2021	OSCAT	active	13515 MHz			Ku-band scatterometer
OceanSat-3	ISRO	≥2020	≥2025	OSCAT	active	13515 MHz			Ku-band scatterometer
OceanSat-3A	ISRO	≥2020	≥2025	OSCAT	active	13515 MHz			Ku-band scatterometer
RISAT-1A	ISRO	≥2020	≥2025	SAR-C	active	5350 MHz			C-band SAR
RISAT-2	ISRO	20/04/2009	≥2020	SAR-X	active	9590 MHz			X-band SAR
RISAT-2B	ISRO	22/05/2019	≥2024	SAR-X	active	9590 MHz			X-band SAR
RISAT-2BR1	ISRO	11/12/2019	≥2024	SAR-X	active	9590 MHz			X-band SAR
RISAT-2BR2	ISRO	≥2020	≥2025	SAR-X	active	9590 MHz			X-band SAR
Megha-Tropiques	ISRO	12/10/2011	≥2020	MADRAS	passive	18700 MHz	200000 kHz	TBD	Window channel
Megha-Tropiques	ISRO	12/10/2011	≥2020	MADRAS	passive	23800 MHz	400000 kHz	V	Water vapour channel
Megha-Tropiques	ISRO	12/10/2011	≥2020	MADRAS	passive	36500 MHz	1000000 kHz	H&V	Window channel
Megha-Tropiques	ISRO	12/10/2011	≥2020	MADRAS	passive	89000 MHz	1700000 kHz	H&V	Window channel
Megha-Tropiques	ISRO	12/10/2011	≥2020	MADRAS	passive	157000 MHz	1700000 kHz	H&V	Weak water vapour channel
Megha-Tropiques	ISRO	12/10/2011	≥2020	SAPHIR	passive	171310-195310 MHz	24000000 kHz	H	Water vapour band, 6 channels
GCOM-W	JAXA	17/05/2012	≥2020	AMSR-2	passive	6925 MHz	350000 kHz	H&V	Window channel
GCOM-W	JAXA	17/05/2012	≥2020	AMSR-2	passive	7300 MHz	350000 kHz	H&V	Window channel
GCOM-W	JAXA	17/05/2012	≥2020	AMSR-2	passive	10650 MHz	100000 kHz	H&V	Window channel
GCOM-W	JAXA	17/05/2012	≥2020	AMSR-2	passive	18700 MHz	200000 kHz	H&V	Window channel

Satellite	Agency	Launch	EOl	Instrument	Sensing mode	Frequency	Bandwidth	Polarisation	Comments
GCOM-W	JAXA	17/05/2012	≥2020	AMSR-2	passive	23800 MHz	400000 kHz	H&V	Water vapour channel
GCOM-W	JAXA	17/05/2012	≥2020	AMSR-2	passive	36500 MHz	1000000 kHz	H&V	Window channel
GCOM-W	JAXA	17/05/2012	≥2020	AMSR-2	passive	89000 MHz	3000000 kHz	H&V	Window channel
COMPIRA	JAXA	≥2020	≥2025	Altimeter	active	5300 MHz			C-band radar altimeter
COMPIRA	JAXA	≥2020	≥2025	Altimeter	active	13500 MHz			Ku-band radar altimeter
COMPIRA	JAXA	≥2020	≥2025	SHIOSAI	active	9500 MHz			X-band radar altimeter
ALOS-2	JAXA	24/05/2014	≥2020	PALSAR-2	active	1270 MHz			L-band SAR
ALOS-4	JAXA	≥2020	≥2027	PALSAR-3	active	1270 MHz			L-band SAR
HY-2A	NSOAS	15/08/2011	≥2020	MWI	passive	6600 MHz	350000 kHz	H&V	Window channel
HY-2A	NSOAS	15/08/2011	≥2020	MWI	passive	10700 MHz	250000 kHz	H&V	Window channel
HY-2A	NSOAS	15/08/2011	≥2020	MWI	passive	18700 MHz	250000 kHz	H&V	Window channel
HY-2A	NSOAS	15/08/2011	≥2020	MWI	passive	23800 MHz	400000 kHz	V	Water vapour channel
HY-2A	NSOAS	15/08/2011	≥2020	MWI	passive	37000 MHz	1000000 kHz	H&V	Window channel
HY-2A	NSOAS	15/08/2011	≥2020	SCAT	active	13256 MHz			Ku-band scatterometer
HY-2A	NSOAS	15/08/2011	≥2020	ALT	active	5250 MHz			C-band altimeter
HY-2A	NSOAS	15/08/2011	≥2020	ALT	active	13580 MHz			Ku-band altimeter
HY-2B	NSOAS	24/10/2018	≥2023	MWI	passive	6600 MHz	350000 kHz	H&V	Window channel
HY-2B	NSOAS	24/10/2018	≥2023	MWI	passive	10700 MHz	250000 kHz	H&V	Window channel
HY-2B	NSOAS	24/10/2018	≥2023	MWI	passive	18700 MHz	250000 kHz	H&V	Window channel
HY-2B	NSOAS	24/10/2018	≥2023	MWI	passive	23800 MHz	400000 kHz	V	Water vapour channel
HY-2B	NSOAS	24/10/2018	≥2023	MWI	passive	37000 MHz	1000000 kHz	H&V	Window channel
HY-2B	NSOAS	24/10/2018	≥2023	SCAT	active	13256 MHz			Ku-band scatterometer
HY-2B	NSOAS	24/10/2018	≥2023	ALT	active	5250 MHz			C-band radar altimeter
HY-2B	NSOAS	24/10/2018	≥2023	ALT	active	13580 MHz			Ku-band radar altimeter
HY-2C	NSOAS	≥2020	≥2025	SCAT	active	13256 MHz			Ku-band scatterometer
HY-2C	NSOAS	≥2020	≥2025	ALT	active	5250 MHz			C-band radar altimeter
HY-2C	NSOAS	≥2020	≥2025	ALT	active	13580 MHz			Ku-band radar altimeter
HY-2D	NSOAS	≥2020	≥2025	SCAT	active	13256 MHz			Ku-band scatterometer
HY-2D	NSOAS	≥2020	≥2025	ALT	active	5250 MHz			C-band radar altimeter
HY-2D	NSOAS	≥2020	≥2025	ALT	active	13580 MHz			Ku-band radar altimeter
HY-2E	NSOAS	≥2020	≥2025	SCAT	active	13256 MHz			Ku-band scatterometer
HY-2E	NSOAS	≥2020	≥2025	ALT	active	5250 MHz			C-band radar altimeter
HY-2E	NSOAS	≥2020	≥2025	ALT	active	13580 MHz			Ku-band radar altimeter
HY-2F	NSOAS	≥2022	≥2027	SCAT	active	13256 MHz			Ku-band scatterometer
HY-2F	NSOAS	≥2022	≥2027	ALT	active	5250 MHz			C-band radar altimeter
HY-2F	NSOAS	≥2022	≥2027	ALT	active	13580 MHz			Ku-band radar altimeter
HY-2G	NSOAS	≥2022	≥2027	SCAT	active	13256 MHz			Ku-band scatterometer
HY-2G	NSOAS	≥2022	≥2027	ALT	active	5250 MHz			C-band radar altimeter
HY-2G	NSOAS	≥2022	≥2027	ALT	active	13580 MHz			Ku-band radar altimeter
HY-2H	NSOAS	≥2023	≥2028	SCAT	active	13256 MHz			Ku-band scatterometer
HY-2H	NSOAS	≥2023	≥2028	ALT	active	5250 MHz			C-band radar altimeter
HY-2H	NSOAS	≥2023	≥2028	ALT	active	13580 MHz			Ku-band radar altimeter
HY-3A	NSOAS	≥2020	≥2028	W-SAR	active	9500 MHz			X-band SAR



Satellite	Agency	Launch	EOl	Instrument	Sensing mode	Frequency	Bandwidth	Polarisation	Comments
HY-3B	NSOAS	≥2020	≥2028	W-SAR	active	9500 MHz			X-band SAR
SARAL	CNES	25/02/2013	≥2020	Altika	active	35750 MHz			Ka-band radar altimeter
SARAL	CNES	25/02/2013	≥2020	Altika	passive	23800 MHz	200000 kHz		Water vapour channel associated to the altimeter
SARAL	CNES	25/02/2013	≥2020	Altika	passive	36500 MHz	200000 kHz		Window channel associated to the altimeter
CFOSAT	CNSA	29/10/2018	≥2022	SCAT	active	13256 MHz			Ku-band scatterometer
CFOSAT	CNSA	29/10/2018	≥2022	SWIM	active	13575 MHz			Ku-band radar altimeter
CFOSAT FO	CNSA	≥2022	≥2027	SCAT	active	13256 MHz			Ku-band scatterometer
CFOSAT FO	CNSA	≥2022	≥2027	SWIM	active	13575 MHz			Ku-band radar altimeter
GF-3	CNSA	09/08/2016	≥2024	SAR-C	active	5400 MHz			C-band SAR
GF-12	CNSA	27/11/2019	≥2027	SAR-C	active	5400 MHz			C-band SAR
CSK-1	ASI	08/06/2007	≥2020	SAR-2000	active	9600 MHz			X-band SAR
CSK-2	ASI	09/12/2007	≥2020	SAR-2000	active	9600 MHz			X-band SAR
CSK-3	ASI	25/10/2008	≥2020	SAR-2000	active	9600 MHz			X-band SAR
CSK-4	ASI	06/11/2010	≥2020	SAR-2000	active	9600 MHz			X-band SAR
CSG-1	ASI	18/12/2019	≥2026	SAR-2000 SG	active	9600 MHz			X-band SAR
CSG-2	ASI	≥2020	≥2027	SAR-2000 SG	active	9600 MHz			X-band SAR
TerraSAR-X	DLR	15/06/2007	≥2020	SAR-X	active	9650 MHz			X-band SAR
TanDEM-X	DLR	21/06/2010	≥2020	SAR-X	active	9650 MHz			X-band SAR
TSX-NG	DLR	≥2020	≥2027	SAR-X	active	9650 MHz			X-band SAR
HRWS-SAR	DLR	≥2022	≥2028	HRWS-SAR	active	9650 MHz			X-band SAR
RadarSat-2	CSA	14/12/2007	≥2020	SAR-C	active	5400 MHz			C-band SAR
RCM-1	CSA	12/06/2019	≥2026	SAR RCM	active	5400 MHz			C-band SAR
RCM-2	CSA	12/06/2019	≥2026	SAR RCM	active	5400 MHz			C-band SAR
RCM-3	CSA	12/06/2019	≥2026	SAR RCM	active	5400 MHz			C-band SAR
SAOCOM-1A	CONAE	08/10/2018	≥2023	SAR-L	active	1275 MHz			L-band SAR
SAOCOM-1B	CONAE	≥2020	≥2025	SAR-L	active	1275 MHz			L-band SAR
SAOCOM-2A	CONAE	≥2020	≥2025	SAR-L	active	1275 MHz			L-band SAR
SAOCOM-2B	CONAE	≥2020	≥2025	SAR-L	active	1275 MHz			L-band SAR
HJ-1C	CAST	18/11/2012	≥2020	SAR-S	active	2700 MHz			S-band SAR
KOMPSAT-5	KARI	22/08/2013	≥2020	CORI	active	9660 MHz			X-band SAR
ASNARO-2	USEF	17/01/2018	≥2023	XSAR	active	9300 MHz			X-band SAR
SEOSAR/Paz	MDE	22/02/2018	≥2023	SAR-X	active	9650 MHz			X-band SAR
NovaSAR-S	SSTL	16/09/2018	≥2025	S-SAR	active	3200 MHz			S-band SAR
Obzor-R N1	Roscosmos	≥2021	≥2026	BRLK "Briz"	active	9623 MHz			X-band SAR
Obzor-R N2	Roscosmos	≥2023	≥2028	BRLK "Briz"	active	9623 MHz			X-band SAR
Obzor-R N3	Roscosmos	≥2024	≥2029	BRLK "Briz"	active	9623 MHz			X-band SAR
Obzor-R N4	Roscosmos	≥2025	≥2030	BRLK "Briz"	active	9623 MHz			X-band SAR