NBS monthly report - 2024 March

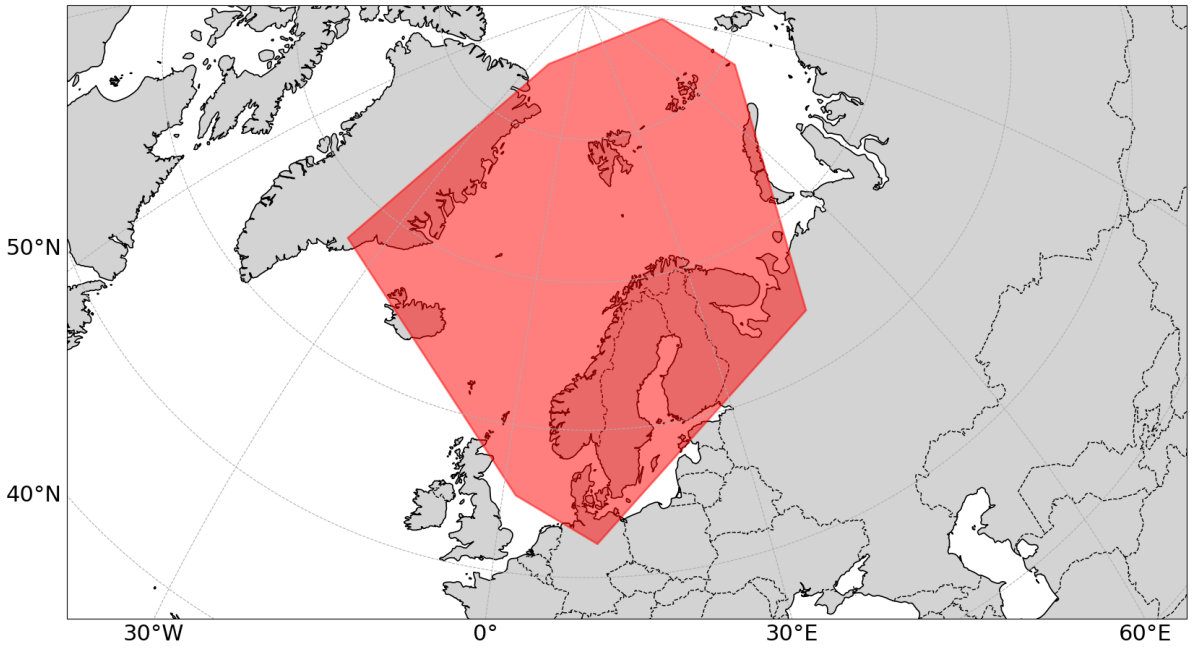
MET Norway - NBS team

Oct 17, 2024

CONTENTS

The NBS project

The European Space Agency (ESA) is in charge for the distribution of data from the Sentinel satellite constellation. In order to maintain a reliable and sustainable data hub, the creation and operation of multiples data hubs is necessary. With the purpose of keeping and maintaining a reliable and online source of data from the ESA Sentinel constellation for an Area Of Interest (AOI) covering Norway, the Norwegian Space Agency (NOSA) funded the National Bakke Segment (NBS) project. The map below is indicating the AOI in red.



Therefore, MET Norway was contracted for the operation of the NBS data. The NBS is implemented as a part of the operational infrastructure at MET Norway. As so it follows the normal procedures for planning, implementation and testing, and operations. User access to the NBS is configured according to NOSA requirements. This includes the use of ESA's DHuS software for synchronization between ESA and user accessibility.

The present report is part of MET Norway duties to inform about its performance as operator of the NBS. Monthly reports will be created monthly to regularly communicate the status of MET Norway's NBS.

The Sentinel products

The NBS project includes the management of the data received from Sentinel-1 (S1), Sentinel-2, Sentinel-3 (S3) and Sentinel-5p (S5p) satellites for the specified AOI. Each of the Sentinels has different operational modes for achieving images with different characteristics. Those images can have different processing levels. The products included in the DHR are Level-1 images for all the Sentinels except for Sentinel-2. For which Level-1 (S2L1C) and Level-2 (S2L2A) are both included in the NBS.

BackEnds and FrontEnds

As operator of NBS, the source of Sentinel data is ESA; and ESA spreads the Sentinel data through the Copernicus Data Space Ecosystem (CDSE - dataspace.copernicus.eu). CDSE is ESA's FrontEnd (FE) for Sentinel data accessibility. MET Norway uses the DHS software for synchronization and creation of other FrontEnds. During the synchronization

process a BackEnd (BE) is created. MET Norway is also running two FEs, colhub.met.no and colhub-archive.met.no. The colhub FE includes or will include all the products mentioned for Sentinel global products plus S3 marine products from Copernicus, S1 products from the Kongsberg Satellite Services (KSAT), and S2 Digital Elevation Model (DEM). The colhub-archive FE includes data from S1, S2L1C, S2L2A, S2DEM, S3, S5p products for the AOI. An important distinction between both FEs is that colhub-archive will always maintain available online all the products for the AOI.

In order to maintain an accountability on products synchronized from ESA's CDSE and available for users at the different FEs, it is necessary to understand the architecture of MET Norway's DHR.

CHAPTER

ONE

ACRONYMS

Here follows a formatted list of acronyms.

BE BackEnd

DEM Digital Elevation Model

DHuS Data Hub Software

ESA European Space Agency

FE FrontEnd

KSAT Kongsberg Satellite Services

MET Norway Meteorological Institute of Norway

CDSE Copernicus Data Space Ecosystem

S1 Sentinel-1

S2 Sentinel-2

S2L1C Sentinel-2 Level-1 C

S2L2A Sentinel-2 Level-2 A

S3 Sentinel-3

S5p Sentinel-5p

CHAPTER

TWO

QUICK SUMMARY

The table below shows a short overview of the NBS performance operation during the last 30 days. The number of products are compared against CDSE. All columns represents the number of products in each portal except the last 3 columns. Those 3 columns represents the data flow from MET Norway to users through the portals where Volumes are measured in Tb.

Portals	S1	S2L1C	S2L2A	S3	S5p	Nb of users	Nb of products	Volume
colhub.met.no	8423	27606	31577	29071	15821	19	41403	14.368
colhub-archive.met.no	8442	27423	31354	28674	15748	23	3421	2.020
dataspace.copernicus.eu	8919	18066	18066	21867	0			

Finally, the total amount of disk space dedicated to the NBS project, including either products in SAFE and NetCDF formats, represents 5419 Tb.

Due to tracking the data ingested and produced for the NBS project in the last year it is possible to forecast the upcoming need for disk space. As long as data flows follows the same pattern than last year, in 6 months the total disk space will grow until 5684 Tb; while in 12 months it is forecast to become 6920 Tb.

CHAPTER

THREE

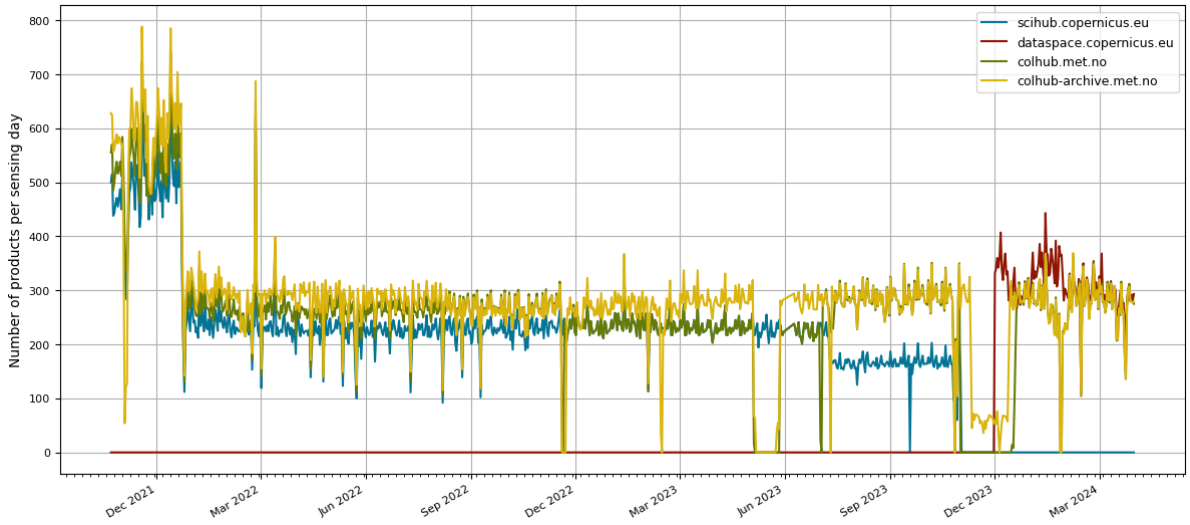
SENTINEL-1 PRODUCTS

This section shows the performance of MET Norway for Sentinel-1 products. Both, an overall status and last month status are shown below.

Note that scihub is no longer in operation but is included for historical comparisons.

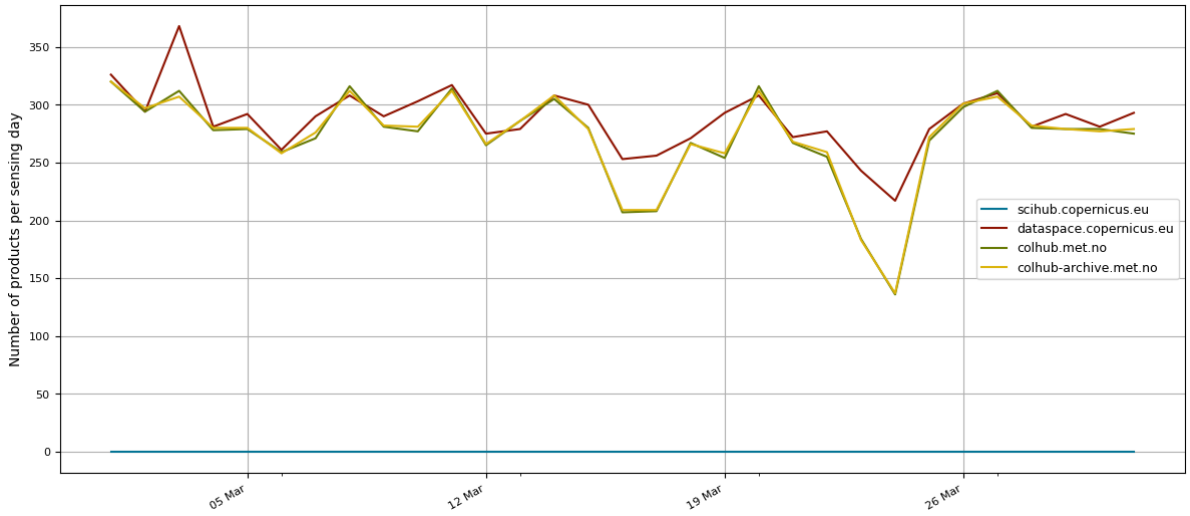
3.1 Products on portals

The following section contains an update on the Sentinel-1 products included in the different FEs and BEs.



The figure above represents the overall number of products present in the different BackEnds and FrontEnds per day for Sentinel-1.

While the figure below shows a zoom on the last month.



A table is also included for more detailed information.

sensing_date	colhub.met.no	dataspace.copernicus.eu	colhub-archive.met.no
2024-03-01	320.0	326.0	320.0
2024-03-02	294.0	294.0	297.0
2024-03-03	312.0	368.0	307.0
2024-03-04	278.0	281.0	280.0
2024-03-05	279.0	292.0	280.0
2024-03-06	259.0	261.0	258.0
2024-03-07	271.0	290.0	276.0
2024-03-08	316.0	308.0	312.0
2024-03-09	281.0	290.0	282.0
2024-03-10	277.0	303.0	281.0
2024-03-11	314.0	317.0	312.0
2024-03-12	265.0	275.0	266.0
2024-03-13	286.0	279.0	286.0
2024-03-14	305.0	308.0	308.0
2024-03-15	280.0	300.0	279.0
2024-03-16	207.0	253.0	209.0
2024-03-17	208.0	256.0	209.0
2024-03-18	267.0	271.0	266.0
2024-03-19	254.0	293.0	258.0
2024-03-20	316.0	308.0	312.0
2024-03-21	267.0	272.0	268.0
2024-03-22	255.0	277.0	259.0
2024-03-23	184.0	243.0	183.0
2024-03-24	136.0	217.0	137.0
2024-03-25	269.0	279.0	272.0
2024-03-26	298.0	301.0	301.0
2024-03-27	312.0	310.0	307.0
2024-03-28	280.0	281.0	282.0
2024-03-29	279.0	292.0	279.0
2024-03-30	279.0	281.0	277.0
2024-03-31	275.0	293.0	279.0

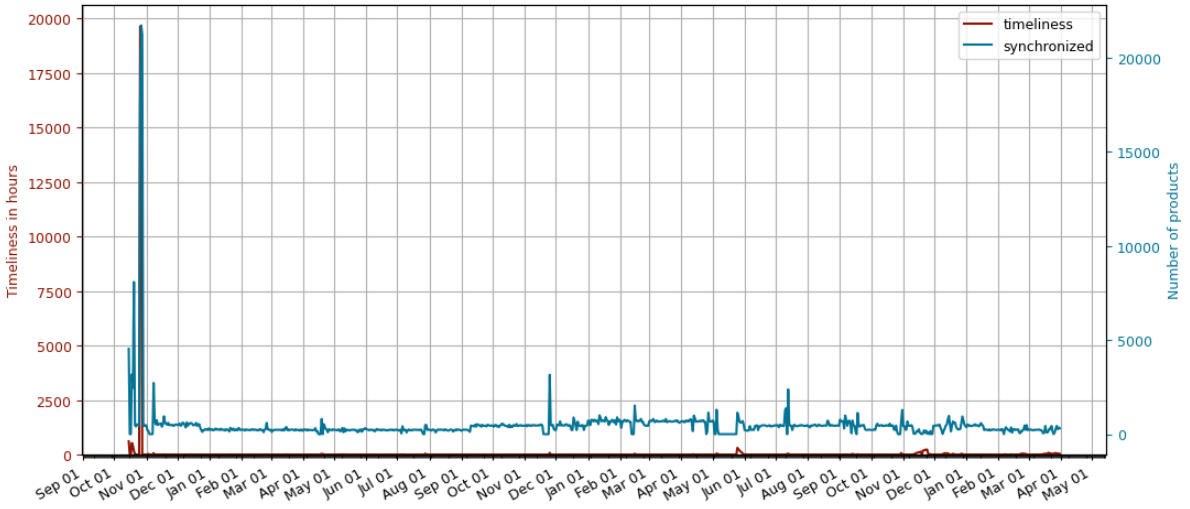
3.2 Missing products

The overall total number of Sentinel-1 products is 2469393. The number of overall Sentinel-1 missing products consists of -36917 images. This represents that a 1100% of the total was included in MET Norway DHR, while a -1000% was not included.

The total number of Sentinel-1 products in March is 537766. The number of Sentinel-1 missing products during March consists of 426125 images. This represents that a 0% of the total was included in MET Norway DHR, while a 100% was not included.

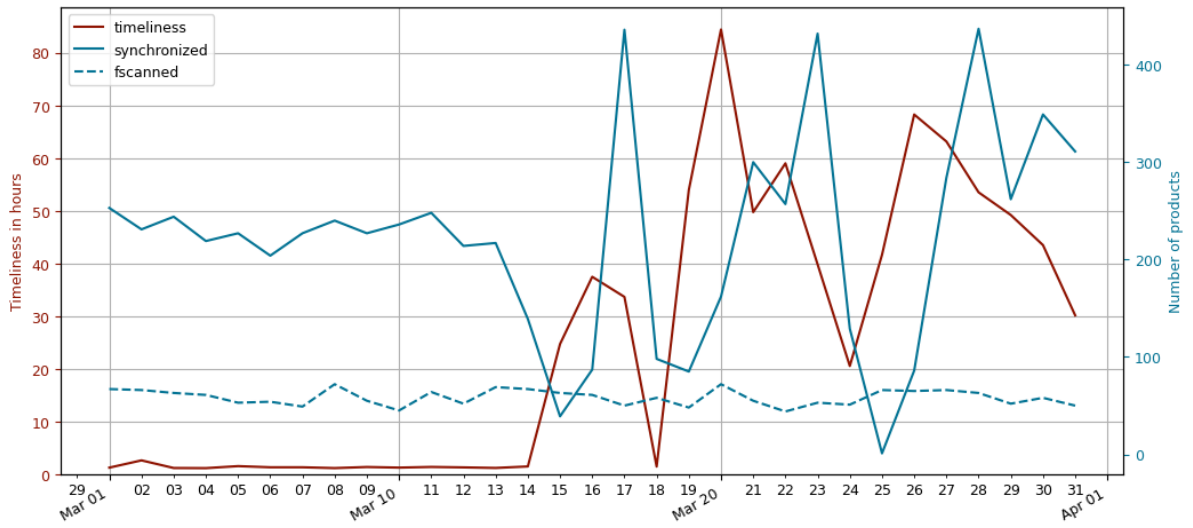
3.3 Data ingestion

In this section the time difference between sensing time and ingestion time at MET Norway is assessed. The ingestion time is the time at which a Sentinel product was downloaded to MET Norway BE and so, it is automatically available in at least one of the MET Norway FEs.



The figure above shows an overall status of the Sentinel-1 synchronization between ESA datahub and MET Norway BE. The number of products synchronized and deleted are represented by the dark and light blue lines respectively. The red line represents the timeliness.

Following previous sections, the graph below shows a zoom in the last month for the synchronization between ESA datahub and MET Norway BE.



A more detailed information is given in the table below where the last month is assessed for products synchronized from ESA.

day	size	number	timeliness
2024-03-01	660.105520	253	1.313405
2024-03-02	548.566178	231	2.690366
2024-03-03	596.503729	244	1.244646
2024-03-04	524.964594	219	1.219317
2024-03-05	490.129814	227	1.602019
2024-03-06	538.142555	204	1.381750
2024-03-07	521.865493	227	1.381789
2024-03-08	583.864900	240	1.227311
2024-03-09	565.870692	227	1.434257
2024-03-10	599.607912	236	1.318681
2024-03-11	646.444956	248	1.446442
2024-03-12	472.071170	214	1.361836
2024-03-13	547.026746	217	1.256012
2024-03-14	299.975505	139	1.538201
2024-03-15	73.404622	39	24.760058
2024-03-16	191.080278	87	37.504372
2024-03-17	1100.016881	436	33.693768
2024-03-18	212.203617	98	1.513688
2024-03-19	162.404379	85	53.976590
2024-03-20	366.758630	162	84.409087
2024-03-21	739.354709	300	49.766640
2024-03-22	616.168390	257	59.025999
2024-03-23	1058.400886	432	39.860676
2024-03-24	307.963616	129	20.586811
2024-03-25	7.248908	1	41.668258
2024-03-26	175.497972	86	68.281909
2024-03-27	655.081468	284	63.165766
2024-03-28	1123.003848	437	53.523712
2024-03-29	630.545221	262	49.223288
2024-03-30	843.913630	349	43.513992
2024-03-31	767.180574	311	30.194194

It is also given extra information in the table below where the data are assessed for products synchronized from KSAT.

day	size	number	timeliness
2024-03-01	78.504820	67	0.681217
2024-03-02	81.465618	66	0.788524
2024-03-03	70.671567	63	0.631795
2024-03-04	75.848270	61	0.743387
2024-03-05	53.871158	53	0.617192
2024-03-06	69.820384	54	0.765668
2024-03-07	56.842649	49	0.676885
2024-03-08	73.969129	72	0.657135
2024-03-09	71.692656	55	0.658983
2024-03-10	59.677490	45	0.864467
2024-03-11	81.319523	64	0.863456
2024-03-12	50.548827	52	0.606898
2024-03-13	80.465311	69	0.701993
2024-03-14	83.526696	67	0.805255
2024-03-15	70.564049	63	0.691870
2024-03-16	75.855338	61	0.705445
2024-03-17	52.832074	50	0.796263
2024-03-18	80.603564	58	0.823874
2024-03-19	54.853983	48	0.665392
2024-03-20	74.158650	72	0.701229
2024-03-21	71.529302	55	0.886992
2024-03-22	59.145690	44	0.855292
2024-03-23	81.326091	53	0.821736
2024-03-24	51.080356	51	0.603542
2024-03-25	77.018190	66	0.714102
2024-03-26	80.089044	65	0.795025
2024-03-27	74.630257	66	0.684055
2024-03-28	77.940052	63	0.776428
2024-03-29	53.913259	52	0.798533
2024-03-30	73.241671	58	0.863055
2024-03-31	55.477099	50	0.691711

CHAPTER

FOUR

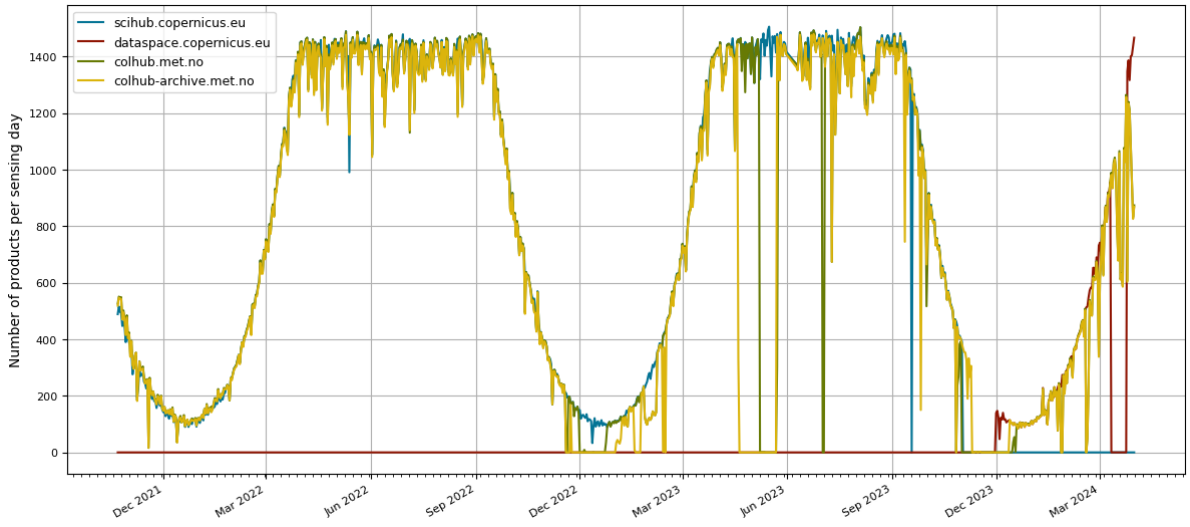
SENTINEL-2 LEVEL-1C PRODUCTS

This section shows the performance of MET Norway for Sentinel-2 Level-1C products. Both, an overall status and last month status are shown below.

Note that scihub is no longer in operation but is included for historical comparisons.

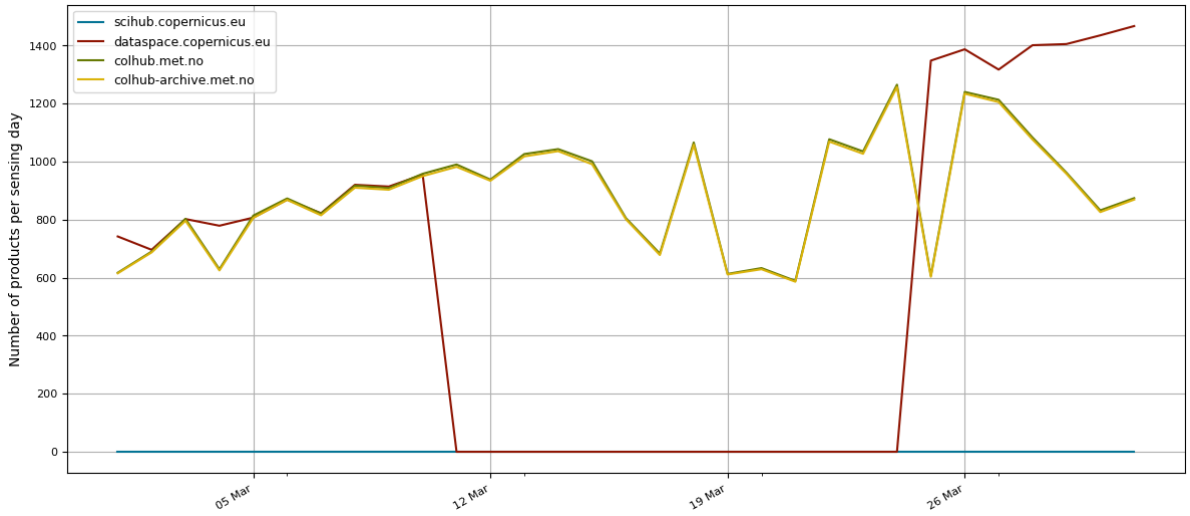
4.1 Products on portals

The following section contains an update on the Sentinel-2 Level-1C products included in the different FEs and BEs.



The figure above represents the overall number of products present in the different BackEnds and FrontEnds per day for Sentinel-2 Level-1C.

While the figure below shows a zoom on the last month.



A table is also included for more detailed information.

sensing_date	colhub.met.no	dataspace.copernicus.eu	colhub-archive.met.no
2024-03-01	617.0	742.0	615.0
2024-03-02	690.0	696.0	687.0
2024-03-03	803.0	802.0	796.0
2024-03-04	629.0	779.0	625.0
2024-03-05	814.0	807.0	806.0
2024-03-06	873.0	869.0	868.0
2024-03-07	821.0	822.0	815.0
2024-03-08	917.0	920.0	910.0
2024-03-09	909.0	914.0	903.0
2024-03-10	958.0	955.0	950.0
2024-03-11	990.0	0.0	982.0
2024-03-12	938.0	0.0	934.0
2024-03-13	1026.0	0.0	1018.0
2024-03-14	1043.0	0.0	1036.0
2024-03-15	1001.0	0.0	991.0
2024-03-16	805.0	0.0	801.0
2024-03-17	683.0	0.0	678.0
2024-03-18	1066.0	0.0	1058.0
2024-03-19	613.0	0.0	611.0
2024-03-20	633.0	0.0	629.0
2024-03-21	589.0	0.0	586.0
2024-03-22	1077.0	0.0	1069.0
2024-03-23	1035.0	0.0	1027.0
2024-03-24	1265.0	0.0	1257.0
2024-03-25	607.0	1348.0	603.0
2024-03-26	1240.0	1387.0	1234.0
2024-03-27	1213.0	1317.0	1205.0
2024-03-28	1083.0	1401.0	1076.0
2024-03-29	962.0	1405.0	958.0
2024-03-30	832.0	1435.0	826.0
2024-03-31	874.0	1467.0	869.0

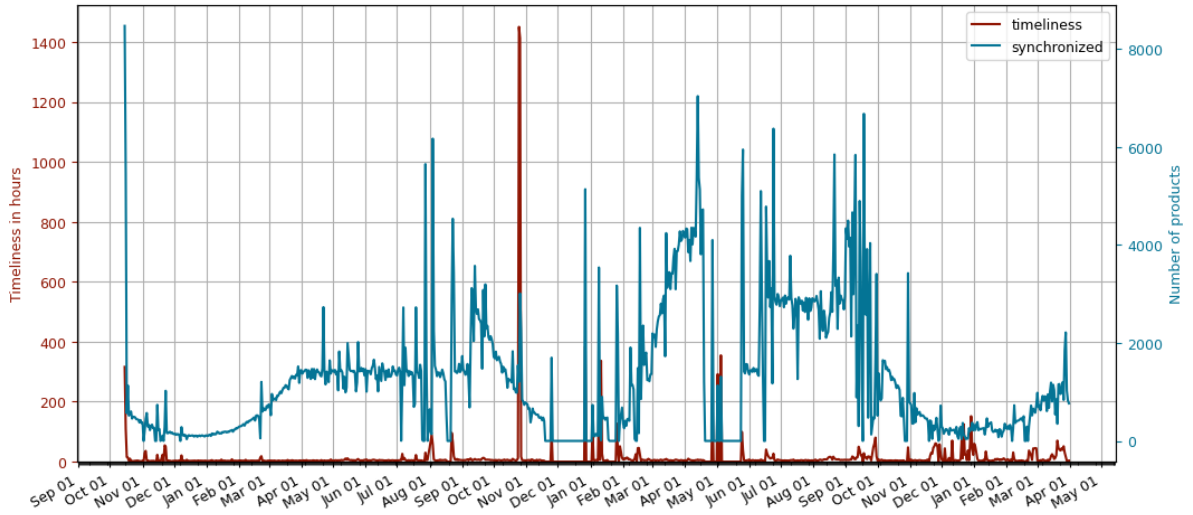
4.2 Missing products

The overall total number of Sentinel-2 Level-1C products is 2469393. The number of overall Sentinel-2 Level-1C missing products consists of -36917 images. This represents that a 1100% of the total was included in MET Norway DHR, while a -1000% was not included.

The total number of Sentinel-2 Level-1C products in March is 537766. The number of Sentinel-2 Level-1C missing products during March consists of 426125 images. This represents that a 0% of the total was included in MET Norway DHR, while a 100% was not included.

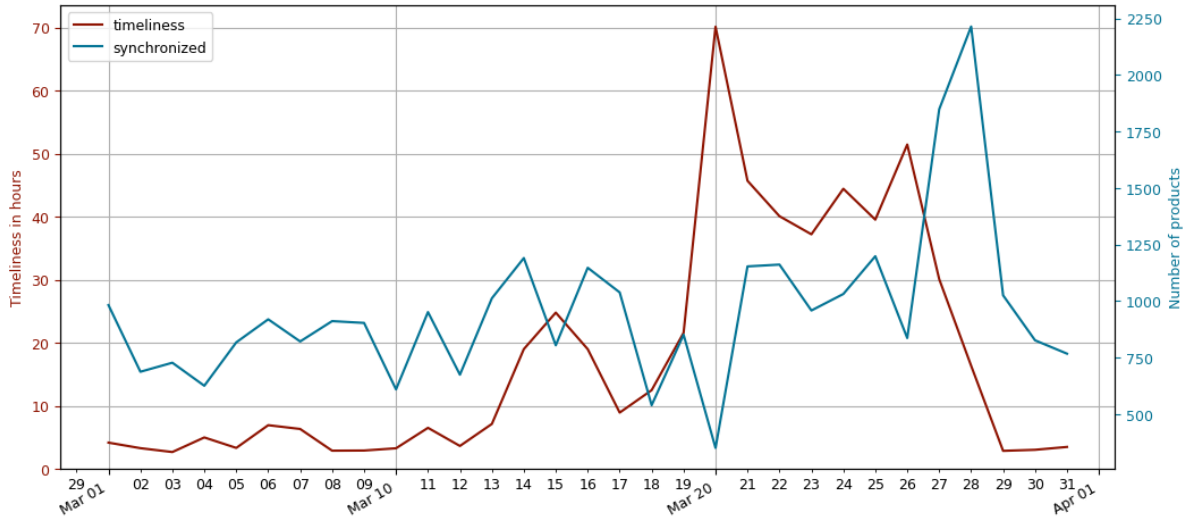
4.3 Data ingestion

In this section the time difference between sensing time and ingestion time at MET Norway is assessed. The ingestion time is the time at which a Sentinel product was downloaded to MET Norway BE and so, it is automatically available in at least one of the MET Norway FEs.



The figure above shows an overall status of the Sentinel-2 Level-1C synchronization between ESA datahub and MET Norway BE. The number of products synchronized and deleted are represented by the dark and light blue lines respectively. The red line represents the timeliness.

Following previous sections, the graph below shows a zoom in the last month for the synchronization between ESA datahub and MET Norway BE.



A more detailed information is given in the table below where the last month is assessed for products synchronized from ESA.

day	size	number	timeliness
2024-03-01	443.320039	982	4.184134
2024-03-02	304.570777	687	3.305963
2024-03-03	320.554689	727	2.690929
2024-03-04	278.938826	625	5.006599
2024-03-05	374.351473	817	3.344874
2024-03-06	416.080794	919	6.949868
2024-03-07	390.276344	821	6.348222
2024-03-08	419.541931	911	2.906424
2024-03-09	404.176878	903	2.931823
2024-03-10	284.433548	609	3.287488
2024-03-11	439.606897	951	6.532107
2024-03-12	323.670033	674	3.654391
2024-03-13	459.852670	1012	7.148624
2024-03-14	537.247742	1190	19.013993
2024-03-15	359.306014	804	24.803119
2024-03-16	507.148911	1147	19.001296
2024-03-17	478.834683	1038	8.942934
2024-03-18	264.298218	539	12.500889
2024-03-19	372.050963	851	21.594872
2024-03-20	162.692495	350	70.129101
2024-03-21	524.058467	1153	45.704014
2024-03-22	526.317934	1161	40.086524
2024-03-23	422.382476	958	37.215148
2024-03-24	468.189676	1031	44.437285
2024-03-25	552.537718	1198	39.537506
2024-03-26	382.863807	836	51.450978
2024-03-27	823.156593	1848	30.107088
2024-03-28	956.690912	2214	16.360699
2024-03-29	419.823415	1025	2.881050
2024-03-30	340.716118	826	3.047751
2024-03-31	335.775009	767	3.501183

CHAPTER

FIVE

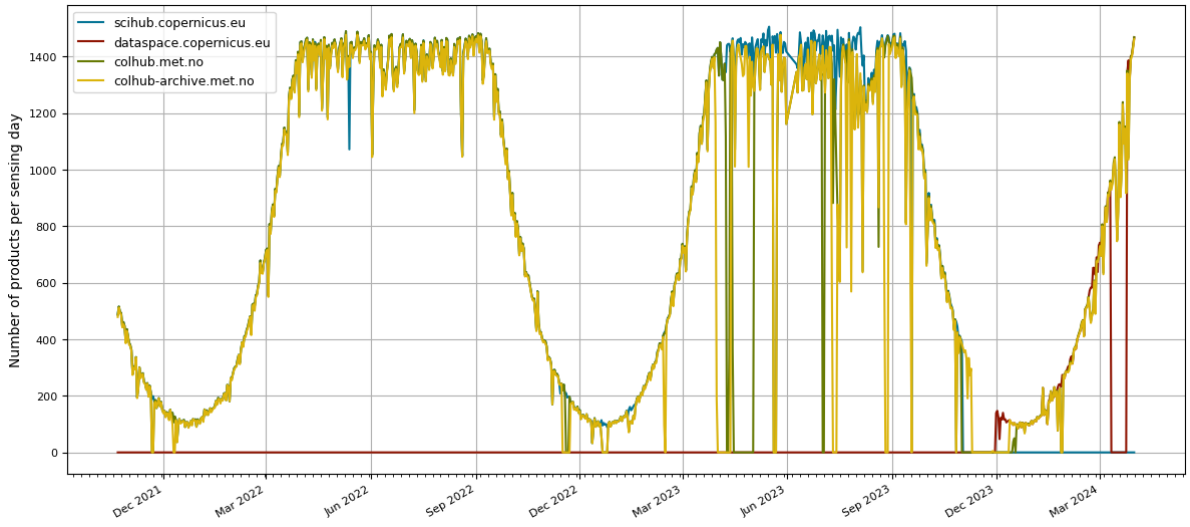
SENTINEL-2 LEVEL-2A PRODUCTS

This section shows the performance of MET Norway for Sentinel-2 Level-2A products. Both, an overall status and last month status are shown below.

Note that scihub is no longer in operation but is included for historical comparisons.

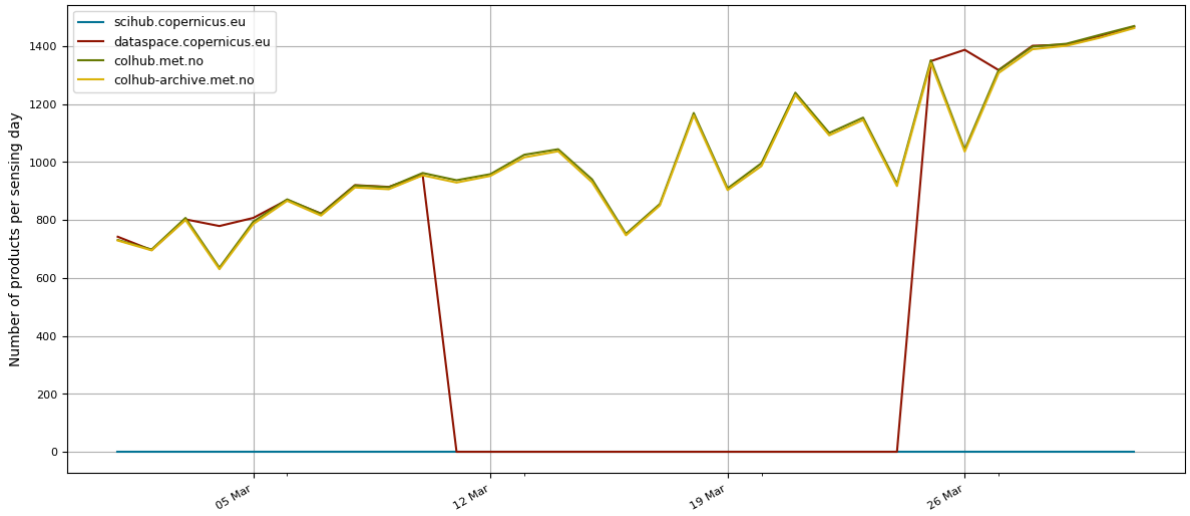
5.1 Products on portals

The following section contains an update on the Sentinel-2 Level-2A products included in the different FEs and BEs.



The figure above represents the overall number of products present in the different BackEnds and FrontEnds per day for Sentinel-2 Level-2A.

While the figure below shows a zoom on the last month.



A table is also included for more detailed information.

sensing_date	colhub.met.no	dataspace.copernicus.eu	colhub-archive.met.no
2024-03-01	731.0	742.0	729.0
2024-03-02	698.0	696.0	695.0
2024-03-03	807.0	802.0	800.0
2024-03-04	635.0	779.0	630.0
2024-03-05	794.0	807.0	786.0
2024-03-06	871.0	869.0	866.0
2024-03-07	821.0	822.0	815.0
2024-03-08	919.0	920.0	912.0
2024-03-09	913.0	914.0	906.0
2024-03-10	962.0	955.0	954.0
2024-03-11	937.0	0.0	929.0
2024-03-12	958.0	0.0	952.0
2024-03-13	1025.0	0.0	1016.0
2024-03-14	1044.0	0.0	1037.0
2024-03-15	940.0	0.0	930.0
2024-03-16	752.0	0.0	747.0
2024-03-17	855.0	0.0	850.0
2024-03-18	1169.0	0.0	1161.0
2024-03-19	909.0	0.0	903.0
2024-03-20	996.0	0.0	986.0
2024-03-21	1239.0	0.0	1231.0
2024-03-22	1100.0	0.0	1092.0
2024-03-23	1153.0	0.0	1145.0
2024-03-24	924.0	0.0	917.0
2024-03-25	1351.0	1348.0	1341.0
2024-03-26	1043.0	1387.0	1036.0
2024-03-27	1317.0	1317.0	1307.0
2024-03-28	1398.0	1401.0	1389.0
2024-03-29	1408.0	1405.0	1401.0
2024-03-30	1439.0	1435.0	1429.0
2024-03-31	1469.0	1467.0	1462.0

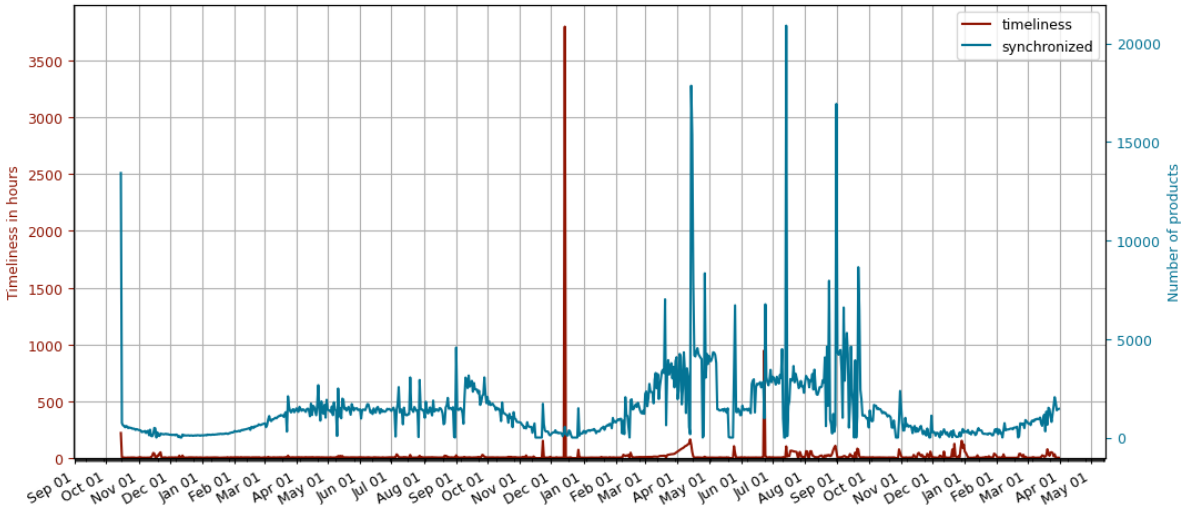
5.2 Missing products

The overall total number of Sentinel-2 Level-2A products is 2469393. The number of overall Sentinel-2 Level-2A missing products consists of -36917 images. This represents that a 1100% of the total was included in MET Norway DHR, while a -1000% was not included.

The total number of Sentinel-2 level-2A products in March is 537766. The number of Sentinel-2 level-2A missing products during March consists of 426125 images. This represents that a 0% of the total was included in MET Norway DHR, while a 100% was not included.

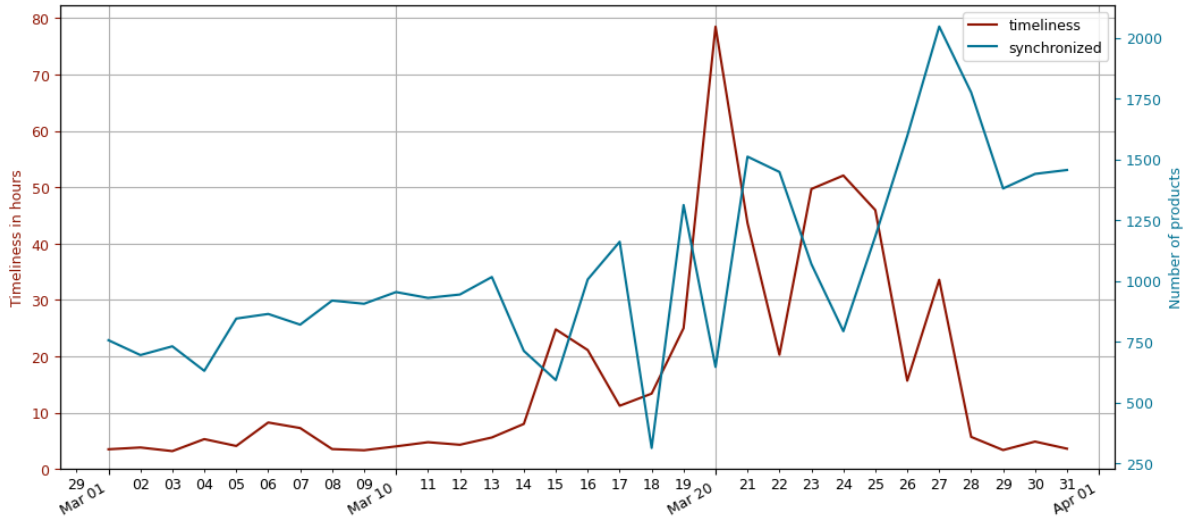
5.3 Data ingestion

In this section the time difference between sensing time and ingestion time at MET Norway is assessed. The ingestion time is the time at which a Sentinel product was downloaded to MET Norway BE and so, it is automatically available in at least one of the MET Norway FEs.



The figure above shows an overall status of the Sentinel-2 Level-2A synchronization between ESA datahub and MET Norway BE. The number of products synchronized and deleted are represented by the dark and light blue lines respectively. The red line represents the timeliness.

Following previous sections, the graph below shows a zoom in the last month for the synchronization between ESA datahub and MET Norway BE.



A more detailed information is given in the table below where the last month is assessed for products synchronized from ESA.

day	size	number	timeliness
2024-03-01	415.483677	756	3.503464
2024-03-02	384.524587	695	3.820692
2024-03-03	411.047716	731	3.176123
2024-03-04	356.937032	630	5.306681
2024-03-05	500.708666	845	4.090674
2024-03-06	486.131452	864	8.256132
2024-03-07	486.618701	820	7.270767
2024-03-08	533.490945	919	3.539652
2024-03-09	512.970154	906	3.328647
2024-03-10	562.123339	954	4.015329
2024-03-11	529.654825	930	4.755833
2024-03-12	555.692644	944	4.305118
2024-03-13	583.333179	1016	5.598172
2024-03-14	394.969981	712	8.001215
2024-03-15	340.256566	592	24.783799
2024-03-16	556.218988	1006	21.109278
2024-03-17	669.121358	1161	11.226600
2024-03-18	167.661946	313	13.381745
2024-03-19	746.557412	1312	25.004572
2024-03-20	391.086133	646	78.500850
2024-03-21	857.532793	1511	43.667782
2024-03-22	805.881233	1448	20.275357
2024-03-23	604.355470	1069	49.695701
2024-03-24	448.707294	793	52.086952
2024-03-25	683.936781	1183	45.950438
2024-03-26	928.093834	1596	15.669930
2024-03-27	1180.098448	2046	33.592699
2024-03-28	1041.462738	1775	5.698741
2024-03-29	776.178659	1380	3.366571
2024-03-30	838.472936	1440	4.867601
2024-03-31	820.263855	1456	3.607508

CHAPTER

SIX

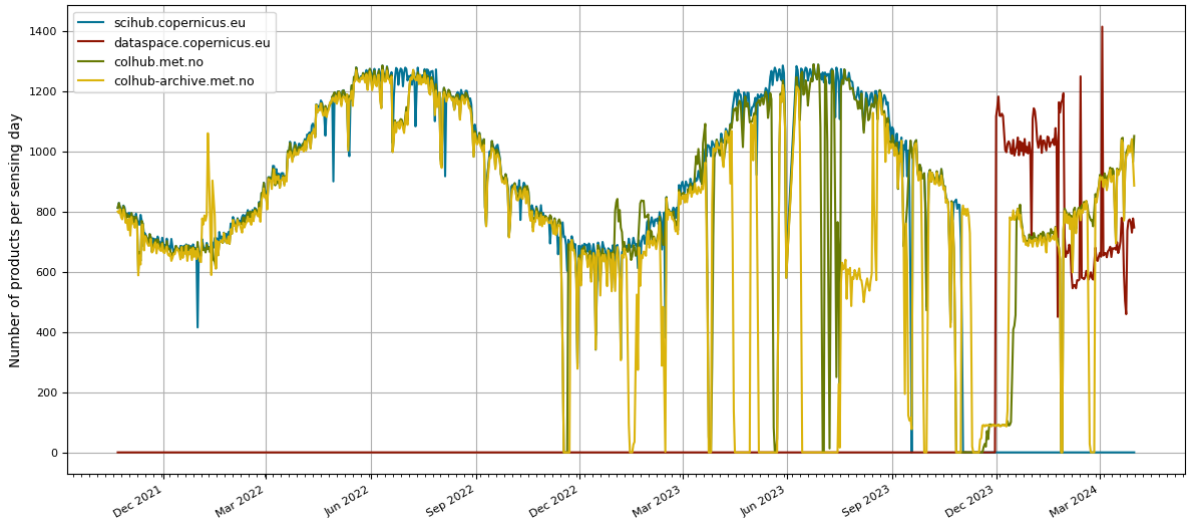
SENTINEL-3 PRODUCTS

This section shows the performance of MET Norway for Sentinel-3 products. Both, an overall status and last month status are shown below.

Note that scihub is no longer in operation but is included for historical comparisons.

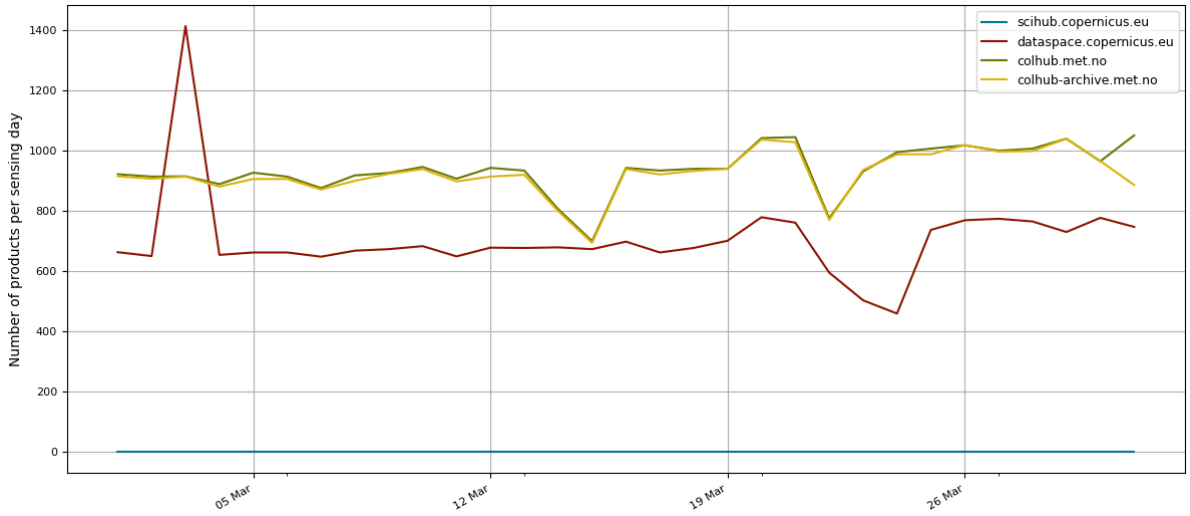
6.1 Products on portals

The following section contains an update on the Sentinel-3 products included in the different FEs and BEs.



The figure above represents the overall number of products present in the different BackEnds and FrontEnds per day for Sentinel-3.

While the figure below shows a zoom on the last month.



A table is also included for more detailed information.

sensing_date	colhub.met.no	dataspace.copernicus.eu	colhub-archive.met.no
2024-03-01	922.0	663.0	915.0
2024-03-02	914.0	650.0	907.0
2024-03-03	915.0	1414.0	914.0
2024-03-04	889.0	654.0	881.0
2024-03-05	927.0	662.0	906.0
2024-03-06	914.0	662.0	906.0
2024-03-07	876.0	648.0	871.0
2024-03-08	918.0	668.0	900.0
2024-03-09	926.0	673.0	923.0
2024-03-10	946.0	683.0	939.0
2024-03-11	907.0	649.0	898.0
2024-03-12	943.0	678.0	914.0
2024-03-13	934.0	677.0	920.0
2024-03-14	806.0	679.0	799.0
2024-03-15	700.0	673.0	694.0
2024-03-16	943.0	698.0	939.0
2024-03-17	934.0	662.0	921.0
2024-03-18	940.0	677.0	933.0
2024-03-19	940.0	701.0	940.0
2024-03-20	1042.0	779.0	1037.0
2024-03-21	1045.0	761.0	1028.0
2024-03-22	776.0	595.0	770.0
2024-03-23	931.0	503.0	936.0
2024-03-24	995.0	459.0	988.0
2024-03-25	1007.0	737.0	988.0
2024-03-26	1018.0	769.0	1019.0
2024-03-27	1000.0	774.0	997.0
2024-03-28	1007.0	765.0	999.0
2024-03-29	1040.0	730.0	1040.0
2024-03-30	965.0	777.0	966.0
2024-03-31	1051.0	747.0	886.0

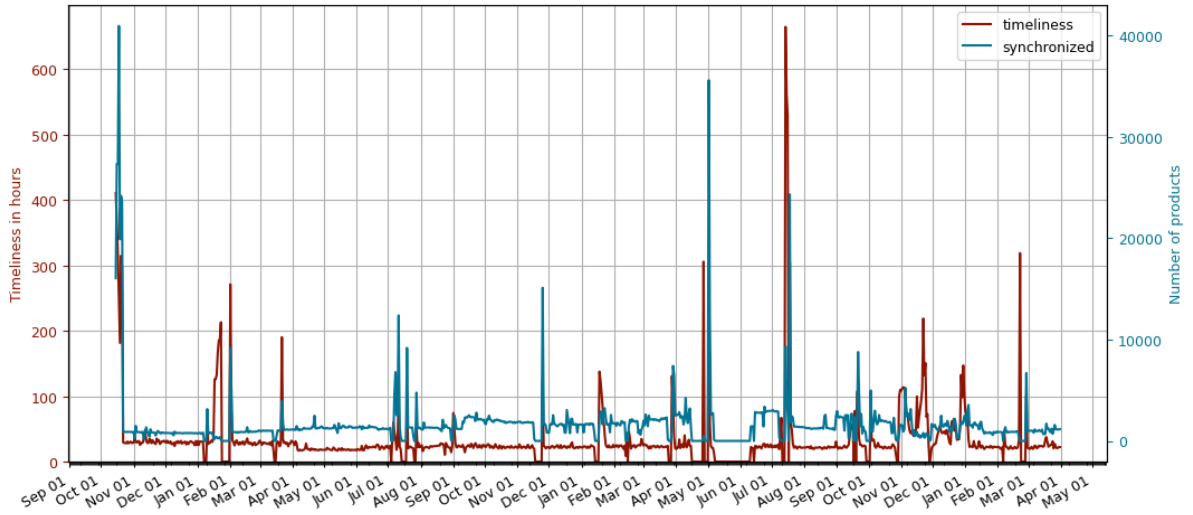
6.2 Missing products

The overall total number of Sentinel-3 products is 2469393. The number of overall Sentinel-3 missing products consists of -36917 images. This represents that a 1100% of the total was included in MET Norway DHR, while a -1000% was not included.

The total number of Sentinel-3 products in March is 537766. The number of Sentinel-3 missing products during March consists of 426125 images. This represents that a 0% of the total was included in MET Norway DHR, while a 100% was not included.

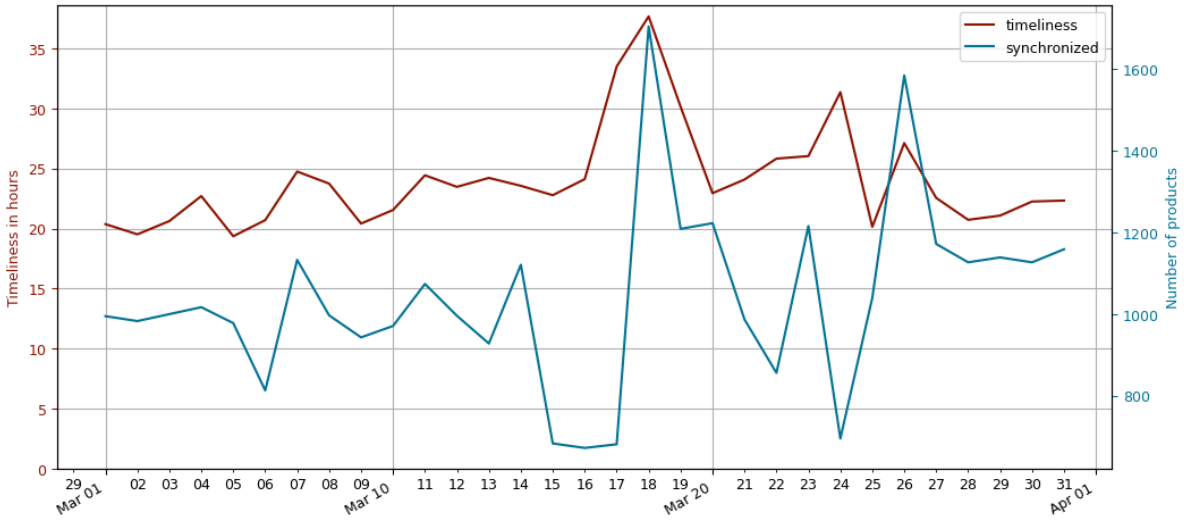
6.3 Data ingestion

In this section the time difference between sensing time and ingestion time at MET Norway is assessed. The ingestion time is the time at which a Sentinel product was downloaded to MET Norway BE and so, it is automatically available in at least one of the MET Norway FEs.



The figure above shows an overall status of the Sentinel-3 synchronization between ESA datahub and MET Norway BE. The number of products synchronized and deleted are represented by the dark and light blue lines respectively. The red line represents the timeliness.

Following previous sections, the graph below shows a zoom in the last month for the synchronization between ESA datahub and MET Norway BE.



A more detailed information is given in the table below where the last month is assessed for products synchronized from ESA.

day	size	number	timeliness
2024-03-01	304.541238	995	20.367408
2024-03-02	293.034727	983	19.520004
2024-03-03	318.735776	1000	20.624289
2024-03-04	307.349319	1017	22.702147
2024-03-05	312.328694	978	19.362536
2024-03-06	257.959259	813	20.700267
2024-03-07	350.543447	1133	24.743879
2024-03-08	313.226251	997	23.739436
2024-03-09	304.066179	943	20.417244
2024-03-10	307.791214	971	21.546173
2024-03-11	342.744996	1074	24.432098
2024-03-12	313.841508	996	23.469995
2024-03-13	299.605727	928	24.213606
2024-03-14	355.143442	1121	23.557145
2024-03-15	223.491782	683	22.776896
2024-03-16	217.316394	672	24.113206
2024-03-17	215.776817	681	33.483764
2024-03-18	579.282768	1705	37.644090
2024-03-19	377.409824	1209	30.140634
2024-03-20	383.996264	1223	22.943247
2024-03-21	299.732344	987	24.078604
2024-03-22	268.888250	856	25.816060
2024-03-23	398.744184	1216	26.028410
2024-03-24	229.978255	695	31.347684
2024-03-25	298.443228	1040	20.142403
2024-03-26	455.236730	1585	27.111744
2024-03-27	401.124078	1172	22.549051
2024-03-28	340.946055	1127	20.727627
2024-03-29	360.725405	1139	21.079058
2024-03-30	364.038260	1127	22.250283
2024-03-31	364.559744	1159	22.327990

CHAPTER

SEVEN

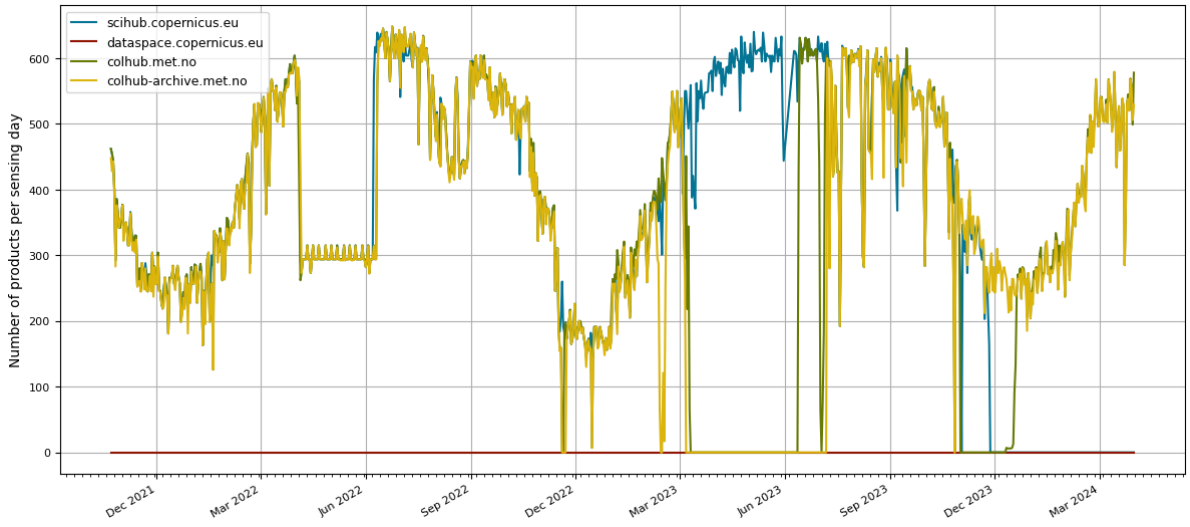
SENTINEL-5P PRODUCTS

This section shows the performance of MET Norway for Sentinel-5p products. Both, an overall status and last month status are shown below.

Note that scihub is no longer in operation but is included for historical comparisons.

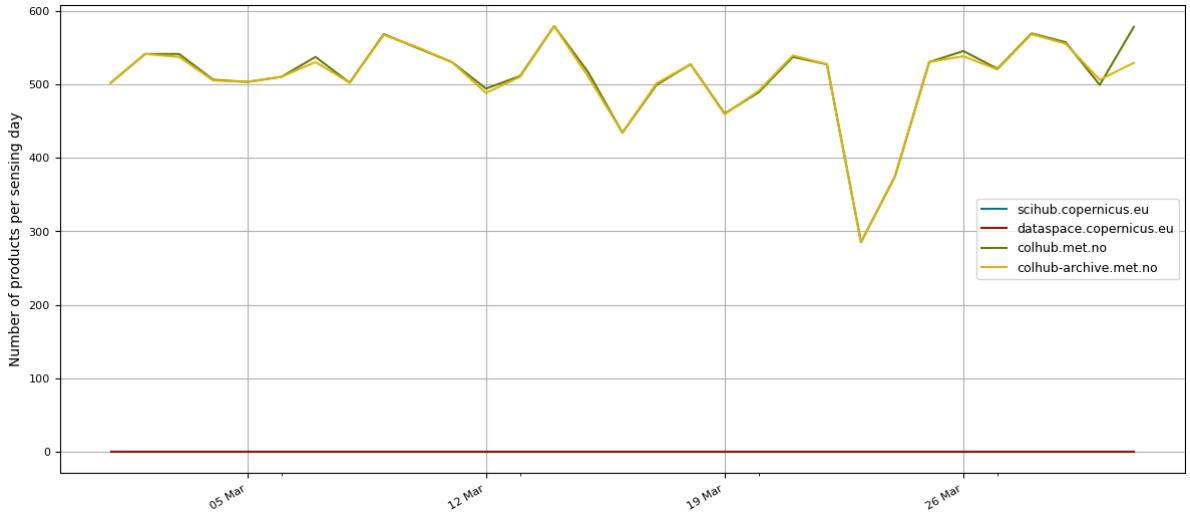
7.1 Products on portals

The following section contains an update on the Sentinel-5p products included in the different FEs and BEs.



The figure above represents the overall number of products present in the different BackEnds and FrontEnds per day for Sentinel-5p.

While the figure below shows a zoom on the last month.



A table is also included for more detailed information.

sensing_date	colhub.met.no	dataspace.copernicus.eu	colhub-archive.met.no
2024-03-01	502.0	0.0	502.0
2024-03-02	541.0	0.0	541.0
2024-03-03	541.0	0.0	537.0
2024-03-04	506.0	0.0	505.0
2024-03-05	503.0	0.0	503.0
2024-03-06	510.0	0.0	510.0
2024-03-07	537.0	0.0	530.0
2024-03-08	502.0	0.0	502.0
2024-03-09	568.0	0.0	567.0
2024-03-10	549.0	0.0	550.0
2024-03-11	530.0	0.0	530.0
2024-03-12	494.0	0.0	488.0
2024-03-13	511.0	0.0	510.0
2024-03-14	579.0	0.0	579.0
2024-03-15	516.0	0.0	510.0
2024-03-16	434.0	0.0	434.0
2024-03-17	499.0	0.0	501.0
2024-03-18	527.0	0.0	527.0
2024-03-19	460.0	0.0	459.0
2024-03-20	489.0	0.0	491.0
2024-03-21	537.0	0.0	539.0
2024-03-22	527.0	0.0	527.0
2024-03-23	285.0	0.0	285.0
2024-03-24	375.0	0.0	375.0
2024-03-25	530.0	0.0	530.0
2024-03-26	545.0	0.0	538.0
2024-03-27	521.0	0.0	520.0
2024-03-28	569.0	0.0	568.0
2024-03-29	557.0	0.0	555.0
2024-03-30	499.0	0.0	506.0
2024-03-31	578.0	0.0	529.0

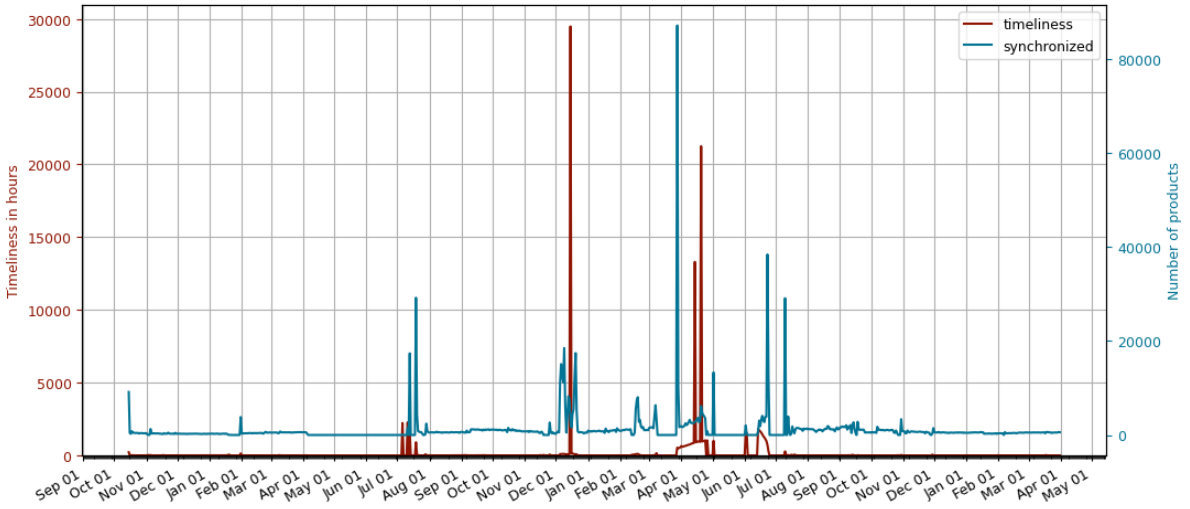
7.2 Missing products

The overall total number of Sentinel-5p products is 2469393. The number of overall Sentinel-5p missing products consists of -36917 images. This represents that a 1100% of the total was included in MET Norway DHR, while a -1000% was not included.

The total number of Sentinel-5p products in March is 537766. The number of Sentinel-5p missing products during March consists of 426125 images. This represents that a 0% of the total was included in MET Norway DHR, while a 100% was not included.

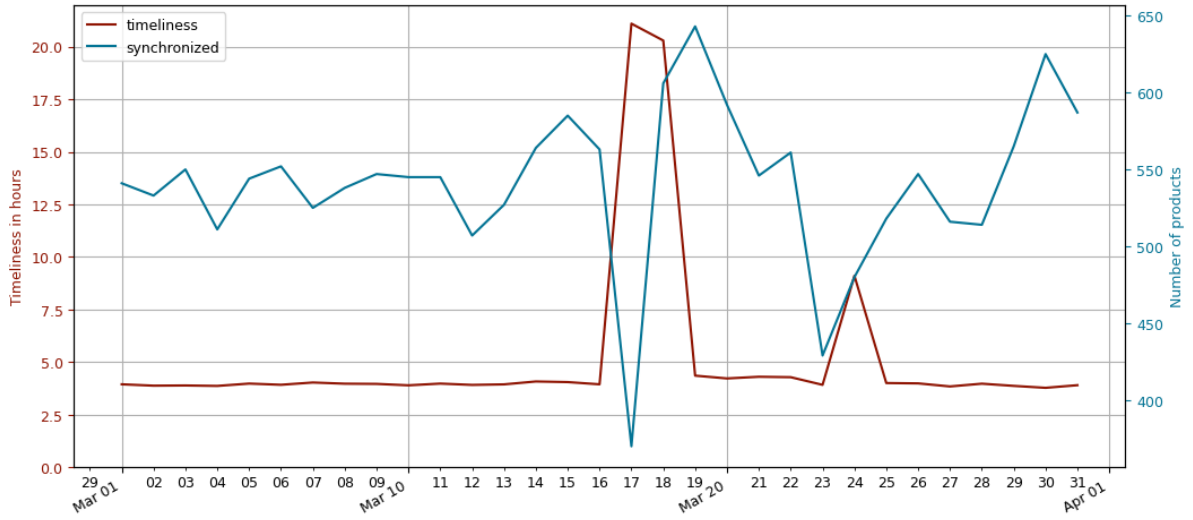
7.3 Data ingestion

In this section the time difference between sensing time and ingestion time at MET Norway is assessed. The ingestion time is the time at which a Sentinel product was downloaded to MET Norway BE and so, it is automatically available in at least one of the MET Norway FEs.



The figure above shows an overall status of the Sentinel-5p synchronization between ESA datahub and MET Norway BE. The number of products synchronized and deleted are represented by the dark and light blue lines respectively. The red line represents the timeliness.

Following previous sections, the graph below shows a zoom in the last month for the synchronization between ESA datahub and MET Norway BE.



A more detailed information is given in the table below where the last month are assessed for products synchronized from ESA.

day	size	number	timeliness
2024-03-01	377.370709	541	3.944765
2024-03-02	355.213267	533	3.879277
2024-03-03	375.015906	550	3.888685
2024-03-04	370.693503	511	3.867414
2024-03-05	365.779138	544	3.978948
2024-03-06	376.657571	552	3.921797
2024-03-07	333.722943	525	4.029824
2024-03-08	373.070303	538	3.973649
2024-03-09	373.177147	547	3.963803
2024-03-10	355.659499	545	3.896113
2024-03-11	354.955235	545	3.978539
2024-03-12	354.932820	507	3.915743
2024-03-13	352.951042	527	3.941393
2024-03-14	372.708627	564	4.079078
2024-03-15	406.683694	585	4.049820
2024-03-16	377.594905	563	3.944091
2024-03-17	43.603406	370	21.097549
2024-03-18	609.124348	606	20.293779
2024-03-19	433.970655	643	4.355924
2024-03-20	394.059261	592	4.223403
2024-03-21	366.152687	546	4.303052
2024-03-22	385.940144	561	4.282654
2024-03-23	208.949717	429	3.918621
2024-03-24	398.751956	480	9.105985
2024-03-25	305.988609	518	4.004758
2024-03-26	352.331998	547	3.988343
2024-03-27	348.983207	516	3.842470
2024-03-28	338.084984	514	3.974022
2024-03-29	346.455172	565	3.869140
2024-03-30	393.974986	625	3.776752
2024-03-31	399.759467	587	3.902287

CHAPTER

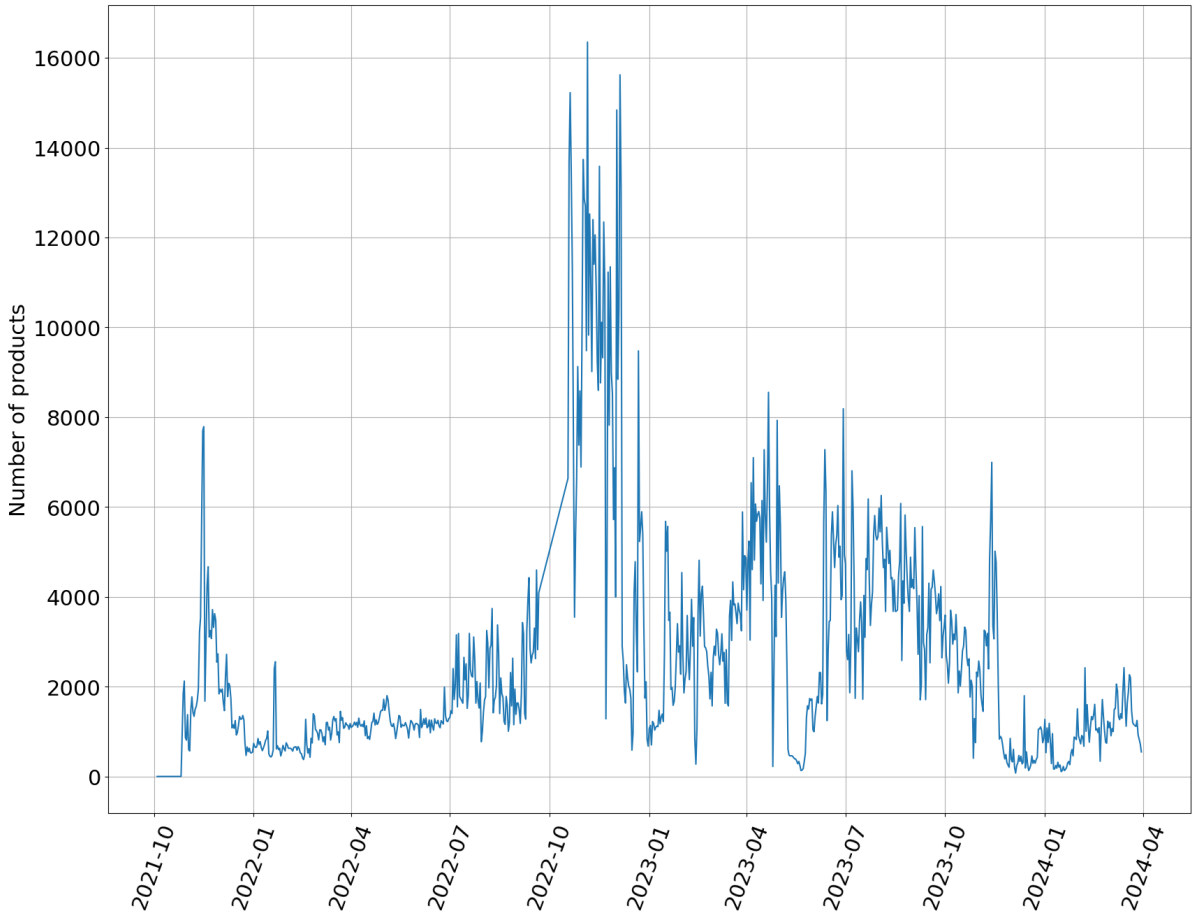
EIGHT

MONITORING DATA DOWNLOADS FROM COLHUB PORTALS

In this section the performance of the FrontEnds is analyzed, for both colhub.met.no and colhub-archive.met.no. The FEs performance is translated as user accessibility to the data which is one of the main goals for the project.

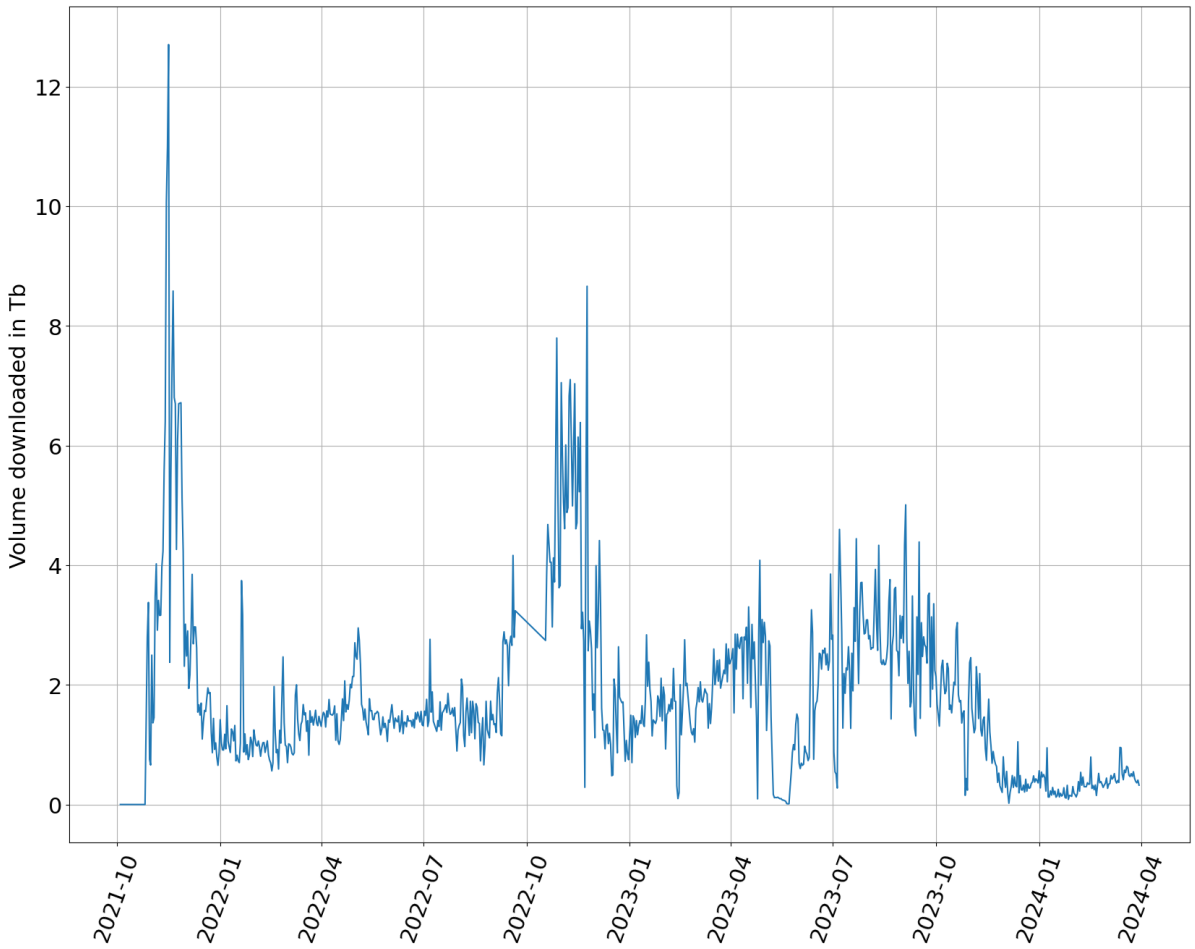
8.1 Portal: colhub.met.no

The first portal to analyze is colhub.met.no. The target of the analysis is to check the amount of data downloaded by users, but also the number of users accessing the datahub. Below the historical amount of data per day is represented.



The same data is also represented below, with a difference. This time the data is not accounted by number, but by volume. Although both graphs show similar trends, they are not exactly equal due to the variability in the ratio volume per product.

For instance, the seasonality of optical products could have an impact in the total volume of products.



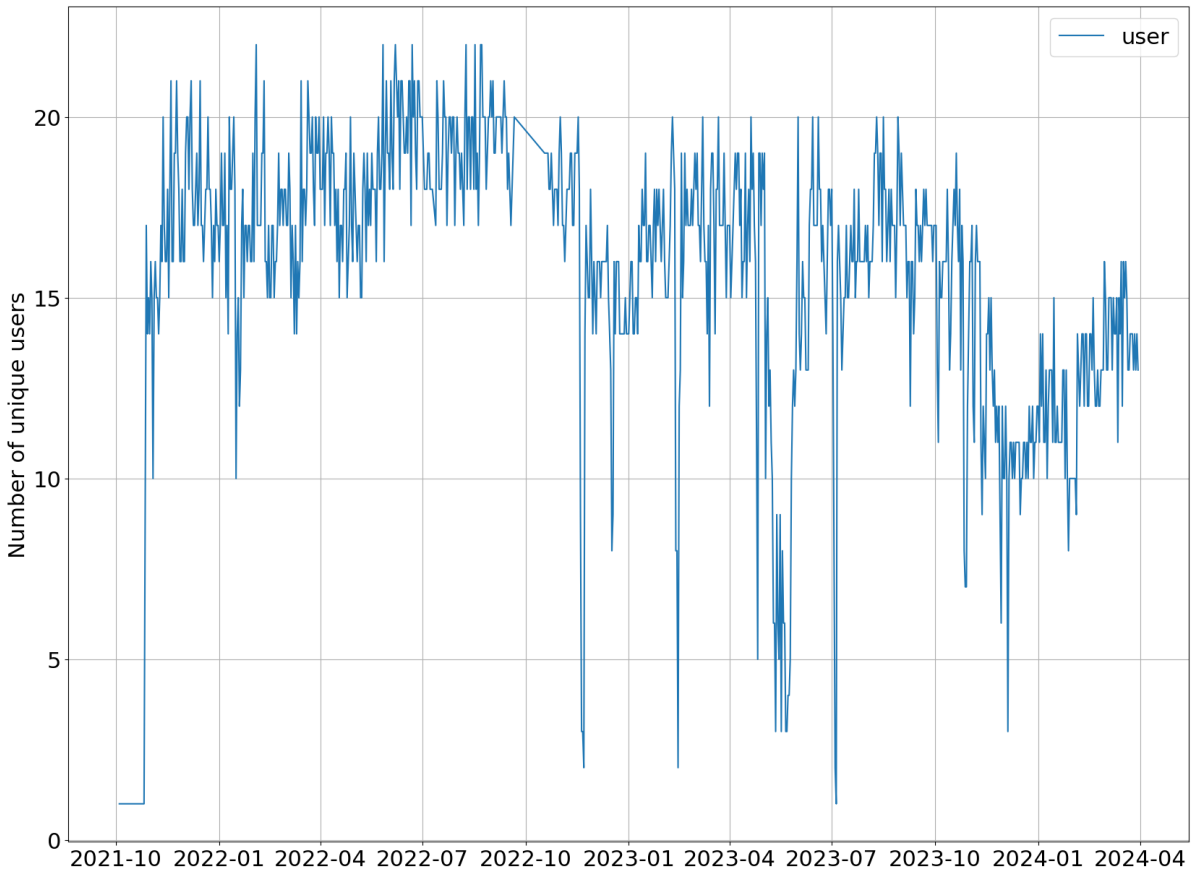
The table below is also interesting. It shows the amount of products downloaded for each the different Sentinel products. As expected, S1 and S2 are the most used Sentinels. S3 is slightly used, while S5p is not used.

```
satellite  product_type
S1         GRDH                241160
           GRDM                106163
           OCN                  88315
           RAW                 196352
           SLC                  62792
S2         MSIL1C              483639
           MSIL1C_DTERRENG       3100
           MSIL2A             1061039
S3         OLCI_L1               7435
           OLCI_L2                490
           SLSTR_L1              7791
           SLSTR_L2                12
           SRAL_L1                 23
           SRAL_L2                 84
           SYN_L2                  40
S5         NRTI_L2               6935
           OFFL_L1B                 3
           OFFL_L2                  6
dtype: int64
```

The following table shows the total downloaded volume of data in Tb per month. Here the seasonality of some Sentinel products can affect the final numbers.

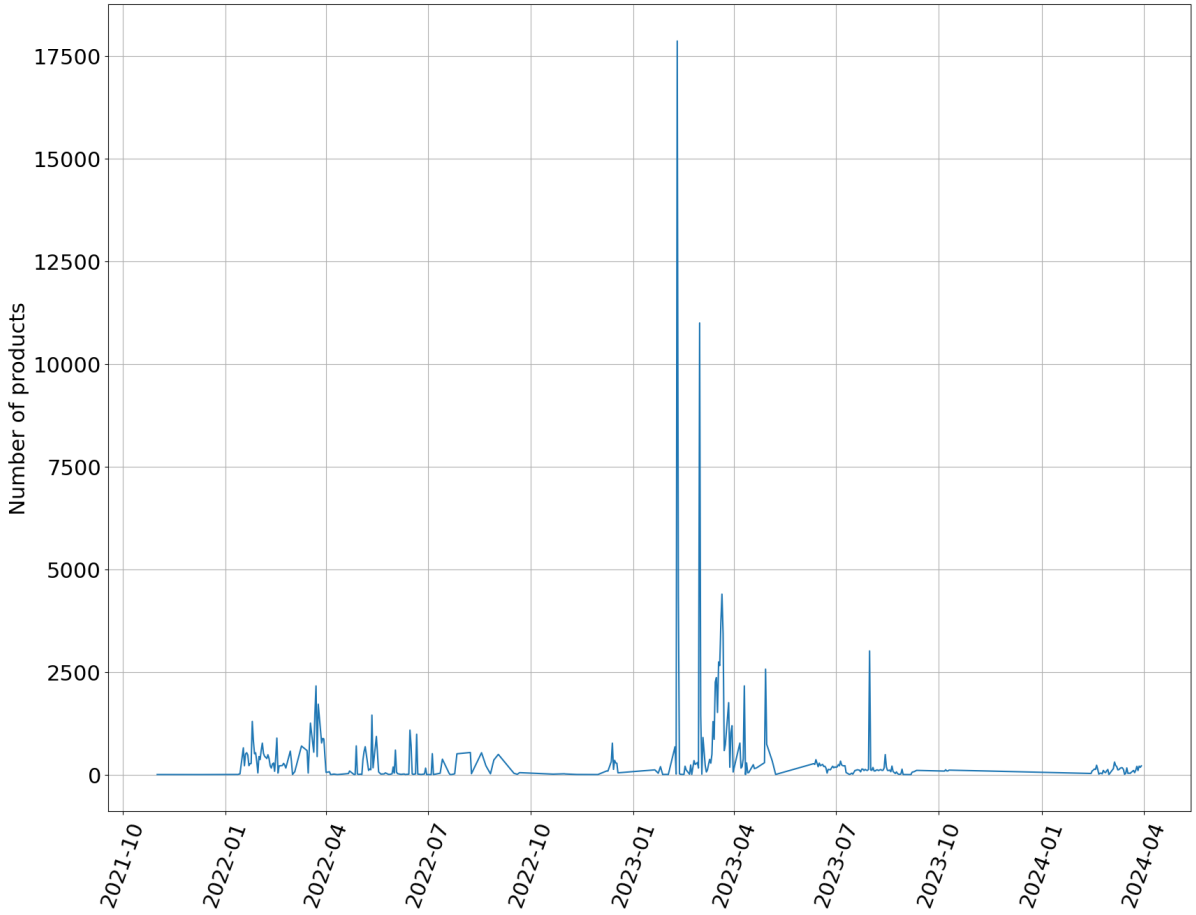
```
download_time  download_time
2021           10                7.588303
               11              158.654049
               12               57.675128
2022           1                36.406545
               2                29.798405
               3                39.869718
               4                46.768604
               5                51.219186
               6                42.277098
               7                44.565096
               8                42.852304
               9                47.447532
               10               60.491409
               11              141.031091
               12               50.957670
2023           1                48.169138
               2                41.604374
               3                61.866205
               4                74.137962
               5                25.676479
               6                54.858885
               7                78.211367
               8                88.075235
               9                80.195622
               10               54.828457
               11               33.878596
               12               10.909848
2024           1                 8.061366
               2                 9.525797
               3                14.406029
Name: size, dtype: float64
```

The number of users accessing and using the datahub is also important to be known. The plot below show the number of users per day. Some variability is represented in its numbers. Nevertheless, colhub.met.no is used by 15 to 20 users per day.



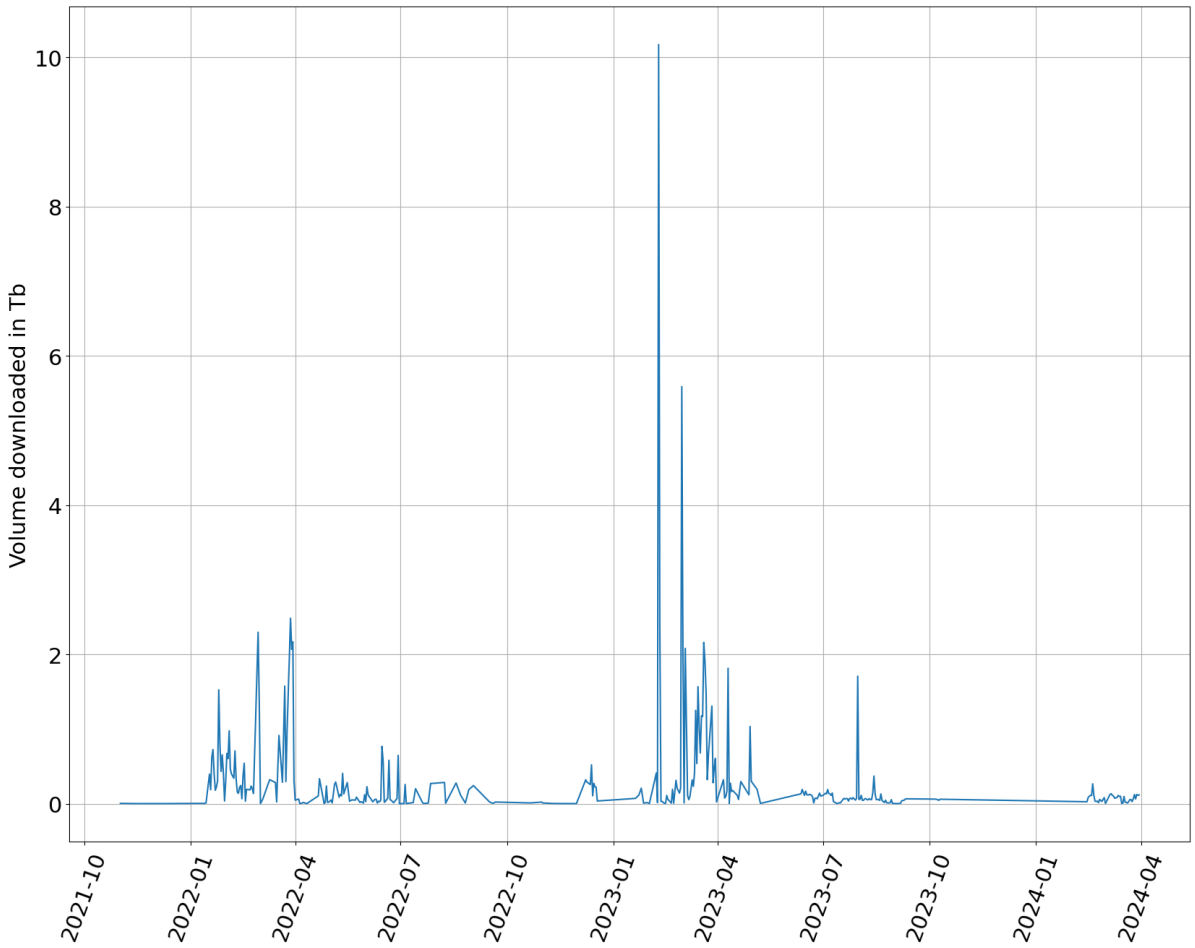
8.2 Portal: colhub-archive.met.no

Similar to colhub.met.no, here it is presented the performance of colhub-archive.met.no. First the number of products downloaded per day. As shown in the plot below, some days the number of products downloaded is null. This is a correct value which is not reflecting the performance of the FE. The archive is not as frequently accessed as colhub.met.no. Only those users looking for historical data will used this portal.



As explained and shown in the previous section, the total volume downloaded is also shown in the graphic below.

```
Index(['size', 'download_duration'], dtype='object')
```



It is still interesting to see the number of products downloaded per product type. As shown in the previous section, S1 and S2 still are the most popular Sentinels.

```
satellite  product_type
S1         GRDH                31536
           GRDM                 8514
           OCN                     1
           RAW                   164
           SLC                  3221
S2         MSIL1C              34571
           MSIL1C_DTERRENG     16832
           MSIL2A              46302
S3         OLCI_L1                 1
           SLSTR_L1              417
           SRAL_L1                 6
           SRAL_L2               159
S5         OFFL_L2                 1
dtype: int64
```

The table below shows the monthly retrieved volume of data in Tb.

```
download_time  download_time
2021           December          0.000696
               November          0.005186
```

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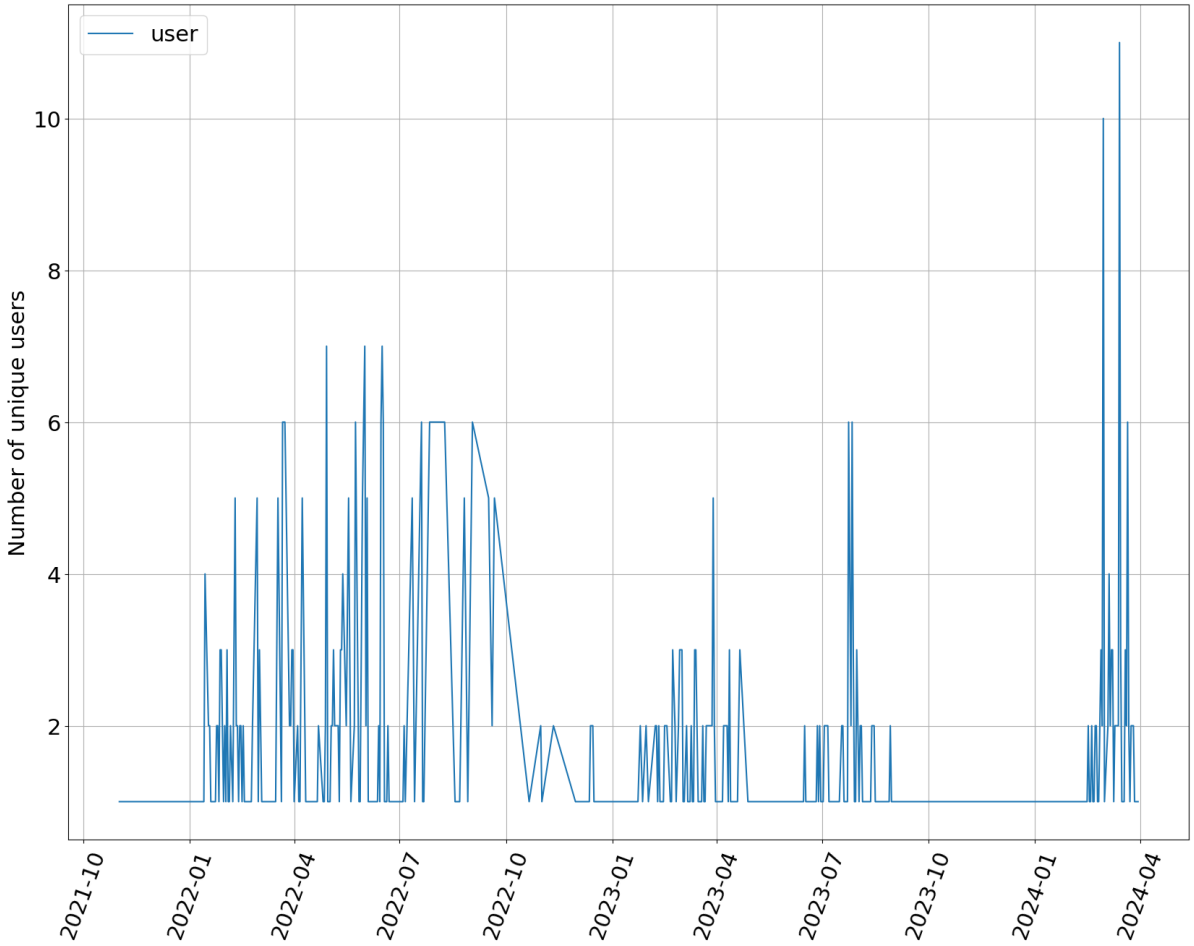
```
2022           April             0.858194
               August            0.874257
               December          2.247264
               February          9.514969
               January           7.210722
               July              0.771705
               June              3.787335
               March            13.999207
               May               2.258999
               November          0.011412
               October           0.030705
               September         0.289683
2023           April             5.010196
               August            1.931697
               February         14.316868
               January           0.417223
               July              3.804772
               June              2.082679
               March            27.805556
               May               0.196331
               October           0.276372
               September         0.220003
2024           February          1.177107
               March             2.019777
Name: size, dtype: float64
```

The last graphic show the number of users accessing and downloading data from the portal. Again, the discontinuity in numbers of users it is not a sign of the portal performance.


user
Number of unique users
10
8
6
4
2
2021-10
2022-01
2022-04
2022-07
2022-10
2023-01
2023-04
2023-07
2023-10
2024-01
2024-04

CHAPTER

NINE

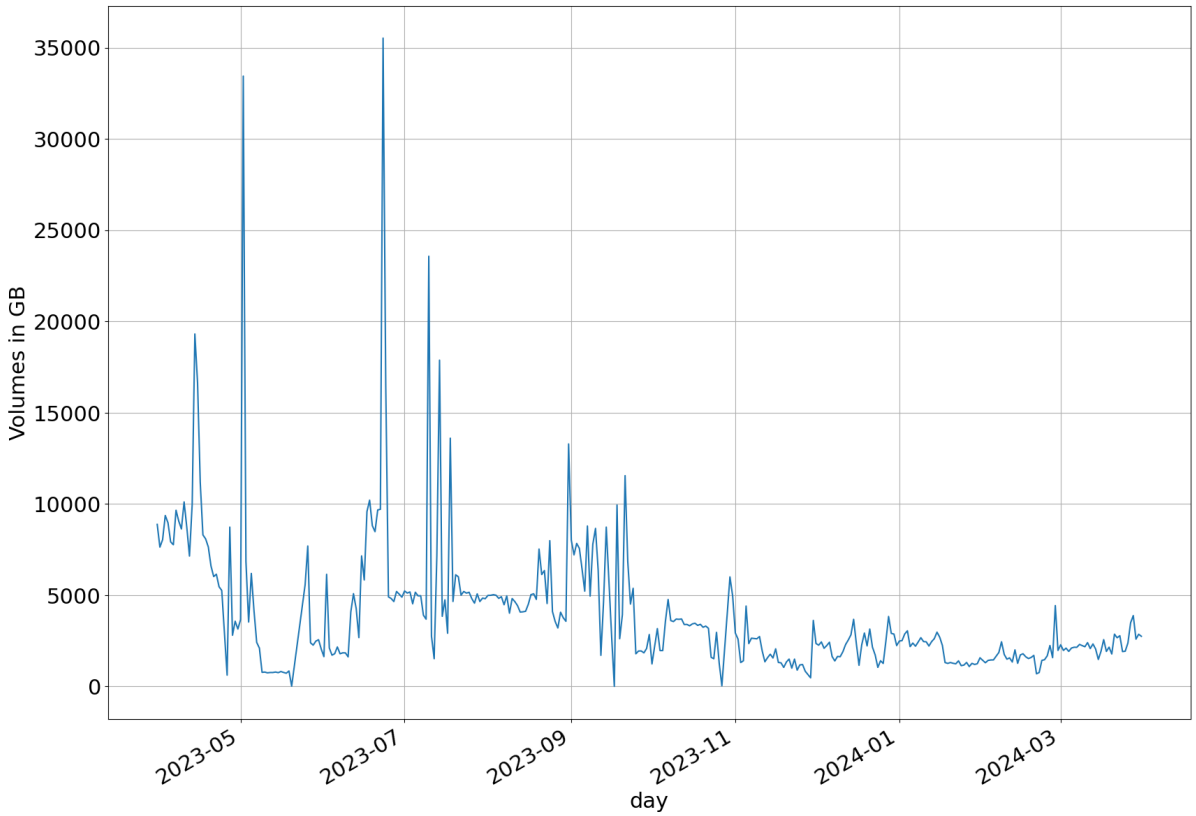
DATA VOLUMES FOR NBS

Satellite data storage requires an important amount of disk space, especially high resolution products such as the ones produced by the Sentinel constellation. This also represents an economical cost. Hence, it is very important to keep track of the total volume of data stored at MET Norway premises. In this section those numbers are shown.

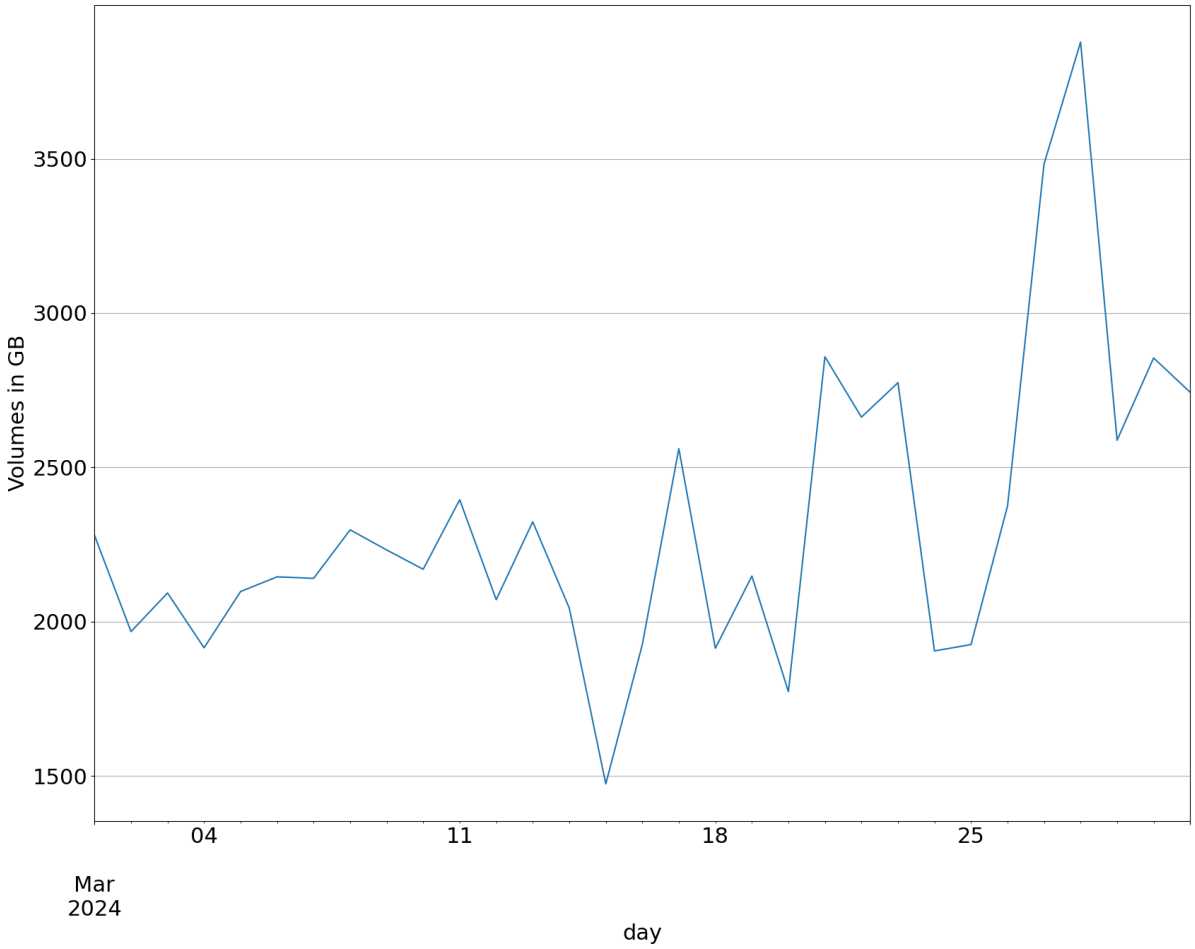
9.1 Volumes for AOI backends

Two type of products can be differentiated, products acquired from ESA datahub which keep the original format and Sentinel products transformed into NetCDF-CF. Those directly acquired from ESA are store at MET Norway BE for the AOI. Later on, they are made available to users through colhub-archive and colhub FEs.

The total amount of Sentinel products for the AOI, located in the AOI BE, represents 4561 TB



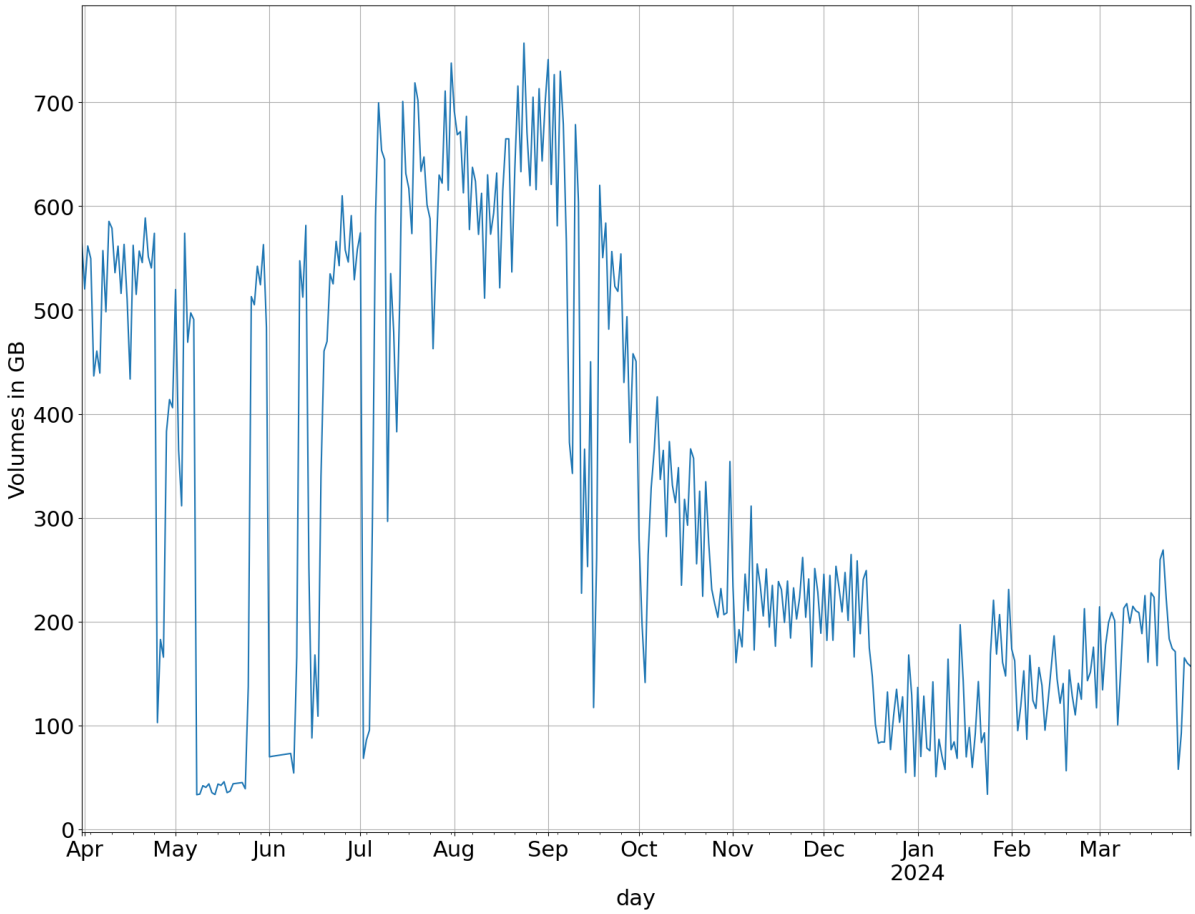
In the graphic above the volume of data per day in GB is shown for the last year. Here we can observed seasonality due to optical sensor products. The table below shows the same information for the last month.



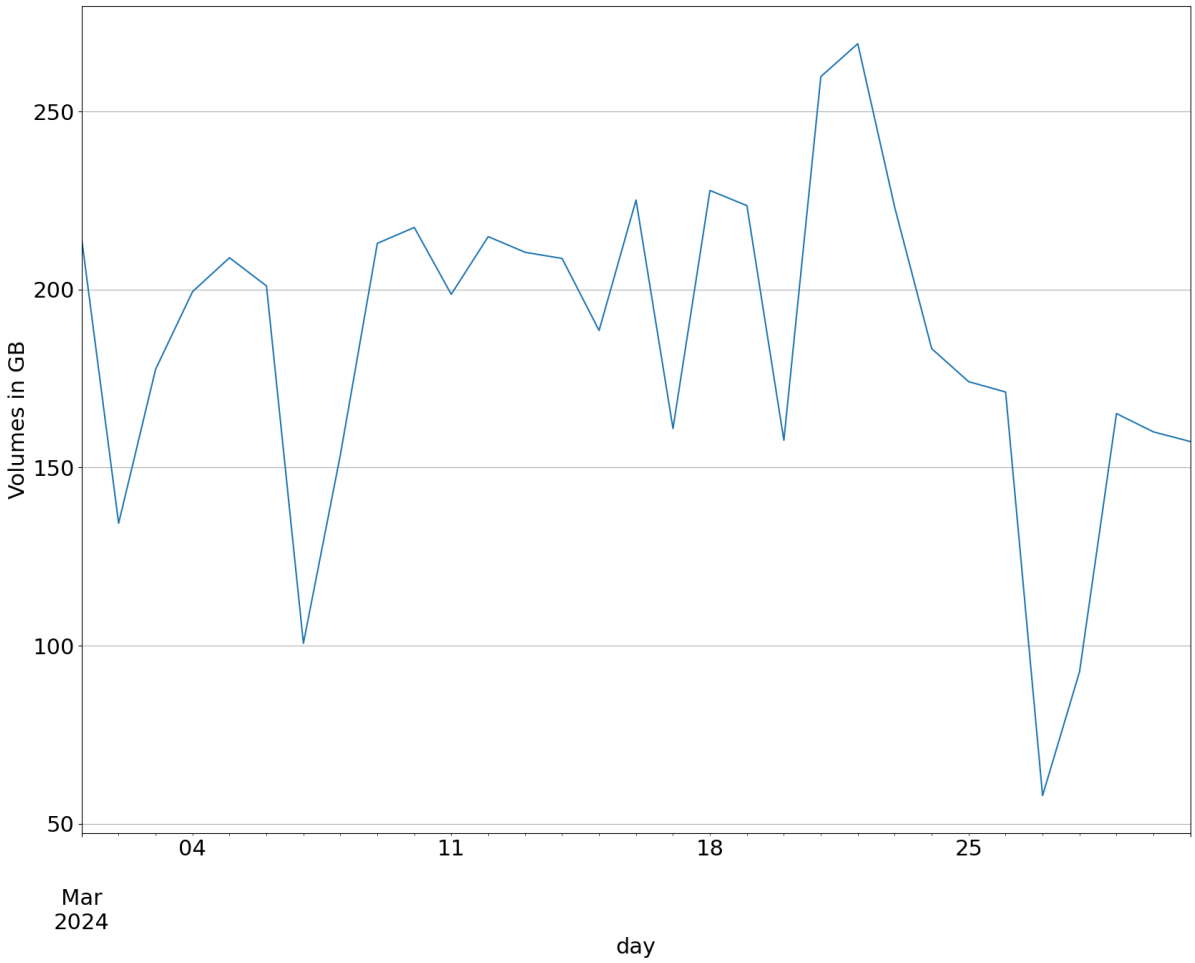
9.2 Volume for netcdf products

The products converted to NetCDF-CF are S1 and S2 products. These Sentinel datasets are served as SAFE format by ESA. This is not always convenient for users. Therefore as part of the NBS project, one of the MET Norway tasks as operator is to translate those products into NetCDF-CF.

The total amount of Sentinel-1 and Sentinel-2 products for the AOI transformed to NetCDF represents 917 TB

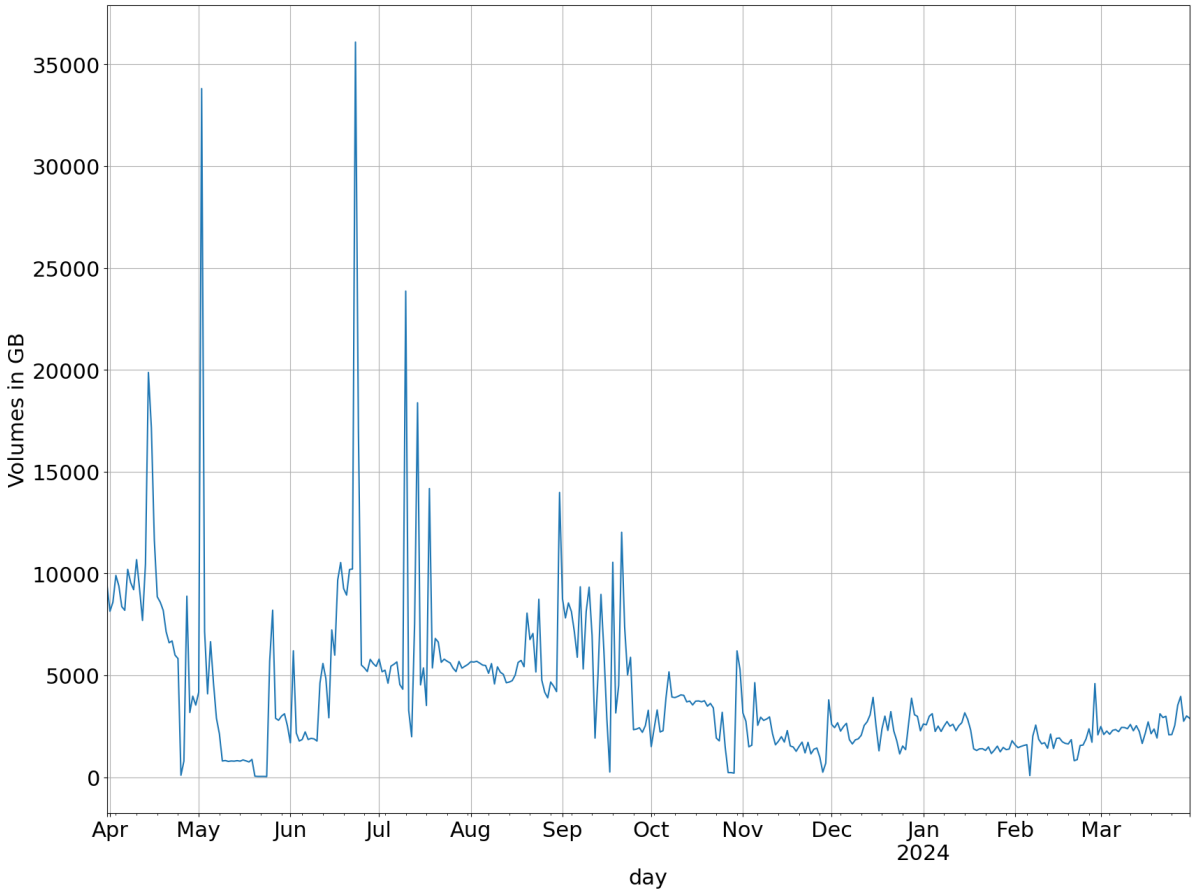


In the graphic above the volume of NetCDF-CF data per day in GB is shown for the last year. Here we can observed seasonality due to optical sensor products. The table below shows the same information for the last 30 days.



9.3 Totals

Finally, the total amount of disk space dedicated to the NBS project, including either products in SAFE and NetCDF formats, represents 5479 TB



In the graphic above the total volume of data per day in GB is shown for the last year. Here we can observed seasonality due to optical sensor products again. The table below shows the same information for the last month.

day	product_type	action	volume	number	timeliness
2024-03-01	GRDH	fscanner	72.550049	27.0	0.672486
2024-03-01	GRDH	synchronized	95.811316	58.0	1.313405
2024-03-01	GRDM	fscanner	5.954772	40.0	0.689948
2024-03-01	GRDM	synchronized	5.587230	15.0	0.717025
2024-03-01	OCN	synchronized	0.915559	46.0	1.436615
2024-03-01	RAW	synchronized	102.129549	73.0	1.148958
2024-03-01	SLC	synchronized	455.661865	61.0	1.760691
2024-03-02	GRDH	fscanner	74.774747	28.0	0.778130
2024-03-02	GRDH	synchronized	78.423382	47.0	2.690366
2024-03-02	GRDM	fscanner	6.690871	38.0	0.798917
2024-03-02	GRDM	synchronized	5.565115	16.0	2.900588
2024-03-02	OCN	synchronized	1.039310	55.0	2.431170
2024-03-02	RAW	synchronized	85.135707	63.0	1.852758
2024-03-02	SLC	synchronized	378.402665	50.0	3.349943
2024-03-03	GRDH	fscanner	65.093358	23.0	0.672080
2024-03-03	GRDH	synchronized	85.482979	51.0	1.276846
2024-03-03	GRDM	fscanner	5.578209	40.0	0.591510
2024-03-03	GRDM	synchronized	6.531979	19.0	0.925867
2024-03-03	OCN	synchronized	1.013777	50.0	1.244646
2024-03-03	RAW	synchronized	95.086266	70.0	0.999023
2024-03-03	SLC	synchronized	408.388728	54.0	1.704609

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2024-03-04	GRDH	fscanner	69.447600	23.0	0.786526
2024-03-04	GRDH	synchronized	73.495869	45.0	1.219317
2024-03-04	GRDM	fscanner	6.400670	38.0	0.700248
2024-03-04	GRDM	synchronized	6.720860	17.0	1.162126
2024-03-04	OCN	synchronized	0.982634	47.0	1.289693
2024-03-04	RAW	synchronized	84.344179	62.0	1.013344
2024-03-04	SLC	synchronized	359.421051	48.0	1.537160
2024-03-05	GRDH	fscanner	47.463404	18.0	0.620668
2024-03-05	GRDH	synchronized	65.587374	39.0	1.452827
2024-03-05	GRDM	fscanner	6.407754	35.0	0.613716
2024-03-05	GRDM	synchronized	9.789338	26.0	1.602019
2024-03-05	OCN	synchronized	1.234826	54.0	1.686504
2024-03-05	RAW	synchronized	84.838627	65.0	1.288538
2024-03-05	SLC	synchronized	328.679649	43.0	2.000485
2024-03-06	GRDH	fscanner	66.129876	20.0	0.710935
2024-03-06	GRDH	synchronized	77.800878	48.0	1.159443
2024-03-06	GRDM	fscanner	3.690507	34.0	0.820402
2024-03-06	GRDM	synchronized	3.372540	9.0	1.493906
2024-03-06	OCN	synchronized	0.676276	39.0	1.381750
2024-03-06	RAW	synchronized	80.985799	57.0	0.952773
2024-03-06	SLC	synchronized	375.307062	51.0	1.548629
2024-03-07	GRDH	fscanner	52.737667	20.0	0.691376
2024-03-07	GRDH	synchronized	73.952768	45.0	1.381789
2024-03-07	GRDM	fscanner	4.104982	29.0	0.662394
2024-03-07	GRDM	synchronized	7.290924	18.0	1.095372
2024-03-07	OCN	synchronized	1.118428	54.0	1.421906
2024-03-07	RAW	synchronized	86.016368	63.0	1.089556
2024-03-07	SLC	synchronized	353.487006	47.0	1.753765
2024-03-08	GRDH	fscanner	67.097943	26.0	0.643062
2024-03-08	GRDH	synchronized	82.865424	50.0	1.227311
2024-03-08	GRDM	fscanner	6.871187	46.0	0.671207
2024-03-08	GRDM	synchronized	6.853227	18.0	1.030954
2024-03-08	OCN	synchronized	1.049674	50.0	1.367318
2024-03-08	RAW	synchronized	95.004988	69.0	1.011229
2024-03-08	SLC	synchronized	398.091587	53.0	1.687870
2024-03-09	GRDH	fscanner	68.221922	23.0	0.654535
2024-03-09	GRDH	synchronized	82.899642	50.0	1.287131
2024-03-09	GRDM	fscanner	3.470734	32.0	0.663430
2024-03-09	GRDM	synchronized	5.110944	13.0	1.902934
2024-03-09	OCN	synchronized	0.943420	49.0	1.434257
2024-03-09	RAW	synchronized	90.274081	64.0	1.063700
2024-03-09	SLC	synchronized	386.642604	51.0	1.620502
2024-03-10	GRDH	fscanner	56.947203	20.0	1.014082
2024-03-10	GRDH	synchronized	86.304558	53.0	1.318681
2024-03-10	GRDM	fscanner	2.730286	25.0	0.714852
2024-03-10	GRDM	synchronized	5.209803	14.0	0.999476
2024-03-10	OCN	synchronized	0.899046	46.0	1.361375
2024-03-10	RAW	synchronized	93.640011	67.0	1.059636
2024-03-10	SLC	synchronized	413.554494	56.0	1.689382
2024-03-11	GRDH	fscanner	77.192778	26.0	0.943933
2024-03-11	GRDH	synchronized	92.568392	56.0	1.446442
2024-03-11	GRDM	fscanner	4.126745	38.0	0.782980
2024-03-11	GRDM	synchronized	5.099117	13.0	1.170272
2024-03-11	OCN	synchronized	0.947125	50.0	1.651378
2024-03-11	RAW	synchronized	97.552670	69.0	1.054488
2024-03-11	SLC	synchronized	450.277652	60.0	1.958805

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2024-03-12	GRDH	fscanner	44.268714	18.0	0.602488
2024-03-12	GRDH	synchronized	65.275425	39.0	1.361836
2024-03-12	GRDM	fscanner	6.280113	34.0	0.611309
2024-03-12	GRDM	synchronized	8.624066	22.0	0.774831
2024-03-12	OCN	synchronized	1.131208	51.0	1.373488
2024-03-12	RAW	synchronized	81.379901	61.0	1.034550
2024-03-12	SLC	synchronized	315.660570	41.0	1.658400
2024-03-13	GRDH	fscanner	74.565690	29.0	0.687773
2024-03-13	GRDH	synchronized	78.082545	47.0	1.256012
2024-03-13	GRDM	fscanner	5.899621	40.0	0.716213
2024-03-13	GRDM	synchronized	5.587812	15.0	0.681485
2024-03-13	OCN	synchronized	0.878682	43.0	1.346726
2024-03-13	RAW	synchronized	86.240563	62.0	1.062354
2024-03-13	SLC	synchronized	376.237145	50.0	1.606420
2024-03-14	GRDH	fscanner	76.901209	29.0	0.812048
2024-03-14	GRDH	synchronized	40.459790	24.0	1.714630
2024-03-14	GRDM	fscanner	6.625487	38.0	0.798463
2024-03-14	GRDM	synchronized	5.658158	15.0	1.016332
2024-03-14	OCN	synchronized	0.786065	35.0	1.538201
2024-03-14	RAW	synchronized	51.199609	39.0	1.184518
2024-03-14	SLC	synchronized	201.871883	26.0	1.885899
2024-03-15	GRDH	fscanner	64.974521	23.0	0.684939
2024-03-15	GRDH	synchronized	21.966431	13.0	24.635541
2024-03-15	GRDM	fscanner	5.589528	40.0	0.698801
2024-03-15	OCN	synchronized	0.124159	9.0	24.884574
2024-03-15	RAW	synchronized	19.743315	13.0	24.458718
2024-03-15	SLC	synchronized	31.570717	4.0	29.990776
2024-03-16	GRDH	fscanner	69.443454	23.0	0.710838
2024-03-16	GRDH	synchronized	15.994318	10.0	36.692716
2024-03-16	GRDM	fscanner	6.411884	38.0	0.700052
2024-03-16	GRDM	synchronized	4.748315	13.0	43.880159
2024-03-16	OCN	synchronized	0.550672	22.0	37.504372
2024-03-16	RAW	synchronized	27.048661	23.0	35.819649
2024-03-16	SLC	synchronized	142.738312	19.0	43.479853
2024-03-17	GRDH	fscanner	46.545729	16.0	0.811710
2024-03-17	GRDH	synchronized	144.282957	87.0	35.157161
2024-03-17	GRDM	fscanner	6.286346	34.0	0.780816
2024-03-17	GRDM	synchronized	12.500226	33.0	29.489298
2024-03-17	OCN	synchronized	1.652487	81.0	33.693768
2024-03-17	RAW	synchronized	181.074361	134.0	31.236080
2024-03-17	SLC	synchronized	760.506850	101.0	34.396128
2024-03-18	GRDH	fscanner	76.911613	24.0	0.827395
2024-03-18	GRDH	synchronized	36.759370	22.0	1.579265
2024-03-18	GRDM	fscanner	3.691951	34.0	0.820352
2024-03-18	GRDM	synchronized	2.282499	6.0	0.975712
2024-03-18	OCN	synchronized	0.675014	27.0	1.513688
2024-03-18	RAW	synchronized	35.302491	25.0	1.508327
2024-03-18	SLC	synchronized	137.184242	18.0	1.800421
2024-03-19	GRDH	fscanner	50.769436	19.0	0.668444
2024-03-19	GRDH	synchronized	33.556573	20.0	53.976590
2024-03-19	GRDM	fscanner	4.084547	29.0	0.662339
2024-03-19	GRDM	synchronized	2.605499	7.0	52.759734
2024-03-19	OCN	synchronized	0.344281	18.0	56.051359
2024-03-19	RAW	synchronized	42.594884	29.0	59.308196
2024-03-19	SLC	synchronized	83.303141	11.0	28.934501
2024-03-20	GRDH	fscanner	67.270871	26.0	0.710793

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2024-03-20	GRDH	synchronized	53.064131	32.0	100.680395
2024-03-20	GRDM	fscanner	6.887779	46.0	0.691665
2024-03-20	GRDM	synchronized	6.082643	16.0	81.349324
2024-03-20	OCN	synchronized	0.817384	40.0	87.254545
2024-03-20	RAW	synchronized	54.469209	41.0	68.782839
2024-03-20	SLC	synchronized	252.325263	33.0	84.409087
2024-03-21	GRDH	fscanner	68.047724	23.0	0.864211
2024-03-21	GRDH	synchronized	99.940192	61.0	51.292479
2024-03-21	GRDM	fscanner	3.481578	32.0	0.909772
2024-03-21	GRDM	synchronized	8.809595	22.0	49.766640
2024-03-21	OCN	synchronized	1.375858	70.0	48.569921
2024-03-21	RAW	synchronized	106.747207	77.0	48.547284
2024-03-21	SLC	synchronized	522.481857	70.0	52.594453
2024-03-22	GRDH	fscanner	56.407482	19.0	0.996583
2024-03-22	GRDH	synchronized	90.129166	55.0	55.556356
2024-03-22	GRDM	fscanner	2.738209	25.0	0.714002
2024-03-22	GRDM	synchronized	6.853070	18.0	60.797503
2024-03-22	OCN	synchronized	1.102875	54.0	60.084016
2024-03-22	RAW	synchronized	102.573110	74.0	59.025999
2024-03-22	SLC	synchronized	415.510169	56.0	57.592363
2024-03-23	GRDH	fscanner	78.496061	26.0	0.944267
2024-03-23	GRDH	synchronized	147.980281	91.0	40.607906
2024-03-23	GRDM	fscanner	2.830030	27.0	0.699205
2024-03-23	GRDM	synchronized	11.544529	30.0	35.279802
2024-03-23	OCN	synchronized	1.850261	90.0	39.860676
2024-03-23	RAW	synchronized	168.984554	122.0	35.090438
2024-03-23	SLC	synchronized	728.041260	99.0	40.777115
2024-03-24	GRDH	fscanner	44.570065	18.0	0.599838
2024-03-24	GRDH	synchronized	42.087622	25.0	20.586811
2024-03-24	GRDM	fscanner	6.510291	33.0	0.607245
2024-03-24	GRDM	synchronized	4.905028	12.0	21.977363
2024-03-24	OCN	synchronized	0.661893	28.0	20.483691
2024-03-24	RAW	synchronized	50.754898	37.0	20.297344
2024-03-24	SLC	synchronized	209.554176	27.0	21.340630
2024-03-25	GRDH	fscanner	71.041951	26.0	0.697144
2024-03-25	GRDM	fscanner	5.976239	40.0	0.731060
2024-03-25	SLC	synchronized	7.248908	1.0	41.668258
2024-03-26	GRDH	fscanner	74.265120	29.0	0.785039
2024-03-26	GRDH	synchronized	25.333601	16.0	68.281909
2024-03-26	GRDM	fscanner	5.823924	36.0	0.805012
2024-03-26	GRDM	synchronized	3.576293	9.0	67.058079
2024-03-26	OCN	synchronized	0.447097	20.0	68.352741
2024-03-26	RAW	synchronized	32.465220	25.0	67.925194
2024-03-26	SLC	synchronized	113.675762	16.0	68.649540
2024-03-27	GRDH	fscanner	69.067552	26.0	0.690187
2024-03-27	GRDH	synchronized	88.401979	53.0	63.165766
2024-03-27	GRDM	fscanner	5.562705	40.0	0.677922
2024-03-27	GRDM	synchronized	10.826094	28.0	63.084568
2024-03-27	OCN	synchronized	1.435642	63.0	63.250677
2024-03-27	RAW	synchronized	108.478662	81.0	62.879002
2024-03-27	SLC	synchronized	445.939092	59.0	63.720162
2024-03-28	GRDH	fscanner	71.594479	25.0	0.745210
2024-03-28	GRDH	synchronized	166.060383	100.0	56.872506
2024-03-28	GRDM	fscanner	6.345572	38.0	0.807646
2024-03-28	GRDM	synchronized	7.558957	21.0	51.721576
2024-03-28	OCN	synchronized	1.643850	93.0	52.990070

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2024-03-28	RAW	synchronized	170.475860	121.0	53.523712
2024-03-28	SLC	synchronized	777.264799	102.0	57.099856
2024-03-29	GRDH	fscanner	47.640884	18.0	0.801213
2024-03-29	GRDH	synchronized	88.934384	53.0	48.788399
2024-03-29	GRDM	fscanner	6.272374	34.0	0.795854
2024-03-29	GRDM	synchronized	7.879649	22.0	49.223288
2024-03-29	OCN	synchronized	1.161569	55.0	49.363138
2024-03-29	RAW	synchronized	101.850202	75.0	48.584218
2024-03-29	SLC	synchronized	430.719417	57.0	49.249051
2024-03-30	GRDH	fscanner	69.552524	24.0	0.905978
2024-03-30	GRDH	synchronized	106.998841	65.0	43.585197
2024-03-30	GRDM	fscanner	3.689148	34.0	0.820131
2024-03-30	GRDM	synchronized	12.434384	32.0	39.613904
2024-03-30	OCN	synchronized	1.673667	76.0	43.513992
2024-03-30	RAW	synchronized	129.480959	97.0	43.257622
2024-03-30	SLC	synchronized	593.325780	79.0	44.008039
2024-03-30	Unknown	deleted	0.000000	7.0	0.000000
2024-03-31	GRDH	fscanner	51.369721	21.0	0.721354
2024-03-31	GRDH	synchronized	110.418089	67.0	30.123275
2024-03-31	GRDM	fscanner	4.107379	29.0	0.662068
2024-03-31	GRDM	synchronized	7.753775	21.0	30.194194
2024-03-31	OCN	synchronized	1.257045	65.0	30.818676
2024-03-31	RAW	synchronized	122.298695	88.0	30.079234
2024-03-31	SLC	synchronized	525.452970	70.0	30.699932
2024-03-01	MSIL1C	synchronized	443.320039	982.0	4.184134
2024-03-02	MSIL1C	synchronized	304.570777	687.0	3.305963
2024-03-03	MSIL1C	synchronized	320.554689	727.0	2.690929
2024-03-04	MSIL1C	synchronized	278.938826	625.0	5.006599
2024-03-05	MSIL1C	synchronized	374.351473	817.0	3.344874
2024-03-06	MSIL1C	synchronized	416.080794	919.0	6.949868
2024-03-07	MSIL1C	synchronized	390.276344	821.0	6.348222
2024-03-08	MSIL1C	synchronized	419.541931	911.0	2.906424
2024-03-09	MSIL1C	synchronized	404.176878	903.0	2.931823
2024-03-10	MSIL1C	synchronized	284.433548	609.0	3.287488
2024-03-11	MSIL1C	synchronized	439.606897	951.0	6.532107
2024-03-12	MSIL1C	synchronized	323.670033	674.0	3.654391
2024-03-13	MSIL1C	synchronized	459.852670	1012.0	7.148624
2024-03-14	MSIL1C	synchronized	537.247742	1190.0	19.013993
2024-03-15	MSIL1C	synchronized	359.306014	804.0	24.803119
2024-03-16	MSIL1C	synchronized	507.148911	1147.0	19.001296
2024-03-17	MSIL1C	synchronized	478.834683	1038.0	8.942934
2024-03-18	MSIL1C	synchronized	264.298218	539.0	12.500889
2024-03-19	MSIL1C	synchronized	372.050963	851.0	21.594872
2024-03-20	MSIL1C	synchronized	162.692495	350.0	70.129101
2024-03-21	MSIL1C	synchronized	524.058467	1153.0	45.704014
2024-03-22	MSIL1C	synchronized	526.317934	1161.0	40.086524
2024-03-23	MSIL1C	synchronized	422.382476	958.0	37.215148
2024-03-24	MSIL1C	synchronized	468.189676	1031.0	44.437285
2024-03-25	MSIL1C	synchronized	552.537718	1198.0	39.537506
2024-03-26	MSIL1C	synchronized	382.863807	836.0	51.450978
2024-03-26	Unknown	deleted	0.000000	1.0	0.000000
2024-03-27	MSIL1C	synchronized	823.156593	1848.0	30.107088
2024-03-28	MSIL1C	synchronized	956.690912	2214.0	16.360699
2024-03-29	MSIL1C	synchronized	419.823415	1025.0	2.881050
2024-03-30	MSIL1C	synchronized	340.716118	826.0	3.047751
2024-03-31	MSIL1C	synchronized	335.775009	767.0	3.501183

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2024-03-01	MSIL2A	synchronized	415.483677	756.0	3.503464
2024-03-02	MSIL2A	synchronized	384.524587	695.0	3.820692
2024-03-03	MSIL2A	synchronized	411.047716	731.0	3.176123
2024-03-04	MSIL2A	synchronized	356.937032	630.0	5.306681
2024-03-05	MSIL2A	synchronized	500.708666	845.0	4.090674
2024-03-06	MSIL2A	synchronized	486.131452	864.0	8.256132
2024-03-07	MSIL2A	synchronized	486.618701	820.0	7.270767
2024-03-08	MSIL2A	synchronized	533.490945	919.0	3.539652
2024-03-09	MSIL2A	synchronized	512.970154	906.0	3.328647
2024-03-10	MSIL2A	synchronized	562.123339	954.0	4.015329
2024-03-11	MSIL2A	synchronized	529.654825	930.0	4.755833
2024-03-12	MSIL2A	synchronized	555.692644	944.0	4.305118
2024-03-13	MSIL2A	synchronized	583.333179	1016.0	5.598172
2024-03-14	MSIL2A	synchronized	394.969981	712.0	8.001215
2024-03-15	MSIL2A	synchronized	340.256566	592.0	24.783799
2024-03-16	MSIL2A	synchronized	556.218988	1006.0	21.109278
2024-03-17	MSIL2A	synchronized	669.121358	1161.0	11.226600
2024-03-18	MSIL2A	synchronized	167.661946	313.0	13.381745
2024-03-19	MSIL2A	synchronized	746.557412	1312.0	25.004572
2024-03-20	MSIL2A	synchronized	391.086133	646.0	78.500850
2024-03-21	MSIL2A	synchronized	857.532793	1511.0	43.667782
2024-03-22	MSIL2A	synchronized	805.881233	1448.0	20.275357
2024-03-23	MSIL2A	synchronized	604.355470	1069.0	49.695701
2024-03-24	MSIL2A	synchronized	448.707294	793.0	52.086952
2024-03-25	MSIL2A	synchronized	683.936781	1183.0	45.950438
2024-03-26	MSIL2A	synchronized	928.093834	1596.0	15.669930
2024-03-27	MSIL2A	synchronized	1180.098448	2046.0	33.592699
2024-03-28	MSIL2A	synchronized	1041.462738	1775.0	5.698741
2024-03-29	MSIL2A	synchronized	776.178659	1380.0	3.366571
2024-03-30	MSIL2A	synchronized	838.472936	1440.0	4.867601
2024-03-31	MSIL2A	synchronized	820.263855	1456.0	3.607508
2024-03-01	OLCI_L1	synchronized	51.862868	81.0	5.787826
2024-03-01	OLCI_L2	synchronized	7.193333	77.0	3.197853
2024-03-01	SLSTR_L1	synchronized	70.507652	180.0	10.703820
2024-03-01	SLSTR_L2	synchronized	16.468360	272.0	20.367408
2024-03-01	SRAL_L1	synchronized	139.459287	86.0	38.631203
2024-03-01	SRAL_L2	synchronized	5.139478	195.0	40.298852
2024-03-01	SYN_L2	synchronized	13.910260	104.0	24.471471
2024-03-02	OLCI_L1	synchronized	47.320376	74.0	5.542254
2024-03-02	OLCI_L2	synchronized	6.814160	75.0	3.040234
2024-03-02	SLSTR_L1	synchronized	68.473623	174.0	16.812441
2024-03-02	SLSTR_L2	synchronized	15.669966	258.0	19.520004
2024-03-02	SRAL_L1	synchronized	134.072572	83.0	38.841594
2024-03-02	SRAL_L2	synchronized	5.506809	211.0	40.577066
2024-03-02	SYN_L2	synchronized	15.177221	108.0	26.005891
2024-03-03	OLCI_L1	synchronized	60.340549	90.0	10.518422
2024-03-03	OLCI_L2	synchronized	8.666215	87.0	11.840813
2024-03-03	SLSTR_L1	synchronized	65.879028	167.0	3.710311
2024-03-03	SLSTR_L2	synchronized	15.132322	249.0	20.624289
2024-03-03	SRAL_L1	synchronized	147.290737	91.0	38.594881
2024-03-03	SRAL_L2	synchronized	5.323847	205.0	39.853703
2024-03-03	SYN_L2	synchronized	16.103078	111.0	26.957448
2024-03-04	OLCI_L1	synchronized	52.235049	79.0	9.498067
2024-03-04	OLCI_L2	synchronized	7.696721	79.0	10.659049
2024-03-04	SLSTR_L1	synchronized	72.599313	185.0	17.394819
2024-03-04	SLSTR_L2	synchronized	16.964278	278.0	22.702147

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2024-03-04	SRAL_L1	synchronized	136.740030	83.0	39.782818
2024-03-04	SRAL_L2	synchronized	5.381555	208.0	40.080060
2024-03-04	SYN_L2	synchronized	15.732372	105.0	26.679128
2024-03-05	OLCI_L1	synchronized	56.118380	82.0	8.242965
2024-03-05	OLCI_L2	synchronized	8.322521	83.0	7.416768
2024-03-05	SLSTR_L1	synchronized	68.147158	173.0	7.200295
2024-03-05	SLSTR_L2	synchronized	15.557363	256.0	19.362536
2024-03-05	SRAL_L1	synchronized	141.653367	87.0	39.152081
2024-03-05	SRAL_L2	synchronized	5.052379	192.0	40.335902
2024-03-05	SYN_L2	synchronized	17.477527	105.0	23.846656
2024-03-06	OLCI_L1	synchronized	44.369706	64.0	5.550836
2024-03-06	OLCI_L2	synchronized	7.721745	76.0	5.956147
2024-03-06	SLSTR_L1	synchronized	56.269621	142.0	17.051338
2024-03-06	SLSTR_L2	synchronized	13.061598	215.0	20.700267
2024-03-06	SRAL_L1	synchronized	116.330575	67.0	39.806509
2024-03-06	SRAL_L2	synchronized	4.390987	160.0	40.913041
2024-03-06	SYN_L2	synchronized	15.815027	89.0	23.568098
2024-03-07	OLCI_L1	synchronized	66.137341	96.0	14.325998
2024-03-07	OLCI_L2	synchronized	9.066090	87.0	16.211512
2024-03-07	SLSTR_L1	synchronized	76.182697	193.0	11.371174
2024-03-07	SLSTR_L2	synchronized	17.362002	286.0	24.743879
2024-03-07	SRAL_L1	synchronized	156.821737	101.0	43.493551
2024-03-07	SRAL_L2	synchronized	6.432126	253.0	43.463114
2024-03-07	SYN_L2	synchronized	18.541453	117.0	29.040947
2024-03-08	OLCI_L1	synchronized	58.458180	82.0	8.547542
2024-03-08	OLCI_L2	synchronized	8.384256	81.0	4.818112
2024-03-08	SLSTR_L1	synchronized	65.069756	165.0	5.357308
2024-03-08	SLSTR_L2	synchronized	16.788122	275.0	23.739436
2024-03-08	SRAL_L1	synchronized	141.609913	88.0	38.902793
2024-03-08	SRAL_L2	synchronized	5.049847	198.0	39.828973
2024-03-08	SYN_L2	synchronized	17.866176	108.0	27.421352
2024-03-09	OLCI_L1	synchronized	57.098185	78.0	6.466695
2024-03-09	OLCI_L2	synchronized	8.142253	78.0	6.320518
2024-03-09	SLSTR_L1	synchronized	65.303215	165.0	18.192591
2024-03-09	SLSTR_L2	synchronized	14.956663	246.0	20.417244
2024-03-09	SRAL_L1	synchronized	136.123794	81.0	40.682876
2024-03-09	SRAL_L2	synchronized	4.996698	189.0	40.691016
2024-03-09	SYN_L2	synchronized	17.445370	106.0	23.833907
2024-03-10	OLCI_L1	synchronized	62.187062	85.0	5.862975
2024-03-10	OLCI_L2	synchronized	8.970467	84.0	5.828431
2024-03-10	SLSTR_L1	synchronized	66.490647	168.0	6.473479
2024-03-10	SLSTR_L2	synchronized	15.334750	252.0	21.546173
2024-03-10	SRAL_L1	synchronized	131.605649	82.0	39.826078
2024-03-10	SRAL_L2	synchronized	5.143294	194.0	41.594546
2024-03-10	SYN_L2	synchronized	18.059345	106.0	25.733983
2024-03-11	OLCI_L1	synchronized	71.923762	97.0	11.013666
2024-03-11	OLCI_L2	synchronized	10.622505	96.0	13.648726
2024-03-11	SLSTR_L1	synchronized	71.596235	181.0	17.150143
2024-03-11	SLSTR_L2	synchronized	16.485340	271.0	24.432098
2024-03-11	SRAL_L1	synchronized	147.597837	93.0	39.821472
2024-03-11	SRAL_L2	synchronized	5.732541	223.0	41.103832
2024-03-11	SYN_L2	synchronized	18.786776	113.0	27.095657
2024-03-12	OLCI_L1	synchronized	61.423398	82.0	7.013843
2024-03-12	OLCI_L2	synchronized	8.393192	79.0	6.822502
2024-03-12	SLSTR_L1	synchronized	69.181369	175.0	19.384790
2024-03-12	SLSTR_L2	synchronized	16.384770	269.0	23.469995

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2024-03-12	SRAL_L1	synchronized	133.036228	80.0	40.547974
2024-03-12	SRAL_L2	synchronized	5.099982	199.0	41.518517
2024-03-12	SYN_L2	synchronized	20.322569	112.0	29.426130
2024-03-13	OLCI_L1	synchronized	58.111304	76.0	7.953153
2024-03-13	OLCI_L2	synchronized	9.159931	85.0	9.311100
2024-03-13	SLSTR_L1	synchronized	67.148264	169.0	16.606164
2024-03-13	SLSTR_L2	synchronized	14.811606	244.0	24.213606
2024-03-13	SRAL_L1	synchronized	127.697299	76.0	41.615170
2024-03-13	SRAL_L2	synchronized	4.748348	178.0	43.141367
2024-03-13	SYN_L2	synchronized	17.928976	100.0	29.864251
2024-03-14	OLCI_L1	synchronized	71.878127	94.0	12.519343
2024-03-14	OLCI_L2	synchronized	9.793344	89.0	12.658361
2024-03-14	SLSTR_L1	synchronized	74.484353	187.0	19.826999
2024-03-14	SLSTR_L2	synchronized	17.093154	282.0	23.557145
2024-03-14	SRAL_L1	synchronized	154.209441	100.0	40.742448
2024-03-14	SRAL_L2	synchronized	6.165838	239.0	42.606535
2024-03-14	SYN_L2	synchronized	21.519186	130.0	28.317581
2024-03-15	OLCI_L1	synchronized	51.169708	66.0	8.281532
2024-03-15	OLCI_L2	synchronized	8.181243	74.0	14.297532
2024-03-15	SLSTR_L1	synchronized	48.451705	122.0	18.528952
2024-03-15	SLSTR_L2	synchronized	11.519409	190.0	22.776896
2024-03-15	SRAL_L1	synchronized	91.052280	52.0	41.053712
2024-03-15	SRAL_L2	synchronized	3.329749	118.0	41.612108
2024-03-15	SYN_L2	synchronized	9.787688	61.0	37.116890
2024-03-16	OLCI_L1	synchronized	40.880754	52.0	16.127619
2024-03-16	OLCI_L2	synchronized	6.392289	57.0	13.739281
2024-03-16	SLSTR_L1	synchronized	46.762687	117.0	20.599242
2024-03-16	SLSTR_L2	synchronized	10.896974	177.0	24.113206
2024-03-16	SRAL_L1	synchronized	94.646344	56.0	43.082289
2024-03-16	SRAL_L2	synchronized	3.760282	141.0	41.332369
2024-03-16	SYN_L2	synchronized	13.977063	72.0	26.455922
2024-03-17	OLCI_L1	synchronized	43.332292	53.0	20.235181
2024-03-17	OLCI_L2	synchronized	6.485572	59.0	19.494582
2024-03-17	SLSTR_L1	synchronized	47.103191	118.0	24.717936
2024-03-17	SLSTR_L2	synchronized	9.956386	163.0	33.483764
2024-03-17	SRAL_L1	synchronized	90.365636	55.0	44.472674
2024-03-17	SRAL_L2	synchronized	3.793941	148.0	44.799291
2024-03-17	SYN_L2	synchronized	14.739799	85.0	40.272426
2024-03-18	OLCI_L1	synchronized	135.677548	169.0	32.020837
2024-03-18	OLCI_L2	synchronized	18.393333	160.0	29.675601
2024-03-18	SLSTR_L1	synchronized	99.291971	249.0	35.570599
2024-03-18	SLSTR_L2	synchronized	22.840962	380.0	37.644090
2024-03-18	SRAL_L1	synchronized	256.851979	161.0	58.242969
2024-03-18	SRAL_L2	synchronized	9.492125	372.0	54.223737
2024-03-18	SYN_L2	synchronized	36.734850	214.0	47.026087
2024-03-19	OLCI_L1	synchronized	80.517158	101.0	16.339632
2024-03-19	OLCI_L2	synchronized	10.543759	92.0	9.791954
2024-03-19	SLSTR_L1	synchronized	98.889577	247.0	30.140634
2024-03-19	SLSTR_L2	synchronized	22.650790	371.0	34.521014
2024-03-19	SRAL_L1	synchronized	138.710041	85.0	44.778793
2024-03-19	SRAL_L2	synchronized	5.305293	202.0	44.758972
2024-03-19	SYN_L2	synchronized	20.793205	111.0	29.157013
2024-03-20	OLCI_L1	synchronized	89.710602	130.0	10.269812
2024-03-20	OLCI_L2	synchronized	11.881365	117.0	7.447697
2024-03-20	SLSTR_L1	synchronized	79.510602	199.0	10.197460
2024-03-20	SLSTR_L2	synchronized	18.179080	298.0	22.943247

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2024-03-20	SRAL_L1	synchronized	152.281445	99.0	40.488906
2024-03-20	SRAL_L2	synchronized	5.754301	227.0	41.678518
2024-03-20	SYN_L2	synchronized	26.678868	153.0	24.992602
2024-03-21	OLCI_L1	synchronized	60.508647	98.0	9.285152
2024-03-21	OLCI_L2	synchronized	10.123401	112.0	10.398847
2024-03-21	SLSTR_L1	synchronized	63.569315	159.0	21.264913
2024-03-21	SLSTR_L2	synchronized	14.712616	241.0	24.078604
2024-03-21	SRAL_L1	synchronized	123.487793	70.0	48.080903
2024-03-21	SRAL_L2	synchronized	4.869371	180.0	47.746389
2024-03-21	SYN_L2	synchronized	22.461201	127.0	30.297317
2024-03-22	OLCI_L1	synchronized	66.230963	99.0	20.684430
2024-03-22	OLCI_L2	synchronized	9.239000	101.0	20.820609
2024-03-22	SLSTR_L1	synchronized	54.996236	138.0	19.901268
2024-03-22	SLSTR_L2	synchronized	12.789356	210.0	25.816060
2024-03-22	SRAL_L1	synchronized	107.166344	65.0	43.579460
2024-03-22	SRAL_L2	synchronized	4.075578	154.0	44.010135
2024-03-22	SYN_L2	synchronized	14.390772	89.0	44.932459
2024-03-23	OLCI_L1	synchronized	90.437255	138.0	14.256699
2024-03-23	OLCI_L2	synchronized	12.422698	135.0	14.486323
2024-03-23	SLSTR_L1	synchronized	66.558323	166.0	26.028410
2024-03-23	SLSTR_L2	synchronized	16.020715	264.0	31.934942
2024-03-23	SRAL_L1	synchronized	171.900535	89.0	45.158383
2024-03-23	SRAL_L2	synchronized	6.336518	214.0	47.346852
2024-03-23	SYN_L2	synchronized	35.068140	210.0	23.138775
2024-03-24	OLCI_L1	synchronized	58.579691	86.0	11.568318
2024-03-24	OLCI_L2	synchronized	7.710138	85.0	12.875570
2024-03-24	SLSTR_L1	synchronized	39.762085	99.0	28.289790
2024-03-24	SLSTR_L2	synchronized	9.176877	152.0	31.347684
2024-03-24	SRAL_L1	synchronized	95.358073	52.0	48.581152
2024-03-24	SRAL_L2	synchronized	3.381856	122.0	48.649480
2024-03-24	SYN_L2	synchronized	16.009535	99.0	33.789355
2024-03-25	OLCI_L1	synchronized	80.336704	121.0	7.572963
2024-03-25	OLCI_L2	synchronized	11.645820	126.0	14.876181
2024-03-25	SLSTR_L1	synchronized	69.750740	175.0	19.410463
2024-03-25	SLSTR_L2	synchronized	13.040951	219.0	20.142403
2024-03-25	SRAL_L1	synchronized	100.577535	86.0	44.221172
2024-03-25	SRAL_L2	synchronized	4.084661	195.0	44.903510
2024-03-25	SYN_L2	synchronized	19.006817	118.0	27.938728
2024-03-26	OLCI_L1	synchronized	116.226075	172.0	15.546622
2024-03-26	OLCI_L2	synchronized	13.777986	145.0	19.324622
2024-03-26	SLSTR_L1	synchronized	108.303882	272.0	26.279246
2024-03-26	SLSTR_L2	synchronized	26.029516	425.0	34.077811
2024-03-26	SRAL_L1	synchronized	149.597266	105.0	40.516779
2024-03-26	SRAL_L2	synchronized	6.051882	257.0	42.648700
2024-03-26	SYN_L2	synchronized	35.250125	209.0	27.111744
2024-03-27	OLCI_L1	synchronized	81.644162	122.0	5.727994
2024-03-27	OLCI_L2	synchronized	13.405562	138.0	13.256158
2024-03-27	SLSTR_L1	synchronized	69.931238	176.0	5.719042
2024-03-27	SLSTR_L2	synchronized	16.267609	270.0	22.549051
2024-03-27	SRAL_L1	synchronized	187.165022	107.0	40.677836
2024-03-27	SRAL_L2	synchronized	4.885031	197.0	42.615066
2024-03-27	SYN_L2	synchronized	27.825453	162.0	27.089617
2024-03-28	OLCI_L1	synchronized	84.087586	121.0	10.070302
2024-03-28	OLCI_L2	synchronized	12.198865	121.0	10.812744
2024-03-28	SLSTR_L1	synchronized	65.433428	163.0	5.119712
2024-03-28	SLSTR_L2	synchronized	14.899003	244.0	20.727627

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2024-03-28	SRAL_L1	synchronized	131.806340	81.0	39.789358
2024-03-28	SRAL_L2	synchronized	6.997383	244.0	69.524305
2024-03-28	SYN_L2	synchronized	25.523451	153.0	24.950866
2024-03-29	OLCI_L1	synchronized	90.923102	129.0	9.962829
2024-03-29	OLCI_L2	synchronized	12.267267	122.0	2.895484
2024-03-29	SLSTR_L1	synchronized	64.825334	161.0	3.556843
2024-03-29	SLSTR_L2	synchronized	14.713022	242.0	21.079058
2024-03-29	SRAL_L1	synchronized	145.663305	88.0	40.197319
2024-03-29	SRAL_L2	synchronized	6.746907	251.0	43.653888
2024-03-29	SYN_L2	synchronized	25.586468	146.0	23.731876
2024-03-30	OLCI_L1	synchronized	94.163635	133.0	10.401157
2024-03-30	OLCI_L2	synchronized	13.192896	133.0	12.506059
2024-03-30	SLSTR_L1	synchronized	68.515441	170.0	6.459273
2024-03-30	SLSTR_L2	synchronized	14.818230	244.0	22.250283
2024-03-30	SRAL_L1	synchronized	142.455361	89.0	38.513335
2024-03-30	SRAL_L2	synchronized	5.217208	202.0	39.886769
2024-03-30	SYN_L2	synchronized	25.675490	156.0	24.282828
2024-03-31	OLCI_L1	synchronized	90.950019	128.0	7.540013
2024-03-31	OLCI_L2	synchronized	12.659474	127.0	3.254063
2024-03-31	SLSTR_L1	synchronized	73.160612	182.0	16.819334
2024-03-31	SLSTR_L2	synchronized	16.901403	277.0	22.327990
2024-03-31	SRAL_L1	synchronized	138.897294	84.0	39.945048
2024-03-31	SRAL_L2	synchronized	5.337293	207.0	40.400184
2024-03-31	SYN_L2	synchronized	26.653648	154.0	24.815485
2024-03-01	NRTI_L2	synchronized	5.669665	242.0	1.886825
2024-03-01	OFFL_L1B	synchronized	304.743957	112.0	3.944765
2024-03-01	OFFL_L2	synchronized	66.957086	187.0	39.559958
2024-03-02	NRTI_L2	synchronized	6.130643	247.0	1.870119
2024-03-02	OFFL_L1B	synchronized	282.762631	104.0	3.879277
2024-03-02	OFFL_L2	synchronized	66.319994	182.0	39.587635
2024-03-03	NRTI_L2	synchronized	6.504815	264.0	1.903448
2024-03-03	OFFL_L1B	synchronized	304.698790	112.0	3.888685
2024-03-03	OFFL_L2	synchronized	63.812300	174.0	39.256699
2024-03-04	NRTI_L2	synchronized	5.505691	232.0	1.920351
2024-03-04	OFFL_L1B	synchronized	307.220473	112.0	3.867414
2024-03-04	OFFL_L2	synchronized	57.967339	167.0	39.263020
2024-03-05	NRTI_L2	synchronized	6.149397	243.0	1.953495
2024-03-05	OFFL_L1B	synchronized	285.352869	104.0	3.978948
2024-03-05	OFFL_L2	synchronized	74.276872	197.0	39.985755
2024-03-06	NRTI_L2	synchronized	7.132365	270.0	1.886825
2024-03-06	OFFL_L1B	synchronized	307.296888	112.0	3.921797
2024-03-06	OFFL_L2	synchronized	62.228319	170.0	39.451728
2024-03-07	NRTI_L2	synchronized	6.816004	254.0	1.903507
2024-03-07	OFFL_L1B	synchronized	263.411930	96.0	4.029824
2024-03-07	OFFL_L2	synchronized	63.495009	175.0	39.433541
2024-03-08	NRTI_L2	synchronized	6.349673	265.0	1.886912
2024-03-08	OFFL_L1B	synchronized	307.178795	112.0	3.973649
2024-03-08	OFFL_L2	synchronized	59.541835	161.0	40.180648
2024-03-09	NRTI_L2	synchronized	7.097428	269.0	1.920125
2024-03-09	OFFL_L1B	synchronized	307.158761	112.0	3.963803
2024-03-09	OFFL_L2	synchronized	58.920958	166.0	39.237861
2024-03-10	NRTI_L2	synchronized	7.405414	270.0	1.936820
2024-03-10	OFFL_L1B	synchronized	285.246078	104.0	3.896113
2024-03-10	OFFL_L2	synchronized	63.008007	171.0	39.537965
2024-03-11	NRTI_L2	synchronized	7.141128	270.0	1.870125
2024-03-11	OFFL_L1B	synchronized	285.193488	104.0	3.978539

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2024-03-11	OFFL_L2	synchronized	62.620620	171.0	39.851502
2024-03-12	NRTI_L2	synchronized	6.043393	228.0	1.886754
2024-03-12	OFFL_L1B	synchronized	285.219684	104.0	3.915743
2024-03-12	OFFL_L2	synchronized	63.669743	175.0	39.682992
2024-03-13	NRTI_L2	synchronized	6.787559	251.0	1.886854
2024-03-13	OFFL_L1B	synchronized	282.873176	104.0	3.941393
2024-03-13	OFFL_L2	synchronized	63.290307	172.0	40.489247
2024-03-14	NRTI_L2	synchronized	7.793620	279.0	1.870048
2024-03-14	OFFL_L1B	synchronized	302.384284	112.0	4.079078
2024-03-14	OFFL_L2	synchronized	62.530723	173.0	39.689099
2024-03-15	NRTI_L2	synchronized	7.202361	271.0	1.903485
2024-03-15	OFFL_L1B	synchronized	326.760885	120.0	4.049820
2024-03-15	OFFL_L2	synchronized	72.720448	194.0	40.144291
2024-03-16	NRTI_L2	synchronized	7.173141	270.0	1.870052
2024-03-16	OFFL_L1B	synchronized	304.916763	112.0	3.944091
2024-03-16	OFFL_L2	synchronized	65.505001	181.0	39.484457
2024-03-17	NRTI_L2	synchronized	7.197862	270.0	1.853447
2024-03-17	OFFL_L2	synchronized	36.405544	100.0	40.341650
2024-03-18	NRTI_L2	synchronized	8.202246	297.0	1.870161
2024-03-18	OFFL_L1B	synchronized	566.104749	208.0	20.293779
2024-03-18	OFFL_L2	synchronized	34.817353	101.0	58.607261
2024-03-19	NRTI_L2	synchronized	8.245197	298.0	1.870121
2024-03-19	OFFL_L1B	synchronized	346.413703	128.0	4.355924
2024-03-19	OFFL_L2	synchronized	79.311755	217.0	64.464349
2024-03-20	NRTI_L2	synchronized	6.976552	261.0	1.870109
2024-03-20	OFFL_L1B	synchronized	304.998991	112.0	4.223403
2024-03-20	OFFL_L2	synchronized	82.083719	219.0	55.478279
2024-03-21	NRTI_L2	synchronized	8.036494	288.0	1.886901
2024-03-21	OFFL_L1B	synchronized	307.572779	114.0	4.303052
2024-03-21	OFFL_L2	synchronized	50.543414	144.0	58.998113
2024-03-22	NRTI_L2	synchronized	9.072817	306.0	1.870182
2024-03-22	OFFL_L1B	synchronized	324.343045	118.0	4.282654
2024-03-22	OFFL_L2	synchronized	52.524283	137.0	66.991982
2024-03-23	NRTI_L2	synchronized	4.563561	126.0	1.892659
2024-03-23	OFFL_L1B	synchronized	109.738652	40.0	3.918621
2024-03-23	OFFL_L2	synchronized	94.647503	263.0	59.867522
2024-03-24	NRTI_L2	synchronized	5.173813	135.0	1.956778
2024-03-24	OFFL_L1B	synchronized	312.986429	120.0	9.105985
2024-03-24	OFFL_L2	synchronized	80.591714	225.0	50.705094
2024-03-25	NRTI_L2	synchronized	8.723548	270.0	1.855138
2024-03-25	OFFL_L1B	synchronized	244.841761	96.0	4.004758
2024-03-25	OFFL_L2	synchronized	52.423301	152.0	39.036552
2024-03-26	NRTI_L2	synchronized	8.849099	278.0	1.896826
2024-03-26	OFFL_L1B	synchronized	285.518569	104.0	3.988343
2024-03-26	OFFL_L2	synchronized	57.964330	165.0	39.484432
2024-03-27	NRTI_L2	synchronized	7.675969	253.0	1.880106
2024-03-27	OFFL_L1B	synchronized	283.096115	104.0	3.842470
2024-03-27	OFFL_L2	synchronized	58.211123	159.0	39.491326
2024-03-28	NRTI_L2	synchronized	8.309152	270.0	1.901337
2024-03-28	OFFL_L1B	synchronized	276.485642	104.0	3.974022
2024-03-28	OFFL_L2	synchronized	53.290190	140.0	40.788878
2024-03-29	NRTI_L2	synchronized	9.591543	313.0	1.885253
2024-03-29	OFFL_L1B	synchronized	285.532088	104.0	3.869140
2024-03-29	OFFL_L2	synchronized	51.331541	148.0	50.559086
2024-03-30	NRTI_L2	synchronized	9.288396	287.0	1.884588
2024-03-30	OFFL_L1B	synchronized	305.024435	112.0	3.776752

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2024-03-30	OFFL_L2	synchronized	79.662155	226.0	42.944811
2024-03-31	NRTI_L2	synchronized	8.877799	287.0	1.901377
2024-03-31	OFFL_L1B	synchronized	326.772445	120.0	3.902287
2024-03-31	OFFL_L2	synchronized	64.109223	180.0	39.380859
2024-03-01	s1_iw	NaN	57.236977	37.0	NaN
2024-03-01	s1_ew	NaN	20.196045	9.0	NaN
2024-03-01	s2_l1c	NaN	68.095879	121.0	NaN
2024-03-01	s2_l2a	NaN	68.739773	0.0	NaN
2024-03-02	s2_l2a	NaN	4.767765	8.0	NaN
2024-03-02	s2_l1c	NaN	87.386578	141.0	NaN
2024-03-02	s1_ew	NaN	21.553223	12.0	NaN
2024-03-02	s1_iw	NaN	20.680740	13.0	NaN
2024-03-03	s1_iw	NaN	64.871559	42.0	NaN
2024-03-03	s1_ew	NaN	10.603504	6.0	NaN
2024-03-03	s2_l1c	NaN	101.045746	181.0	NaN
2024-03-03	s2_l2a	NaN	1.088825	4.0	NaN
2024-03-04	s2_l1c	NaN	58.785637	104.0	NaN
2024-03-04	s2_l2a	NaN	70.730106	0.0	NaN
2024-03-04	s1_iw	NaN	56.796494	33.0	NaN
2024-03-04	s1_ew	NaN	13.094585	6.0	NaN
2024-03-05	s1_iw	NaN	70.730167	0.0	NaN
2024-03-05	s1_ew	NaN	21.966686	11.0	NaN
2024-03-05	s2_l1c	NaN	109.503864	173.0	NaN
2024-03-05	s2_l2a	NaN	6.733604	8.0	NaN
2024-03-06	s2_l2a	NaN	70.730232	0.0	NaN
2024-03-06	s1_iw	NaN	70.730232	0.0	NaN
2024-03-06	s1_ew	NaN	9.466560	3.0	NaN
2024-03-06	s2_l1c	NaN	50.090729	88.0	NaN
2024-03-07	s2_l2a	NaN	7.587624	8.0	NaN
2024-03-07	s2_l1c	NaN	67.872814	95.0	NaN
2024-03-07	s1_ew	NaN	18.461895	6.0	NaN
2024-03-07	s1_iw	NaN	6.769215	5.0	NaN
2024-03-08	s1_iw	NaN	70.730366	0.0	NaN
2024-03-08	s1_ew	NaN	10.404015	4.0	NaN
2024-03-08	s2_l1c	NaN	70.730366	0.0	NaN
2024-03-08	s2_l2a	NaN	1.724533	4.0	NaN
2024-03-09	s2_l1c	NaN	70.730423	0.0	NaN
2024-03-09	s2_l2a	NaN	0.781399	2.0	NaN
2024-03-09	s1_iw	NaN	70.730423	0.0	NaN
2024-03-09	s1_ew	NaN	70.730423	0.0	NaN
2024-03-10	s1_iw	NaN	70.730488	0.0	NaN
2024-03-10	s1_ew	NaN	70.730488	0.0	NaN
2024-03-10	s2_l1c	NaN	70.730488	0.0	NaN
2024-03-10	s2_l2a	NaN	5.241516	8.0	NaN
2024-03-11	s1_iw	NaN	39.211006	34.0	NaN
2024-03-11	s1_ew	NaN	12.262196	5.0	NaN
2024-03-11	s2_l1c	NaN	76.451328	129.0	NaN
2024-03-11	s2_l2a	NaN	70.730633	0.0	NaN
2024-03-12	s2_l2a	NaN	7.234718	8.0	NaN
2024-03-12	s2_l1c	NaN	163.505260	270.0	NaN
2024-03-12	s1_ew	NaN	27.218910	12.0	NaN
2024-03-12	s1_iw	NaN	16.897430	15.0	NaN
2024-03-13	s1_iw	NaN	24.449959	30.0	NaN
2024-03-13	s1_ew	NaN	22.962330	10.0	NaN
2024-03-13	s2_l1c	NaN	162.026978	279.0	NaN
2024-03-13	s2_l2a	NaN	1.021847	4.0	NaN

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2024-03-14	s2_l1c	NaN	182.095600	308.0	NaN
2024-03-14	s2_l2a	NaN	1.910763	3.0	NaN
2024-03-14	s1_iw	NaN	3.278133	9.0	NaN
2024-03-14	s1_ew	NaN	21.436375	12.0	NaN
2024-03-15	s1_iw	NaN	14.416061	30.0	NaN
2024-03-15	s1_ew	NaN	10.837540	6.0	NaN
2024-03-15	s2_l1c	NaN	161.410786	277.0	NaN
2024-03-15	s2_l2a	NaN	1.845448	4.0	NaN
2024-03-16	s2_l2a	NaN	70.703960	0.0	NaN
2024-03-16	s1_iw	NaN	13.325897	23.0	NaN
2024-03-16	s1_ew	NaN	13.147839	6.0	NaN
2024-03-16	s2_l1c	NaN	127.948830	222.0	NaN
2024-03-17	s1_ew	NaN	21.803226	10.0	NaN
2024-03-17	s2_l1c	NaN	132.718849	220.0	NaN
2024-03-17	s1_iw	NaN	1.757828	12.0	NaN
2024-03-17	s2_l2a	NaN	4.707512	5.0	NaN
2024-03-18	s2_l2a	NaN	0.759052	3.0	NaN
2024-03-18	s2_l1c	NaN	209.121552	350.0	NaN
2024-03-18	s1_ew	NaN	14.580681	5.0	NaN
2024-03-18	s1_iw	NaN	3.356350	23.0	NaN
2024-03-19	s1_iw	NaN	5.238388	11.0	NaN
2024-03-19	s1_ew	NaN	17.952835	8.0	NaN
2024-03-19	s2_l1c	NaN	129.667194	217.0	NaN
2024-03-19	s2_l2a	NaN	70.704250	0.0	NaN
2024-03-20	s1_iw	NaN	21.854378	31.0	NaN
2024-03-20	s1_ew	NaN	17.168907	8.0	NaN
2024-03-20	s2_l1c	NaN	112.601818	181.0	NaN
2024-03-20	s2_l2a	NaN	6.072689	8.0	NaN
2024-03-21	s2_l2a	NaN	70.704441	0.0	NaN
2024-03-21	s2_l1c	NaN	162.302288	277.0	NaN
2024-03-21	s1_iw	NaN	17.090240	18.0	NaN
2024-03-21	s1_ew	NaN	9.674309	4.0	NaN
2024-03-22	s1_iw	NaN	6.703224	17.0	NaN
2024-03-22	s1_ew	NaN	9.145779	3.0	NaN
2024-03-22	s2_l1c	NaN	246.100784	406.0	NaN
2024-03-22	s2_l2a	NaN	7.072800	8.0	NaN
2024-03-23	s1_iw	NaN	15.031528	23.0	NaN
2024-03-23	s1_ew	NaN	9.808567	4.0	NaN
2024-03-23	s2_l1c	NaN	197.083378	340.0	NaN
2024-03-23	s2_l2a	NaN	1.113186	4.0	NaN
2024-03-24	s2_l2a	NaN	1.549671	3.0	NaN
2024-03-24	s2_l1c	NaN	150.148380	254.0	NaN
2024-03-24	s1_iw	NaN	3.524818	12.0	NaN
2024-03-24	s1_ew	NaN	28.181091	13.0	NaN
2024-03-25	s1_iw	NaN	12.792229	27.0	NaN
2024-03-25	s1_ew	NaN	19.868736	9.0	NaN
2024-03-25	s2_l1c	NaN	70.740509	0.0	NaN
2024-03-25	s2_l2a	NaN	70.740509	0.0	NaN
2024-03-26	s2_l2a	NaN	70.740578	0.0	NaN
2024-03-26	s1_iw	NaN	11.844742	12.0	NaN
2024-03-26	s1_ew	NaN	17.901772	10.0	NaN
2024-03-26	s2_l1c	NaN	70.740578	0.0	NaN
2024-03-27	s2_l2a	NaN	5.067135	8.0	NaN
2024-03-27	s2_l1c	NaN	18.783192	31.0	NaN
2024-03-27	s1_iw	NaN	20.899223	31.0	NaN
2024-03-27	s1_ew	NaN	13.179562	8.0	NaN

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2024-03-28	s2_l1c	NaN	70.740696	0.0	NaN
2024-03-28	s1_iw	NaN	7.672852	11.0	NaN
2024-03-28	s1_ew	NaN	13.046227	7.0	NaN
2024-03-28	s2_l2a	NaN	1.219814	4.0	NaN
2024-03-29	s2_l2a	NaN	1.587402	3.0	NaN
2024-03-29	s2_l1c	NaN	70.740765	0.0	NaN
2024-03-29	s1_iw	NaN	70.740765	0.0	NaN
2024-03-29	s1_ew	NaN	22.113079	11.0	NaN
2024-03-30	s1_iw	NaN	70.740814	0.0	NaN
2024-03-30	s1_ew	NaN	13.294258	6.0	NaN
2024-03-30	s2_l1c	NaN	70.740814	0.0	NaN
2024-03-30	s2_l2a	NaN	5.263615	8.0	NaN
2024-03-31	s1_iw	NaN	10.740154	12.0	NaN
2024-03-31	s1_ew	NaN	20.984459	10.0	NaN
2024-03-31	s2_l1c	NaN	54.861649	92.0	NaN
2024-03-31	s2_l2a	NaN	70.740967	0.0	NaN

CHAPTER

TEN

PREVIOUS REPORTS

Below is a list of previous reports. If viewing the HTML version of this report online, you can click the link to download a PDF version of a previous report

- NBS_monthly_report_2024_01.pdf
- NBS_monthly_report_2024_02.pdf
- NBS_monthly_report_2024_03.pdf