
NBS monthly report - 2024 July

MET Norway - NBS team

Oct 17, 2024

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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.

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

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	8694	40447	40625	36265	15860	19	31255	15.123
colhub-archive.met.no	8695	40163	40340	35771	15793	9	6544	3.264
dataspace.copernicus.eu	11793	40776	40750	54947	0			

Finally, the total amount of disk space dedicated to the NBS project, including either products in SAFE and NetCDF formats, represents 5845 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 6206 Tb; while in 12 months it is forecast to become 6870 Tb.

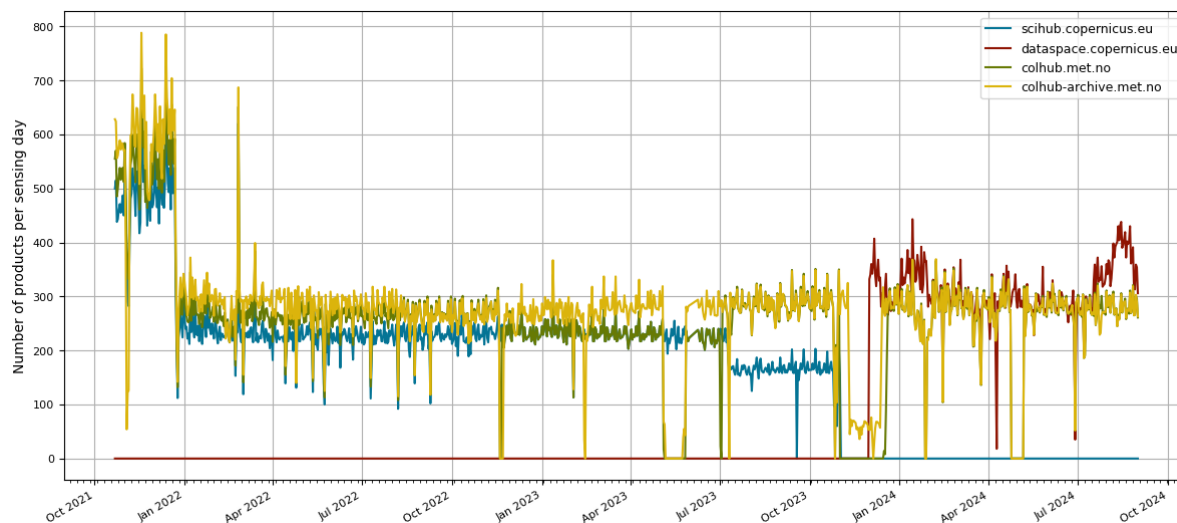
SENTINEL-1 PRODUCTS

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.

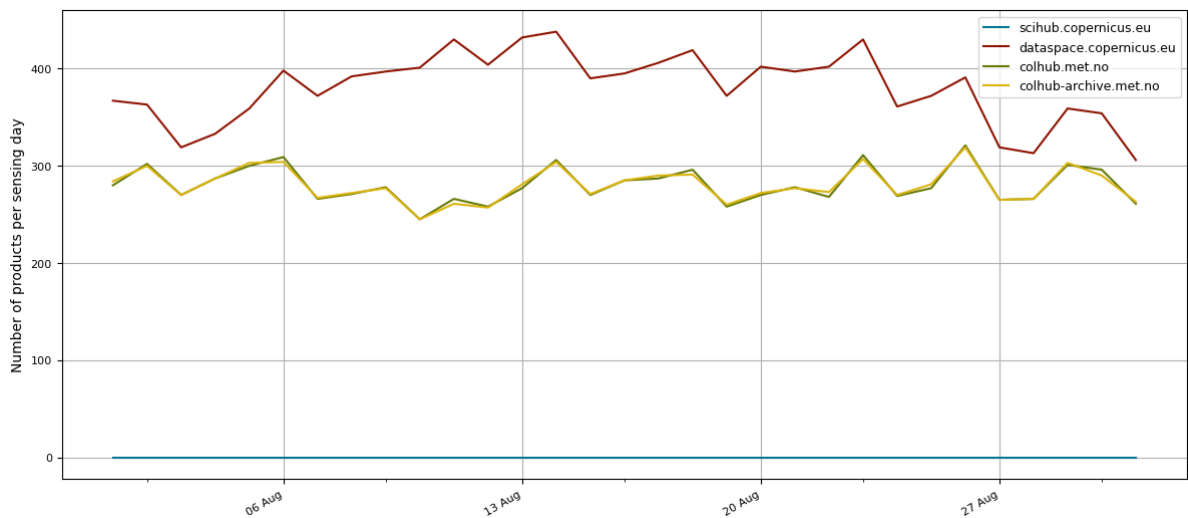
3.1 Products on portals

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.

	colhub.met.no	dataspace.copernicus.eu	colhub-archive.met.no
sensing_date			
2024-08-01	280.0	367.0	284.0
2024-08-02	302.0	363.0	300.0
2024-08-03	270.0	319.0	270.0
2024-08-04	287.0	333.0	287.0
2024-08-05	300.0	359.0	303.0
2024-08-06	309.0	398.0	304.0
2024-08-07	266.0	372.0	267.0
2024-08-08	271.0	392.0	272.0
2024-08-09	278.0	397.0	277.0
2024-08-10	245.0	401.0	245.0
2024-08-11	266.0	430.0	261.0
2024-08-12	258.0	404.0	257.0
2024-08-13	277.0	432.0	281.0
2024-08-14	306.0	438.0	304.0
2024-08-15	270.0	390.0	271.0
2024-08-16	285.0	395.0	285.0
2024-08-17	287.0	406.0	290.0
2024-08-18	296.0	419.0	291.0
2024-08-19	258.0	372.0	260.0
2024-08-20	270.0	402.0	272.0
2024-08-21	278.0	397.0	277.0
2024-08-22	268.0	402.0	273.0
2024-08-23	311.0	430.0	307.0
2024-08-24	269.0	361.0	270.0
2024-08-25	277.0	372.0	281.0
2024-08-26	321.0	391.0	319.0
2024-08-27	265.0	319.0	265.0
2024-08-28	266.0	313.0	266.0
2024-08-29	301.0	359.0	303.0
2024-08-30	296.0	354.0	290.0
2024-08-31	261.0	306.0	263.0

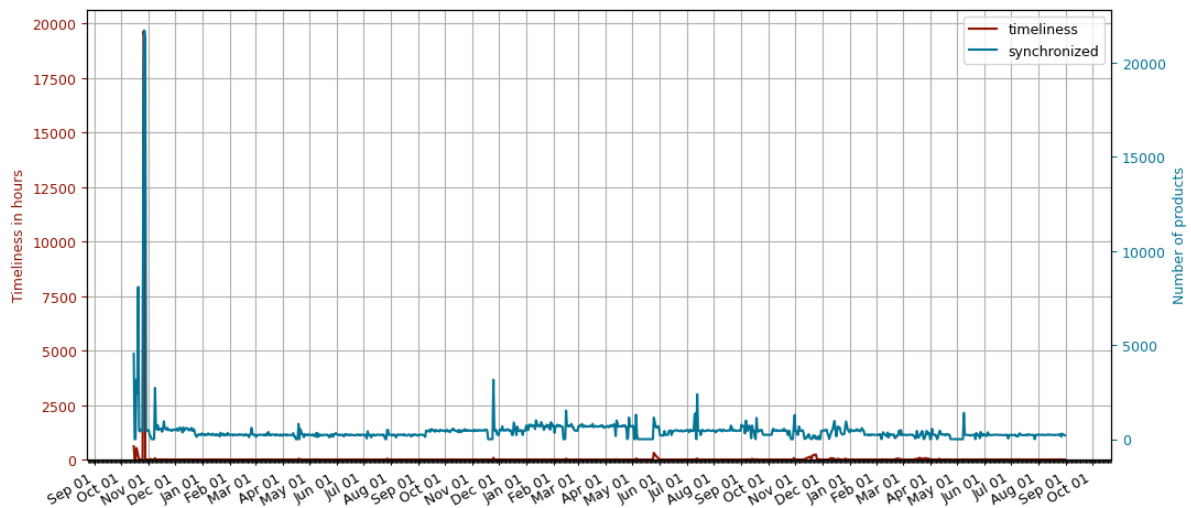
3.2 Missing products

The overall total number of Sentinel-1 products is 6878944. The number of overall Sentinel-1 missing products consists of 3761619 images. This represents that a 400% of the total was included in MET Norway DHR, while a -300% was not included.

The total number of Sentinel-1 products in August is 1445000. The number of Sentinel-1 missing products during August consists of 1304238 images. This represents that a 0% of the total was included in MET Norway DHR, while a 100% was not included.

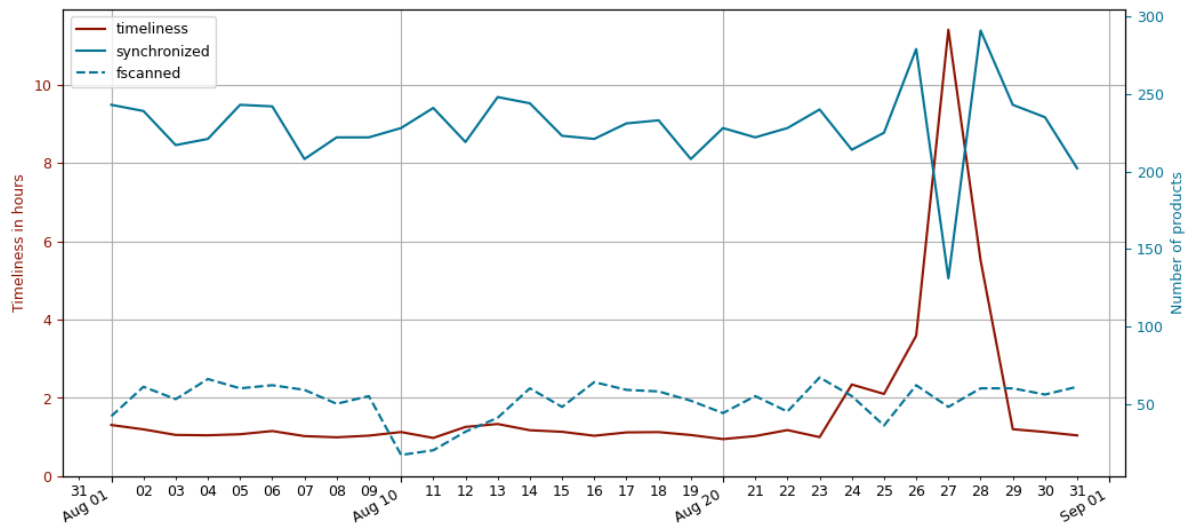
3.3 Data ingestion

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
2024-08-01	599.962540	243	1.306587
2024-08-02	626.460852	239	1.194507
2024-08-03	470.924241	217	1.052842
2024-08-04	547.186384	221	1.043226
2024-08-05	553.139332	243	1.070350
2024-08-06	596.027821	242	1.152466
2024-08-07	519.369748	208	1.022555
2024-08-08	485.861792	222	0.991942
2024-08-09	548.726064	222	1.034636
2024-08-10	521.557093	228	1.126413
2024-08-11	584.048413	241	0.975805
2024-08-12	521.397379	219	1.256743
2024-08-13	642.417247	248	1.331754
2024-08-14	644.705678	244	1.173010
2024-08-15	473.991065	223	1.132782
2024-08-16	546.961296	221	1.031561
2024-08-17	545.626095	231	1.117197
2024-08-18	591.799471	233	1.124831
2024-08-19	519.331064	208	1.050276
2024-08-20	488.768887	228	0.946733
2024-08-21	547.485432	222	1.023512
2024-08-22	520.633616	228	1.176559
2024-08-23	576.378752	240	0.996883
2024-08-24	550.139148	214	2.339792
2024-08-25	551.689568	225	2.099658
2024-08-26	747.327985	279	3.587906
2024-08-27	268.358374	131	11.400380
2024-08-28	732.490700	291	5.510151
2024-08-29	552.835212	243	1.199134
2024-08-30	599.429859	235	1.127604
2024-08-31	517.002242	202	1.040611

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

	size	number	timeliness
day			
2024-08-01	54.160355	42	0.776811
2024-08-02	77.514326	61	0.764434
2024-08-03	50.796370	53	0.606532
2024-08-04	73.837880	66	0.635253
2024-08-05	75.219300	60	0.784368
2024-08-06	67.188488	62	0.659493
2024-08-07	75.472403	59	0.700900
2024-08-08	46.457868	50	0.588363
2024-08-09	72.966428	55	2.968935
2024-08-10	42.806085	17	0.724379
2024-08-11	55.057153	20	0.606151
2024-08-12	65.467974	32	0.922468
2024-08-13	50.059847	41	0.833970
2024-08-14	75.513669	60	0.759884
2024-08-15	44.272647	48	0.605280
2024-08-16	70.099329	64	0.670537
2024-08-17	69.860278	59	0.780886
2024-08-18	60.738873	58	0.632225
2024-08-19	60.733092	52	0.731195
2024-08-20	47.245615	44	0.699167
2024-08-21	68.583217	55	0.924890
2024-08-22	45.671445	45	0.678638
2024-08-23	67.527510	67	0.641856
2024-08-24	73.042061	55	0.681335
2024-08-25	35.925059	36	0.767770
2024-08-26	74.345947	62	0.848102
2024-08-27	46.350413	48	0.644120
2024-08-28	64.631141	60	0.606173
2024-08-29	75.134794	60	0.779482
2024-08-30	64.662155	56	0.537168
2024-08-31	68.564936	61	0.814679

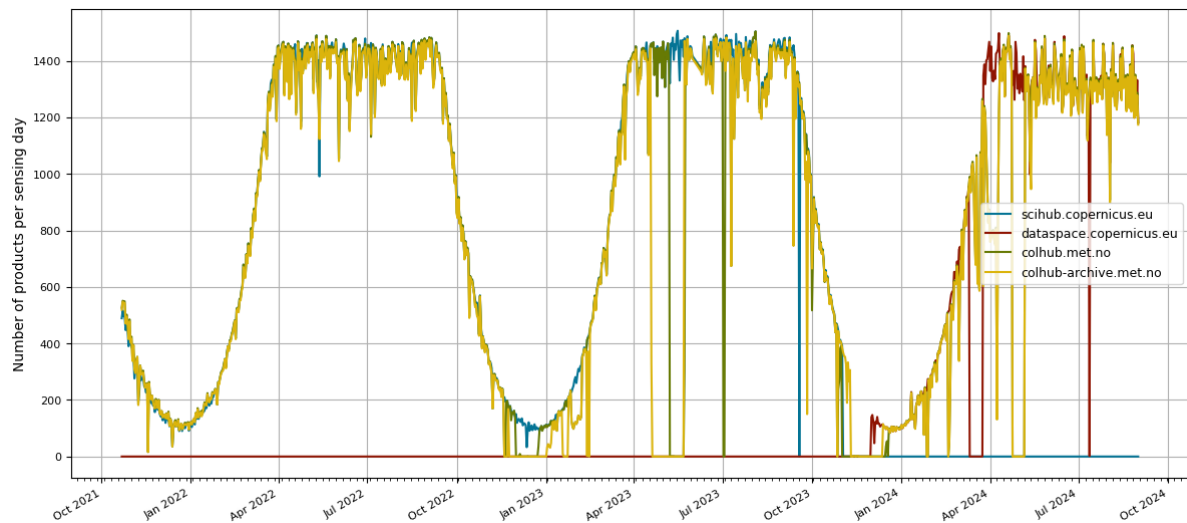
SENTINEL-2 LEVEL-1C PRODUCTS

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.

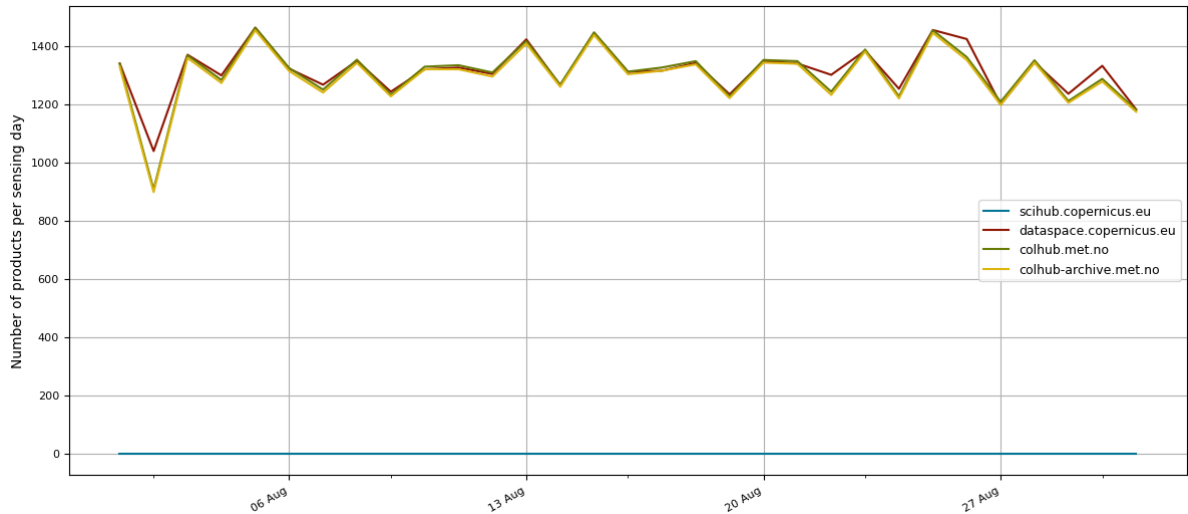
4.1 Products on portals

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.

	colhub.met.no	dataspace.copernicus.eu	colhub-archive.met.no
sensing_date			
2024-08-01	1339.0	1340.0	1329.0
2024-08-02	907.0	1039.0	898.0
2024-08-03	1368.0	1370.0	1359.0
2024-08-04	1283.0	1299.0	1273.0
2024-08-05	1463.0	1463.0	1454.0
2024-08-06	1324.0	1322.0	1314.0
2024-08-07	1250.0	1267.0	1240.0
2024-08-08	1353.0	1349.0	1342.0
2024-08-09	1233.0	1243.0	1227.0
2024-08-10	1329.0	1320.0	1320.0
2024-08-11	1334.0	1326.0	1320.0
2024-08-12	1309.0	1304.0	1295.0
2024-08-13	1417.0	1423.0	1408.0
2024-08-14	1267.0	1265.0	1260.0
2024-08-15	1447.0	1445.0	1438.0
2024-08-16	1312.0	1311.0	1303.0
2024-08-17	1326.0	1315.0	1315.0
2024-08-18	1348.0	1342.0	1337.0
2024-08-19	1227.0	1234.0	1221.0
2024-08-20	1352.0	1349.0	1343.0
2024-08-21	1348.0	1340.0	1339.0
2024-08-22	1243.0	1301.0	1232.0
2024-08-23	1388.0	1384.0	1381.0
2024-08-24	1227.0	1253.0	1220.0
2024-08-25	1454.0	1455.0	1445.0
2024-08-26	1362.0	1424.0	1352.0
2024-08-27	1208.0	1199.0	1198.0
2024-08-28	1351.0	1344.0	1343.0
2024-08-29	1211.0	1236.0	1205.0
2024-08-30	1287.0	1332.0	1278.0
2024-08-31	1180.0	1182.0	1174.0

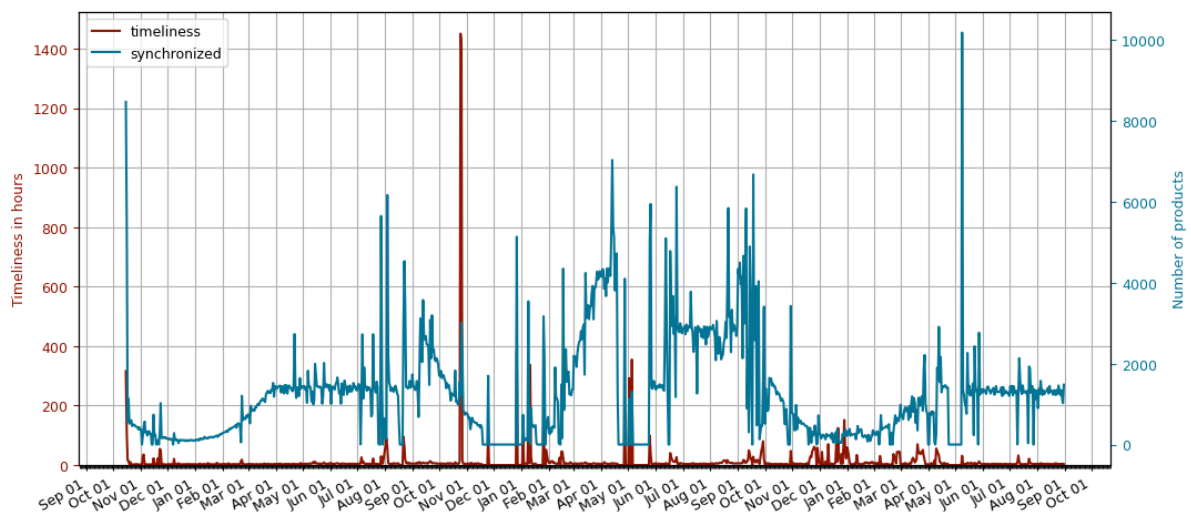
4.2 Missing products

The overall total number of Sentinel-2 Level-1C products is 6878944. The number of overall Sentinel-2 Level-1C missing products consists of 3761619 images. This represents that a 400% of the total was included in MET Norway DHR, while a -300% was not included.

The total number of Sentinel-2 Level-1C products in August is 1445000. The number of Sentinel-2 Level-1C missing products during August consists of 1304238 images. This represents that a 0% of the total was included in MET Norway DHR, while a 100% was not included.

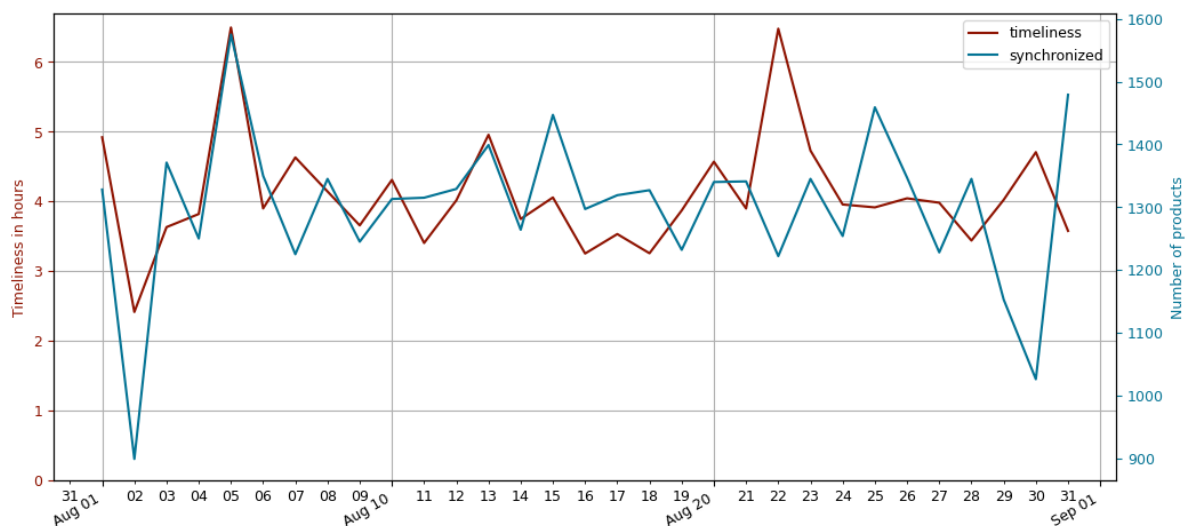
4.3 Data ingestion

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
2024-08-01	566.518880	1328	4.917333
2024-08-02	394.582656	899	2.411881
2024-08-03	598.627261	1371	3.628951
2024-08-04	554.716938	1250	3.816718
2024-08-05	725.407676	1575	6.491926
2024-08-06	598.039775	1350	3.897006
2024-08-07	525.170891	1225	4.628209
2024-08-08	546.061973	1345	4.139949
2024-08-09	528.376842	1245	3.653539
2024-08-10	564.269424	1313	4.305992
2024-08-11	555.296435	1315	3.401353
2024-08-12	581.984783	1329	4.011899
2024-08-13	620.058930	1399	4.953284
2024-08-14	545.848699	1264	3.745068
2024-08-15	629.043253	1447	4.053941
2024-08-16	550.582174	1297	3.250070
2024-08-17	538.256441	1319	3.529138
2024-08-18	562.972571	1327	3.253908
2024-08-19	550.386631	1232	3.867627
2024-08-20	578.007726	1340	4.567247
2024-08-21	576.546740	1341	3.895732
2024-08-22	529.368418	1222	6.474768
2024-08-23	598.085093	1345	4.726281
2024-08-24	563.228493	1254	3.953632
2024-08-25	655.555514	1459	3.911808
2024-08-26	596.275347	1347	4.041596
2024-08-27	537.026268	1228	3.978553
2024-08-28	590.871907	1345	3.436297
2024-08-29	523.236433	1153	4.019606
2024-08-30	456.137822	1026	4.703679
2024-08-31	635.903331	1479	3.574846

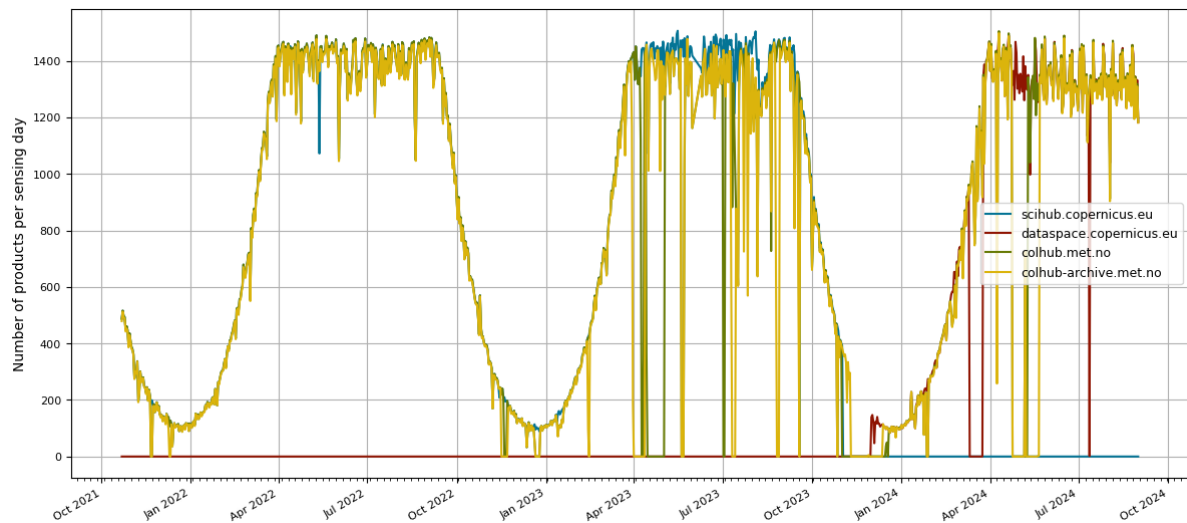
SENTINEL-2 LEVEL-2A PRODUCTS

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.

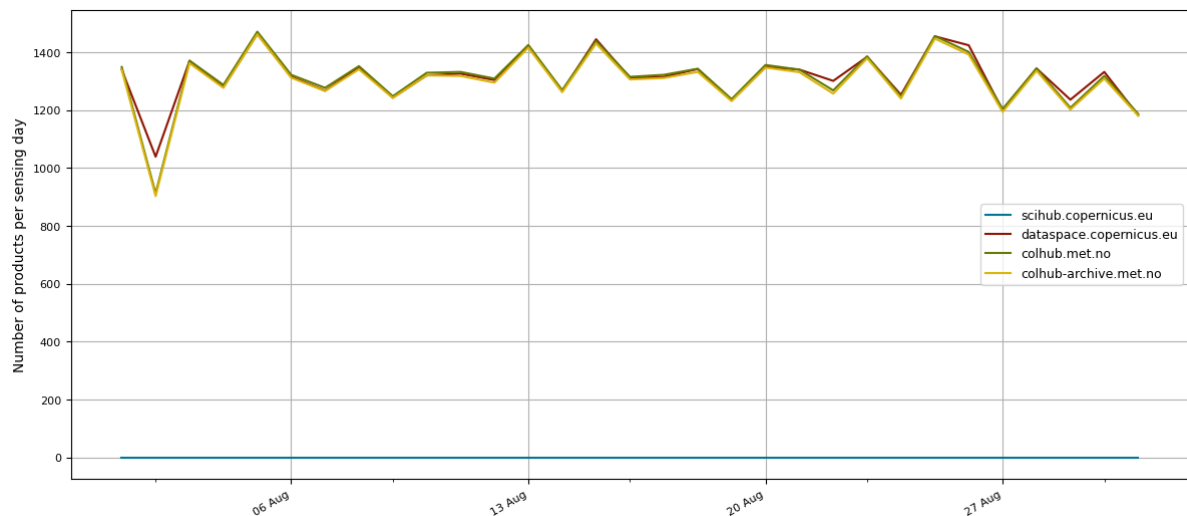
5.1 Products on portals

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.

	colhub.met.no	dataspace.copernicus.eu	colhub-archive.met.no
sensing_date			
2024-08-01	1349.0	1340.0	1339.0
2024-08-02	912.0	1039.0	903.0
2024-08-03	1371.0	1370.0	1362.0
2024-08-04	1287.0	1280.0	1277.0
2024-08-05	1471.0	1463.0	1462.0
2024-08-06	1322.0	1315.0	1312.0
2024-08-07	1277.0	1267.0	1266.0
2024-08-08	1352.0	1349.0	1341.0
2024-08-09	1248.0	1243.0	1242.0
2024-08-10	1329.0	1320.0	1320.0
2024-08-11	1332.0	1326.0	1318.0
2024-08-12	1309.0	1304.0	1295.0
2024-08-13	1425.0	1423.0	1416.0
2024-08-14	1269.0	1265.0	1262.0
2024-08-15	1439.0	1445.0	1430.0
2024-08-16	1315.0	1311.0	1306.0
2024-08-17	1322.0	1315.0	1311.0
2024-08-18	1343.0	1342.0	1332.0
2024-08-19	1238.0	1234.0	1231.0
2024-08-20	1356.0	1349.0	1347.0
2024-08-21	1340.0	1340.0	1331.0
2024-08-22	1268.0	1301.0	1257.0
2024-08-23	1386.0	1384.0	1379.0
2024-08-24	1247.0	1253.0	1240.0
2024-08-25	1456.0	1455.0	1447.0
2024-08-26	1401.0	1424.0	1392.0
2024-08-27	1204.0	1199.0	1194.0
2024-08-28	1344.0	1344.0	1336.0
2024-08-29	1208.0	1236.0	1202.0
2024-08-30	1318.0	1332.0	1309.0
2024-08-31	1187.0	1182.0	1181.0

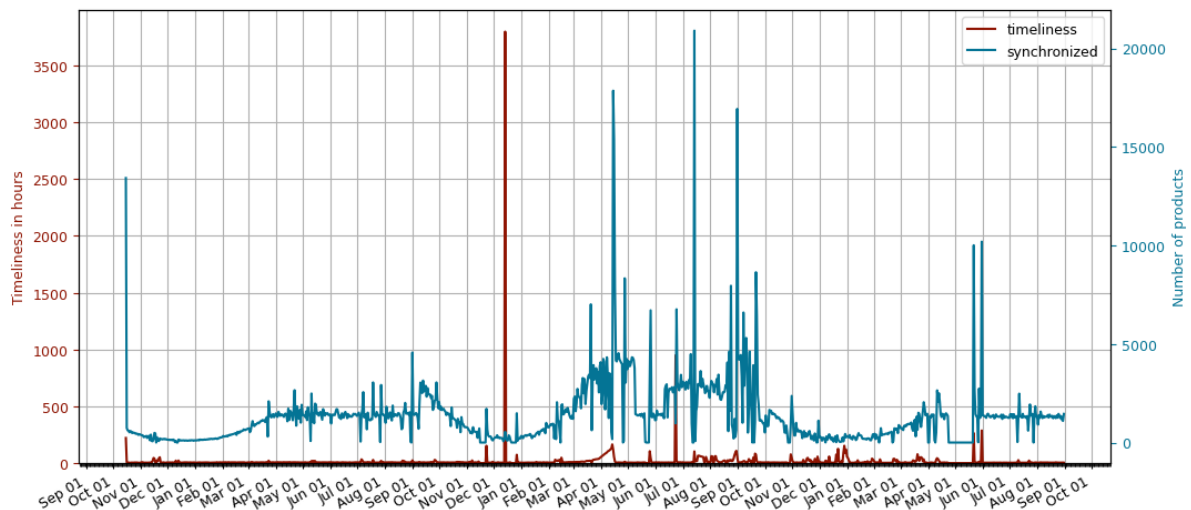
5.2 Missing products

The overall total number of Sentinel-2 Level-2A products is 6878944. The number of overall Sentinel-2 Level-2A missing products consists of 3761619 images. This represents that a 400% of the total was included in MET Norway DHR, while a -300% was not included.

The total number of Sentinel-2 level-2A products in August is 1445000. The number of Sentinel-2 level-2A missing products during August consists of 1304238 images. This represents that a 0% of the total was included in MET Norway DHR, while a 100% was not included.

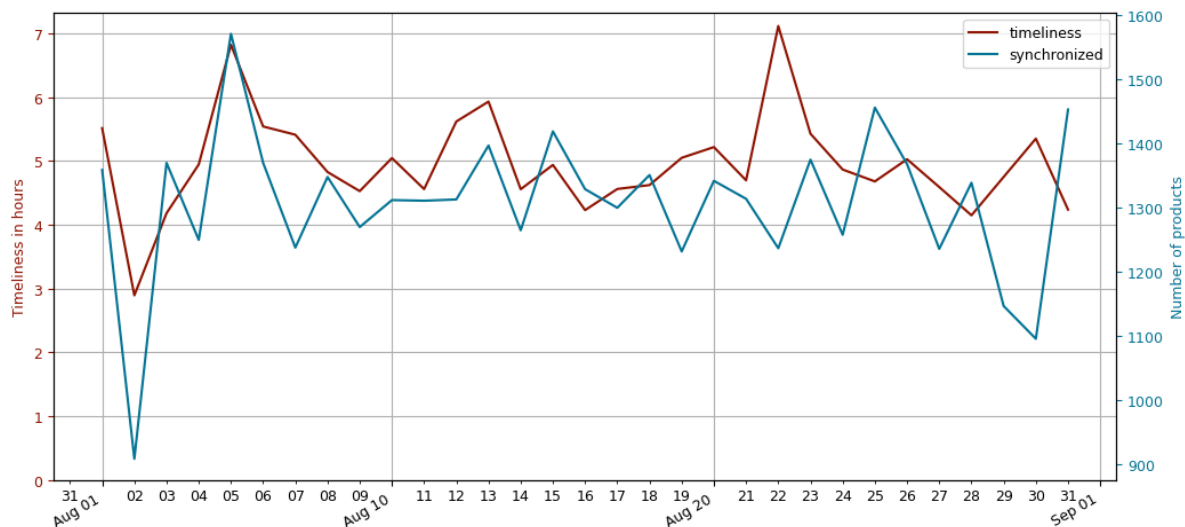
5.3 Data ingestion

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
2024-08-01	743.153362	1359	5.515359
2024-08-02	518.622186	909	2.895697
2024-08-03	771.705834	1370	4.183631
2024-08-04	720.821357	1250	4.946949
2024-08-05	931.123821	1571	6.823204
2024-08-06	784.393439	1370	5.542413
2024-08-07	684.321522	1238	5.413245
2024-08-08	707.152680	1348	4.828562
2024-08-09	701.364174	1270	4.528965
2024-08-10	721.936186	1312	5.047026
2024-08-11	716.221753	1311	4.560999
2024-08-12	730.665214	1313	5.620380
2024-08-13	778.847761	1397	5.932376
2024-08-14	678.916315	1265	4.558785
2024-08-15	781.445238	1419	4.939862
2024-08-16	710.812966	1329	4.231449
2024-08-17	663.752914	1300	4.562498
2024-08-18	739.145822	1351	4.623741
2024-08-19	704.450728	1232	5.050797
2024-08-20	743.752986	1342	5.219262
2024-08-21	725.315784	1314	4.698496
2024-08-22	680.491461	1237	7.116887
2024-08-23	780.100174	1375	5.428847
2024-08-24	725.358992	1258	4.867309
2024-08-25	830.724056	1456	4.681273
2024-08-26	770.152876	1368	5.028622
2024-08-27	695.816286	1236	4.592469
2024-08-28	753.122467	1339	4.150057
2024-08-29	667.735380	1147	4.751586
2024-08-30	623.204752	1096	5.351502
2024-08-31	787.248133	1453	4.238997

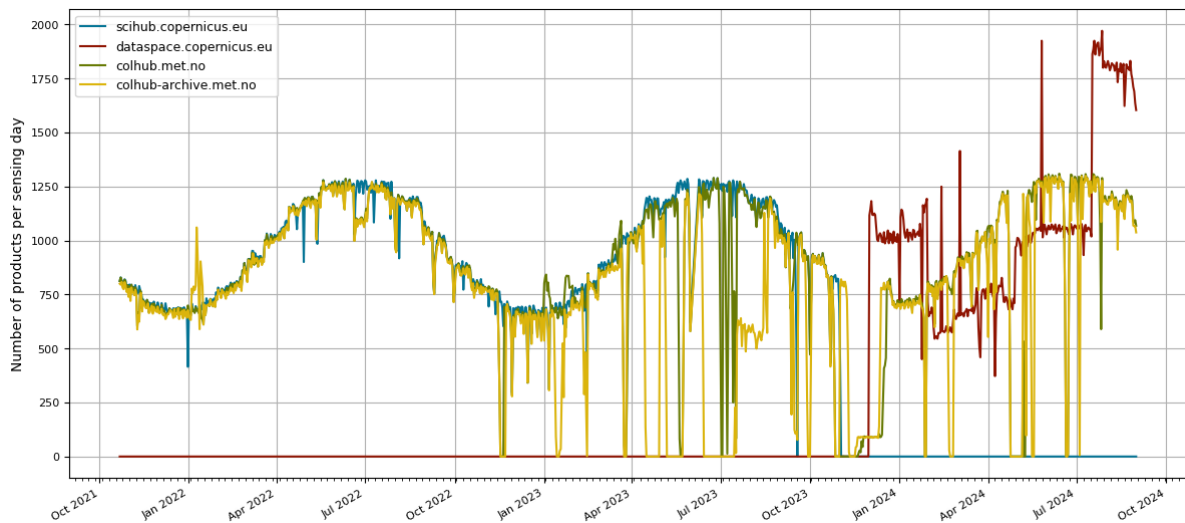
SENTINEL-3 PRODUCTS

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.

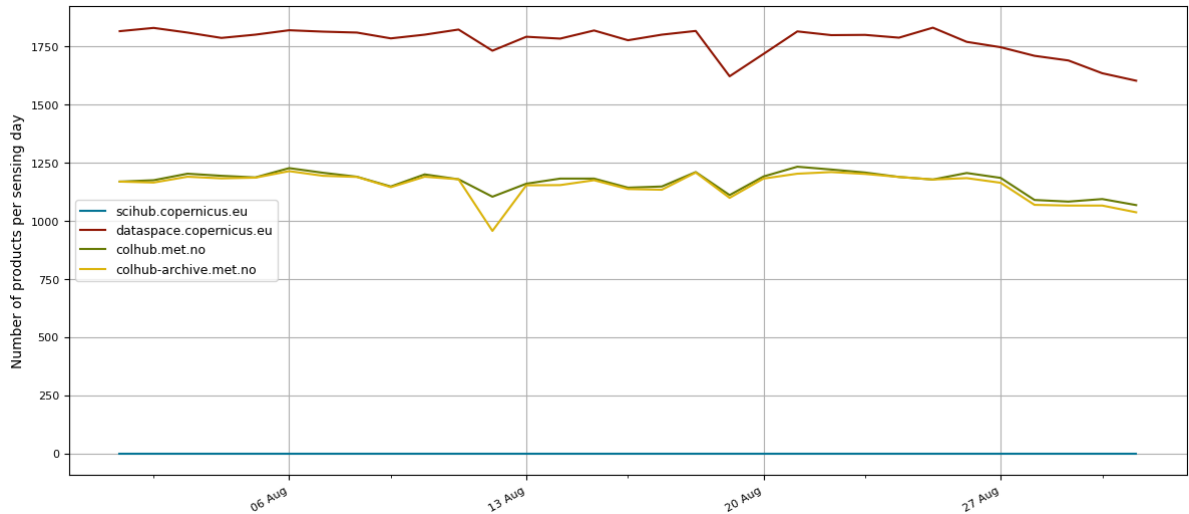
6.1 Products on portals

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.

	colhub.met.no	dataspace.copernicus.eu	colhub-archive.met.no
sensing_date			
2024-08-01	1169.0	1816.0	1169.0
2024-08-02	1175.0	1830.0	1165.0
2024-08-03	1203.0	1810.0	1190.0
2024-08-04	1194.0	1787.0	1183.0
2024-08-05	1187.0	1801.0	1186.0
2024-08-06	1227.0	1820.0	1214.0
2024-08-07	1207.0	1814.0	1194.0
2024-08-08	1190.0	1810.0	1189.0
2024-08-09	1148.0	1785.0	1145.0
2024-08-10	1200.0	1801.0	1190.0
2024-08-11	1179.0	1823.0	1179.0
2024-08-12	1104.0	1732.0	957.0
2024-08-13	1160.0	1792.0	1153.0
2024-08-14	1182.0	1784.0	1154.0
2024-08-15	1182.0	1819.0	1175.0
2024-08-16	1143.0	1777.0	1137.0
2024-08-17	1148.0	1801.0	1134.0
2024-08-18	1210.0	1817.0	1208.0
2024-08-19	1111.0	1622.0	1099.0
2024-08-20	1191.0	1718.0	1182.0
2024-08-21	1233.0	1815.0	1203.0
2024-08-22	1221.0	1799.0	1210.0
2024-08-23	1208.0	1800.0	1202.0
2024-08-24	1189.0	1788.0	1189.0
2024-08-25	1178.0	1831.0	1178.0
2024-08-26	1206.0	1770.0	1184.0
2024-08-27	1185.0	1747.0	1164.0
2024-08-28	1090.0	1710.0	1069.0
2024-08-29	1083.0	1690.0	1066.0
2024-08-30	1094.0	1635.0	1066.0
2024-08-31	1068.0	1603.0	1037.0

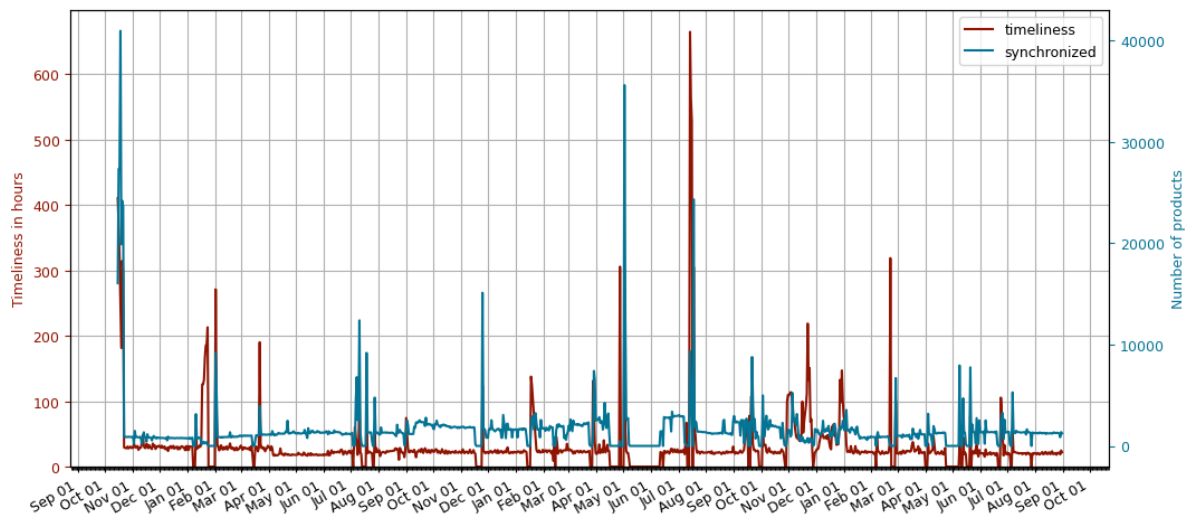
6.2 Missing products

The overall total number of Sentinel-3 products is 6878944. The number of overall Sentinel-3 missing products consists of 3761619 images. This represents that a 400% of the total was included in MET Norway DHR, while a -300% was not included.

The total number of Sentinel-3 products in August is 1445000. The number of Sentinel-3 missing products during August consists of 1304238 images. This represents that a 0% of the total was included in MET Norway DHR, while a 100% was not included.

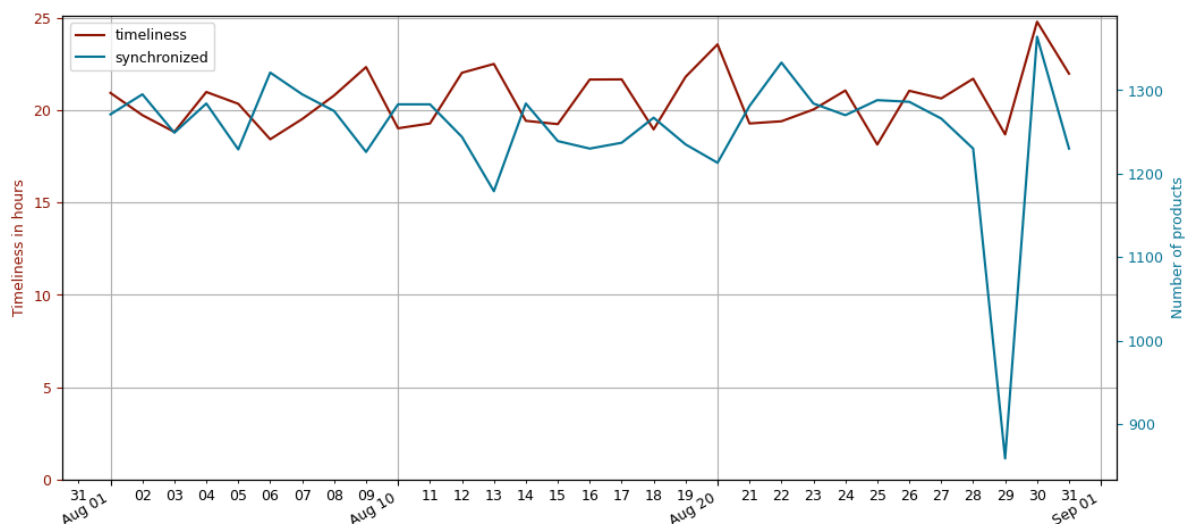
6.3 Data ingestion

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
2024-08-01	436.698469	1271	20.935201
2024-08-02	443.803463	1295	19.730150
2024-08-03	429.409601	1249	18.823325
2024-08-04	439.649411	1284	20.986606
2024-08-05	428.178757	1229	20.346749
2024-08-06	449.474124	1321	18.425711
2024-08-07	438.178245	1295	19.520414
2024-08-08	431.039739	1275	20.797888
2024-08-09	419.931291	1226	22.335083
2024-08-10	430.391249	1283	19.021073
2024-08-11	430.931745	1283	19.281586
2024-08-12	419.738254	1244	22.026700
2024-08-13	380.821831	1179	22.505034
2024-08-14	429.041247	1284	19.425292
2024-08-15	424.552382	1239	19.245776
2024-08-16	410.000629	1230	21.660576
2024-08-17	417.904029	1237	21.668228
2024-08-18	419.525046	1267	18.961926
2024-08-19	405.090198	1235	21.807665
2024-08-20	408.503374	1213	23.562126
2024-08-21	419.035875	1281	19.281061
2024-08-22	429.284789	1333	19.400717
2024-08-23	420.666980	1284	20.036971
2024-08-24	412.288208	1270	21.066362
2024-08-25	424.159233	1288	18.142210
2024-08-26	416.568525	1286	21.051791
2024-08-27	412.931543	1266	20.636014
2024-08-28	404.787875	1230	21.703804
2024-08-29	289.394768	859	18.688492
2024-08-30	454.411406	1364	24.790699
2024-08-31	404.118644	1230	21.977219

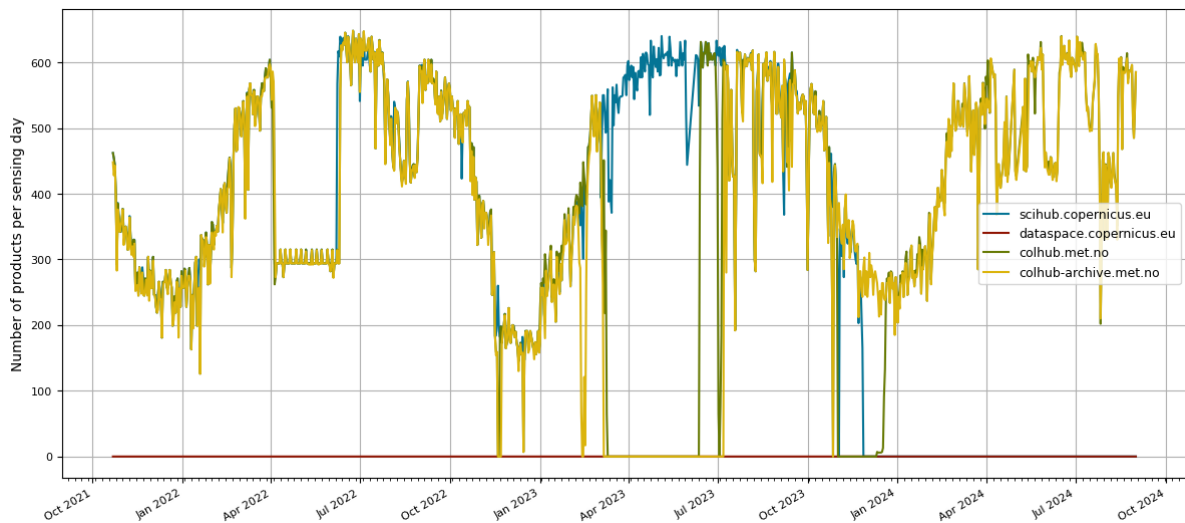
SENTINEL-5P PRODUCTS

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.

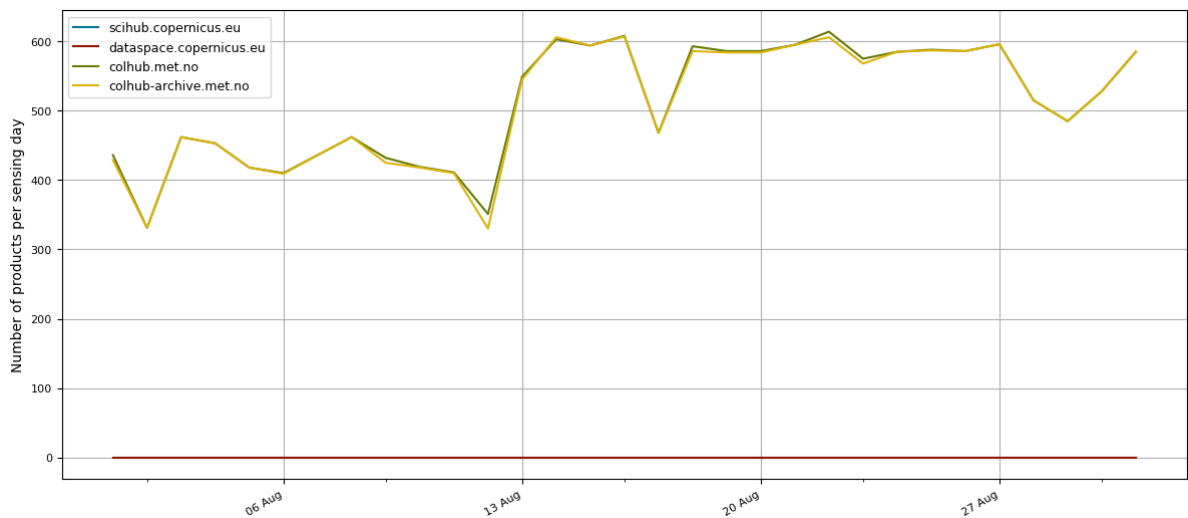
7.1 Products on portals

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.

	colhub.met.no	dataspace.copernicus.eu	colhub-archive.met.no
sensing_date			
2024-08-01	436.0	0.0	429.0
2024-08-02	331.0	0.0	331.0
2024-08-03	462.0	0.0	462.0
2024-08-04	453.0	0.0	453.0
2024-08-05	418.0	0.0	418.0
2024-08-06	410.0	0.0	409.0
2024-08-07	436.0	0.0	436.0
2024-08-08	462.0	0.0	462.0
2024-08-09	432.0	0.0	425.0
2024-08-10	419.0	0.0	418.0
2024-08-11	411.0	0.0	410.0
2024-08-12	351.0	0.0	330.0
2024-08-13	549.0	0.0	545.0
2024-08-14	603.0	0.0	606.0
2024-08-15	594.0	0.0	594.0
2024-08-16	608.0	0.0	607.0
2024-08-17	468.0	0.0	468.0
2024-08-18	593.0	0.0	586.0
2024-08-19	586.0	0.0	584.0
2024-08-20	586.0	0.0	584.0
2024-08-21	595.0	0.0	595.0
2024-08-22	614.0	0.0	606.0
2024-08-23	575.0	0.0	568.0
2024-08-24	585.0	0.0	585.0
2024-08-25	588.0	0.0	587.0
2024-08-26	586.0	0.0	586.0
2024-08-27	596.0	0.0	596.0
2024-08-28	515.0	0.0	515.0
2024-08-29	485.0	0.0	485.0
2024-08-30	528.0	0.0	528.0
2024-08-31	585.0	0.0	585.0

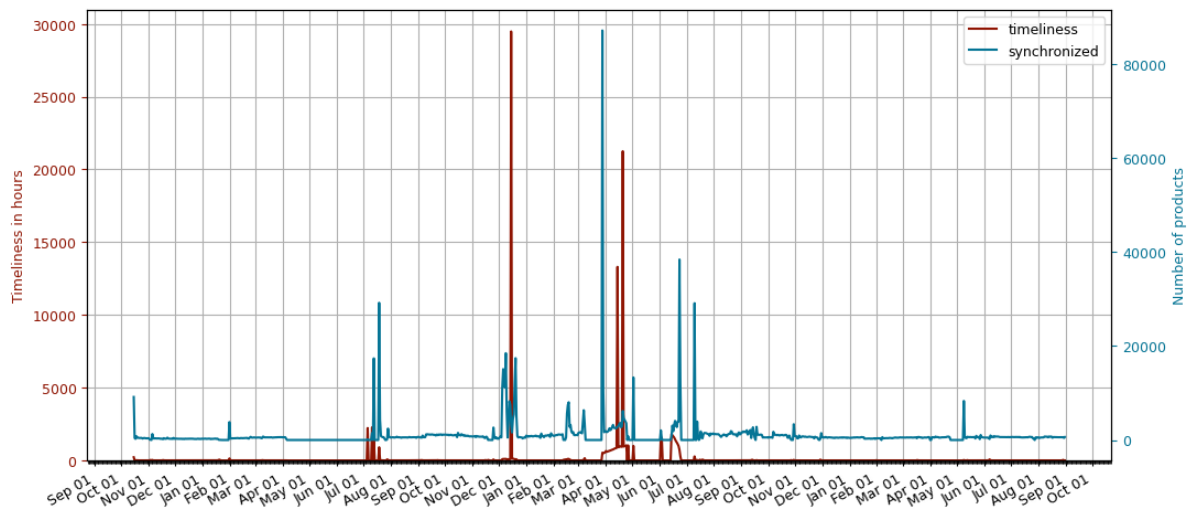
7.2 Missing products

The overall total number of Sentinel-5p products is 6878944. The number of overall Sentinel-5p missing products consists of 3761619 images. This represents that a 400% of the total was included in MET Norway DHR, while a -300% was not included.

The total number of Sentinel-5p products in August is 1445000. The number of Sentinel-5p missing products during August consists of 1304238 images. This represents that a 0% of the total was included in MET Norway DHR, while a 100% was not included.

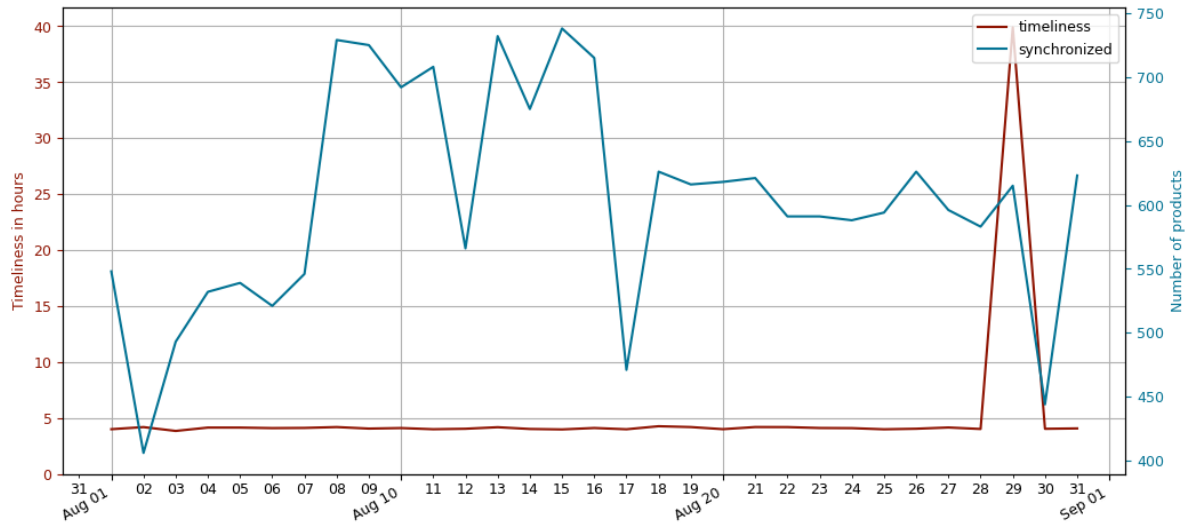
7.3 Data ingestion

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.

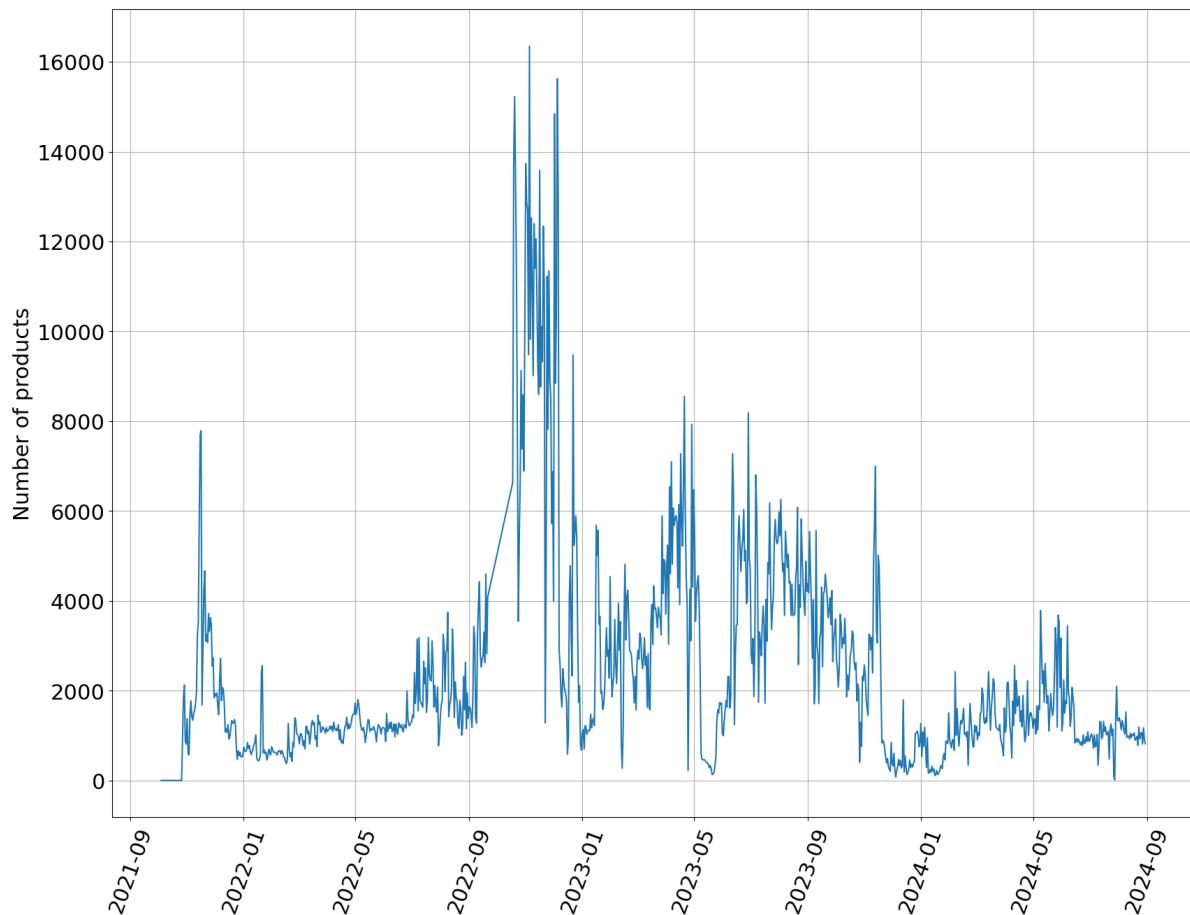
day	size	number	timeliness
2024-08-01	407.368098	548	4.014447
2024-08-02	251.380297	406	4.202083
2024-08-03	349.628887	493	3.858835
2024-08-04	353.894077	532	4.159518
2024-08-05	391.273346	539	4.158044
2024-08-06	360.358922	521	4.112125
2024-08-07	382.261302	546	4.128800
2024-08-08	457.832247	729	4.205884
2024-08-09	419.218554	725	4.068688
2024-08-10	411.866350	692	4.117178
2024-08-11	419.816815	708	4.011696
2024-08-12	296.884837	566	4.053727
2024-08-13	443.130873	732	4.191614
2024-08-14	412.544576	675	4.035100
2024-08-15	411.721027	738	3.994448
2024-08-16	434.164531	715	4.122241
2024-08-17	274.262835	471	4.008488
2024-08-18	448.319320	626	4.281014
2024-08-19	448.964794	616	4.205267
2024-08-20	382.457147	618	4.016927
2024-08-21	384.956187	621	4.208194
2024-08-22	405.837712	591	4.203107
2024-08-23	382.321127	591	4.122843
2024-08-24	384.218854	588	4.108632
2024-08-25	379.686361	594	4.006080
2024-08-26	382.444965	626	4.055897
2024-08-27	378.403221	596	4.166489
2024-08-28	377.786701	583	4.034120
2024-08-29	590.448960	615	39.895112
2024-08-30	284.688456	444	4.049751
2024-08-31	379.311787	623	4.084647

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.

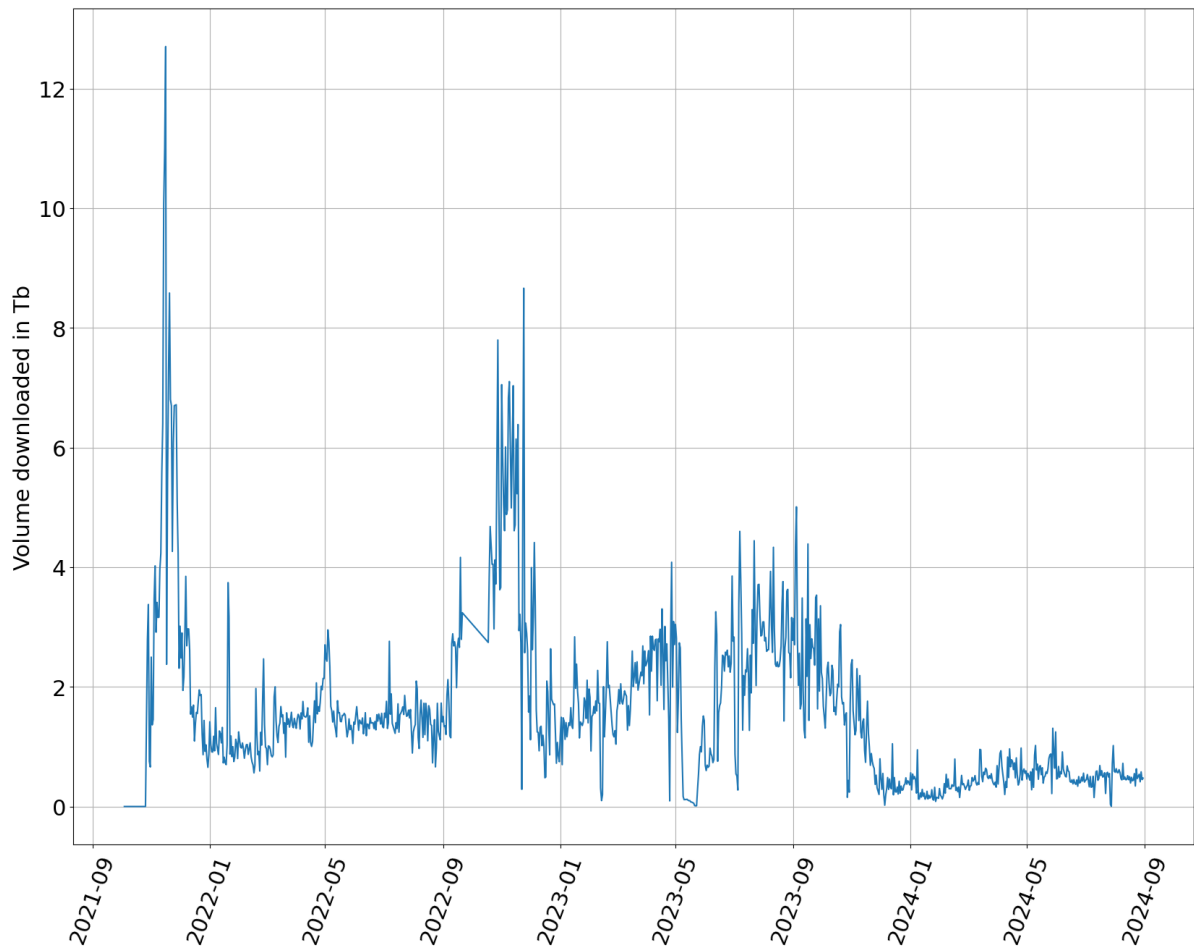
8.1 Portal: [colhub.met.no](#)

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.

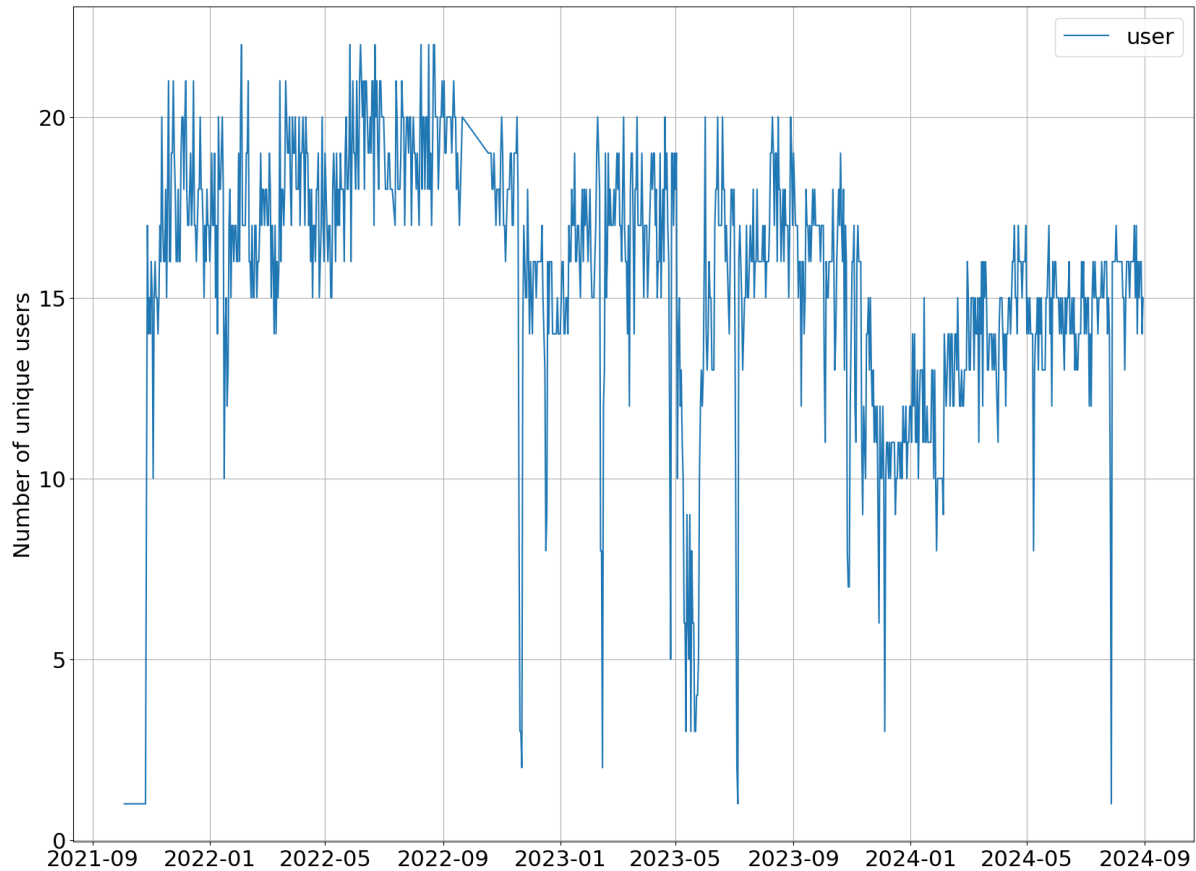
satellite	product_type	
S1	GRDH	247437
	GRDM	116220
	OCN	103579
	RAW	196353
	SLC	62838
S2	MSIL1C	571859
	MSIL1C_DTERRENG	3100
	MSIL2A	1140577
S3	OLCI_L1	9055
	OLCI_L2	490
	SLSTR_L1	15576
	SLSTR_L2	12
	SRAL_L1	23
	SRAL_L2	85
	SYN_L2	41
S5	NRTI_L2	10306
	OFFL_L1B	3
	OFFL_L2	11
		dtype: int64

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	15.088652
	4	18.111391
	5	19.999434
	6	15.003660
	7	14.552019
	8	15.172892

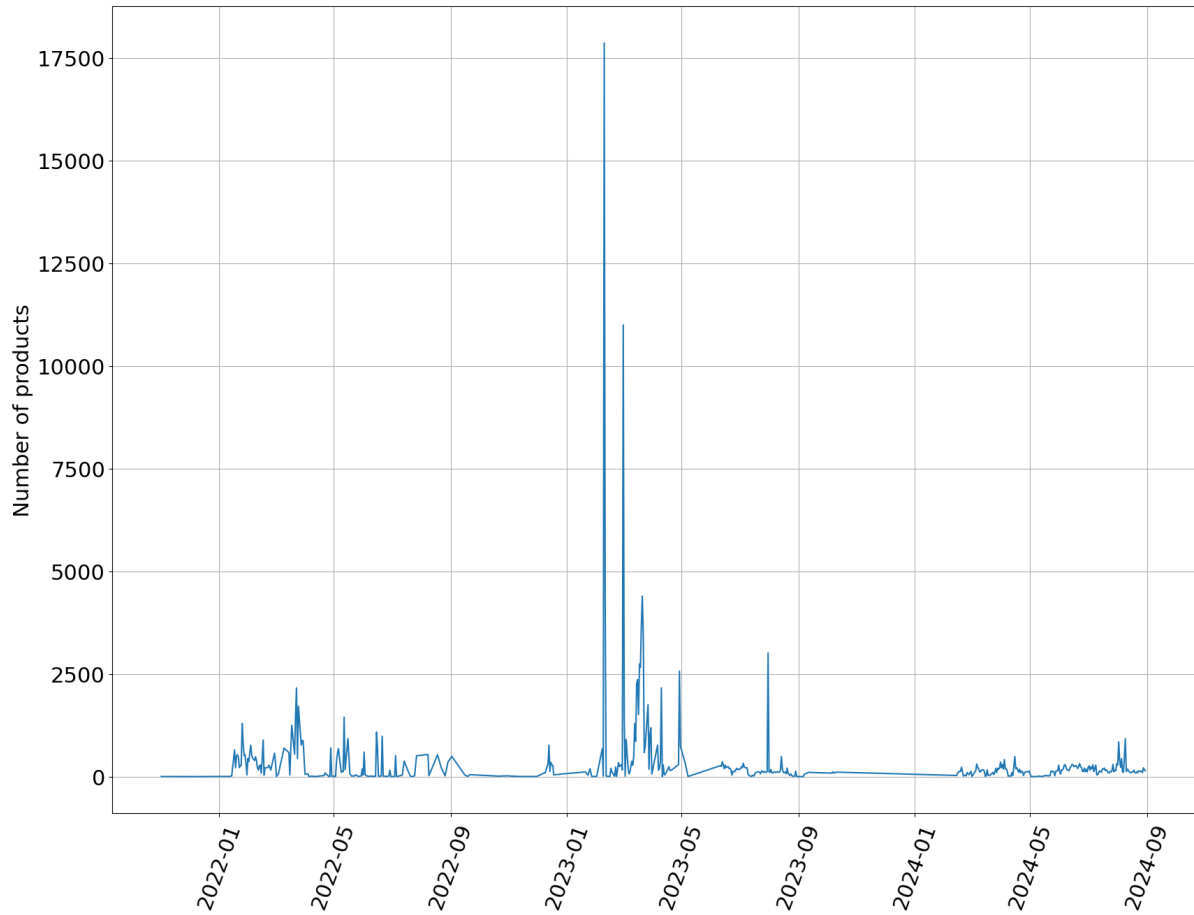
Name: size, dtype: float64

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.



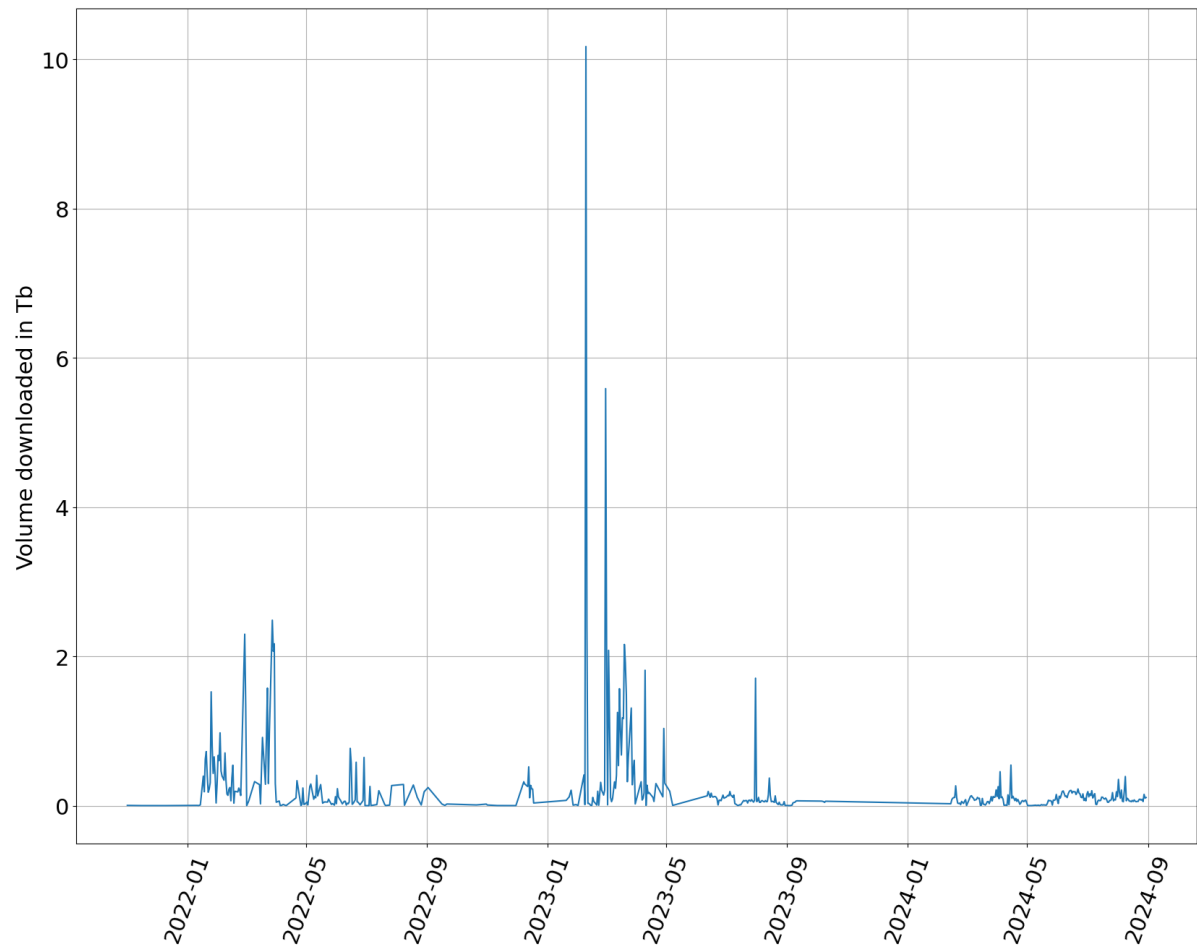
8.2 Portal: colhub-archive.met.no

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	32308
	GRDM	10209
	OCN	1
	RAW	875
	SLC	3221
S2	MSIL1C	34642
	MSIL1C_DTERRENG	16832
	MSIL2A	63480
S3	OLCI_L1	4
	OLCI_L2	1
	SLSTR_L1	4022
	SRAL_L1	6
	SRAL_L2	160
S5	OFFL_L2	2
dtype: int64		

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

download_time	download_time	
2021	December	0.000696

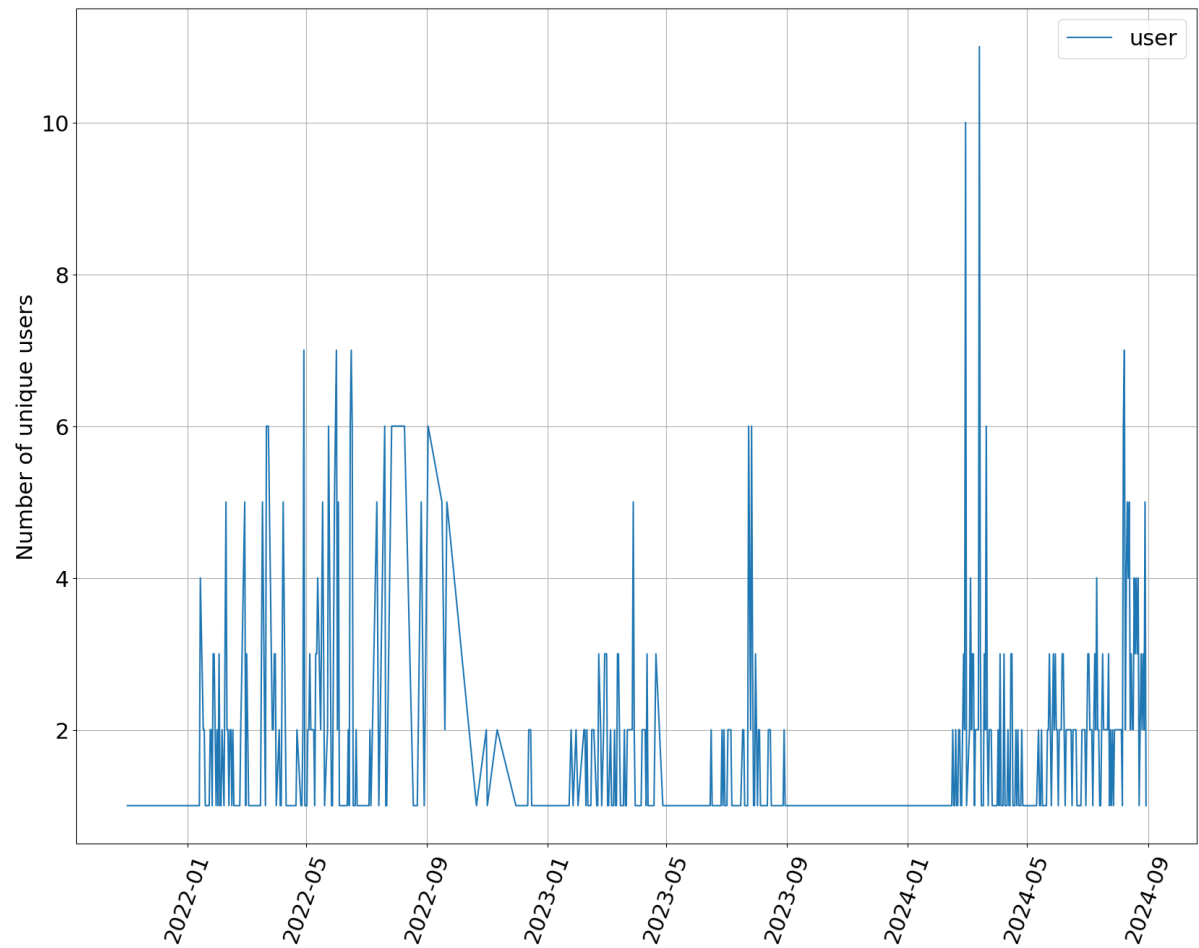
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2022	November	0.005186
	April	0.858194
	August	0.874257
	December	2.247264
	February	9.514969
	January	7.210722
	July	0.771705
	June	3.787335
	March	13.999207
	May	2.258999
2023	November	0.011412
	October	0.030705
	September	0.289683
	April	5.010196
	August	1.931697
	February	14.316868
	January	0.417223
	July	3.804772
	June	2.082679
	March	27.805556
2024	May	0.196331
	October	0.276372
	September	0.220003
	April	3.181320
	August	3.264419
	February	1.177107
	July	3.158623
	June	4.358417
	March	2.230899
	May	0.761791

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.



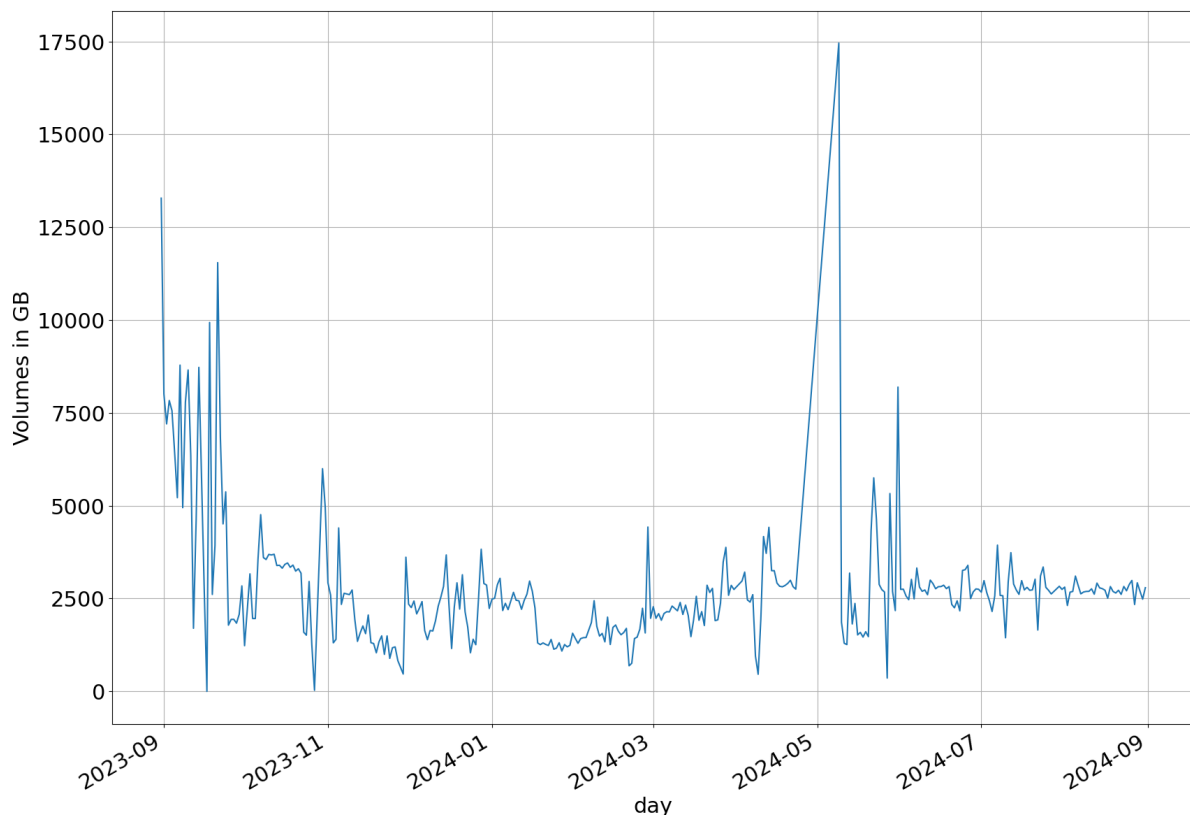
DATA VOLUMES FOR NBS

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.

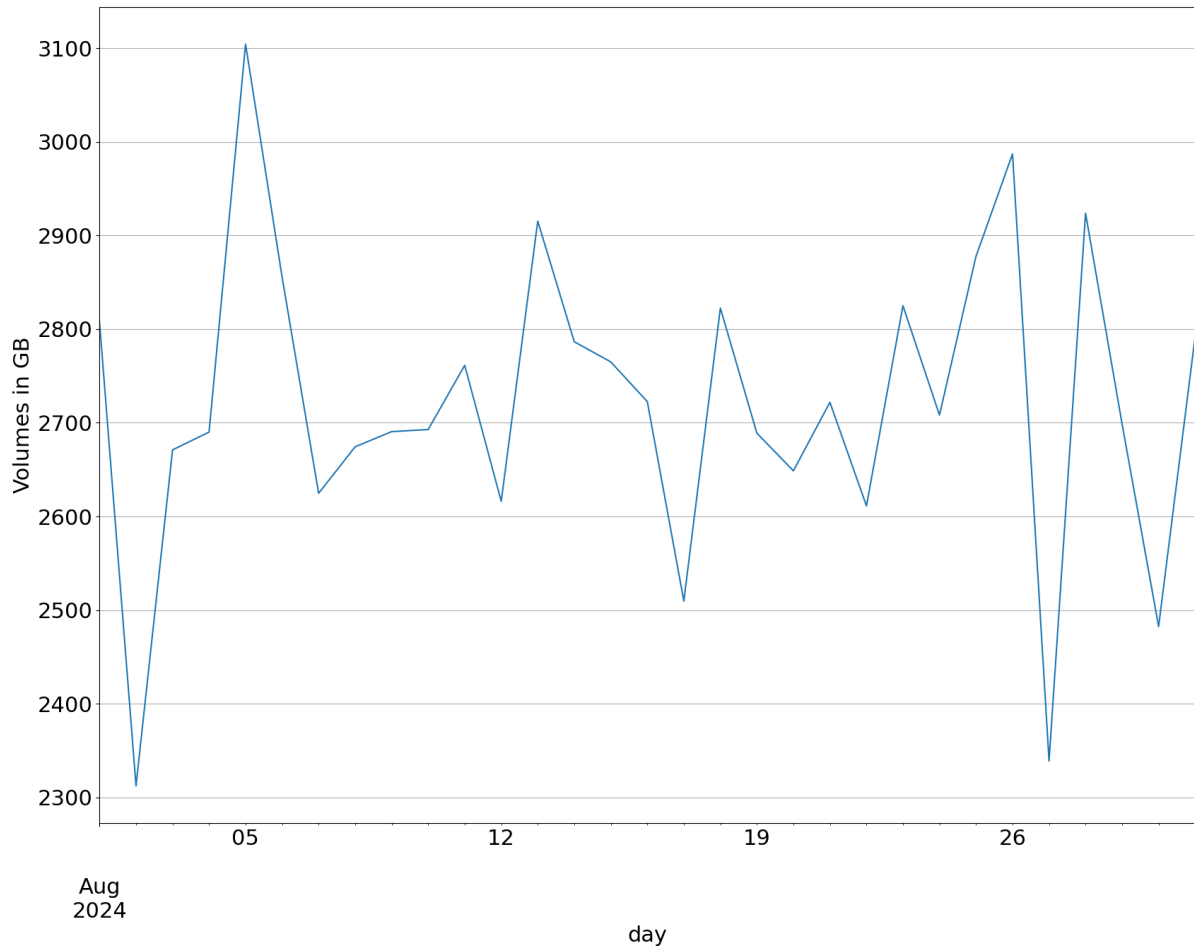
9.1 Volumes for AOI backends

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 4939 TB



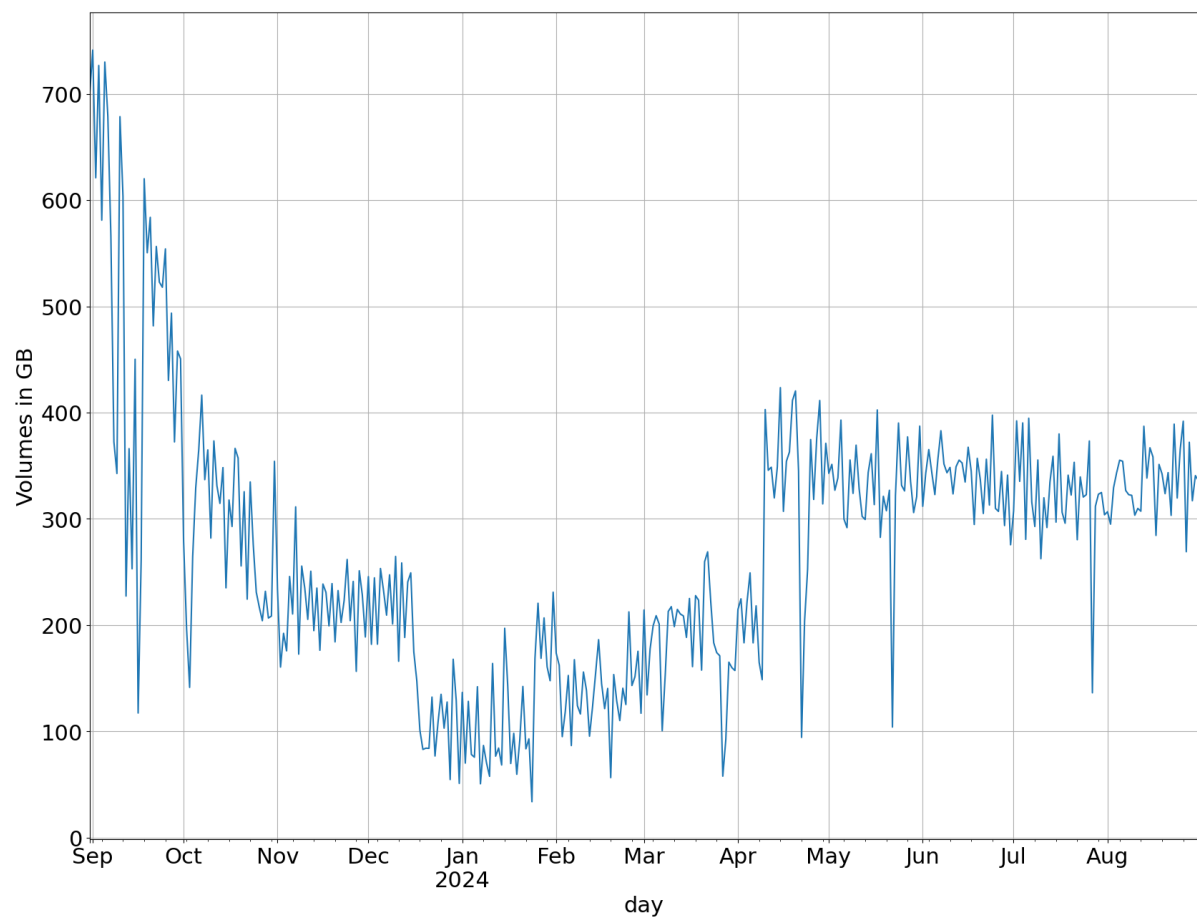
In the graphic above the volume of data per day in GB is shown for the last year. Here we can observed seasonality due to optical sensor products. The table below shows the same information for the last month.



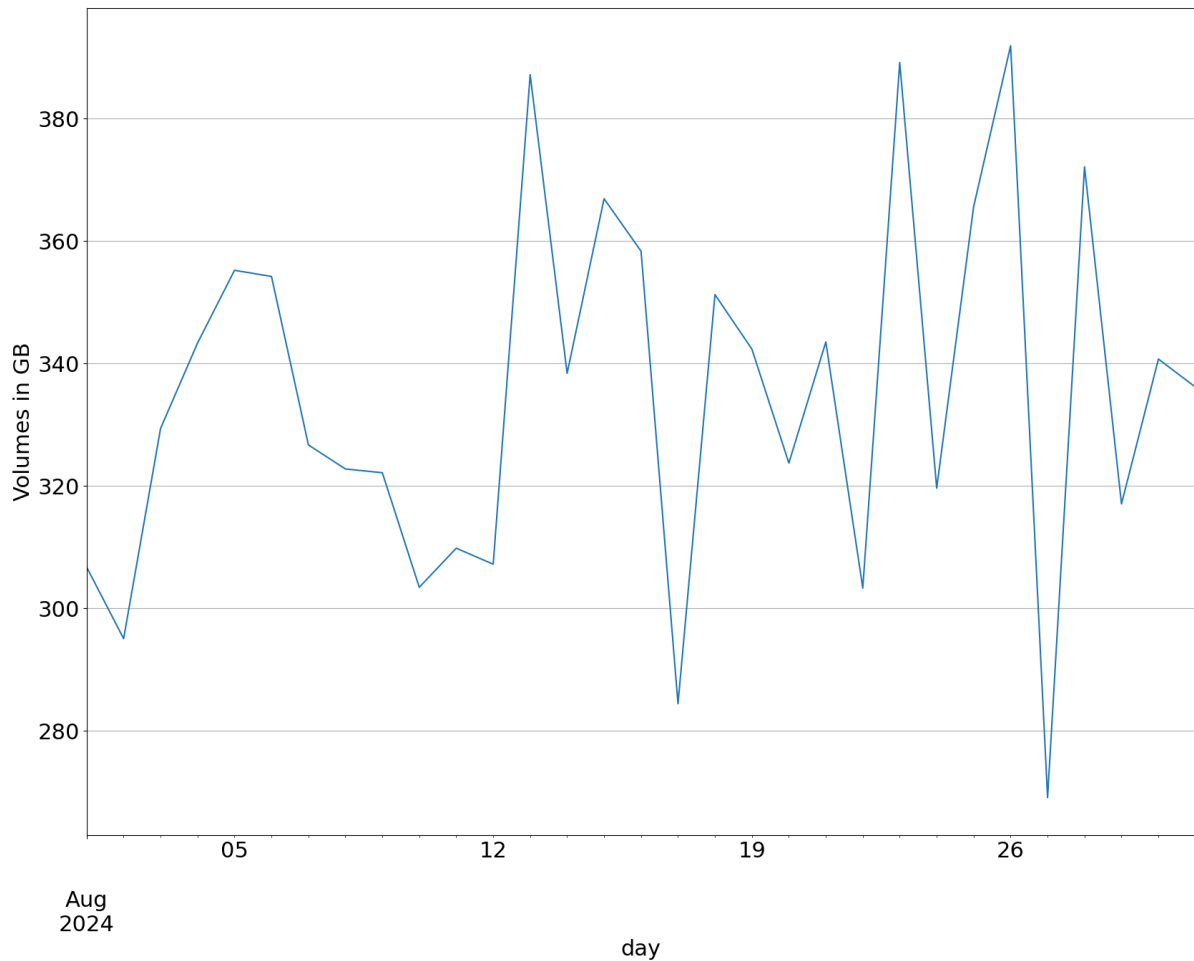
9.2 Volume for netcdf products

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

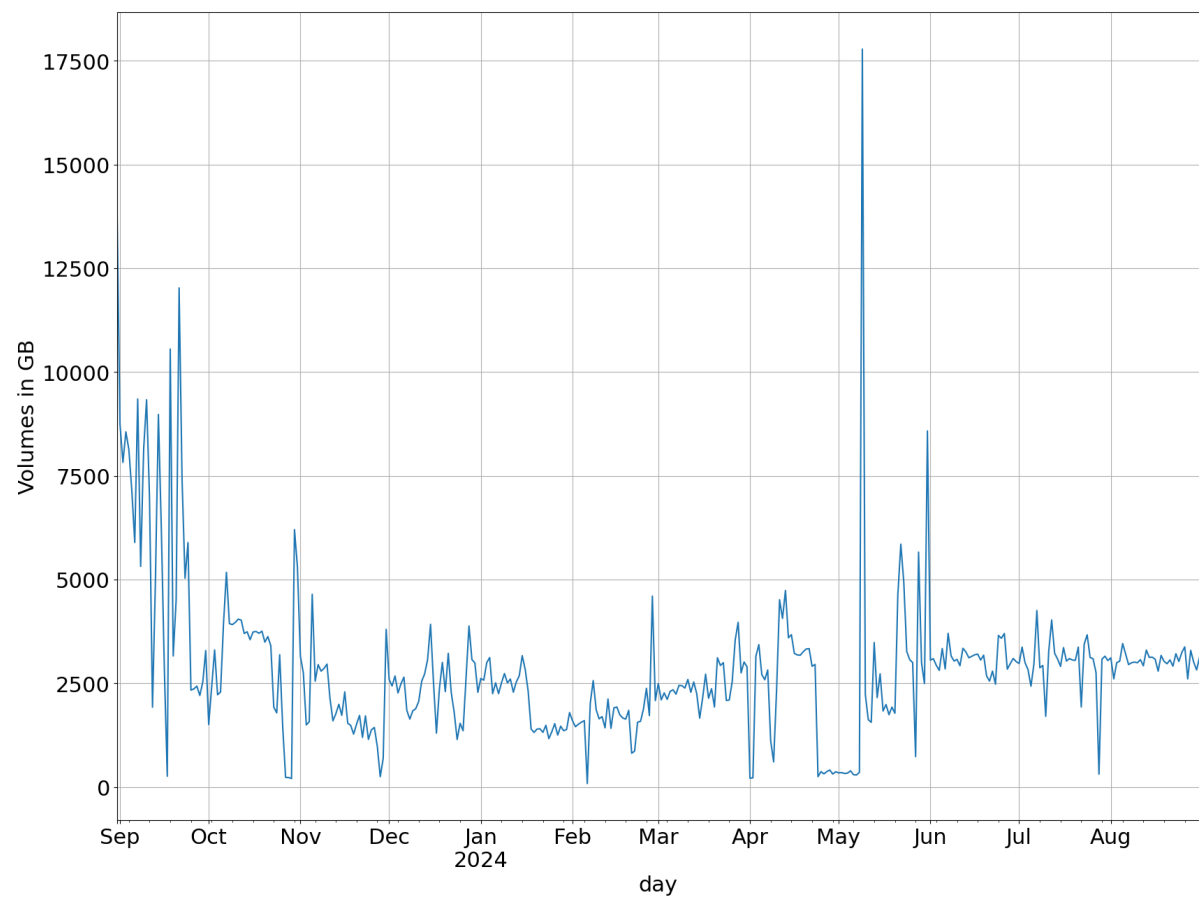


In the graphic above the volume of NetCDF-CF data per day in GB is shown for the last year. Here we can observed seasonality due to optical sensor products. The table below shows the same information for the last 30 days.



9.3 Totals

Finally, the total amount of disk space dedicated to the NBS project, including either products in SAFE and NetCDF formats, represents 5857 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
2024-08-01	GRDH	fscanner	51.435837	17.0	0.839337
2024-08-01	GRDH	synchronized	85.984097	53.0	1.165634
2024-08-01	GRDM	fscanner	2.724518	25.0	0.714286
2024-08-01	GRDM	synchronized	6.299364	17.0	2.570650
2024-08-01	OCN	synchronized	0.953195	48.0	1.306587
2024-08-01	RAW	synchronized	95.149514	69.0	1.011205
2024-08-01	SLC	synchronized	411.576370	56.0	1.481361
2024-08-02	GRDH	fscanner	73.400182	23.0	0.766872
2024-08-02	GRDH	synchronized	92.382378	56.0	1.198196
2024-08-02	GRDM	fscanner	4.114144	38.0	0.761996
2024-08-02	GRDM	synchronized	3.664227	10.0	1.150559
2024-08-02	OCN	synchronized	0.840472	49.0	1.194507
2024-08-02	RAW	synchronized	94.101193	66.0	0.965211
2024-08-02	SLC	synchronized	435.472583	58.0	1.541868
2024-08-03	GRDH	fscanner	44.390028	18.0	0.598650
2024-08-03	GRDH	synchronized	65.110803	39.0	1.266248
2024-08-03	GRDM	fscanner	6.406342	35.0	0.614413
2024-08-03	GRDM	synchronized	8.623712	22.0	0.748636
2024-08-03	OCN	synchronized	1.192408	54.0	1.052842
2024-08-03	RAW	synchronized	81.573512	61.0	0.866799
2024-08-03	SLC	synchronized	314.423806	41.0	1.607884

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2024-08-04	GRDH	fscanner	67.448089	25.0	0.653911
2024-08-04	GRDH	synchronized	78.083448	47.0	1.043226
2024-08-04	GRDM	fscanner	6.389791	41.0	0.616596
2024-08-04	GRDM	synchronized	5.586601	15.0	0.606241
2024-08-04	OCN	synchronized	0.926050	47.0	1.116199
2024-08-04	RAW	synchronized	86.347850	62.0	0.820934
2024-08-04	SLC	synchronized	376.242435	50.0	1.416969
2024-08-05	GRDH	fscanner	68.536542	22.0	0.791596
2024-08-05	GRDH	synchronized	78.418887	47.0	1.070350
2024-08-05	GRDM	fscanner	6.682758	38.0	0.777140
2024-08-05	GRDM	synchronized	7.190345	20.0	0.582051
2024-08-05	OCN	synchronized	1.185899	60.0	1.138019
2024-08-05	RAW	synchronized	90.155433	67.0	0.911528
2024-08-05	SLC	synchronized	376.188769	49.0	1.584896
2024-08-06	GRDH	fscanner	61.614048	22.0	0.684003
2024-08-06	GRDH	synchronized	85.317647	51.0	1.152466
2024-08-06	GRDM	fscanner	5.574440	40.0	0.634982
2024-08-06	GRDM	synchronized	6.371147	18.0	1.077660
2024-08-06	OCN	synchronized	1.004128	50.0	1.181915
2024-08-06	RAW	synchronized	95.577678	69.0	1.007631
2024-08-06	SLC	synchronized	407.757221	54.0	1.467549
2024-08-07	GRDH	fscanner	69.084670	21.0	0.745112
2024-08-07	GRDH	synchronized	73.495101	45.0	1.055918
2024-08-07	GRDM	fscanner	6.387732	38.0	0.656689
2024-08-07	GRDM	synchronized	5.093559	13.0	0.596527
2024-08-07	OCN	synchronized	0.846009	44.0	1.022555
2024-08-07	RAW	synchronized	80.513564	58.0	0.839339
2024-08-07	SLC	synchronized	359.421515	48.0	1.357381
2024-08-08	GRDH	fscanner	40.086313	15.0	0.563253
2024-08-08	GRDH	synchronized	65.421438	39.0	0.991942
2024-08-08	GRDM	fscanner	6.371555	35.0	0.613473
2024-08-08	GRDM	synchronized	8.963984	24.0	0.682470
2024-08-08	OCN	synchronized	1.169627	53.0	1.058940
2024-08-08	RAW	synchronized	82.867806	63.0	0.820699
2024-08-08	SLC	synchronized	327.438936	43.0	1.406756
2024-08-09	GRDH	fscanner	69.372290	22.0	1.521467
2024-08-09	GRDH	synchronized	78.327736	48.0	1.034636
2024-08-09	GRDM	fscanner	3.594138	33.0	4.416403
2024-08-09	GRDM	synchronized	5.303171	14.0	0.883176
2024-08-09	OCN	synchronized	0.889794	47.0	1.090054
2024-08-09	RAW	synchronized	86.489845	62.0	0.826810
2024-08-09	SLC	synchronized	377.715517	51.0	1.411749
2024-08-10	GRDH	fscanner	42.806085	17.0	0.724379
2024-08-10	GRDH	synchronized	73.830067	45.0	1.088901
2024-08-10	GRDM	synchronized	7.290045	18.0	1.126413
2024-08-10	OCN	synchronized	1.126221	55.0	1.203948
2024-08-10	RAW	synchronized	86.740511	63.0	0.877196
2024-08-10	SLC	synchronized	352.570249	47.0	1.439226
2024-08-11	GRDH	fscanner	55.057153	20.0	0.606151
2024-08-11	GRDH	synchronized	82.864160	50.0	0.965015
2024-08-11	GRDM	synchronized	6.851423	18.0	0.975805
2024-08-11	OCN	synchronized	1.057588	51.0	1.064845
2024-08-11	RAW	synchronized	95.182892	69.0	0.821520
2024-08-11	SLC	synchronized	398.092350	53.0	1.412811
2024-08-12	GRDH	fscanner	64.164162	20.0	0.927449
2024-08-12	GRDH	synchronized	82.891855	50.0	1.058720

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2024-08-12	GRDM	fscanner	1.303812	12.0	0.917487
2024-08-12	GRDM	synchronized	5.109750	13.0	2.242035
2024-08-12	OCN	synchronized	0.940172	49.0	1.256743
2024-08-12	RAW	synchronized	85.595141	61.0	0.932624
2024-08-12	SLC	synchronized	346.860460	46.0	1.439072
2024-08-13	GRDH	fscanner	47.334295	16.0	0.952989
2024-08-13	GRDH	synchronized	86.205303	53.0	1.224480
2024-08-13	GRDM	fscanner	2.725552	25.0	0.714951
2024-08-13	GRDM	synchronized	5.760769	15.0	2.348641
2024-08-13	OCN	synchronized	0.945118	47.0	1.331754
2024-08-13	RAW	synchronized	101.339087	73.0	1.013795
2024-08-13	SLC	synchronized	448.166970	60.0	1.532885
2024-08-14	GRDH	fscanner	71.387626	22.0	0.743155
2024-08-14	GRDH	synchronized	92.740116	56.0	1.082833
2024-08-14	GRDM	fscanner	4.126043	38.0	0.776613
2024-08-14	GRDM	synchronized	4.283473	11.0	2.250242
2024-08-14	OCN	synchronized	0.899339	50.0	1.173010
2024-08-14	RAW	synchronized	95.716727	67.0	0.934536
2024-08-14	SLC	synchronized	451.066025	60.0	1.464055
2024-08-15	GRDH	fscanner	37.660968	14.0	0.606110
2024-08-15	GRDH	synchronized	65.108823	39.0	1.132782
2024-08-15	GRDM	fscanner	6.611679	34.0	0.604451
2024-08-15	GRDM	synchronized	9.449389	24.0	0.713893
2024-08-15	OCN	synchronized	1.267949	56.0	1.206747
2024-08-15	RAW	synchronized	83.740816	63.0	0.855955
2024-08-15	SLC	synchronized	314.424088	41.0	1.603737
2024-08-16	GRDH	fscanner	64.143821	24.0	0.637490
2024-08-16	GRDH	synchronized	78.080856	47.0	1.031561
2024-08-16	GRDM	fscanner	5.955508	40.0	0.703584
2024-08-16	GRDM	synchronized	5.586445	15.0	0.572832
2024-08-16	OCN	synchronized	0.926244	47.0	1.173416
2024-08-16	RAW	synchronized	86.127175	62.0	0.842941
2024-08-16	SLC	synchronized	376.240576	50.0	1.529078
2024-08-17	GRDH	fscanner	63.192148	21.0	0.798062
2024-08-17	GRDH	synchronized	78.234232	47.0	1.117197
2024-08-17	GRDM	fscanner	6.668130	38.0	0.763709
2024-08-17	GRDM	synchronized	5.563809	16.0	0.567082
2024-08-17	OCN	synchronized	1.040835	56.0	1.136057
2024-08-17	RAW	synchronized	85.463786	63.0	0.897146
2024-08-17	SLC	synchronized	375.323434	49.0	1.647794
2024-08-18	GRDH	fscanner	55.559570	19.0	0.676289
2024-08-18	GRDH	synchronized	85.474211	51.0	1.220703
2024-08-18	GRDM	fscanner	5.179303	39.0	0.588161
2024-08-18	GRDM	synchronized	5.151643	15.0	0.666503
2024-08-18	OCN	synchronized	0.896873	47.0	1.124831
2024-08-18	RAW	synchronized	91.896374	66.0	0.885763
2024-08-18	SLC	synchronized	408.380369	54.0	1.444885
2024-08-19	GRDH	fscanner	54.672781	17.0	0.787371
2024-08-19	GRDH	synchronized	73.493375	45.0	1.050276
2024-08-19	GRDM	fscanner	6.060311	35.0	0.675018
2024-08-19	GRDM	synchronized	5.093159	13.0	0.596618
2024-08-19	OCN	synchronized	0.846666	44.0	1.073560
2024-08-19	RAW	synchronized	80.478582	58.0	0.833604
2024-08-19	SLC	synchronized	359.419283	48.0	1.332720
2024-08-20	GRDH	fscanner	41.411497	14.0	0.802056
2024-08-20	GRDH	synchronized	65.412023	39.0	1.111403

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2024-08-20	GRDM	fscanner	5.834118	30.0	0.596277
2024-08-20	GRDM	synchronized	9.789069	26.0	0.712372
2024-08-20	OCN	synchronized	1.243079	55.0	0.946733
2024-08-20	RAW	synchronized	84.945112	65.0	0.794417
2024-08-20	SLC	synchronized	327.379605	43.0	1.400910
2024-08-21	GRDH	fscanner	64.885029	21.0	1.029133
2024-08-21	GRDH	synchronized	78.151912	48.0	1.023512
2024-08-21	GRDM	fscanner	3.698188	34.0	0.820647
2024-08-21	GRDM	synchronized	5.303108	14.0	0.887847
2024-08-21	OCN	synchronized	0.888318	47.0	1.075400
2024-08-21	RAW	synchronized	86.227575	62.0	0.814873
2024-08-21	SLC	synchronized	376.914519	51.0	1.344426
2024-08-22	GRDH	fscanner	41.568099	16.0	0.694331
2024-08-22	GRDH	synchronized	73.690541	45.0	1.114604
2024-08-22	GRDM	fscanner	4.103345	29.0	0.662946
2024-08-22	GRDM	synchronized	7.290735	18.0	1.176559
2024-08-22	OCN	synchronized	1.127255	55.0	1.209604
2024-08-22	RAW	synchronized	86.453787	63.0	0.922965
2024-08-22	SLC	synchronized	352.071298	47.0	1.402618
2024-08-23	GRDH	fscanner	60.654135	21.0	0.612744
2024-08-23	GRDH	synchronized	82.866616	50.0	0.996883
2024-08-23	GRDM	fscanner	6.873375	46.0	0.670967
2024-08-23	GRDM	synchronized	6.851705	18.0	0.952902
2024-08-23	OCN	synchronized	1.059677	51.0	1.220206
2024-08-23	RAW	synchronized	95.297194	69.0	0.865802
2024-08-23	SLC	synchronized	390.303561	52.0	1.461507
2024-08-24	GRDH	fscanner	69.452094	22.0	0.688923
2024-08-24	GRDH	synchronized	82.899242	50.0	1.739290
2024-08-24	GRDM	fscanner	3.589967	33.0	0.673746
2024-08-24	GRDM	synchronized	3.483874	9.0	2.521976
2024-08-24	OCN	synchronized	0.794677	45.0	2.588141
2024-08-24	RAW	synchronized	86.102796	60.0	1.387378
2024-08-24	SLC	synchronized	376.858559	50.0	2.339792
2024-08-25	GRDH	fscanner	33.198935	11.0	0.821000
2024-08-25	GRDH	synchronized	78.052145	48.0	2.099658
2024-08-25	GRDM	fscanner	2.726124	25.0	0.714539
2024-08-25	GRDM	synchronized	6.433329	17.0	1.840085
2024-08-25	OCN	synchronized	0.940750	44.0	2.352498
2024-08-25	RAW	synchronized	89.278679	65.0	1.620960
2024-08-25	SLC	synchronized	376.984665	51.0	2.608182
2024-08-26	GRDH	fscanner	69.879151	21.0	0.909303
2024-08-26	GRDH	synchronized	107.359871	66.0	3.347328
2024-08-26	GRDM	fscanner	4.466795	41.0	0.786900
2024-08-26	GRDM	synchronized	3.471809	9.0	4.192813
2024-08-26	OCN	synchronized	0.943067	58.0	3.820212
2024-08-26	RAW	synchronized	107.995819	75.0	3.573719
2024-08-26	SLC	synchronized	527.557419	71.0	3.587906
2024-08-27	GRDH	fscanner	40.275164	16.0	0.683481
2024-08-27	GRDH	synchronized	35.259479	21.0	11.747737
2024-08-27	GRDM	fscanner	6.075248	32.0	0.604758
2024-08-27	GRDM	synchronized	6.533352	17.0	10.116836
2024-08-27	OCN	synchronized	0.774922	32.0	11.400380
2024-08-27	RAW	synchronized	48.771128	38.0	11.091117
2024-08-27	SLC	synchronized	177.019493	23.0	12.046200
2024-08-28	GRDH	fscanner	58.689284	20.0	0.620207
2024-08-28	GRDH	synchronized	107.795025	65.0	5.510151

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2024-08-28	GRDM	fscanner	5.941857	40.0	0.592138
2024-08-28	GRDM	synchronized	5.721928	15.0	4.605179
2024-08-28	OCN	synchronized	1.169609	64.0	5.580770
2024-08-28	RAW	synchronized	113.806678	80.0	4.979296
2024-08-28	SLC	synchronized	503.997461	67.0	5.795309
2024-08-29	GRDH	fscanner	68.554779	23.0	0.798354
2024-08-29	GRDH	synchronized	78.230101	47.0	1.199134
2024-08-29	GRDM	fscanner	6.580016	37.0	0.760609
2024-08-29	GRDM	synchronized	7.190642	20.0	0.623690
2024-08-29	OCN	synchronized	1.185545	60.0	1.264134
2024-08-29	RAW	synchronized	89.459947	67.0	0.923987
2024-08-29	SLC	synchronized	376.768977	49.0	1.589184
2024-08-30	GRDH	fscanner	59.696627	21.0	0.543000
2024-08-30	GRDH	synchronized	85.475410	51.0	1.127604
2024-08-30	GRDM	fscanner	4.965529	35.0	0.531336
2024-08-30	GRDM	synchronized	5.151327	15.0	0.666456
2024-08-30	OCN	synchronized	0.909902	48.0	1.141727
2024-08-30	RAW	synchronized	91.794477	66.0	1.005223
2024-08-30	SLC	synchronized	416.098742	55.0	1.420853
2024-08-31	GRDH	fscanner	61.656280	20.0	0.831304
2024-08-31	GRDH	synchronized	73.497014	45.0	1.093584
2024-08-31	GRDM	fscanner	6.908656	41.0	0.798053
2024-08-31	GRDM	synchronized	4.278176	11.0	0.595302
2024-08-31	OCN	synchronized	0.774994	42.0	1.040611
2024-08-31	RAW	synchronized	79.030652	56.0	0.813215
2024-08-31	SLC	synchronized	359.421405	48.0	1.406024
2024-08-01	MSIL1C	synchronized	566.518880	1328.0	4.917333
2024-08-02	MSIL1C	synchronized	394.582656	899.0	2.411881
2024-08-03	MSIL1C	synchronized	598.627261	1371.0	3.628951
2024-08-04	MSIL1C	synchronized	554.716938	1250.0	3.816718
2024-08-05	MSIL1C	synchronized	725.407676	1575.0	6.491926
2024-08-06	MSIL1C	synchronized	598.039775	1350.0	3.897006
2024-08-07	MSIL1C	synchronized	525.170891	1225.0	4.628209
2024-08-08	MSIL1C	synchronized	546.061973	1345.0	4.139949
2024-08-09	MSIL1C	synchronized	528.376842	1245.0	3.653539
2024-08-10	MSIL1C	synchronized	564.269424	1313.0	4.305992
2024-08-11	MSIL1C	synchronized	555.296435	1315.0	3.401353
2024-08-12	MSIL1C	synchronized	581.984783	1329.0	4.011899
2024-08-13	MSIL1C	synchronized	620.058930	1399.0	4.953284
2024-08-14	MSIL1C	synchronized	545.848699	1264.0	3.745068
2024-08-15	MSIL1C	synchronized	629.043253	1447.0	4.053941
2024-08-16	MSIL1C	synchronized	550.582174	1297.0	3.250070
2024-08-17	MSIL1C	synchronized	538.256441	1319.0	3.529138
2024-08-18	MSIL1C	synchronized	562.972571	1327.0	3.253908
2024-08-19	MSIL1C	synchronized	550.386631	1232.0	3.867627
2024-08-20	MSIL1C	synchronized	578.007726	1340.0	4.567247
2024-08-21	MSIL1C	synchronized	576.546740	1341.0	3.895732
2024-08-22	MSIL1C	synchronized	529.368418	1222.0	6.474768
2024-08-23	MSIL1C	synchronized	598.085093	1345.0	4.726281
2024-08-24	MSIL1C	synchronized	563.228493	1254.0	3.953632
2024-08-25	MSIL1C	synchronized	655.555514	1459.0	3.911808
2024-08-26	MSIL1C	synchronized	596.275347	1347.0	4.041596
2024-08-27	MSIL1C	synchronized	537.026268	1228.0	3.978553
2024-08-28	MSIL1C	synchronized	590.871907	1345.0	3.436297
2024-08-29	MSIL1C	synchronized	523.236433	1153.0	4.019606
2024-08-30	MSIL1C	synchronized	456.137822	1026.0	4.703679

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2024-08-31	MSIL1C	synchronized	635.903331	1479.0	3.574846
2024-08-01	MSIL2A	synchronized	743.153362	1359.0	5.515359
2024-08-02	MSIL2A	synchronized	518.622186	909.0	2.895697
2024-08-03	MSIL2A	synchronized	771.705834	1370.0	4.183631
2024-08-04	MSIL2A	synchronized	720.821357	1250.0	4.946949
2024-08-05	MSIL2A	synchronized	931.123821	1571.0	6.823204
2024-08-06	MSIL2A	synchronized	784.393439	1370.0	5.542413
2024-08-07	MSIL2A	synchronized	684.321522	1238.0	5.413245
2024-08-08	MSIL2A	synchronized	707.152680	1348.0	4.828562
2024-08-09	MSIL2A	synchronized	701.364174	1270.0	4.528965
2024-08-10	MSIL2A	synchronized	721.936186	1312.0	5.047026
2024-08-11	MSIL2A	synchronized	716.221753	1311.0	4.560999
2024-08-12	MSIL2A	synchronized	730.665214	1313.0	5.620380
2024-08-13	MSIL2A	synchronized	778.847761	1397.0	5.932376
2024-08-14	MSIL2A	synchronized	678.916315	1265.0	4.558785
2024-08-15	MSIL2A	synchronized	781.445238	1419.0	4.939862
2024-08-16	MSIL2A	synchronized	710.812966	1329.0	4.231449
2024-08-17	MSIL2A	synchronized	663.752914	1300.0	4.562498
2024-08-18	MSIL2A	synchronized	739.145822	1351.0	4.623741
2024-08-19	MSIL2A	synchronized	704.450728	1232.0	5.050797
2024-08-20	MSIL2A	synchronized	743.752986	1342.0	5.219262
2024-08-21	MSIL2A	synchronized	725.315784	1314.0	4.698496
2024-08-22	MSIL2A	synchronized	680.491461	1237.0	7.116887
2024-08-23	MSIL2A	synchronized	780.100174	1375.0	5.428847
2024-08-24	MSIL2A	synchronized	725.358992	1258.0	4.867309
2024-08-25	MSIL2A	synchronized	830.724056	1456.0	4.681273
2024-08-26	MSIL2A	synchronized	770.152876	1368.0	5.028622
2024-08-27	MSIL2A	synchronized	695.816286	1236.0	4.592469
2024-08-28	MSIL2A	synchronized	753.122467	1339.0	4.150057
2024-08-29	MSIL2A	synchronized	667.735380	1147.0	4.751586
2024-08-30	MSIL2A	synchronized	623.204752	1096.0	5.351502
2024-08-31	MSIL2A	synchronized	787.248133	1453.0	4.238997
2024-08-01	OLCI_L1	synchronized	144.282627	178.0	6.529815
2024-08-01	OLCI_L2	synchronized	20.992567	175.0	3.916157
2024-08-01	SLSTR_L1	synchronized	70.131451	170.0	16.202201
2024-08-01	SLSTR_L2	synchronized	15.883846	251.0	20.935201
2024-08-01	SRAL_L1	synchronized	137.058142	85.0	38.538850
2024-08-01	SRAL_L2	synchronized	5.228043	197.0	39.683454
2024-08-01	SYN_L2	synchronized	43.121791	215.0	21.264572
2024-08-02	OLCI_L1	synchronized	147.163162	182.0	5.987985
2024-08-02	OLCI_L2	synchronized	21.455577	176.0	3.348960
2024-08-02	SLSTR_L1	synchronized	70.556900	171.0	14.940994
2024-08-02	SLSTR_L2	synchronized	16.522551	260.0	19.730150
2024-08-02	SRAL_L1	synchronized	134.289734	85.0	38.459222
2024-08-02	SRAL_L2	synchronized	5.208510	196.0	40.555655
2024-08-02	SYN_L2	synchronized	48.607029	225.0	22.132059
2024-08-03	OLCI_L1	synchronized	142.617589	176.0	3.569528
2024-08-03	OLCI_L2	synchronized	19.944228	168.0	2.936550
2024-08-03	SLSTR_L1	synchronized	65.996515	160.0	3.170332
2024-08-03	SLSTR_L2	synchronized	15.260130	242.0	18.823325
2024-08-03	SRAL_L1	synchronized	133.351472	81.0	38.520035
2024-08-03	SRAL_L2	synchronized	5.482338	207.0	39.361518
2024-08-03	SYN_L2	synchronized	46.757330	215.0	21.325200
2024-08-04	OLCI_L1	synchronized	146.365047	179.0	9.731504
2024-08-04	OLCI_L2	synchronized	21.475861	184.0	10.944766
2024-08-04	SLSTR_L1	synchronized	66.912170	162.0	3.722020

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2024-08-04	SLSTR_L2	synchronized	15.862899	251.0	22.410746
2024-08-04	SRAL_L1	synchronized	139.511907	87.0	38.515046
2024-08-04	SRAL_L2	synchronized	5.494068	206.0	39.679673
2024-08-04	SYN_L2	synchronized	44.027459	215.0	20.986606
2024-08-05	OLCI_L1	synchronized	140.734904	172.0	10.004163
2024-08-05	OLCI_L2	synchronized	19.920427	171.0	10.604999
2024-08-05	SLSTR_L1	synchronized	64.419521	156.0	4.491553
2024-08-05	SLSTR_L2	synchronized	14.718808	233.0	23.113732
2024-08-05	SRAL_L1	synchronized	139.135822	86.0	38.550799
2024-08-05	SRAL_L2	synchronized	5.184874	196.0	39.635818
2024-08-05	SYN_L2	synchronized	44.064401	215.0	20.346749
2024-08-06	OLCI_L1	synchronized	149.016149	184.0	7.642175
2024-08-06	OLCI_L2	synchronized	20.457379	175.0	5.490571
2024-08-06	SLSTR_L1	synchronized	74.023589	179.0	5.974773
2024-08-06	SLSTR_L2	synchronized	17.882835	282.0	18.425711
2024-08-06	SRAL_L1	synchronized	136.792482	85.0	38.470833
2024-08-06	SRAL_L2	synchronized	5.274907	196.0	40.170946
2024-08-06	SYN_L2	synchronized	46.026784	220.0	21.874537
2024-08-07	OLCI_L1	synchronized	136.683967	170.0	4.845598
2024-08-07	OLCI_L2	synchronized	20.328182	174.0	3.400714
2024-08-07	SLSTR_L1	synchronized	76.537961	185.0	15.419733
2024-08-07	SLSTR_L2	synchronized	16.651213	264.0	19.520414
2024-08-07	SRAL_L1	synchronized	138.735166	86.0	38.907230
2024-08-07	SRAL_L2	synchronized	5.448182	208.0	39.502063
2024-08-07	SYN_L2	synchronized	43.793575	208.0	21.705461
2024-08-08	OLCI_L1	synchronized	141.294820	176.0	10.536388
2024-08-08	OLCI_L2	synchronized	21.778669	188.0	11.543756
2024-08-08	SLSTR_L1	synchronized	66.600350	161.0	5.031111
2024-08-08	SLSTR_L2	synchronized	16.339908	257.0	22.156545
2024-08-08	SRAL_L1	synchronized	136.816820	84.0	38.889525
2024-08-08	SRAL_L2	synchronized	5.359639	201.0	40.107885
2024-08-08	SYN_L2	synchronized	42.849534	208.0	20.797888
2024-08-09	OLCI_L1	synchronized	141.434855	180.0	8.140161
2024-08-09	OLCI_L2	synchronized	19.811985	171.0	10.560004
2024-08-09	SLSTR_L1	synchronized	64.101001	155.0	16.142490
2024-08-09	SLSTR_L2	synchronized	15.029336	237.0	22.759618
2024-08-09	SRAL_L1	synchronized	131.750550	81.0	38.513607
2024-08-09	SRAL_L2	synchronized	4.991823	190.0	39.393184
2024-08-09	SYN_L2	synchronized	42.811740	212.0	22.335083
2024-08-10	OLCI_L1	synchronized	141.343130	182.0	7.056454
2024-08-10	OLCI_L2	synchronized	19.734055	170.0	3.265107
2024-08-10	SLSTR_L1	synchronized	68.127117	165.0	4.697912
2024-08-10	SLSTR_L2	synchronized	17.159387	270.0	19.021073
2024-08-10	SRAL_L1	synchronized	137.664846	88.0	38.758919
2024-08-10	SRAL_L2	synchronized	5.329537	198.0	40.520830
2024-08-10	SYN_L2	synchronized	41.033177	210.0	21.496055
2024-08-11	OLCI_L1	synchronized	136.221075	176.0	6.341919
2024-08-11	OLCI_L2	synchronized	19.568197	167.0	10.398074
2024-08-11	SLSTR_L1	synchronized	72.763513	177.0	3.517624
2024-08-11	SLSTR_L2	synchronized	16.475088	260.0	19.281586
2024-08-11	SRAL_L1	synchronized	138.603130	85.0	39.219328
2024-08-11	SRAL_L2	synchronized	5.516782	209.0	39.093755
2024-08-11	SYN_L2	synchronized	41.783960	209.0	22.232498
2024-08-12	OLCI_L1	synchronized	130.069431	169.0	9.906728
2024-08-12	OLCI_L2	synchronized	20.252708	174.0	11.644954
2024-08-12	SLSTR_L1	synchronized	65.576774	160.0	11.696325

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2024-08-12	SLSTR_L2	synchronized	15.266073	241.0	23.619046
2024-08-12	SRAL_L1	synchronized	140.976156	85.0	38.672465
2024-08-12	SRAL_L2	synchronized	5.422627	205.0	40.316801
2024-08-12	SYN_L2	synchronized	42.174485	210.0	22.026700
2024-08-13	OLCI_L1	synchronized	108.293058	142.0	6.563127
2024-08-13	OLCI_L2	synchronized	17.604457	153.0	3.375738
2024-08-13	SLSTR_L1	synchronized	64.154825	156.0	6.409826
2024-08-13	SLSTR_L2	synchronized	15.675857	247.0	22.539608
2024-08-13	SRAL_L1	synchronized	126.233598	78.0	38.501292
2024-08-13	SRAL_L2	synchronized	5.113663	191.0	39.935129
2024-08-13	SYN_L2	synchronized	43.746371	212.0	22.505034
2024-08-14	OLCI_L1	synchronized	136.760876	179.0	6.462057
2024-08-14	OLCI_L2	synchronized	21.390036	188.0	11.242427
2024-08-14	SLSTR_L1	synchronized	68.462304	166.0	4.602175
2024-08-14	SLSTR_L2	synchronized	16.847103	266.0	19.425292
2024-08-14	SRAL_L1	synchronized	141.118217	85.0	39.784003
2024-08-14	SRAL_L2	synchronized	5.194950	198.0	39.984443
2024-08-14	SYN_L2	synchronized	39.267762	202.0	20.348352
2024-08-15	OLCI_L1	synchronized	140.915612	182.0	9.424586
2024-08-15	OLCI_L2	synchronized	18.655125	163.0	6.455407
2024-08-15	SLSTR_L1	synchronized	68.608851	166.0	15.411731
2024-08-15	SLSTR_L2	synchronized	15.161213	239.0	19.245776
2024-08-15	SRAL_L1	synchronized	136.325564	84.0	38.536359
2024-08-15	SRAL_L2	synchronized	5.457170	203.0	40.067043
2024-08-15	SYN_L2	synchronized	39.428848	202.0	21.707951
2024-08-16	OLCI_L1	synchronized	131.191001	171.0	9.799344
2024-08-16	OLCI_L2	synchronized	19.835848	178.0	10.652382
2024-08-16	SLSTR_L1	synchronized	64.860431	157.0	3.156431
2024-08-16	SLSTR_L2	synchronized	15.170572	239.0	22.565123
2024-08-16	SRAL_L1	synchronized	134.864249	82.0	38.585340
2024-08-16	SRAL_L2	synchronized	5.262135	195.0	39.897086
2024-08-16	SYN_L2	synchronized	38.816393	208.0	21.660576
2024-08-17	OLCI_L1	synchronized	136.134761	181.0	3.741914
2024-08-17	OLCI_L2	synchronized	18.087411	162.0	2.920852
2024-08-17	SLSTR_L1	synchronized	65.236642	158.0	3.786318
2024-08-17	SLSTR_L2	synchronized	14.904986	235.0	21.668228
2024-08-17	SRAL_L1	synchronized	137.842041	88.0	38.464130
2024-08-17	SRAL_L2	synchronized	5.320470	199.0	40.012919
2024-08-17	SYN_L2	synchronized	40.377719	214.0	22.173506
2024-08-18	OLCI_L1	synchronized	134.260126	178.0	5.195855
2024-08-18	OLCI_L2	synchronized	20.536267	188.0	10.241574
2024-08-18	SLSTR_L1	synchronized	65.317791	158.0	3.096364
2024-08-18	SLSTR_L2	synchronized	15.723007	248.0	18.961926
2024-08-18	SRAL_L1	synchronized	138.390114	83.0	39.524730
2024-08-18	SRAL_L2	synchronized	5.334243	202.0	39.948859
2024-08-18	SYN_L2	synchronized	39.963497	210.0	21.741531
2024-08-19	OLCI_L1	synchronized	130.603890	173.0	9.178231
2024-08-19	OLCI_L2	synchronized	18.963384	172.0	8.378989
2024-08-19	SLSTR_L1	synchronized	63.431300	164.0	15.693143
2024-08-19	SLSTR_L2	synchronized	15.449093	241.0	21.807665
2024-08-19	SRAL_L1	synchronized	133.964887	83.0	38.512198
2024-08-19	SRAL_L2	synchronized	5.452199	205.0	40.045355
2024-08-19	SYN_L2	synchronized	37.225446	197.0	22.340339
2024-08-20	OLCI_L1	synchronized	132.940415	177.0	9.895025
2024-08-20	OLCI_L2	synchronized	19.459042	176.0	10.352828
2024-08-20	SLSTR_L1	synchronized	61.495786	171.0	15.311959

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2024-08-20	SLSTR_L2	synchronized	14.396972	227.0	23.562126
2024-08-20	SRAL_L1	synchronized	143.410814	86.0	38.806145
2024-08-20	SRAL_L2	synchronized	5.419650	203.0	39.589602
2024-08-20	SYN_L2	synchronized	31.380696	173.0	27.894249
2024-08-21	OLCI_L1	synchronized	134.057431	180.0	6.537399
2024-08-21	OLCI_L2	synchronized	19.084644	176.0	5.246064
2024-08-21	SLSTR_L1	synchronized	66.652885	171.0	3.971277
2024-08-21	SLSTR_L2	synchronized	16.315284	255.0	19.281061
2024-08-21	SRAL_L1	synchronized	139.949834	89.0	38.484622
2024-08-21	SRAL_L2	synchronized	5.262529	200.0	39.553262
2024-08-21	SYN_L2	synchronized	37.713267	210.0	23.846079
2024-08-22	OLCI_L1	synchronized	132.361493	178.0	5.441833
2024-08-22	OLCI_L2	synchronized	19.661989	185.0	9.886691
2024-08-22	SLSTR_L1	synchronized	75.883973	184.0	10.285143
2024-08-22	SLSTR_L2	synchronized	17.609980	277.0	19.400717
2024-08-22	SRAL_L1	synchronized	138.722144	84.0	39.004788
2024-08-22	SRAL_L2	synchronized	5.465698	208.0	40.164572
2024-08-22	SYN_L2	synchronized	39.579512	217.0	22.049892
2024-08-23	OLCI_L1	synchronized	131.322504	176.0	9.565588
2024-08-23	OLCI_L2	synchronized	18.303054	171.0	3.465851
2024-08-23	SLSTR_L1	synchronized	70.982076	172.0	3.579821
2024-08-23	SLSTR_L2	synchronized	16.243102	256.0	20.036971
2024-08-23	SRAL_L1	synchronized	139.786251	87.0	38.507544
2024-08-23	SRAL_L2	synchronized	5.566442	208.0	40.102483
2024-08-23	SYN_L2	synchronized	38.463551	214.0	21.634575
2024-08-24	OLCI_L1	synchronized	124.715010	170.0	5.402510
2024-08-24	OLCI_L2	synchronized	19.174728	180.0	10.524501
2024-08-24	SLSTR_L1	synchronized	69.790986	169.0	16.140979
2024-08-24	SLSTR_L2	synchronized	15.998960	252.0	21.789882
2024-08-24	SRAL_L1	synchronized	139.709638	87.0	38.477196
2024-08-24	SRAL_L2	synchronized	5.212507	199.0	39.435729
2024-08-24	SYN_L2	synchronized	37.686378	213.0	21.066362
2024-08-25	OLCI_L1	synchronized	140.369753	189.0	8.601849
2024-08-25	OLCI_L2	synchronized	19.239108	177.0	3.511550
2024-08-25	SLSTR_L1	synchronized	70.765082	171.0	15.410616
2024-08-25	SLSTR_L2	synchronized	16.746428	263.0	18.142210
2024-08-25	SRAL_L1	synchronized	132.288036	84.0	38.447161
2024-08-25	SRAL_L2	synchronized	5.217192	196.0	40.353232
2024-08-25	SYN_L2	synchronized	39.533634	208.0	20.421109
2024-08-26	OLCI_L1	synchronized	128.357886	175.0	6.632756
2024-08-26	OLCI_L2	synchronized	19.233223	179.0	6.736194
2024-08-26	SLSTR_L1	synchronized	70.972454	172.0	6.486844
2024-08-26	SLSTR_L2	synchronized	16.581641	261.0	23.580244
2024-08-26	SRAL_L1	synchronized	136.014370	82.0	39.152020
2024-08-26	SRAL_L2	synchronized	5.431588	208.0	40.008338
2024-08-26	SYN_L2	synchronized	39.977362	209.0	21.051791
2024-08-27	OLCI_L1	synchronized	123.536270	170.0	9.669087
2024-08-27	OLCI_L2	synchronized	17.981400	166.0	11.568788
2024-08-27	SLSTR_L1	synchronized	71.540386	174.0	17.008112
2024-08-27	SLSTR_L2	synchronized	16.039159	253.0	21.565501
2024-08-27	SRAL_L1	synchronized	139.766893	87.0	38.502603
2024-08-27	SRAL_L2	synchronized	5.613641	208.0	40.002614
2024-08-27	SYN_L2	synchronized	38.453794	208.0	20.636014
2024-08-28	OLCI_L1	synchronized	124.602227	170.0	8.655744
2024-08-28	OLCI_L2	synchronized	18.583376	171.0	10.704625
2024-08-28	SLSTR_L1	synchronized	66.584429	162.0	4.261455

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2024-08-28	SLSTR_L2	synchronized	15.502144	245.0	23.168199
2024-08-28	SRAL_L1	synchronized	137.443421	86.0	38.755623
2024-08-28	SRAL_L2	synchronized	5.285987	200.0	39.897208
2024-08-28	SYN_L2	synchronized	36.786291	196.0	21.703804
2024-08-29	OLCI_L1	synchronized	75.194339	95.0	4.857229
2024-08-29	OLCI_L2	synchronized	11.762975	102.0	3.765070
2024-08-29	SLSTR_L1	synchronized	49.279403	120.0	4.481179
2024-08-29	SLSTR_L2	synchronized	12.252699	193.0	18.688492
2024-08-29	SRAL_L1	synchronized	107.995047	61.0	39.815085
2024-08-29	SRAL_L2	synchronized	3.961463	142.0	40.526778
2024-08-29	SYN_L2	synchronized	28.948842	146.0	23.771322
2024-08-30	OLCI_L1	synchronized	146.632216	177.0	14.244464
2024-08-30	OLCI_L2	synchronized	20.353317	167.0	16.493384
2024-08-30	SLSTR_L1	synchronized	84.779959	206.0	22.809240
2024-08-30	SLSTR_L2	synchronized	19.222937	303.0	24.790699
2024-08-30	SRAL_L1	synchronized	137.604306	86.0	40.289938
2024-08-30	SRAL_L2	synchronized	5.687714	220.0	40.462530
2024-08-30	SYN_L2	synchronized	40.130957	205.0	28.463134
2024-08-31	OLCI_L1	synchronized	107.804753	135.0	9.381253
2024-08-31	OLCI_L2	synchronized	16.699228	145.0	10.080443
2024-08-31	SLSTR_L1	synchronized	75.441324	185.0	15.812339
2024-08-31	SLSTR_L2	synchronized	18.079072	286.0	21.977219
2024-08-31	SRAL_L1	synchronized	148.598071	94.0	39.252370
2024-08-31	SRAL_L2	synchronized	5.688370	213.0	40.111635
2024-08-31	SYN_L2	synchronized	31.807826	172.0	22.465563
2024-08-01	NRTI_L2	synchronized	11.912236	317.0	1.896768
2024-08-01	OFFL_L1B	synchronized	356.932151	136.0	4.014447
2024-08-01	OFFL_L2	synchronized	38.523711	95.0	107.073028
2024-08-02	NRTI_L2	synchronized	8.983081	261.0	1.980047
2024-08-02	OFFL_L1B	synchronized	214.641461	79.0	4.202083
2024-08-02	OFFL_L2	synchronized	27.755754	66.0	120.203245
2024-08-03	NRTI_L2	synchronized	11.789767	309.0	2.012383
2024-08-03	OFFL_L1B	synchronized	309.455772	113.0	3.858835
2024-08-03	OFFL_L2	synchronized	28.383349	71.0	130.450252
2024-08-04	NRTI_L2	synchronized	13.210596	337.0	2.079086
2024-08-04	OFFL_L1B	synchronized	306.096427	112.0	4.159518
2024-08-04	OFFL_L2	synchronized	34.587054	83.0	144.300201
2024-08-05	NRTI_L2	synchronized	12.470979	342.0	1.962313
2024-08-05	OFFL_L1B	synchronized	350.076278	128.0	4.158044
2024-08-05	OFFL_L2	synchronized	28.726090	69.0	158.076066
2024-08-06	NRTI_L2	synchronized	10.393880	289.0	1.912366
2024-08-06	OFFL_L1B	synchronized	305.883229	114.0	4.112125
2024-08-06	OFFL_L2	synchronized	44.081814	118.0	165.373448
2024-08-07	NRTI_L2	synchronized	11.844645	315.0	1.895719
2024-08-07	OFFL_L1B	synchronized	325.307462	118.0	4.128800
2024-08-07	OFFL_L2	synchronized	45.109195	113.0	168.996033
2024-08-08	NRTI_L2	synchronized	12.458661	332.0	1.912356
2024-08-08	OFFL_L1B	synchronized	349.894930	128.0	4.205884
2024-08-08	OFFL_L2	synchronized	95.478657	269.0	162.197902
2024-08-09	NRTI_L2	synchronized	12.112002	331.0	1.895747
2024-08-09	OFFL_L1B	synchronized	305.878723	112.0	4.068688
2024-08-09	OFFL_L2	synchronized	101.227829	282.0	149.550292
2024-08-10	NRTI_L2	synchronized	10.813727	315.0	1.912266
2024-08-10	OFFL_L1B	synchronized	305.895322	112.0	4.117178
2024-08-10	OFFL_L2	synchronized	95.157301	265.0	135.944267
2024-08-11	NRTI_L2	synchronized	11.898110	324.0	1.879086

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2024-08-11	OFFL_L1B	synchronized	311.879407	115.0	4.011696
2024-08-11	OFFL_L2	synchronized	96.039298	269.0	125.156611
2024-08-12	NRTI_L2	synchronized	8.507328	216.0	1.882412
2024-08-12	OFFL_L1B	synchronized	193.459477	72.0	4.053727
2024-08-12	OFFL_L2	synchronized	94.918033	278.0	111.658217
2024-08-13	NRTI_L2	synchronized	12.002633	325.0	1.882459
2024-08-13	OFFL_L1B	synchronized	327.235421	125.0	4.191614
2024-08-13	OFFL_L2	synchronized	103.892819	282.0	99.450323
2024-08-14	NRTI_L2	synchronized	11.521076	295.0	1.898994
2024-08-14	OFFL_L1B	synchronized	303.355696	112.0	4.035100
2024-08-14	OFFL_L2	synchronized	97.667803	268.0	85.773785
2024-08-15	NRTI_L2	synchronized	12.178792	350.0	1.932284
2024-08-15	OFFL_L1B	synchronized	305.793082	112.0	3.994448
2024-08-15	OFFL_L2	synchronized	93.749152	276.0	67.118891
2024-08-16	NRTI_L2	synchronized	10.750139	307.0	1.899056
2024-08-16	OFFL_L1B	synchronized	319.079382	117.0	4.122241
2024-08-16	OFFL_L2	synchronized	104.335009	291.0	53.471814
2024-08-17	NRTI_L2	synchronized	5.915463	180.0	1.915669
2024-08-17	OFFL_L1B	synchronized	184.995185	67.0	4.008488
2024-08-17	OFFL_L2	synchronized	83.352186	224.0	41.679728
2024-08-18	NRTI_L2	synchronized	11.429839	306.0	1.902930
2024-08-18	OFFL_L1B	synchronized	369.518878	136.0	4.281014
2024-08-18	OFFL_L2	synchronized	67.370604	184.0	39.294539
2024-08-19	NRTI_L2	synchronized	10.625466	295.0	1.869563
2024-08-19	OFFL_L1B	synchronized	371.747080	136.0	4.205267
2024-08-19	OFFL_L2	synchronized	66.592248	185.0	41.114449
2024-08-20	NRTI_L2	synchronized	11.330040	322.0	1.936212
2024-08-20	OFFL_L1B	synchronized	305.800623	112.0	4.016927
2024-08-20	OFFL_L2	synchronized	65.326485	184.0	39.337436
2024-08-21	NRTI_L2	synchronized	11.939711	324.0	1.886166
2024-08-21	OFFL_L1B	synchronized	305.702217	112.0	4.208194
2024-08-21	OFFL_L2	synchronized	67.314259	185.0	39.285211
2024-08-22	NRTI_L2	synchronized	11.055791	288.0	1.952856
2024-08-22	OFFL_L1B	synchronized	327.714707	120.0	4.203107
2024-08-22	OFFL_L2	synchronized	67.067215	183.0	39.529598
2024-08-23	NRTI_L2	synchronized	10.236697	297.0	1.886431
2024-08-23	OFFL_L1B	synchronized	305.776608	112.0	4.122843
2024-08-23	OFFL_L2	synchronized	66.307821	182.0	39.414933
2024-08-24	NRTI_L2	synchronized	10.162945	288.0	1.919656
2024-08-24	OFFL_L1B	synchronized	305.719665	112.0	4.108632
2024-08-24	OFFL_L2	synchronized	68.336245	188.0	39.221272
2024-08-25	NRTI_L2	synchronized	11.021718	304.0	1.894587
2024-08-25	OFFL_L1B	synchronized	303.221706	112.0	4.006080
2024-08-25	OFFL_L2	synchronized	65.442937	178.0	39.591478
2024-08-26	NRTI_L2	synchronized	11.011523	324.0	1.886260
2024-08-26	OFFL_L1B	synchronized	303.193073	112.0	4.055897
2024-08-26	OFFL_L2	synchronized	68.240369	190.0	39.084591
2024-08-27	NRTI_L2	synchronized	10.444293	308.0	1.852928
2024-08-27	OFFL_L1B	synchronized	303.073127	110.0	4.166489
2024-08-27	OFFL_L2	synchronized	64.885801	178.0	39.371257
2024-08-28	NRTI_L2	synchronized	9.756625	297.0	1.886166
2024-08-28	OFFL_L1B	synchronized	305.767438	112.0	4.034120
2024-08-28	OFFL_L2	synchronized	62.262638	174.0	39.156936
2024-08-29	NRTI_L2	synchronized	9.523975	271.0	1.886225
2024-08-29	OFFL_L1B	synchronized	523.091091	189.0	55.356972
2024-08-29	OFFL_L2	synchronized	57.833895	155.0	39.895112

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2024-08-30	NRTI_L2	synchronized	8.465312	212.0	1.886345
2024-08-30	OFFL_L1B	synchronized	221.082196	81.0	4.049751
2024-08-30	OFFL_L2	synchronized	55.140948	151.0	40.007327
2024-08-31	NRTI_L2	synchronized	10.649927	330.0	1.869547
2024-08-31	OFFL_L1B	synchronized	303.227693	112.0	4.084647
2024-08-31	OFFL_L2	synchronized	65.434167	181.0	39.353243
2024-08-01	s2_l1c	NaN	257.165039	488.0	NaN
2024-08-01	s2_l2a	NaN	1.762199	3.0	NaN
2024-08-01	s1_iw	NaN	39.322090	11.0	NaN
2024-08-01	s1_ew	NaN	8.495419	3.0	NaN
2024-08-02	s1_iw	NaN	60.216984	16.0	NaN
2024-08-02	s1_ew	NaN	6.135216	2.0	NaN
2024-08-02	s2_l1c	NaN	222.464294	412.0	NaN
2024-08-02	s2_l2a	NaN	6.251534	10.0	NaN
2024-08-03	s2_l1c	NaN	261.347713	502.0	NaN
2024-08-03	s2_l2a	NaN	27.085415	0.0	NaN
2024-08-03	s1_iw	NaN	17.136471	5.0	NaN
2024-08-03	s1_ew	NaN	23.834831	8.0	NaN
2024-08-04	s1_iw	NaN	45.349480	35.0	NaN
2024-08-04	s1_ew	NaN	19.912266	10.0	NaN
2024-08-04	s2_l1c	NaN	251.005341	443.0	NaN
2024-08-04	s2_l2a	NaN	27.085434	0.0	NaN
2024-08-05	s2_l2a	NaN	1.487701	4.0	NaN
2024-08-05	s1_iw	NaN	15.458794	12.0	NaN
2024-08-05	s1_ew	NaN	18.095940	10.0	NaN
2024-08-05	s2_l1c	NaN	320.188446	530.0	NaN
2024-08-06	s2_l1c	NaN	285.750443	495.0	NaN
2024-08-06	s2_l2a	NaN	1.838017	3.0	NaN
2024-08-06	s1_iw	NaN	57.992462	40.0	NaN
2024-08-06	s1_ew	NaN	8.650787	6.0	NaN
2024-08-07	s1_iw	NaN	53.323669	31.0	NaN
2024-08-07	s1_ew	NaN	12.720177	6.0	NaN
2024-08-07	s2_l1c	NaN	255.110481	451.0	NaN
2024-08-07	s2_l2a	NaN	5.553623	8.0	NaN
2024-08-08	s1_iw	NaN	25.146469	6.0	NaN
2024-08-08	s1_ew	NaN	20.108597	7.0	NaN
2024-08-08	s2_l1c	NaN	247.357895	476.0	NaN
2024-08-08	s2_l2a	NaN	30.170792	0.0	NaN
2024-08-09	s2_l2a	NaN	4.965546	8.0	NaN
2024-08-09	s2_l1c	NaN	241.372803	475.0	NaN
2024-08-09	s1_ew	NaN	12.579456	5.0	NaN
2024-08-09	s1_iw	NaN	63.247433	14.0	NaN
2024-08-10	s1_iw	NaN	18.801769	5.0	NaN
2024-08-10	s1_ew	NaN	16.935947	6.0	NaN
2024-08-10	s2_l1c	NaN	266.257210	464.0	NaN
2024-08-10	s2_l2a	NaN	1.455105	4.0	NaN
2024-08-11	s2_l2a	NaN	1.746288	3.0	NaN
2024-08-11	s1_iw	NaN	52.290436	14.0	NaN
2024-08-11	s1_ew	NaN	11.723515	4.0	NaN
2024-08-11	s2_l1c	NaN	244.076385	475.0	NaN
2024-08-12	s2_l2a	NaN	5.815598	8.0	NaN
2024-08-12	s2_l1c	NaN	255.386230	487.0	NaN
2024-08-12	s1_ew	NaN	9.019077	3.0	NaN
2024-08-12	s1_iw	NaN	37.007973	12.0	NaN
2024-08-13	s1_iw	NaN	49.651821	27.0	NaN
2024-08-13	s1_ew	NaN	6.593666	3.0	NaN

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2024-08-13	s2_l1c	NaN	306.057919	523.0	NaN
2024-08-13	s2_l2a	NaN	24.881153	0.0	NaN
2024-08-14	s2_l1c	NaN	256.956825	449.0	NaN
2024-08-14	s2_l2a	NaN	5.733521	8.0	NaN
2024-08-14	s1_iw	NaN	69.494511	41.0	NaN
2024-08-14	s1_ew	NaN	6.216736	2.0	NaN
2024-08-15	s1_iw	NaN	20.577988	5.0	NaN
2024-08-15	s1_ew	NaN	22.000595	7.0	NaN
2024-08-15	s2_l1c	NaN	323.209270	521.0	NaN
2024-08-15	s2_l2a	NaN	1.137089	4.0	NaN
2024-08-16	s1_iw	NaN	52.488895	14.0	NaN
2024-08-16	s1_ew	NaN	16.615608	6.0	NaN
2024-08-16	s2_l1c	NaN	287.495495	487.0	NaN
2024-08-16	s2_l2a	NaN	1.755417	3.0	NaN
2024-08-17	s2_l2a	NaN	6.033535	8.0	NaN
2024-08-17	s2_l1c	NaN	245.999718	466.0	NaN
2024-08-17	s1_ew	NaN	12.515472	4.0	NaN
2024-08-17	s1_iw	NaN	19.885231	5.0	NaN
2024-08-18	s1_iw	NaN	53.700676	39.0	NaN
2024-08-18	s1_ew	NaN	4.940392	3.0	NaN
2024-08-18	s2_l1c	NaN	268.276146	474.0	NaN
2024-08-18	s2_l2a	NaN	24.347610	0.0	NaN
2024-08-19	s2_l1c	NaN	274.453079	467.0	NaN
2024-08-19	s2_l2a	NaN	6.425407	8.0	NaN
2024-08-19	s1_iw	NaN	47.902382	26.0	NaN
2024-08-19	s1_ew	NaN	13.571499	6.0	NaN
2024-08-20	s1_iw	NaN	26.875473	13.0	NaN
2024-08-20	s1_ew	NaN	18.522129	9.0	NaN
2024-08-20	s2_l1c	NaN	277.025707	461.0	NaN
2024-08-20	s2_l2a	NaN	1.319637	4.0	NaN
2024-08-21	s2_l2a	NaN	1.440113	3.0	NaN
2024-08-21	s1_iw	NaN	59.884296	36.0	NaN
2024-08-21	s1_ew	NaN	13.866795	5.0	NaN
2024-08-21	s2_l1c	NaN	268.343216	467.0	NaN
2024-08-22	s2_l2a	NaN	3.674564	6.0	NaN
2024-08-22	s2_l1c	NaN	261.567638	462.0	NaN
2024-08-22	s1_ew	NaN	20.443890	9.0	NaN
2024-08-22	s1_iw	NaN	17.641094	13.0	NaN
2024-08-23	s1_iw	NaN	56.907127	39.0	NaN
2024-08-23	s1_ew	NaN	16.870911	8.0	NaN
2024-08-23	s2_l1c	NaN	291.032291	492.0	NaN
2024-08-23	s2_l2a	NaN	24.365654	0.0	NaN
2024-08-24	s2_l1c	NaN	260.537395	450.0	NaN
2024-08-24	s2_l2a	NaN	5.708946	8.0	NaN
2024-08-24	s1_iw	NaN	44.301670	24.0	NaN
2024-08-24	s1_ew	NaN	9.099247	3.0	NaN
2024-08-25	s1_iw	NaN	32.955750	22.0	NaN
2024-08-25	s1_ew	NaN	8.894558	3.0	NaN
2024-08-25	s2_l1c	NaN	322.385365	524.0	NaN
2024-08-25	s2_l2a	NaN	1.398472	4.0	NaN
2024-08-26	s1_iw	NaN	76.546761	42.0	NaN
2024-08-26	s1_ew	NaN	5.535530	2.0	NaN
2024-08-26	s2_l1c	NaN	308.064610	512.0	NaN
2024-08-26	s2_l2a	NaN	1.773037	3.0	NaN
2024-08-27	s2_l2a	NaN	5.127777	8.0	NaN
2024-08-27	s2_l1c	NaN	217.693684	380.0	NaN

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2024-08-27	s1_ew	NaN	19.743706	10.0	NaN
2024-08-27	s1_iw	NaN	26.536503	17.0	NaN
2024-08-28	s1_iw	NaN	56.661770	37.0	NaN
2024-08-28	s1_ew	NaN	13.573593	6.0	NaN
2024-08-28	s2_l1c	NaN	271.445000	481.0	NaN
2024-08-28	s2_l2a	NaN	30.455441	0.0	NaN
2024-08-29	s2_l1c	NaN	275.248058	462.0	NaN
2024-08-29	s2_l2a	NaN	5.979805	8.0	NaN
2024-08-29	s1_iw	NaN	19.387413	5.0	NaN
2024-08-29	s1_ew	NaN	16.465149	6.0	NaN
2024-08-30	s1_iw	NaN	54.928329	14.0	NaN
2024-08-30	s1_ew	NaN	6.733089	3.0	NaN
2024-08-30	s2_l1c	NaN	277.561192	471.0	NaN
2024-08-30	s2_l2a	NaN	1.511990	4.0	NaN
2024-08-31	s2_l2a	NaN	0.861385	2.0	NaN
2024-08-31	s1_iw	NaN	56.949093	18.0	NaN
2024-08-31	s1_ew	NaN	9.321857	3.0	NaN
2024-08-31	s2_l1c	NaN	269.031643	467.0	NaN

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