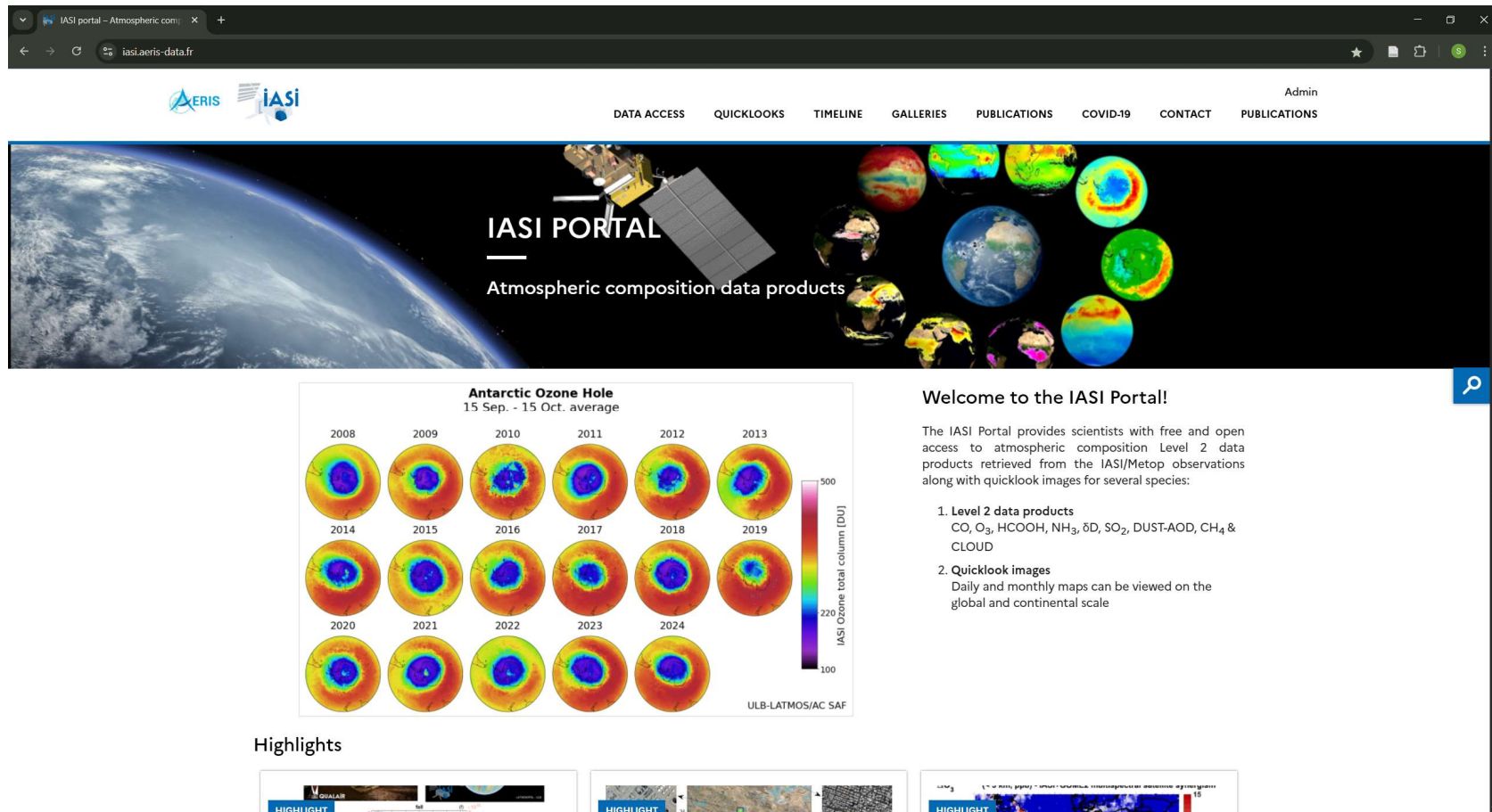




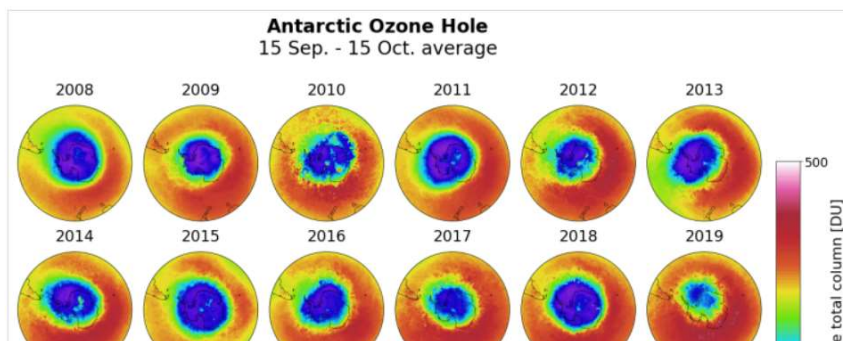
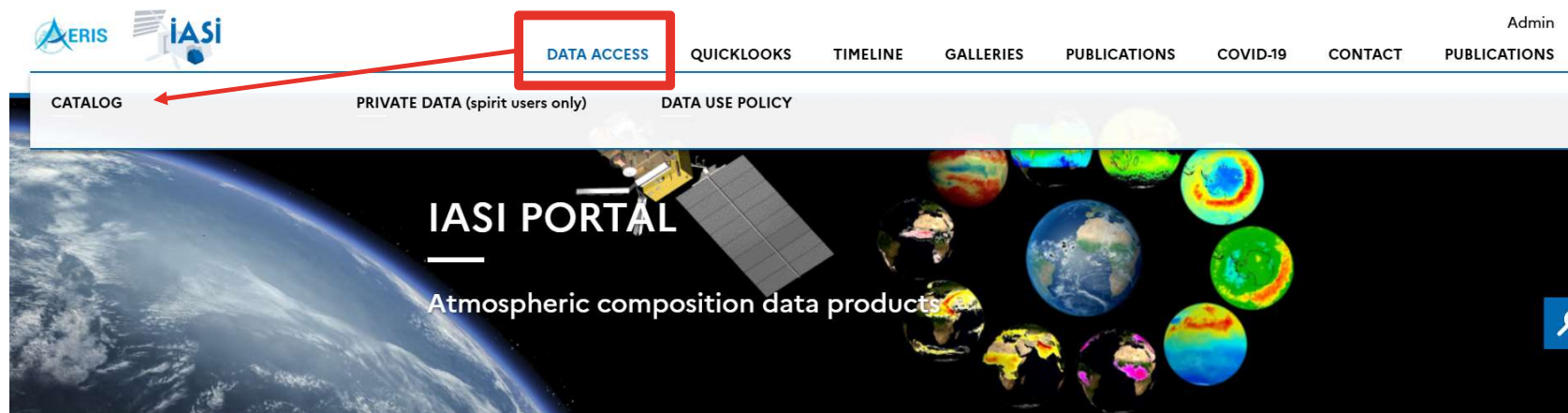
How to download IASI data from AERIS ?

AERIS IASI portal (<https://iasi.aeris-data.fr/>)



Data access from Catalog page

To get information about all the IASI products available on AERIS



Welcome to the IASI Portal!

The IASI Portal provides scientists with free and open access to atmospheric composition Level 2 data products retrieved from the IASI/Metop observations along with quicklook images for several species:

1. **Level 2 data products**
CO, O₃, HCOOH, NH₃, δD, SO₂, DUST-AOD, CH₄ & CLOUD
2. **Quicklook images**
Daily and monthly maps can be viewed on the [data and visualization page](#).



Data access from Catalog page

To get information about all the IASI products available on AERIS

The screenshot displays the AERIS IASI data catalog interface. At the top, the AERIS and IASI logos are visible on the left, and a navigation menu with links like DATA ACCESS, QUICKLOOKS, TIMELINE, GALLERIES, PUBLICATIONS, COVID-19, CONTACT, and PUBLICATIONS is on the right. Below the navigation bar, a search bar shows '55 RESULTS'. On the left side, there are filters for Temporal extent, Spatial extent, Parameters, and Levels. The main content area lists several IASI products, each with a description and a 'Discover IASI data' button. The products listed are:

- Daily IASI+GOME2/Metop-B LISA ozone (O3) L2 product (vertical profiles)
- Daily IASI/Metop-A LMD Dust-AOD and DUST-Mean Layer Altitude L2 product
- Daily IASI/Metop-A LMD carbon dioxide (CO2) L2 product (mid tropospheric column) - Reanalysis
- Daily IASI/Metop-A LMD cloud properties (emissivity, pressure, type, temperature, height and...)
- Daily IASI/Metop-A LMD methane (CH4) L2 product (mid tropospheric column) - Reanalysis
- Daily IASI/Metop-A ULB-LATMOS DUST L2 products (at 10 micron, 11 micron and 550 nm)
- Daily IASI/Metop-A ULB-LATMOS carbon monoxide (CO) L2 product (total column)

Each product entry has a 'Discover IASI data' button. The interface also includes a 'RESET' button and a 'SEARCH' button in the top left of the results area.



Data access from Catalog page

You can search for the data you need in the « Search » panel

The screenshot displays the IASI data catalog search interface. A red box highlights the search panel on the left, which includes a search bar, a 'RESET' button, a 'SEARCH' button, and filters for Temporal extent, Spatial extent, Parameters, and Levels. The main area shows a list of 55 search results for IASI data products, such as ozone, dust, carbon dioxide, and methane. The top navigation bar includes links for DATA ACCESS, QUICKLOOKS, TIMELINE, GALLERIES, PUBLICATIONS, COVID-19, CONTACT, and PUBLICATIONS. The top right corner shows the user 'Admin'.

Admin

DATA ACCESS QUICKLOOKS TIMELINE GALLERIES PUBLICATIONS COVID-19 CONTACT PUBLICATIONS

SEARCH 55 RESULTS METADATA

RESET

SEARCH

Full text search

Temporal extent

Spatial extent

Parameters

Levels

Discover IASI data

Daily IASI+GOME2/Metop-B LISA ozone (O3) L2 product (vertical profiles)

Daily IASI/Metop-A LMD Dust-AOD and DUST-Mean Layer Altitude L2 product

Daily IASI/Metop-A LMD carbon dioxide (CO2) L2 product (mid tropospheric column) - Reanalysis

Daily IASI/Metop-A LMD cloud properties (emissivity, pressure, type, temperature, height and...

Daily IASI/Metop-A LMD methane (CH4) L2 product (mid tropospheric column) - Reanalysis

Daily IASI/Metop-A ULB-LATMOS DUST L2 products (at 10 micron, 11 micron and 550 nm)

Daily IASI/Metop-A ULB-LATMOS carbon monoxide (CO) L2 product (total column)



Data access from Catalog (example with CO from IASI/MetopA)

Here's an example for IASI CO data for 2010. You can have more details by clicking on each result in the « Metadata » panel.

The screenshot displays the AERIS IASI data catalog interface. At the top, the AERIS and IASI logos are on the left, and a navigation bar with links like DATA ACCESS, QUICKLOOKS, and TIMELINE is on the right. Below the navigation bar, a search bar on the left contains the text 'carbon monoxide'. To its right, a sidebar lists search filters: Temporal extent (set to 2010-01-01 to 2011-01-01), Spatial extent, Parameters, and Levels. The main content area shows '3 RESULTS' and a 'METADATA' panel. The first result is 'Daily IASI/Metop-A ULB-LATMOS carbon monoxide (CO) L2 product (total column)'. The 'METADATA' panel for this result shows the title 'Daily IASI/Metop-A ULB-LATMOS carbon monoxide (CO) L2 product (vertical profile and total column – EUMETSAT processing)', a date '2025-04-04 11:25:31', and an 'IASI' label. Below the title are tabs for INFORMATION, DOWNLOAD, STATISTICS, and INTEROPERABILITY. The 'Abstract' section describes the data processing by EUMETSAT and lists the Climate Data Record (CDR) as available from July 2007 to October 2021. The 'Spatial extent' section shows a world map with a red overlay indicating the data coverage over Europe and North Africa.



Data access from Catalog (example with CO from IASI/MetopA)

Click on the download link in the « Data access » section.

The screenshot displays the AERIS IASI data catalog interface. The top navigation bar includes links for DATA ACCESS, QUICKLOOKS, TIMELINE, GALLERIES, PUBLICATIONS, COVID-19, CONTACT, and PUBLICATIONS. The left sidebar contains search filters for Temporal extent (2010-01-01 to 2011-01-01), Spatial extent, Parameters, and Levels. The main content area shows the title 'Daily IASI/Metop-A ULB-LATMOS carbon monoxide (CO) L2 product (vertical profile and total column – EUMETSAT processing)' and tabs for INFORMATION, DOWNLOAD, STATISTICS, and INTEROPERABILITY. The 'Data access' section is highlighted with a red box and contains the text 'HTTP download links' and the URL 'https://iasi.aeris-data.fr/CO/' for CO quicklooks and data. A red arrow points from the 'Data access' section to the 'DOWNLOAD' tab.

Full text search
carbon monoxide

Temporal extent
From 2010-01-01 To 2011-01-01

Spatial extent

Parameters

Levels

Daily IASI/Metop-A ULB-LATMOS carbon monoxide (CO) L2 product (total column)

Daily IASI/Metop-A ULB-LATMOS carbon monoxide (CO) L2 product (vertical profile and total column – EUMETSAT processing)

Monthly IASI/Metop-A ULB-LATMOS carbon monoxide (CO) L3 product (total column)

How to cite

Clérbaux, C. & Coheur, P.-F. (2020). Daily IASI/Metop-A ULB-LATMOS carbon monoxide (CO) L2 product (vertical profile and total column – EUMETSAT processing). [dataset]. Aeris. <https://doi.org/10.25326/63>

Data policy

Description
<https://iasi.aeris-data.fr/data-use-policy/>

Data Access Permissions

Sign-in is required to download data.

Data access

HTTP download links

<https://iasi.aeris-data.fr/CO/>
CO quicklooks and data



Data access from Quicklooks page

You are now on the Quicklooks page.

[DATA ACCESS](#)[QUICKLOOKS](#)[TIMELINE](#)[GALLERIES](#)[PUBLICATIONS](#)[COVID-19](#)[CONTACT](#)[PUBLICATIONS](#)[Admin](#)

CO

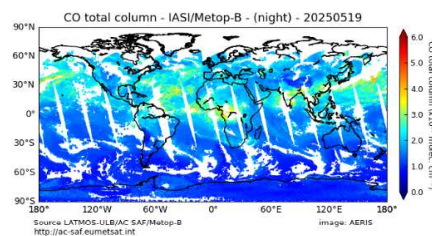
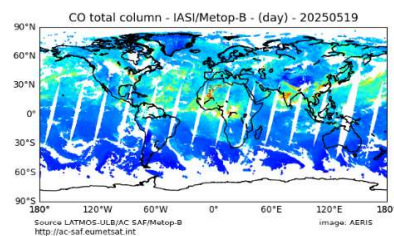
CO total column from IASI (Level 2)

Satellite :
Metop-B

Domain :
Global

Level:
L2

Date :
< 2025-05-19 >



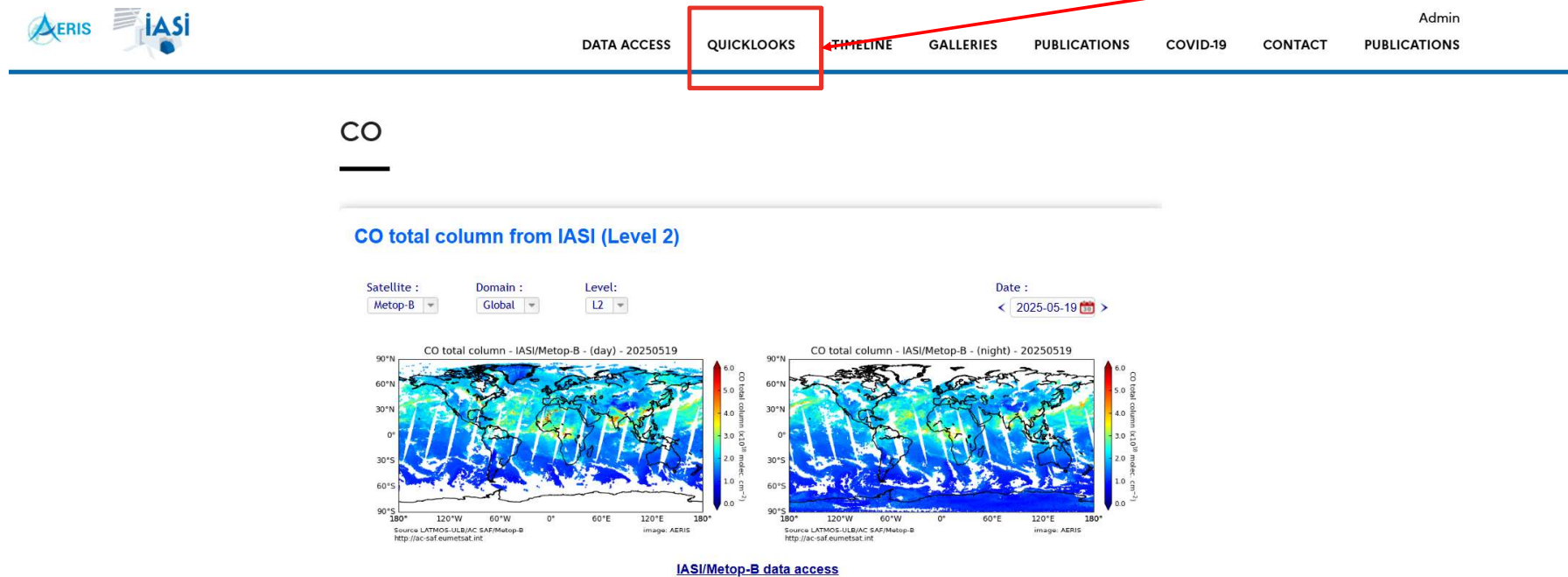
[IASI/Metop-B data access](#)



Data access from Quicklooks page

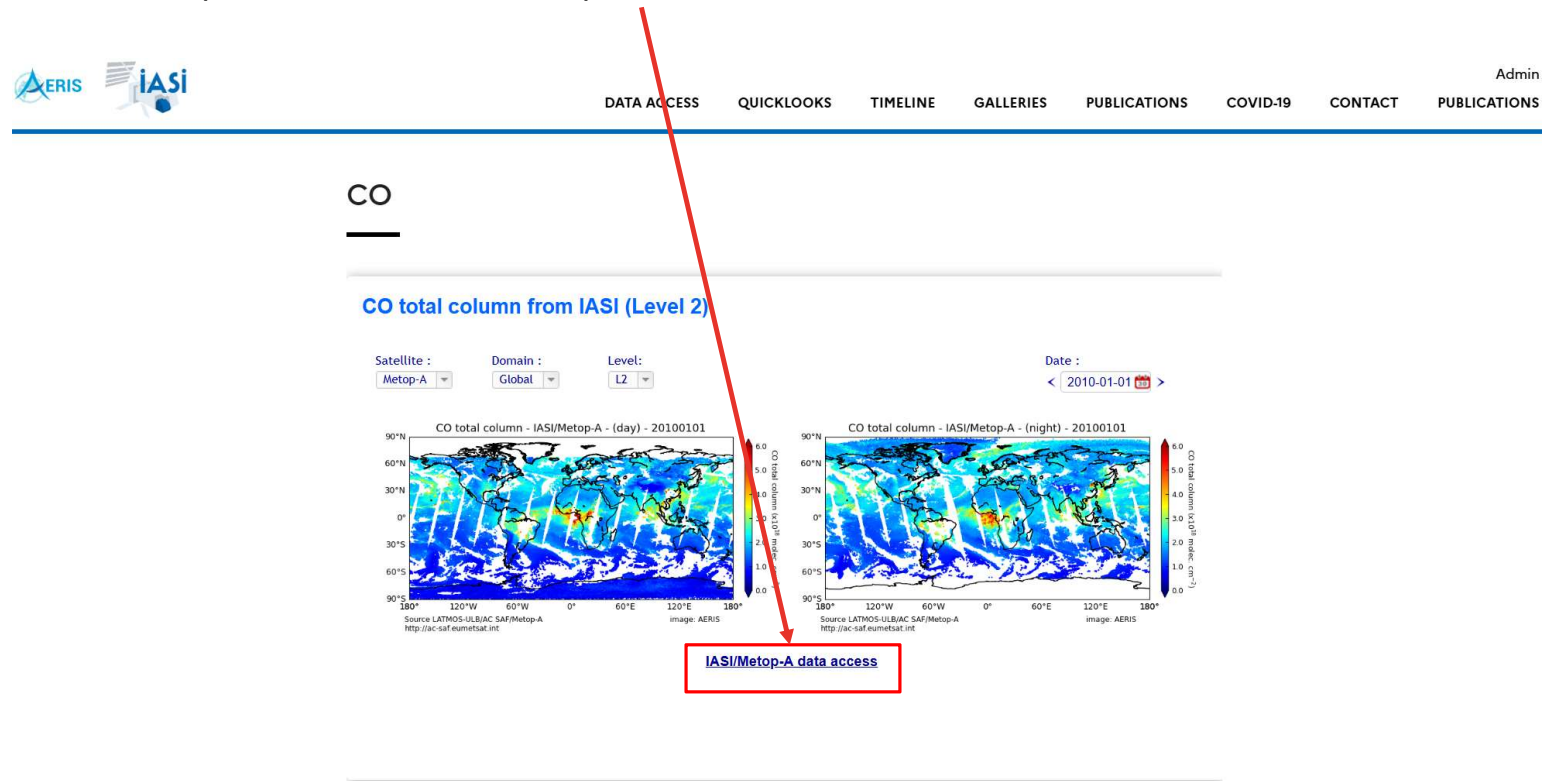
You are now on the Quicklooks page.

If you know in advance which data and periods you need, you can skip the previous steps and click directly on Quicklooks.





Data access from Quicklooks page

Let's go back to our example and click on IASI/Metop-A data access.



Data access from Quicklooks page

If it's your first time accessing AERIS, you'll have to provide your details.



DATA ACCESS QUICKLOOKS TIMELINE GALLERIES PUBLICATIONS COVID-19 CONTACT PUBLICATIONS Admin

IASI/METOP-A CO LEVEL 2 DATA

IASI/CO access

It's your first access to IASI CO data. Please, fill in the form below :

Last name :

First name :

Laboratory :

Country :

E_mail :

In a few words, explain below why you want to access to this data :

Send



Downloading data for 1 day

You have 2 ways to download data for a single day :
- by clicking on any date in the calendar

[DATA ACCESS](#)[QUICKLOOKS](#)[TIMELINE](#)[GALLERIES](#)[PUBLICATIONS](#)[COVID-19](#)[CONTACT](#)[PUBLICATIONS](#)[Admin](#)

IASI/METOP-A CO LEVEL 2 DATA

Data access : [2007](#) | [2008](#) | [2009](#) | [2010](#) | [2011](#) | [2012](#) | [2013](#) | [2014](#) | [2015](#) | [2016](#) | [2017](#) | [2018](#) | [2019](#)

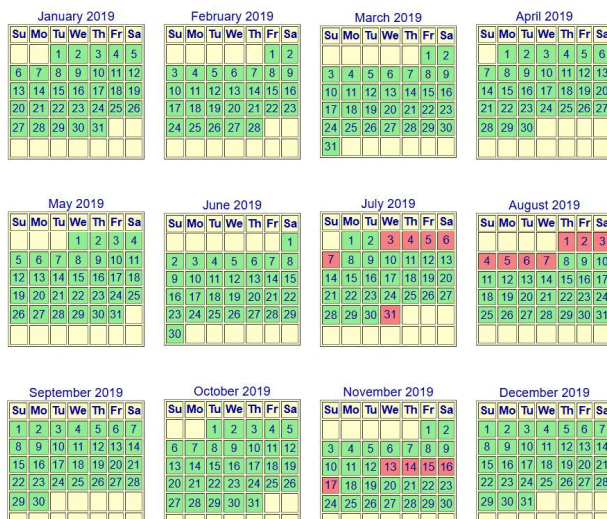
via calendar: click on a day to download the corresponding datafile

[QUICKLOOKS](#)

[via curl command](#)

[Metadata page](#)

Disclaimer: the data file of day D can still be updated until day D+30 because of some potential missing data.



Downloading data for 1 day

You have 2 ways to download data for a single day :

- by clicking on any date in the calendar
- by using the curl command



DATA ACCESS

QUICKLOOKS

TIMELINE

GALLERIES

PUBLICATIONS

COVID-19

CONTACT

PUBLICATIONS

Admin

IASI/METOP-A CO LEVEL 2 DATA

Data access : [2007](#) | [2008](#) | [2009](#) | [2010](#) | [2011](#) | [2012](#) | [2013](#) | [2014](#) | [2015](#) | [2016](#) | [2017](#) | [2018](#) | [2019](#)

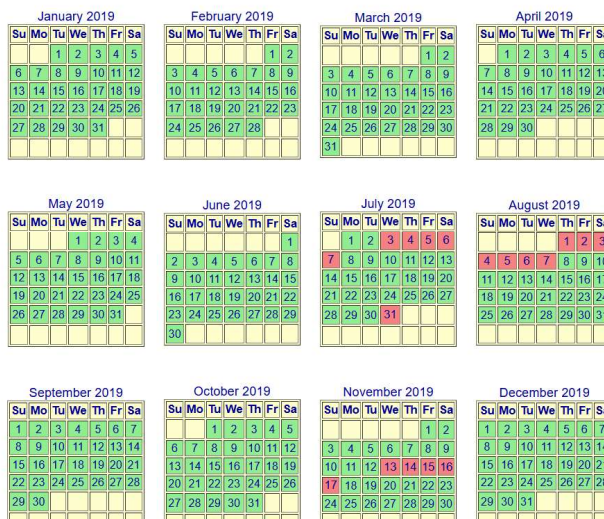
via calendar: click on a day to download the corresponding datafile

[via curl command](#)

[QUICKLOOKS](#)

[Metadata page](#)

Disclaimer: the data file of day D can still be updated until day D+30 because of some potential missing data.



calendar: click on a day to download the corresponding datafile

via curl command

if you want to download the data file from 1st January 2019, type the command :

```
curl --insecure https://cds-espri.ipsl.fr/iasial2/iasi_co/V1.2.1/2019/01/IASI_METOPA_L2_CO_20190101_ULB-LATMOS_CDR_V1.2.1.nc -O
```

if you want to download more than one file, type :

```
curl --insecure https://cds-espri.ipsl.fr/iasial2/iasi_co/V1.2.1/2019/01/IASI_METOPA_L2_CO_201901[19-25]_ULB-LATMOS_CDR_V1.2.1.nc -O
```



Downloading data for 1 day

You have 2 ways to download data for a single day :

- by clicking on any date in the calendar
- by using the curl command



DATA ACCESS

QUICKLOOKS

TIMELINE

GALLERIES

PUBLICATIONS

COVID-19

CONTACT

PUBLICATIONS

Admin

IASI/METOP-A CO LEVEL 2 DATA

Data access : [2007](#) | [2008](#) | [2009](#) | [2010](#) | [2011](#) | [2012](#) | [2013](#) | [2014](#) | [2015](#) | [2016](#) | [2017](#) | [2018](#) | [2019](#)

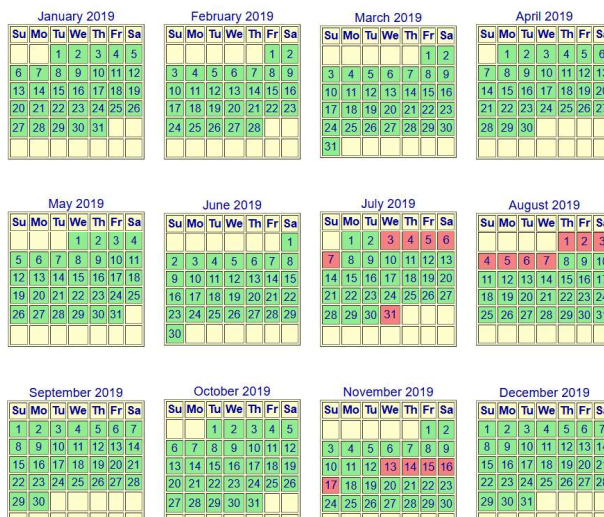
via calendar: click on a day to download the corresponding datafile

[via curl command](#)

[QUICKLOOKS](#)

[Metadata page](#)

Disclaimer: the data file of day D can still be updated until day D+30 because of some potential missing data.



calendar: click on a day to download the corresponding datafile

via curl command

if you want to download the data file from 1st January 2019, type the command :

```
curl --insecure https://cds-espri.ipsl.fr/iasial2/iasi_co/V1.2.1/2019/01/IASI_METOPA_L2_CO_20190101_ULB-LATMOS_CDR_V1.2.1.nc -O
```

if you want to download more than one file, type :

```
curl --insecure https://cds-espri.ipsl.fr/iasial2/iasi_co/V1.2.1/2019/01/IASI_METOPA_L2_CO_201901[19-25]_ULB-LATMOS_CDR_V1.2.1.nc -O
```

! \ The file path changes depending on the IASI product, the product version and the instrument (see example down below for IASI-B CO).

calendar: click on a day to download the corresponding datafile

via wget tools

if you want to download the data file from 1st January 2025, type the command :

```
curl --insecure https://cds-espri.ipsl.fr/iasib2/iasi_co/V6.7.1/2025/01/IASI_METOPB_L2_CO_20250101_ULB-LATMOS_ICDR_V6.7.1.nc -O
```

if you want to download more than one file, type :

```
curl --insecure https://cds-espri.ipsl.fr/iasib2/iasi_co/V6.7.1/2025/01/IASI_METOPB_L2_CO_20250101[19-25]_ULB-LATMOS_ICDR_V6.7.1.nc -O
```



Downloading data using bash scripts with curl command

Example of a bash script ("download_iasi_data_1day.sh") to download 1 day of CO data from IASI-MetopC :

```
1  #!/bin/bash
2
3  YEAR=2025
4  MONTH=1
5  DAY=15
6  METOP=C
7
8  MMONTH=$(printf "%02d" "$MONTH")
9  DDAY=$(printf "%02d" "$DAY")
10
11  echo "${YEAR}${MMONTH}${DDAY}"
12  echo "IASI/METOP${METOP^}"
13
14  curl --insecure https://cds-espri.ipsl.fr/iasi/${METOP,}12/iasi_co/V6.7.1/$YEAR/$MMONTH/IASI_METOP"${METOP^}"_L2_CO_"${YEAR}${MMONTH}${DDAY}"_ULB-LATMOS_ICDR_V6.7.1.nc -O
15
```

Example of a bash script ("download_iasi_data.sh") to download multiple days of CO data from IASI-MetopC :

```
1  #!/bin/bash
2
3  YEAR=2025
4  MONTHMIN=1
5  MONTHMAX=2
6  DAYMIN=10
7  DAYMAX=15
8  METOP=C
9
10
11  for ((MONTH=$MONTHMIN; MONTH <=$MONTHMAX ; MONTH++)); do
12      MMONTH=$(printf "%02d" "$MONTH")
13      NBDAYSINMONTH=$(cal $month $year | awk 'NF {DAYS = $NF}; END {print DAYS}')
14
15      DDAYMIN=$(printf "%02d" "$DAYMIN")
16      DDAYMAX=$(printf "%02d" "$DAYMAX")
17
18      FILENAME="IASI_METOP${METOP^}_L2_CO_${YEAR}${MMONTH}[$DDAYMIN-$NBDAYSINMONTH]_ULB-LATMOS_ICDR_V6.7.1.nc"
19      echo "Downloading: $FILENAME"
20
21      curl --insecure "https://cds-espri.ipsl.fr/iasi/${METOP,}12/iasi_co/V6.7.1/$YEAR/$MMONTH/$FILENAME" -O
22
23  done
24
```



Downloading data using bash scripts with curl command

To run any of these scripts on Linux :

1. Open a terminal and go to where you script is with `cd`.
2. Write this in the terminal to run the bash script : `bash scriptname.sh`

```
(base) selviga@pc-selviga:~$ cd codes/ACAM/
(base) selviga@pc-selviga:~/codes/ACAM$ ls
download_iasi_data_1day.sh  download_iasi_data.sh
(base) selviga@pc-selviga:~/codes/ACAM$ bash download_iasi_data_1day.sh
20250115
IASI/METOPC
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left   Speed
 55  859M  55  477M    0     0   109M    0  0:00:07  0:00:04  0:00:03  109M
```

3. Check with `ls` if the file is correctly downloaded.

```
(base) selviga@pc-selviga:~/codes/ACAM$ ls
download_iasi_data_1day.sh  download_iasi_data.sh  IASI_METOPC_L2_CO_20250115_ULB-LATMOS_ICDR_V6.7.1.nc
```



Downloading data using bash scripts with curl command

To run any of these scripts on Windows :

1. Open a PowerShell (Win + X and select Windows PowerShell)
2. Type `bash` and press Enter. This will drop you into a bash shell inside PowerShell, allowing you to run any bash commands. If Git Bash is not installed, see next slides.
3. Go to where the directory where the bash script is located with `cd`.
4. Run the script with `bash scriptname.sh`

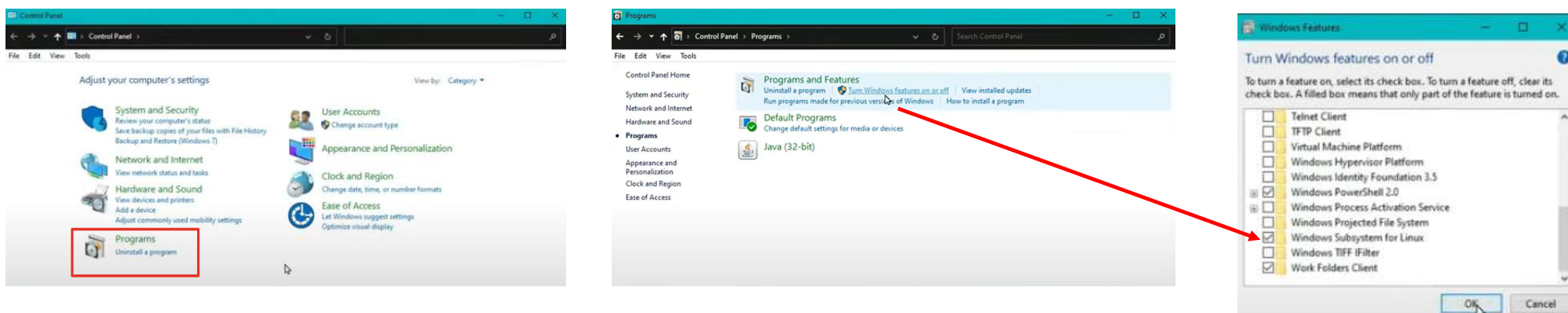
```
selviga@pc-selviga:/mnt/c/Users/selviga/Downloads$ bash download_iasi_data_1day.sh
20250115
IASI/METOPC
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left   Speed
100  859M  100  859M    0     0  111M      0  0:00:07  0:00:07 --:--:-- 112M
```

5. Check with `ls` if the file is correctly downloaded.



How to configure Windows PowerShell to run bash scripts

1. Go to Control Panel > Programs > Turn Windows features on or off. Turn on the Windows Subsystem for Linux and click on ok.



2. Open PowerShell as an Administrator (Win + X and select Windows PowerShell (Admin))
3. Download WSL with this command : `wsl --install` (more information here: <https://learn.microsoft.com/en-us/windows/wsl/install>)
4. Install Ubuntu 20.04 with this command : `wsl --install -d Ubuntu20.04` (To get the list of distributors, you can type this command : `wsl --list -online`)
5. Close the current panel and open PowerShell and type `bash` to check everything works. You can now run bash scripts.

