

AERONET Cimel Web Connect for Cimel 4.8x and Cimel 5.x

The AERONET cimel connect program provides a more efficient option for users to download from the Cimel sun/sky radiometer, transfer and process these data automatically to the AERONET server, and synchronize the V5.x Cimel control box clock with the AERONET server.

Requirements

Minimum Requirements:

- Windows PC (version XP or greater)
- Computer with a serial com port or USB-to-serial adapter com port
- Cimel ASTPwin program must be turned off.
- *For Cimel V4.8x:* Install user-defined data transfer scenarios:
https://aeronet.gsfc.nasa.gov/new_web/automatic_cimel_upload_4.8x.pdf

For Cimel V5.x: “Link to PC” must be set to YES in the Cimel Control box parameters (that is, press PW, increment to 11, press PAR, change to “Link PC”, and set to “YES”)

Desired Requirements:

- Windows PC (version 7 or greater)
- Computer connected to the Internet (the Internet connection can be intermittent)

Setup Cimel Connect without proxy (see proxy instructions on next page)

Instructions:

1. Verify the minimum requirements above have been met.
2. Download the cimel_https_connect.exe software from the AERONET web site:
https://aeronet.gsfc.nasa.gov/CIMEL_CONNECT/cimel_https_connect.exe (to download version 2.6 or greater)
3. Place the file anywhere in the computer. (e.g., Desktop, My Documents, or you can make special folder just for it).
4. Connect the cimel to com port. Then double-click the cimel_https_connect.exe to start program. The program will search for the first active com port.
Note: If more than one active com port is used, see ** for instructions to start the program on computers with multiple active com ports.

That is all. The program will make a folder “dir_comX” (where X is the com number) and place all files in that folder. The program will also try to upload the data to the AERONET server for processing if the Internet is available from the computer. The program will also adjust the clock of the Cimel control box using the time from the AERONET server.

Please send all questions/problems in the software setup to Ilya.Slutsker@nasa.gov and David.Giles@nasa.gov.

****Instructions for multiple active com ports on the computer**

- The cimel_connect program can be opened multiple times; just double-click on cimel_connect.exe and each time it will check for the next com port. Once you have the program listening to the desired com port, then you can close the other windows for com1, 2, and 3, etc.
- Alternatively, you can use the Command Prompt (Start->Run->cmd) and change directory to the location of cimel_connect.exe and type the following command:
cimel_connect.exe comX
where X is the com port number the program will use to acquire Cimel data

Setting up Cimel Connect with Proxy

Instructions:

1. Verify the minimum requirements above have been met.
2. Download the cimel_https_connect.exe software from the AERONET web site: https://aeronet.gsfc.nasa.gov/CIMEL_CONNECT/cimel_https_connect.exe (to download version 2.3 or greater)
3. Rename cimel_https_connect.exe to cimel_proxy_connect.exe.
4. Place the file anywhere on the computer. (e.g., Desktop, My Documents, or you can make a folder).
5. Connect the cimel to the com port.
6. Use the Command Prompt (Start->Run->cmd) and change directory to the location of cimel_proxy_connect.exe and type the following command:
cimel_proxy_connect.exe proxy=myproxy.university.edu:8001 comX
where “myproxy.university.edu:8001” is the proxy server name and port number and X is the com port number the program will use to acquire Cimel data. If com port is not provided as an argument, the program will use the first available com port.

* The program may also be started by double-click but proxy server information must be entered each time.

Questions/Answers:

Q. Does the computer really need to be connected to Internet?

A. The computer does not have to be connected to Internet. If it is connected, the data will be automatically uploaded for processing. If it is not, the data will stay on the dir_com directory, and you will need to manually submit them. If you can connect the computer to Internet, the program will attempt submitting the data itself.

Q. How often are data collected from the Cimel control box?

A. The Cimel must operate in auto mode LINK TO PC (Cimel V5.x) or user-defined data transfer scenarios (Cimel V4.8x) should be enabled for the data to be collected every 15 minutes (or less). Each time data is collected by the Cimel V5.x or Cimel V4.8x transfer time, the control box will attempt to connect to the PC and "cimel_connect.exe" will receive the data. The program will create files with extension .K7 making files for each hour and one daily file. All of the files will remain in the dir_comX folder. If the file is successfully submitted, the extension will change to .K8 or the file will be deleted.

Q. What is the procedure of operation, collection and transmission of data?

A. If Cimel is an auto mode, "LINK TO PC" (Cimel V5.x) is enabled or user-defined data transfer is enabled (Cime 4.8x), PC com port is connected to the Cimel, and cimel_connect is running, then the rest should be done automatically.

Q. Can I collect data from Cimel one time per week?

A. Yes, you can. Email us all the files with extension .K7 you find on the dir_com directory. The easiest way is to connect computer to Internet, then restart cimel_connect. Upon restart, the program will discover the Internet connection and it will try to upload all the .K7 files from the dir_com directory.

Q. Do I need to use the Task Manager?

A. No. However, the task manager running a cimel_https_connect.exe script can be used to wake the computer (e.g., hourly) if the system experiences frequent power outages.