



## NetCDF-Extractor

### ▪ Buy a license and Installing

The installation process for the tool is simple and hassle-free. Upon acquiring a license, you will be provided with a utility called "ID Finder." Share your ID with us, and in return, you will receive the installer for the registered version. Execute the installer and the tool will be installed effortlessly, requiring no additional activation key. After installation, you can easily access the tool either by clicking on the desktop shortcut or by searching for "NetCDF-Extractor" in your computer's program list.

### What is NetCDF-Extractor V2.1?

NetCDF-Extractor V2.1 is a tool specifically engineered to extract time series data from NetCDF files by utilizing cell numbers. Users manually convert the coordinates of weather stations into cell numbers (or Grid Numbers), which are then employed to extract time series data from one or multiple NetCDF files.

In this version, users have the capability to extract time series data from multiple .nc files simultaneously, significantly enhancing their workflow efficiency. By loading multiple files concurrently, the software optimizes operations and reduces the risk of errors. Users can then save the extracted

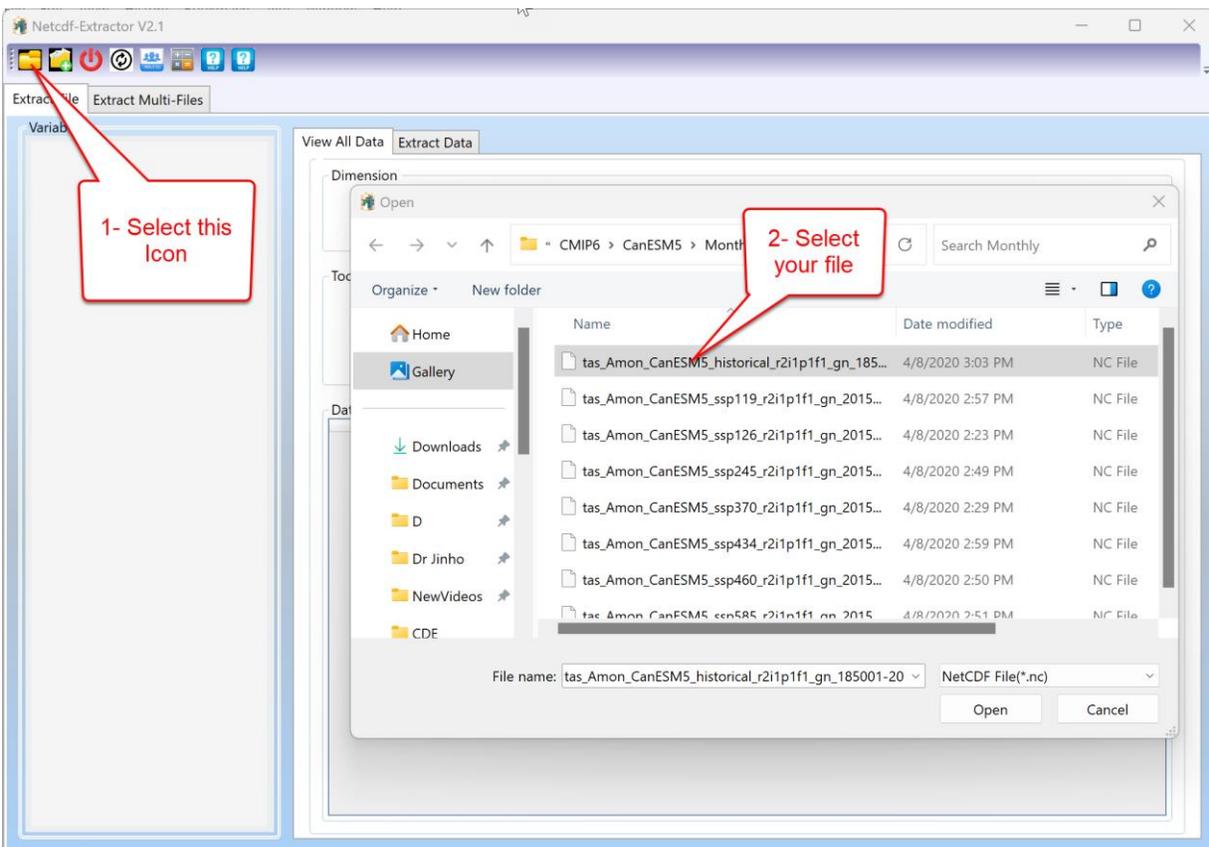


data in Excel, CSV, or text format, with CSV format is the recommended choice.

The tool comprises two distinct tabs, each dedicated to specific functions outlined below:

## **First tab:**

The initial tab allows users to visualize the contents of a NetCDF file and export any one or two-dimensional data to a CSV file. Simply select your file, and upon selecting two radio buttons, the data will be displayed. You can refer to the step-by-step instructions provided in the accompanying images below.





Netcdf-Extractor V2.1

Extract File | Extract Multi-Files

Variables

- tas\_Amon\_CanESM5\_historic
  - timebnds
  - latbnds
  - lonbnds
  - tas**
  - time
  - lat
  - lon
  - height

View All Data | Extract Data

tas

Dimension

time = UNLIMITED; // (1980 currently)  lat = 64;  lon = 128;

Tools

Save To File | 15.5

change Items of the dimension

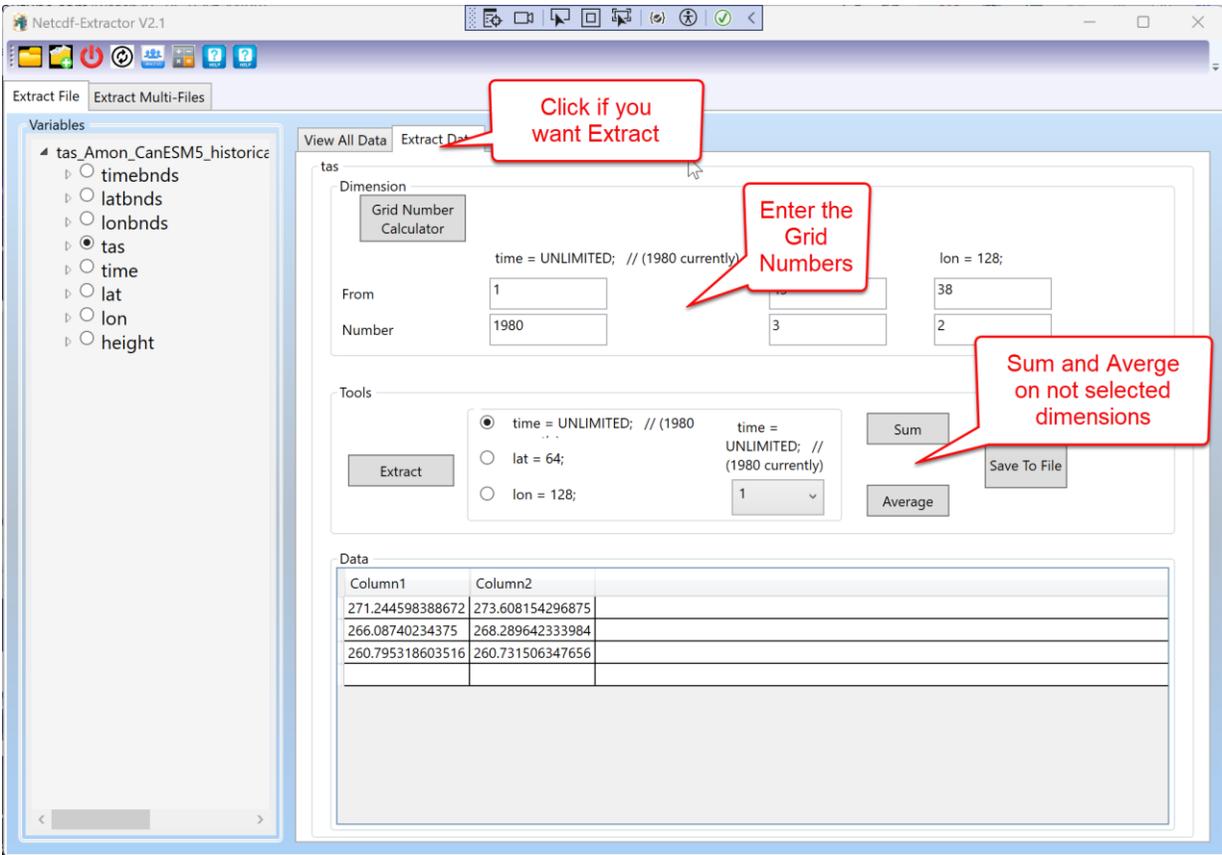
3- select

4- Select dimension

save to csv

Column1	Column2	Column3	Column4	Column5	Column6	Column7
248.716171264648	248.569885253906	248.398574829102	248.257888793945	248.115829467773	247.963470458984	247.7972
248.396835327148	247.999969482422	247.626708984375	247.248123168945	246.960250854492	246.713790893555	246.4476
247.723175048828	247.34326171875	247.006225585938	246.672714233398	246.351379394531	246.050323486328	245.6574
247.771072387695	247.301498413086	246.953918457031	246.618286132813	246.311508178711	245.904159545898	245.3384
247.311996459961	246.404052734375	245.889572143555	245.366348266602	244.787200927734	244.259460449219	243.8533
251.785614013672	250.62190246582	249.474227905273	248.57829284668	248.103668212891	247.844177246094	247.9826
261.6328125	261.385772705078	261.033386230469	260.435943603516	260.182891845703	259.818878173828	259.9647
269.145660400391	269.303100585938	269.507049560547	269.7060546875	269.881622314453	269.863555908203	270.0755
269.530303955078	269.608795166016	269.822387695313	270.051086425781	270.210693359375	270.387420654297	270.4295
270.077362060547	269.716491699219	269.729034423828	269.761840820313	269.706909179688	269.807708740234	269.9933
270.855072021484	270.626892089844	270.531097412109	270.49560546875	270.39697265625	270.390686035156	270.3985
271.956146240234	271.791473388672	271.591583251953	271.422760009766	271.2021484375	271.259338378906	271.3912
273.703979492188	273.647552490234	273.288452148438	272.920074462891	272.929565429688	273.119171142578	273.2346
275.625244140625	275.749450683594	275.758239746094	275.520629882813	275.462036132813	275.156860351563	275.1389
278.544555664063	278.353332519531	278.005096435547	277.872009277344	277.954498291016	277.754028320313	277.5551

If you wish to extract data from the file, navigate to the "Extract Data" tab. Here, input the grid numbers and click on the "Extract" button. If your variable in the NetCDF file has three dimensions, you will need to select one of the radio buttons corresponding to those dimensions. The "Average" and "Sum" buttons calculate the mean or sum of the two dimensions not selected. For instance, if the time radio button is selected and you click on the "Average" or "Sum" button, you will obtain a spatial mean time series.



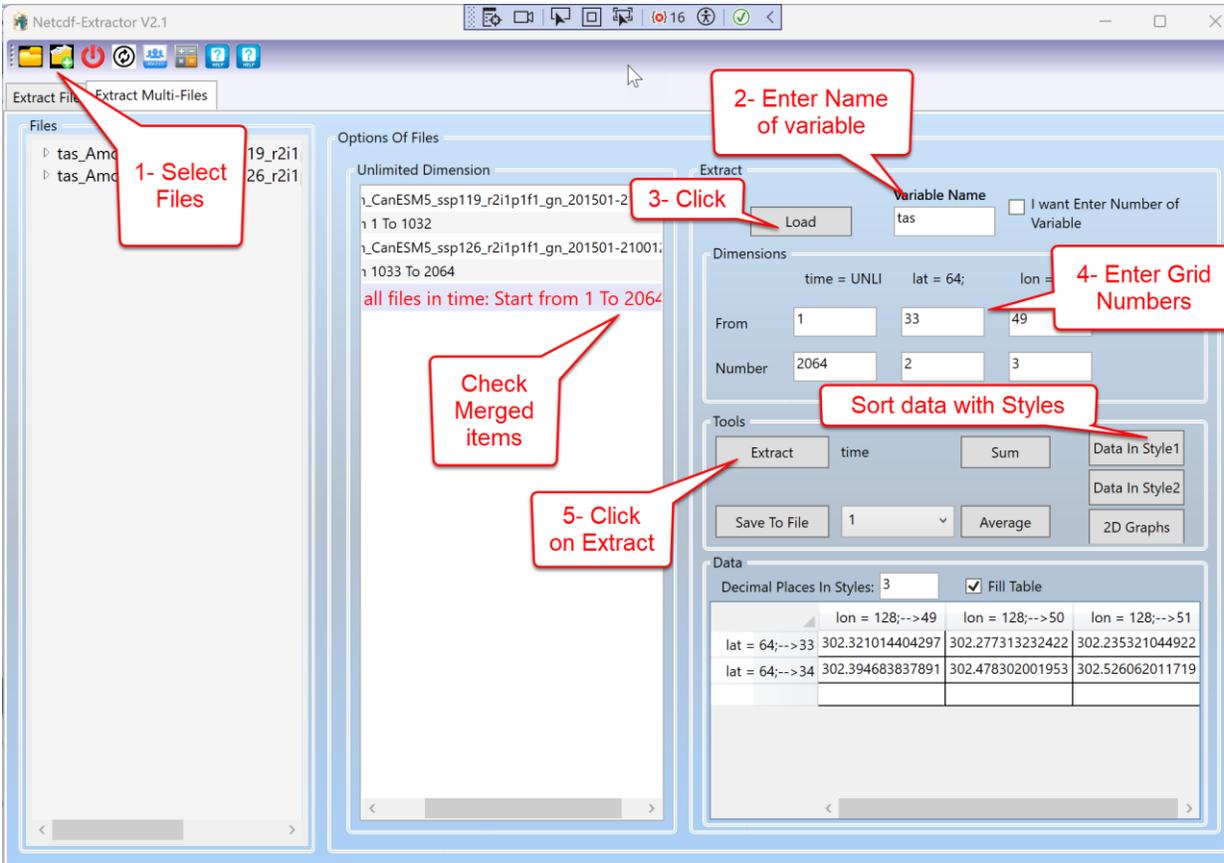
## Second tab:

If you open one or multiple NetCDF files using the second icon on the top bar, you can utilize the second tab to extract merged data in unlimited dimensions. If your files do not have unlimited dimensions, a window will prompt you to select one of the dimensions as unlimited for merging (typically the time dimension).

Please input the variable name and click on the "Load" button. Upon opening one of the files in the tree view on the left-hand side, you can locate the variable name. Please be aware that occasionally, NetCDF files may have



issues causing the variable names to be incorrect. In such cases, you can check the checkbox and input the variable number.



You should enter the grid numbers and click on extract. The first dimension usually is time dimension therefore Average and Sum button will apply on the second and third dimension that here is lat and lon. Also you can use the styles button to resort the three dimensions data in a table (two dimension data).

If you wish to display the extracted data in the table, you can check the "Fill Table" checkbox and save them to a file. Otherwise, after extraction, you can save the result in a CSV file and open the file using Excel.



When utilizing the Style buttons, you have the option to select the number of decimal places. Refer to the image below to understand how the data appears when sorted in different styles.

Style 1										
	Lon1_Lat1	Lon1_Lat2	Lon1_Lat3	Lon1_Lat4	Lon2_Lat1	Lon2_Lat2	Lon2_Lat3	.	.	.
Time1										
Time2										
Time3										
Time4										
Time5										
Time6										
Time7										
Time8										
.										
.										
.										

Style 2										
Lat / Lon	Lon1	Lon2	Lon3	Lon4	Lon5	Lon6	Lon7	.	.	.
Time1	Lat1									
	Lat2									
	Lat3									
	Lat4									
	Lat5									
	Lat6									
	Lat7									
	Lat8									
	.									
.										
.										

Lat / Lon	Lon1	Lon2	Lon3	Lon4	Lon5	Lon6	Lon7	.	.	.
Time2	Lat1									
	Lat2									
	Lat3									
	Lat4									
	Lat5									
	Lat6									
	Lat7									
	Lat8									
	.									
.										
.										

Lat / Lon	Lon1	Lon2	Lon3	Lon4	Lon5	Lon6	Lon7	.	.	.
Time3										
.										
.										
.										