LS4P archive design

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This document specifies technical aspects of LS4P data archive and data formats, including the common naming system. The List of requested LS4P variables and timescale is contained in

“LS4P\_ESM\_outputs\_list\_update” from <https://ls4p.geog.ucla.edu/experiments/>

1. File Format and File naming (Same as we list before)

Only ensemble means are required to submit to the data base. Data files have to comply with the NetCDF format, version 4. The names of the files in the LS4P archives are made as describe below and must appear in the following order:

VariableName\_LS4P\_ESMModelName\_ LS4PExperimentName\_Frequency\_[StartTime-EndTime].nc

**VariableName** corresponds to the name of the target variable in the NetCDF files.

**ESMModelName** identifies the model name.

**LS4PExperimentName** identifies the experiment name [Task1], [Task2], [Task3] and [Task4]. Task 3 is for LST/SUBT experiment. If you use different CTRL for Task3 other than Task1, please use [Task3-CTRL] to identify the Task3 control run. In case you need clarification about, please contact us.

**Frequency** is the output frequency indicator: 3hr=3hourly, 6hr=6hourly, day=daily, mon=monthly.

**StartTime**and**EndTime** indicate the time span of the content of the file, such as 00z01052003 and 18z30062003.

For example, pr\_LS4P\_UCLACFSSiB2\_Task1\_3hr\_00z01052003-18z30062003.nc

1. **Uploading LS4P data procedure in the Pan-TPE data system**

The data portal is available at <http://data.tpdc.ac.cn/zh-hans/> (Chinese) or <http://data.tpdc.ac.cn/en/> (English). The login is “LS4P\_group”. Pan-TPE data system has an online data submission system which is similar to paper submission system. For instance, folders can be uploaded, but not needed to be tarred in one file. It is recommended that each modeling group to create its own folder using the following naming: InstituteName\_ESMModelName (example: UCLA\_CFS-SSiB2). Note that each folder can contain many subfolders/files (e.g. UCLA\_CFS-SSiB2/Task1/ or UCLA\_CFS-SSiB2/Task2/…). It is recommender to create subfolder for each **LS4PExperimentName (example: Task1, Task 2, and Task3, Task4).** Additionally, under each LS4P ExperimentName subfolder, we suggest creating subfolders such as monthly, daily, and 6hourly (e.g. UCLA\_CFS-SSiB2/Task1/monthly/ or UCLA\_CFS-SSiB2/Task1/daily/…).

1. **Upload data into Pan-TPE using Filezilla**

To upload data into Pan-TPE data system, we recommend to use “Filezilla”. With Filezilla, the host, username and password are generated automatically for the Filezilla when the data are uploaded. The following procedure is based on “Filezilla”.

The procedure will be as following:

1). Login to the online Pan-TPE data system (<http://data.tpdc.ac.cn/en/>), using the aforementioned login details (see II). Login name: LS4P\_group

2). Go to ‘LS4P\_group’/‘personal center’; Select “My Data” on the left bar, then select “SubmitData”.

1. You will see the webpage “CREATEMETADATA”. Please fill in your data information, such as i) Overview (Title, abstract, data file naming, file size, time range,…), ii) Reference, iii) Keyword(s),…etc. After complete, click “Save” to save the information.
2. Then select “Data Files”. A new page will popup, where you will find

(i) The host ip address, (ii) the port number, (iii) the username, and (iv) the password to use for Filezilla.

1. On your local site, such as NCAR Cheyenne, open Filezilla at the directory where the data you would like to upload are located. Please use the information from (4) to remotely access the data center via Filezilla.

6). You will be at the root directory. The root directory is empty and you need to create a folder using the naming method mentioned in Section I, for example, UCLA\_CFS-SSiB2 under the ‘‘root directory”. If you have created the folder before, you will find it, when you log back.

7) Then from your Filezilla window, you can drag your data from your local site to the newly created folder/subfolder, such as Task1.

8) Send an email to Duo at panxd@itpcas.ac.cn. Then she will synchronize the data for you directly!

9) Click “submit” to submit the online data in the window appeared in step 3.

10). Duo will send you an email confirmation to confirm the proper submission. By that time, you should be able to see your data.

In case there is any problem/question, please contact Duo (panxd@itpcas.ac.cn) with cc to Ismaila (idiallo@ucla.edu) for help.

1. **To see data belonging to LS4P project**

a) Login to the online Pan-TPE data system (<http://data.tpdc.ac.cn/en/>), using the aforementioned login details (see II).

b) Go to “LS4P\_group” / “Personal Center”

c) Select “My Data”, and then select “Review” or “My Draft”

d) You will see all the metadata belonging to LS4P group.

e) Under the metadata, click “edit” button, and move to “Data Files” item, you will find the host, port, username and passport for the specific group data you selected.

f) Open Filezilla using the information’s from e),

g) Now from Filezilla you can manage the LS4P directory and see what has been uploaded, along with the current directories/sub-directories.