


**From:** Rohini Kumar rohini.kumar@ufz.de   
**Subject:** Re: Data Request + Introduction  
**Date:** February 28, 2023 at 9:43 AM  
**To:** Renee Obringer obringer@psu.edu  
**Cc:** Adul, Joy Atieno jaa6483@psu.edu

RK

Dear Renee and dar Joy,

Good to know you, Joy.

I have processed the required datasets (attached). Inside the zipped file you can find separate files with daily values of required meteorological variables, averaged over the US states for the period 2000-2022.

Total States: 56 (8 are missing, either very small or not within the CONUS domain) - so effectively 48 lower US States.  
Missing values are marked with -9999.0 for all variables for the 8 States

Files: Description [Unit]

daily\_precip\_2000\_2022.txt: Daily total precipitation [mm/d]  
daily\_rh\_2000\_2022.txt: Daily avg. relative humidity [%]  
daily\_tavg\_2000\_2022.txt: Daily avg. air temperature [K]  
daily\_uwind10m\_2000\_2022.txt: Daily avg. u wind at 10 m [m/s]  
daily\_vwind10m\_2000\_2022.txt: Daily avg. v wind at 10 m [m/s]

Here is a snapshot of one of those files.

| YYYY | MM | DD | ID_01  | ID_02    | ID_03    | ID_04  | ID_05  | ID_06  | ID_07    | ID_08  |
|------|----|----|--------|----------|----------|--------|--------|--------|----------|--------|
| 2000 | 01 | 01 | 288.88 | -9999.00 | -9999.00 | 280.36 | 283.42 | 278.40 | -9999.00 | 272.74 |
| 2000 | 01 | 02 | 289.29 | -9999.00 | -9999.00 | 275.84 | 287.20 | 276.78 | -9999.00 | 270.30 |
| 2000 | 01 | 03 | 291.03 | -9999.00 | -9999.00 | 272.68 | 289.67 | 276.81 | -9999.00 | 265.95 |
| 2000 | 01 | 04 | 288.57 | -9999.00 | -9999.00 | 272.74 | 279.51 | 278.57 | -9999.00 | 263.18 |
| 2000 | 01 | 05 | 277.09 | -9999.00 | -9999.00 | 275.97 | 273.83 | 277.73 | -9999.00 | 268.22 |
| 2000 | 01 | 06 | 277.28 | -9999.00 | -9999.00 | 274.26 | 275.52 | 277.16 | -9999.00 | 264.89 |
| 2000 | 01 | 07 | 279.74 | -9999.00 | -9999.00 | 273.17 | 280.25 | 278.91 | -9999.00 | 265.67 |
| 2000 | 01 | 08 | 280.02 | -9999.00 | -9999.00 | 274.93 | 279.73 | 278.31 | -9999.00 | 266.99 |
| 2000 | 01 | 09 | 286.54 | -9999.00 | -9999.00 | 275.50 | 281.91 | 278.66 | -9999.00 | 267.10 |
| 2000 | 01 | 10 | 288.77 | -9999.00 | -9999.00 | 277.47 | 283.40 | 279.63 | -9999.00 | 267.90 |
| 2000 | 01 | 11 | 283.89 | -9999.00 | -9999.00 | 279.38 | 281.31 | 280.26 | -9999.00 | 270.97 |
| 2000 | 01 | 12 | 286.17 | -9999.00 | -9999.00 | 280.77 | 283.34 | 279.42 | -9999.00 | 273.98 |
| 2000 | 01 | 13 | 287.66 | -9999.00 | -9999.00 | 281.58 | 286.02 | 280.59 | -9999.00 | 271.69 |
| 2000 | 01 | 14 | 277.91 | -9999.00 | -9999.00 | 283.24 | 276.05 | 282.81 | -9999.00 | 272.77 |

Here, ID\_XX is the ID of the federal states. Note that there are 56 states in colons but 8 of them have missing values (-999.000). I also provided a separate excel file ("CONUS\_States\_info.xlsx") with look-up-table information on IDs and the corresponding US states. You can use this information to map and spatially visualize the corresponding data sets in a geographical sense.

Let me know if something is unclear. I look forward to working with you both on this interesting project.

Best regards,  
Rohini

CONUS\_States\_  
info.xlsx  
11 KB

Archive.zip  
4.9 MB

On 15. Feb 2023, at 18:36, Obringer, Renee <[obringer@psu.edu](mailto:obringer@psu.edu)> wrote:

Hi Rohini

Hi Rohini,

I have Cc'd my PhD student, Joy Adul. She is interested in studying the impacts of climate change on energy generation within the context of the energy transition in the US and possibly Kenya, if we can obtain data. For now, she is going to focus on a few states in the US and would like to use NARR data to do the initial modeling with observational data.

She would like the following variables:

- Temperature
- Relative Humidity
- Precipitation
- Wind Speed

She is planning on starting with the states of California, Georgia, Florida, and New York, but hopes to eventually expand to all 50 states. Ideally, we would like the data to be daily values, so that we can aggregate to monthly maximums, minimums, and means.

Do you think that you could extract the NARR data for her?

Thanks,

Renee

---

Dr. Rohini Kumar  
Senior Scientist  
Department of Computational HydroSystem (CHS)  
Helmholtz Centre for Environmental Research GmbH - UFZ  
Permoserstraße 15 / 04318 Leipzig / Germany  
phone +49 341 235 1972 / fax +49 341 235 451972  
[rohini.kumar@ufz.de](mailto:rohini.kumar@ufz.de) / [www.ufz.de/index.php?en=10340](http://www.ufz.de/index.php?en=10340)

Sitz der Gesellschaft/Registered Office: Leipzig  
Registergericht/Registration Office: Amtsgericht Leipzig  
Handelsregister Nr./Trade Register Nr.: B 4703  
Vorsitzender des Aufsichtsrats/Chairman of the Supervisory Board: MinDirig Wilfried Kraus  
Wissenschaftlicher Geschäftsführer/Scientific Managing Director: Prof. Dr. Rolf Altenburger  
Administrative Geschäftsführerin/Administrative Managing Director: Dr. Sabine König

---