Re: [EXTERNAL] IMPORTANT: Data Mismatches in the OMTO3d Global Ozone Data Annual Zip Files

From: Lar Ert (suertau@gmail.com)

To: leslie.r.lait@nasa.gov

Cc: paul.a.newman@nasa.gov; lertaul@yahoo.com; victor.murta97@gmail.com

Date: Saturday, April 19, 2025 at 05:59 PM PDT

Dear Dr. Lait,

Thank you very much for your prompt response. I greatly appreciate it. I also thank Dr. McPeters for correcting the data.

Sincerely,
Lara

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> On Thu, Apr 17, 2025 at 12:03 PM Lait, Leslie R. (ARC-SG) <leslie.r.lait@nasa.gov> wrote:
>
> Dear Lara Su Ertaul,
>
> Following up on last week's emails: I heard back from Dr. Rich McPeters, who created the zip files. He said that the file you pointed out has older data that has been replaced with a better version that matches what is in the Y2021/ directory. He also sent me a new zip file of the newer data, which I have placed in the website directory.
>
> Thanks again for bringing this to our attention.
>
> Good luck with your research project.
>
> Lait, Leslie R. (ARC-SG)

Leslie Lait

Research AST, Data Analysis

ARC-SG

Leslie R. Lait

Code 614, NASA Goddard Space Flight Center

8800 Greenbelt Road, Greenbelt, MD 20771 (office address)
O: 301.614.5990

Leslie.R.Lait@nasa.gov

On 4/9/25, 5:49 PM, "Lar Ert" <suertau@gmail.com> wrote:

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Dear Leslie,

Thank you for your quick reply and for forwarding my email. I appreciate your efforts in looking into this and will await their reply.

Additionally, thank you for the helpful information regarding the OMI instrument's current data quality and the suggestion to use the OMPS data. I will definitely look into those files!

Regards,

Lara Su Ertaul

On Wed, Apr 9, 2025 at 1:25 PM Lait, Leslie R. (ARC-SG) <leslie.r.lait@nasa.gov <mailto:leslie.r.lait@nasa.gov>> wrote:

Dear Lara Su Ertaul,

Thank you for your email concerning the mismatch in those OMI data files. I have sent your question on to the people who actually created those files, and I will send you their reply when I receive one.

In the meantime, I can advise you that the OMI instrument on NASA's Aura satellite is well past its design lifetime, and consequently it has been experiencing increasingly severe data quality issues for some years now. For recent years, you can find better-quality ozone data in the same format at https://ozonewatch.gsfc.nasa.gov/data/omps/ <https://ozonewatch.gsfc.nasa.gov/data/omps/>; these data are from the OMPS instrument onboard the Suomi NPP satellite, which is newer. The OMPS data are what our current ozone maps are made from.

I hope you find this helpful, and I will send you any further information that I receive about this issue.

Lait, Leslie R. (ARC-SG)

<https://www.nasa.gov/>

Leslie Lait

Research AST, Data Analysis

ARC-SG

Leslie R. Lait

Code 614, NASA Goddard Space Flight Center

8800 Greenbelt Road, Greenbelt, MD 20771 <font-family:Helvetica> (office address)

O: 301.614.5990

Leslie.R.Lait@nasa.gov <font-family:"Calibri Light",sans-serif>

On 4/9/25, 2:14 PM, "Lar Ert" <suertau@gmail.com <mailto:suertau@gmail.com>> wrote:

CAUTION: This email originated from outside of NASA. Please take care when clicking links or opening attachments. Use the "Report Message" button to report suspicious messages to the NASA SOC.

Dear Paul and Leslie,

My name is Lara Su Ertaul and I am a highschool student at Tamalpais High School, Mill Valley CA. I am doing a research project titled "Spectral and Statistical Analysis of the Ozone Layer in the Bay Area" by using the OMTO3d Global Ozone Data (ozonewatch.gsfc.nasa.gov/data/omi/ <http://ozonewatch.gsfc.nasa.gov/data/omi/> <http://ozonewatch.gsfc.nasa.gov/data/omi/> <http://ozonewatch.gsfc.nasa.gov/data/omi/%3e>). While I was doing my research, I realized that the data you are providing in the annual_zip/ does not match some of the data in the original data. For example, if you read the data from ozone_omi_2021.zip and select L3_ozone_omi_20211209 (Lat 37.5º and 36.5º), the data reads over 900 DU many times. Whereas, the original data contains different values at Lat 37.5º and 36.5º (around 200-300 DU). There are many more of these cases throughout the zipped data. Would you please look into this? If you need more information, I am happy to provide that.

Regards,

Lara Su Ertaul

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