



Applied Remote Sensing Training (ARSET) Program

Geostationary Remote Sensing of Trace Gases for Air Quality Applications in North America

Homework Questions

Question 1

Which of the following are capabilities of TEMPO?

Answers: (bold correct)

- a. Active sensing, allowing trace gas observations at nighttime and through cloud cover
- b. Hyperspectral resolution, allowing retrieval of atmospheric trace gas concentrations**
- c. Geostationary orbit, allowing hourly scans over North America**
- d. Polar orbit, allowing full global coverage

Feedback:

TEMPO is a passive hyperspectral remote sensing instrument within the visible and UV spectrum and it is in a geostationary orbit over North America. Prior remote sensing observations of trace gases over this area have been limited to polar orbiting satellites with hyperspectral sensors.

Question 2

Choose the best suited remote sensing instrument for tracking atmospheric trace gas concentration trends globally at 13x24 km resolution, starting from the mid-2000s.

Answers:

- a. TROPOMI
- b. TEMPO

- c. **OMI**
- d. Pandora

Feedback: OMI, as a hyperspectral instrument operating since 2004, is suitable for tracking long-term trace gas concentration trends.

Question 3

Choose the best suited remote sensing instrument for evaluating hour-to-hour, and diurnal trace gas concentration changes at urban scale spatial resolution over North America.

Answers:

- a. TROPOMI
- b. **TEMPO**
- c. OMI
- d. Pandora

Feedback:

TEMPO, as a hyperspectral instrument in geostationary orbit, is able to provide hourly trace gas retrievals over North America.

Question 4

Choose the best suited remote sensing instrument for mapping average trace gas pollutant concentrations globally at ~5km resolution since 2017.

Answers:

- a. **TROPOMI**
- b. TEMPO
- c. OMI
- d. Pandora

Feedback:

TROPOMI, as a hyperspectral instrument with 3.5 by 5.5 km pixel resolution, is suitable for mapping trace gases at ~5k spatial resolution.

Question 5

Choose the best suited remote sensing instrument for providing ground-based, column data for validating satellite trace gas products at specific locations.

Answers:

- a. TROPOMI
- b. TEMPO
- c. OMI
- d. Pandora**

Feedback:

Pandora instruments are ground-based remote sensors, suitable for validating satellite trace gas products.

Question 6

Which of these Level-2 TEMPO products have a spatial resolution coarser than 2.0 x 4.75 km² at the center of the field of regard?

Answers:

- a. Total Column Formaldehyde
- b. Total Column Ozone
- c. Ozone Profile**
- d. Tropospheric Nitrogen Dioxide

Feedback:

All TEMPO Level 2 trace gas products have a nominal spatial resolution of 2.0 by 4.75 kilometers, except for the ozone profile product, which requires data from multiple pixels, giving a resolution of 8.0 by 4.75 kilometers.

Question 7

Identify whether the statement best applies to Level 2 or Level 3 TEMPO products: Pixels are organized into a regular latitude-longitude grid.

Answers:

- a. Level 2
- b. Level 3**

Feedback:

Level 3 products are organized to a regular latitude-longitude grid.

Question 8

Identify whether the statement best applies to Level 2 or Level 3 TEMPO products: Pixel sizes vary by both latitude and longitude.

Answers:

- a. Level 2**
- b. Level 3

Feedback:

Level 2 products have pixel sizes which vary by latitude and longitude across the field of regard.

Question 9

Identify whether the statement best applies to Level 2 or Level 3 TEMPO products: Generally features smoother spatial patterns.

Answers:

- a. Level 2
- b. Level 3**

Feedback:

Level 3 products generally feature smoother spatial patterns compared to the corresponding Level 2 data.

Question 10

Identify whether the statement best applies to Level 2 or Level 3 TEMPO products: Multiple files representing the Field of Regard per hour during standard operations.

Answers:

- a. **Level 2**
- b. Level 3

Feedback:

Level 2 products are divided into 9 granule files per hour during standard operations.

Question 11

If you intend to apply TEMPO data to monitor wildfire plumes and associated trace gases, at the time of the event, what type of quality assurance (QA) setting might you choose?

Answers:

- a. Only the highest quality via QA settings
- b. Strict QA settings for quantitative use of the data
- c. **More relaxed QA settings for qualitative use of the data**

Feedback:

Wildfires often have thick plumes that can be misinterpreted as clouds. Therefore, the highest quality and strict QA settings will mask areas with trace gas information in these thick plumes. The more relaxed QA settings will use a higher Effective Cloud Fraction value that allows more of each pixel to be covered in cloud or smoke before it masks the data. For a long term study and associated quantitative results, however, one would want a strict QA setting or even the highest quality settings.

Eaton and Palisades Wildfires

The Eaton and Palisades Wildfires were highly destructive fires which occurred in the West/Northwest portion of Los Angeles, California, beginning on January 7, 2025. Navigate to this location and time using [NASA Worldview](#) and answer the following questions using its TEMPO data product visualizations.

Question 12

Which of the following times (UTC) most closely matches the first availability of TEMPO Level-2 tropospheric NO₂ data covering the region of the Eaton (34.2°N,-118.1°E) and Palisades (34.0°N,-118.5°E) fires on 7 January 2025?

Answers:

- a. 16:00
- b. 16:44**
- c. 17:30
- d. No data were available from TEMPO on that day.

Feedback:

The first TEMPO Level 2 data on that day for the wildfire locations are available starting 16:44 UTC, as the solar zenith angle over the city becomes low enough to collect reliable data. Be sure to notice the Level-2 granule time but incrementing TEMPO every 6 minutes as opposed to the hourly Level-3 data. Here is a direct link to the solution in Worldview:

[https://worldview.earthdata.nasa.gov/?v=-123.4928290894289,31.06535767872088,-112.04080669336098,37.12856731397239&z=4&i=5&ics=true&ici=5&icd=6&l=Reference Labels 15m,Reference Features 15m,Coastlines 15m\(hidden\),OMPS Aerosol Index\(hidden\),OMPS Aerosol Index PyroCumuloNimbus\(hidden\),OMPS NOAA20 NadirMapper AerosolIndex 380\(hidden\),OMPS NOAA20 NadirMapper AerosolIndex PyroCumuloNimbus 380\(hidden\),VIIRS NOAA20 DayNightBand At Sensor Radiance\(hidden\),VIIRS NOAA20 DayNightBand AtSensor M15\(hidden\),VIIRS SNPP DayNightBand At Sensor Radiance\(hidden\),VIIRS SNPP DayNightBand AtSensor M15\(hidden\),TEMPO L3 Formaldehyde Vertical Column\(hidden\),TEMPO L2 Formaldehyde Vertical Column Granule\(hidden,count=1\),TEMPO L3 Ozone Column Amount\(hidden\),TEMPO L2 Ozone Column Amount Granule\(hidden,count=1\),TEMPO L3 NO2 Vertical Column Troposphere\(hidden\),TEMPO L2 NO2 Vertical Column Troposphere Granule\(count=1\),OCI PACE True Color\(hidden\),VIIRS NOAA21 CorrectedReflectance TrueColor\(hidden\),VIIRS NOAA20 CorrectedReflectance TrueColor,VIIRS SNPP CorrectedReflectance TrueColor\(hidden\),MODIS Aqua CorrectedReflectance TrueColor\(hidden\),MODIS Terra CorrectedReflectance TrueColor\(hidden\)&lg=true&t=2025-01-07-T16%3A44%3A00Z](https://worldview.earthdata.nasa.gov/?v=-123.4928290894289,31.06535767872088,-112.04080669336098,37.12856731397239&z=4&i=5&ics=true&ici=5&icd=6&l=Reference%20Labels%2015m,Reference%20Features%2015m,Coastlines%2015m(hidden),OMPS%20Aerosol%20Index(hidden),OMPS%20Aerosol%20Index%20PyroCumuloNimbus(hidden),OMPS%20NOAA20%20NadirMapper%20AerosolIndex%20380(hidden),OMPS%20NOAA20%20NadirMapper%20AerosolIndex%20PyroCumuloNimbus%20380(hidden),VIIRS%20NOAA20%20DayNightBand%20At%20Sensor%20Radiance(hidden),VIIRS%20NOAA20%20DayNightBand%20At%20Sensor%20M15(hidden),VIIRS%20SNPP%20DayNightBand%20At%20Sensor%20Radiance(hidden),VIIRS%20SNPP%20DayNightBand%20At%20Sensor%20M15(hidden),TEMPO%20L3%20Formaldehyde%20Vertical%20Column(hidden),TEMPO%20L2%20Formaldehyde%20Vertical%20Column%20Granule(hidden,count=1),TEMPO%20L3%20Ozone%20Column%20Amount(hidden),TEMPO%20L2%20Ozone%20Column%20Amount%20Granule(hidden,count=1),TEMPO%20L3%20NO2%20Vertical%20Column%20Troposphere(hidden),TEMPO%20L2%20NO2%20Vertical%20Column%20Troposphere%20Granule(count=1),OCI%20PACE%20True%20Color(hidden),VIIRS%20NOAA21%20CorrectedReflectance%20TrueColor(hidden),VIIRS%20NOAA20%20CorrectedReflectance%20TrueColor,VIIRS%20SNPP%20CorrectedReflectance%20TrueColor(hidden),MODIS%20Aqua%20CorrectedReflectance%20TrueColor(hidden),MODIS%20Terra%20CorrectedReflectance%20TrueColor(hidden)&lg=true&t=2025-01-07-T16%3A44%3A00Z)

Question 13

Using TEMPO Level 3 tropospheric NO₂ data products, for which of these times are plumes with highly elevated concentrations ($> 1.5 \times 10^{16}$ mol/cm²) distinctly visible for both fires?

Answers:

- a. 7 January, 2025, 21:00-22:00Z
- b. 8 January, 2025, 18:00-19:00Z
- c. 9 January, 2025, 20:00-21:00Z**
- d. 10 January 2025, 23:00-24:00Z

Feedback:

You can adjust the View Options > Thresholds such that only concentrations above the indicated level are visible in the imagery. For the times noted on 7 and 8 January, elevated plumes were only visible from a single fire location. On 10 January, concentrations were more diffuse, without easily distinguishable plumes. Only for the 9 January time noted were two visibly distinct plumes with concentrations above these thresholds clearly visible. Here is a direct link to the solution in Worldview: [https://worldview.earthdata.nasa.gov/?v=-121.58897948764941,32.21416866358917,-114.72116735589186,35.85029364223636&z=4&i=4&l=Reference_Labels_15m,Reference_Features_15m,Coastlines_15m\(hidden\),TEMPO_L3_Formaldehyde_Vertical_Column\(hidden,min=2004000000000000,squash=true\),TEMPO_L2_Formaldehyde_Vertical_Column_Granule\(hidden,count=9\),TEMPO_L3_Ozone_Column_Amount\(hidden\),TEMPO_L2_Ozone_Column_Amount_Granule\(hidden,count=9\),TEMPO_L3_NO2_Vertical_Column_Troposphere\(min=1500000000000000,squash=true\),TEMPO_L2_NO2_Vertical_Column_Troposphere_Granule\(hidden,count=9\),OCI_PACE_True_Color\(hidden\),VIIRS_NOAA21_CorrectedReflectance_TrueColor\(hidden\),VIIRS_NOAA20_CorrectedReflectance_TrueColor,VIIRS_SNPP_CorrectedReflectance_TrueColor\(hidden\),MODIS_Aqua_CorrectedReflectance_TrueColor\(hidden\),MODIS_Terra_CorrectedReflectance_TrueColor\(hidden\)&lg=true&t=2025-01-09-T20%3A30%3A00Z](https://worldview.earthdata.nasa.gov/?v=-121.58897948764941,32.21416866358917,-114.72116735589186,35.85029364223636&z=4&i=4&l=Reference_Labels_15m,Reference_Features_15m,Coastlines_15m(hidden),TEMPO_L3_Formaldehyde_Vertical_Column(hidden,min=2004000000000000,squash=true),TEMPO_L2_Formaldehyde_Vertical_Column_Granule(hidden,count=9),TEMPO_L3_Ozone_Column_Amount(hidden),TEMPO_L2_Ozone_Column_Amount_Granule(hidden,count=9),TEMPO_L3_NO2_Vertical_Column_Troposphere(min=1500000000000000,squash=true),TEMPO_L2_NO2_Vertical_Column_Troposphere_Granule(hidden,count=9),OCI_PACE_True_Color(hidden),VIIRS_NOAA21_CorrectedReflectance_TrueColor(hidden),VIIRS_NOAA20_CorrectedReflectance_TrueColor,VIIRS_SNPP_CorrectedReflectance_TrueColor(hidden),MODIS_Aqua_CorrectedReflectance_TrueColor(hidden),MODIS_Terra_CorrectedReflectance_TrueColor(hidden)&lg=true&t=2025-01-09-T20%3A30%3A00Z)

Question 14

Examine TEMPO Formaldehyde Level-3 data for 9 January 2025, either by stepping through each time of the day or using the animation loop feature to see the HCHO spatial and concentration changes. Which of these statements is most accurate?

Answers:

- a. Concentrations are basically constant throughout the day, with slight elevations in the morning (16:00-17:00 UTC) and afternoon (22:00-24:00 UTC) over downtown Los Angeles.
- b. The highest concentrations are visible in the first observations of the day (16:00-17:00 UTC), associated with the Eaton Fire, with the plume being dispersed to the Northwest as the day progresses.

- c. Concentrations are generally higher offshore throughout the day, with wind pushing these onshore to the Northeast and into Los Angeles from about 18:00 UTC to the end of the day's observations at 24:00 UTC.
- d. **A high-concentration plume begins to build starting about 17:00 UTC, moving to the Southwest over the course of the day, with peak concentrations between 19:00-21:00 UTC, beginning to disperse towards the end of the day.**

Feedback:

Use the animation loop feature to visualize changes throughout the day. A plume of formaldehyde is visible, forming during the day and moving to the Southwest, with the highest concentrations visible at about 20:00 UTC, and dispersing towards the end of the day. Here is a direct link to the solution in Worldview:

[https://worldview.earthdata.nasa.gov/?v=-121.58897948764941,32.21416866358917,-114.72116735589186,35.85029364223636&z=4&i=4&as=2025-01-09-T16%3A30%3A00Z&ae=2025-01-09-T23%3A30%3A00Z&l=Reference Labels 15m,Reference Features 15m,Coastlines 15m\(hidden\),TEMPO L3 Formaldehyde Vertical Column,TEMPO L2 Formaldehyde Vertical Column Granule\(hidden,count=9\),TEMPO L3 Ozone Column Amount\(hidden\),TEMPO L2 Ozone Column Amount Granule\(hidden,count=9\),TEMPO L3 NO2 Vertical Column Troposphere\(hidden,min=1500000000000000,squash=true\),TEMPO L2 NO2 Vertical Column Troposphere Granule\(hidden,count=9\),OCI PACE True Color\(hidden\),VIIRS NOAA21 CorrectedReflectance TrueColor\(hidden\),VIIRS NOAA20 CorrectedReflectance TrueColor,VIIRS SNPP CorrectedReflectance TrueColor\(hidden\),MODIS Aqua CorrectedReflectance TrueColor\(hidden\),MODIS Terra CorrectedReflectance TrueColor\(hidden\)&lg=true&al=true&av=1.5&ab=on](https://worldview.earthdata.nasa.gov/?v=-121.58897948764941,32.21416866358917,-114.72116735589186,35.85029364223636&z=4&i=4&as=2025-01-09-T16%3A30%3A00Z&ae=2025-01-09-T23%3A30%3A00Z&l=Reference%20Labels%2015m,Reference%20Features%2015m,Coastlines%2015m(hidden),TEMPO%20L3%20Formaldehyde%20Vertical%20Column,TEMPO%20L2%20Formaldehyde%20Vertical%20Column%20Granule(hidden,count=9),TEMPO%20L3%20Ozone%20Column%20Amount(hidden),TEMPO%20L2%20Ozone%20Column%20Amount%20Granule(hidden,count=9),TEMPO%20L3%20NO2%20Vertical%20Column%20Troposphere(hidden,min=1500000000000000,squash=true),TEMPO%20L2%20NO2%20Vertical%20Column%20Troposphere%20Granule(hidden,count=9),OCI%20PACE%20True%20Color(hidden),VIIRS%20NOAA21%20CorrectedReflectance%20TrueColor(hidden),VIIRS%20NOAA20%20CorrectedReflectance%20TrueColor,VIIRS%20SNPP%20CorrectedReflectance%20TrueColor(hidden),MODIS%20Aqua%20CorrectedReflectance%20TrueColor(hidden),MODIS%20Terra%20CorrectedReflectance%20TrueColor(hidden)&lg=true&al=true&av=1.5&ab=on)

Question 15

Examining TEMPO Level-3 Total Column Ozone data for 7-11 January 2025, which of these statements is most accurate?

Answers:

- a. Due to cloud cover, there are no TEMPO ozone data for this time period.
- b. **The wildfires do not appear to have had any noticeable impact on the total ozone column, with concentrations remaining at about 300 DU throughout.**
- c. Slight enhancements in total column ozone, to about 350 DU, are visible associated with the Eaton fire starting from 8 January and are visible through to 11 January.
- d. There is a strong diurnal cycle, with total column ozone varying between about 200 DU in the morning and evening to about 400 DU near mid-day.

Feedback:

Enhancements to tropospheric ozone will generally not be visible in the Total Column Ozone product, due to the elevated concentrations of ozone higher in the atmosphere. During this event, those concentrations dominated the total column, with a column concentration of about 300 Dobson Units throughout the days in question. Here is a direct link to the solution in Worldview:

[https://worldview.earthdata.nasa.gov/?v=-124.11412918851022,30.30727764987743,-112.36658182909926,36.52695133516556&z=4&i=4&l=Reference_Labels_15m,Reference_Features_15m,Coastlines_15m\(hidden\),TEMPO_L3_Formaldehyde_Vertical_Column\(hidden\),TEMPO_L2_Formaldehyde_Vertical_Column_Granule\(hidden,count=9\),TEMPO_L3_Ozone_Column_Amount,TEMPO_L2_Ozone_Column_Amount_Granule\(hidden,count=9\),TEMPO_L3_NO2_Vertical_Column_Troposphere\(hidden,min=1500000000000000,squash=true\),TEMPO_L2_NO2_Vertical_Column_Troposphere_Granule\(hidden,count=9\),OCI_PACE_True_Color\(hidden\),VIIRS_NOAA21_CorrectedReflectance_TrueColor\(hidden\),VIIRS_NOAA20_CorrectedReflectance_TrueColor,VIIRS_SNPP_CorrectedReflectance_TrueColor\(hidden\),MODIS_Aqua_CorrectedReflectance_TrueColor\(hidden\),MODIS_Terra_CorrectedReflectance_TrueColor\(hidden\)&lg=true&t=2025-01-07-T16%3A30%3A00Z](https://worldview.earthdata.nasa.gov/?v=-124.11412918851022,30.30727764987743,-112.36658182909926,36.52695133516556&z=4&i=4&l=Reference_Labels_15m,Reference_Features_15m,Coastlines_15m(hidden),TEMPO_L3_Formaldehyde_Vertical_Column(hidden),TEMPO_L2_Formaldehyde_Vertical_Column_Granule(hidden,count=9),TEMPO_L3_Ozone_Column_Amount,TEMPO_L2_Ozone_Column_Amount_Granule(hidden,count=9),TEMPO_L3_NO2_Vertical_Column_Troposphere(hidden,min=1500000000000000,squash=true),TEMPO_L2_NO2_Vertical_Column_Troposphere_Granule(hidden,count=9),OCI_PACE_True_Color(hidden),VIIRS_NOAA21_CorrectedReflectance_TrueColor(hidden),VIIRS_NOAA20_CorrectedReflectance_TrueColor,VIIRS_SNPP_CorrectedReflectance_TrueColor(hidden),MODIS_Aqua_CorrectedReflectance_TrueColor(hidden),MODIS_Terra_CorrectedReflectance_TrueColor(hidden)&lg=true&t=2025-01-07-T16%3A30%3A00Z)

Question 16

The [TEMPO Operations Log](#) notes that special 10-minute scans of the LA region were conducted on 16-19 January, associated with the fires. Using Worldview, navigate to the dates and time intervals below, and select the time periods during which these special 10-minute scans were being conducted, choosing all that apply (hint: look at the Level-2 tropospheric NO₂ product, change the time interval option to 10 minutes, and look through).

Answers:

- a. **January 17th, 18:00-19:00 UTC**
- b. **January 18th, 20:00-21:00 UTC**
- c. January 19th, 21:00-22:00 UTC

Feedback:

Correct answers are a and b. Scrolling through these time periods, the Level-2 tropospheric NO₂ product is being updated every 10 minutes over the LA region. For January 19th, 21:00-22:00 UTC, scan data are only available over LA at the beginning and end of the period; this is representative of a normal operational mode for TEMPO. The TEMPO Operations Log notes that for January 16th-19th, 10-minute scans were alternated with standard hourly scans. Here is a direct link to the first interval in Worldview:

[https://worldview.earthdata.nasa.gov/?v=-157.316680123187,11.30203224788778,-52.44636641502285,62.22148534915655&z=4&i=5&ics=true&ici=5&icd=10&l=Reference Labels 15m\(hidden\),Reference Features 15m\(hidden\),Coastlines 15m,TEMPO L3 Ozone UV Aerosol Index\(hidden\),TEMPO L2 Ozone UV Aerosol Index Granule\(hidden,count=2\),TEMPO L3 Ozone Cloud Fraction\(hidden\),TEMPO L3 Ozone Column Amount\(hidden\),TEMPO L2 Ozone Cloud Fraction Granule\(hidden,count=2\),TEMPO L2 Ozone Column Amount Granule\(hidden,count=2\),TEMPO L3 Cloud Cloud Pressure Total\(hidden\),TEMPO L2 Cloud Cloud Pressure Total Granule\(hidden,count=2\),TEMPO L3 Cloud Cloud Fraction Total\(hidden\),TEMPO L2 Cloud Cloud Fraction Total Granule\(hidden,count=2\),TEMPO L3 NO2 Vertical Column Troposphere\(hidden\),TEMPO L3 NO2 Vertical Column Stratosphere\(hidden\),TEMPO L2 NO2 Vertical Column Troposphere Granule\(count=2\),TEMPO L2 NO2 Vertical Column Stratosphere Granule\(hidden,count=2\),TEMPO L3 Formaldehyde Vertical Column\(hidden\),TEMPO L2 Formaldehyde Vertical Column Granule\(hidden,count=2\),OCI PACE True Color\(hidden\),VIIRS NOAA20 CorrectedReflectance TrueColor\(hidden\),VIIRS SNPP CorrectedReflectance TrueColor,MODIS Aqua CorrectedReflectance TrueColor\(hidden\),MODIS Terra CorrectedReflectance TrueColor\(hidden\)&lg=true&t=2025-01-16-T16%3A00%3A24Z](https://worldview.earthdata.nasa.gov/?v=-157.316680123187,11.30203224788778,-52.44636641502285,62.22148534915655&z=4&i=5&ics=true&ici=5&icd=10&l=Reference%20Labels%2015m(hidden),Reference%20Features%2015m(hidden),Coastlines%2015m,TEMPO%20L3%20Ozone%20UV%20Aerosol%20Index(hidden),TEMPO%20L2%20Ozone%20UV%20Aerosol%20Index%20Granule(hidden,count=2),TEMPO%20L3%20Ozone%20Cloud%20Fraction(hidden),TEMPO%20L3%20Ozone%20Column%20Amount(hidden),TEMPO%20L2%20Ozone%20Cloud%20Fraction%20Granule(hidden,count=2),TEMPO%20L2%20Ozone%20Column%20Amount%20Granule(hidden,count=2),TEMPO%20L3%20Cloud%20Cloud%20Pressure%20Total(hidden),TEMPO%20L2%20Cloud%20Cloud%20Pressure%20Total%20Granule(hidden,count=2),TEMPO%20L3%20Cloud%20Cloud%20Fraction%20Total(hidden),TEMPO%20L2%20Cloud%20Cloud%20Fraction%20Total%20Granule(hidden,count=2),TEMPO%20L3%20NO2%20Vertical%20Column%20Troposphere(hidden),TEMPO%20L3%20NO2%20Vertical%20Column%20Stratosphere(hidden),TEMPO%20L2%20NO2%20Vertical%20Column%20Troposphere%20Granule(count=2),TEMPO%20L2%20NO2%20Vertical%20Column%20Stratosphere%20Granule(hidden,count=2),TEMPO%20L3%20Formaldehyde%20Vertical%20Column(hidden),TEMPO%20L2%20Formaldehyde%20Vertical%20Column%20Granule(hidden,count=2),OCI%20PACE%20True%20Color(hidden),VIIRS%20NOAA20%20CorrectedReflectance%20TrueColor(hidden),VIIRS%20SNPP%20CorrectedReflectance%20TrueColor,MODIS%20Aqua%20CorrectedReflectance%20TrueColor(hidden),MODIS%20Terra%20CorrectedReflectance%20TrueColor(hidden)&lg=true&t=2025-01-16-T16%3A00%3A24Z)