

CASTNET Ozone and Trace-level Gas Monitoring Program Frequently Asked Questions

1. How does EPA use CASTNET ozone data?

Consistent with 40 CFR Part 58 App D Ch 1.1, ambient air quality monitoring data of NAAQS pollutants that are reported by FRM, FEM, or ARM monitors are used for comparison against the respective NAAQS. In addition to comparison of air quality measurements against the NAAQS, EPA uses CASTNET ozone data for assessment of emission reduction programs, spatial and temporal trends, review and evaluation of the ozone NAAQS, and impacts from stratospheric ozone intrusions, wildfires, and ozone transport events.

2. Why did CASTNET become a regulatory monitoring network?

CASTNET was not originally designed to be a regulatory monitoring network; however, many stakeholders, including CASAC and NACAA, requested that ozone data measured by CASTNET be of comparable data quality as that collected by SLAMS. In 2010, the Clean Air Markets Division began upgrading the QA/QC protocols, evaluation criteria, audit schedules, and equipment to ensure EPA-sponsored CASTNET ozone monitors are compliant with the regulatory requirements in 40 CFR Parts 50, 53 and 58. CASTNET ozone data are reported to AQS and are used to support NAAQS decisions.

3. Can a State, Local, or Tribal (S/L/T) air agency use CASTNET ozone or trace-level gas monitoring data to meet the minimum monitoring requirements for their area (Table D-2 of Appendix D to Part 58)?

Yes, because CASTNET ozone and trace-level gas analyzers meet the regulatory requirements for comparison against the NAAQS, these data may be used in place of a SLAMS monitor. Air agencies interested in using CASTNET ozone or trace-level gas analyzers to meet their agency's minimum monitoring requirements should contact Timothy Sharac (sharac.timothy@epa.gov) so that any proposed changes to these analyzers are communicated to the respective air agency. Proposed changes to any CASTNET ozone and trace-level gas monitoring sites are included in the annual network plan that is posted on the CASTNET website

<https://www.epa.gov/castnet/documents-reports>

4. Where can I access the CASTNET ozone and trace-level gas monitoring data?

Final hourly ozone and trace-level gas monitoring data may be accessed through AQS, the CASTNET data download page, or the CASTNET ftp site. Final data will have a QA code of 3. QA codes are defined in the CASTNET QAPP posted under Documents on the CASTNET website.

Near-real time ozone data may be accessed through EPA's AirNow tech page using 'OAP', 'NPS' or 'BLW' as the agency ID for EPA, NPS and BLM sites, respectively. "Level 1" data are posted to the CASTNET Data Download page and the ftp site approximately 24 hours after collection. Level 1 data are preliminary and are subject to change after data review.

CASTNET webpage: <https://epa.gov/castnet>

CASTNET FTP: https://gaftp.epa.gov/Castnet/CASTNET_Outgoing/data/

AirNow Tech: <https://airnowtech.org/>

5. Can air agency staff be contacted when a CASTNET ozone analyzer exceeds the NAAQS (8-hour daily maximum)?

You may choose to sign up to receive an automatic email when an ozone analyzer measures a daily maximum 8-hour average at or above the current ozone NAAQS. Activating and deactivating auto email communications is easy. Please send an email with the sites you wish to receive updates for to Timothy Sharac (sharac.timothy@epa.gov)

6. Where can I find CASTNET Quality Assurance/Quality Control documentation and results?

The approved network Quality Assurance Project Plan, QA Quarterly Reports, and Independent Audit results can be found on the “Documents” page:
(<https://www.epa.gov/castnet/documents-reports>)

7. Can a State, Local agency, or Tribe (S/L/T) conduct a Performance Evaluation and/or Technical Systems Audit at a CASTNET site?

You may contact Timothy Sharac to schedule an audit at any of the CASTNET sites within your state/local area/tribal land. Please contact Timothy prior to performing any audit so data may be flagged appropriately and access to the site can be provided. For more details on performing third-party audits on CASTNET ozone or trace-gas analyzers, review the CASTNET third party audit guidance document https://www.epa.gov/sites/default/files/2015-07/documents/third_party_audits.pdf

8. Who operates the CASTNET sites?

Site operators include independent landowners, park rangers, university students, environmental professionals, academic faculty, and many others. Day-to-day operation of CASTNET field and data operations are managed by a contractor. The contractor reviews the hourly ozone data and QC checks daily. They may troubleshoot problems remotely or contact the site operator to make adjustments if a problem is identified.

9. How should a S/L/T agency handle a possible exceptional event recorded at a CASTNET site?

As stated in 40 CFR 50.14, it is the responsibility of the S/L/T monitoring agency to identify exceptional events. CAMD will rely on the monitoring agencies within the state to identify and report exceptional events. If you wish to denote data as likely being impacted by an exceptional event upon further review, please email Timothy Sharac with the site ID, date range, type of possible exceptional event, and a comment describing the exceptional event. CAMD will then ensure the data are properly flagged in AQS. If a S/L/T agency determines that an exceptional event occurred, they should submit the exceptional event report to the region for concurrence.

10. Who submits Exceptional Event Demonstrations for CASTNET data on Tribal Land?

As noted in the preamble to the 2016 Exception Events Rule (81 FR 68216, 10/3/2016), ‘as the single actor responsible for administering air quality planning and management activities within its jurisdictional boundaries, the state, exclusive of tribal lands, is ultimately responsible for submitting exceptional event demonstrations for exceedances that occur at all regulatory monitoring sites within the boundary of the state.’ If a NAAQS exceedance occurs at an CASTNET tribal monitoring site, there are two options:

- a. The tribal partner may submit an exceptional event demonstration. The Region and EPA’s CASTNET team may assist the tribe in drafting the package, but ultimately the tribe will submit the package to the EPA Region.

- b. The state agency may submit an exceptional event demonstration, with an addendum from the tribe concurring that they support the assessment provided by the state.

An example of this collaboration can be found here: [Public Notice of Exceptional Events - Uinta Basin of Utah | Air Quality Analysis | US EPA](#) EPA's CASTNET team will work with the tribe, the region and the state to assist with preparing an exceptional event demonstration if requested.