

List of flags used in NAMN database

All flags are grouped in two categories: V (Valid measurement) or I (Invalid measurement).

Flag V/I Description

Group 1: Exception flags for accepted, irregular data

100	V	Failed QA/QC threshold (denuder capture < 75%); value is reported and is considered valid
101	V	Failed QA/QC threshold (Flow rate < 0.22 L min ⁻¹ for piston pump or < 0.15 L min ⁻¹ for 12 volt pumps); value is reported and is considered valid
102	V	Failed QA/QC thresholds (denuder capture < 75%, and Flow rate < 0.22 L min ⁻¹ for piston pump or < 0.15 L min ⁻¹ for 12 volt pumps); value is reported and is considered valid
110	V	Failed QA/QC threshold (CV of replicate diffusion tubes > 30 %); value is reported and is considered valid
111	V	Failed QA/QC threshold (CV of replicate ALPHA samplers > 15 %); value is reported and is considered valid
120	V	Below theoretical detection limit, but a value has been measured and reported and is considered valid

Group 2: Sampling problem

200	I	Equipment malfunction
201	I	Too small air volume: Silicone tubing kinked
202	I	Too small air volume: Air pump malfunction
203	I	Too small air volume: Air leak in system
204	I	Air leak between sample and gas meter
205	I	Power off for short periods of time
210	V	Sampling period longer than normal
211	V	Sampling period shorter than normal
220	V	Only one value reported from replicate passive samplers; others damaged

Group 3: Chemical problem

300	I	Contamination due to ingress of rain water
301	I	Contamination (unspecified) suspected

Group 4: Inconsistent values

400	I	Outlier (low value), outside four times standard deviation in a lognormal distribution).
401	I	Outlier (high value), outside four times standard deviation in a lognormal distribution).

Group 5: Missing flags

500	I	Measurement missing: Power off
501	I	Measurement missing: Air pump not working
502	I	Measurement missing: Samples stolen / damaged
503	I	Measurement missing: Non-return
504	I	Measurement missing: Lost in post
505	I	Measurement missing: Sample lost during extraction
510	I	Measurement missing: No access to sites due to FMD outbreak
511	I	Measurement missing: No access due to unspecified problems
520	I	Aerosol sampling stopped
530	I	Site moved
540	I	Site closed permanently
550	I	Sampling stopped temporarily