GHOST Data Flag Definitions

Table of Contents

[Preface 1](#_Toc535321132)

[Definition Syntax 1](#_Toc535321133)

[DATA FLAG DEFINITIONS 1](#_Toc535321134)

# Preface

Indicate the data quality of a specific measurement, provided by the data reporter.

These flags refer specifically to information/or lack of information provided by the data provider and not to post-processing/quality control of observations (given separately by the ‘qa’ flags).

# Definition Syntax

# DATA FLAG DEFINITIONS

#A = Unspecified Aggregation/Representation issue

#A1 = Data completeness less than 90%

#A2 = Data completeness less than 75%

#A3 = Data completeness less than 66%

#A4 = Data completeness less than 50%

#A5 = Data completeness less than 25%

#A6 = More than 75% of the measurements are below detection limit

#A7 = More than 50% of the measurements are below detection limit

#C = Unspecified Chemical issue

#D = Unspecified data formatting/processing issue

#D1 = Unspecified corrected data formatting/processing issue

#E = Estimated data - unspecified reason

#E1 - Below detection limit

#E2 - Above detection limit

#E3 - Value substituted from secondary monitor

#L = Unspecified Local Contamination

#L1 = Agricultural Contamination

#L2 = Bird-dropping Contamination

#L3 = Construction Contamination

#L4 = Dust Contamination

#L5 = Fire/Wood Burning Contamination

#L6 = Industrial Contamination

#L7 = Internal laboratory/instrument Contamination

#L8 = Insect Contamination

#L9 = Pollen/leaf Contamination

#L10 = Sea-salt Contamination

#L11 = Traffic Contamination

#I = Unspecified Measurement issue

#I1 = Bad operation procedures

#I2 = Calibration/Precision Issues

#I3 = Below Detection Limit

#I4 = Invalid Flow Rate

#I5 = Extreme Internal meteorological conditions

#I6 = Physical Issue with filter

#I7 = Mechanical issue/non-operational equipment

#I8 = Power Fail

#I9 = Low Data Capture

#I10 = Erroneous sampling

#I11 = No Technician

#I12 = Unmeasured key meteorological parameter

#I13 = Sample diluted for analysis

#I14 = External meteorological conditions significantly impact upon instrumental operation

#I15 = Matrix effect

#J = Un-specified operational checks

#J1 = Calibration/blank check

#J2 = Precision check

#J3 = Zero-span check

#M = Missing data - No stated reason why

#N = Un-flagged data

#P = Preliminary data

#U = Unspecified issue

#V = Valid data

#W = Unspecified Exceptional Event

#W1 = Asian Dust Event

#W2 = Station inside cloud

#W3 = Demolition

#W4 = Seismic activity

#W5 = Fireworks

#W6 = Hurricane

#W7 = Chemical Spill/Industrial Accident

#W8 = Infrequent Large Gathering

#W9 = Stratospheric Ozone Intrusion

#W10 = Heavy rain/snowfall shower (squall)

#W11 = Sahara Dust Event

#W12 = Terrorist Act

#W13 = Cleanup After a Major Disaster

#W14 = Volcanic Eruptions

#W15 = High Winds

#W16 = Wildfire

#X = Unspecified extreme/inconsistent/irregular/suspect data

#X1 = Irregular data manually screened and accepted

#X2 = Irregular data manually screened and rejected

#X3 = Close to detection limit

#X4 = Extremely high value

#X5 = Extremely low value

#X6 = Negative values

#X7 = Inconsistent with other measurements

#X8 = Data does not meet quality control criteria

#X9 = Reconstructed/recalculated/reanalysed data

#X10 = High variability