

Customer-led collocations guide

To support EarthSense® in the development of our products, we understand the importance of completing co-location studies at multiple locations across the Globe.

To support us with a co-location trial, the following good practice guidance has been produced:

Locations should not be remote or rural

Zephyr® sensors are intended for urban environments, therefore evaluations should take place where local emission sources are present

Data Frequency

Zephyr® sensors are indicative monitors, and as such should be evaluated on 24-hour, one-week or one-month mean

Duration of Evaluation

An evaluation period should be for a minimum of one month – this ensures a variation of conditions are experienced

Data Quality of Reference

The reference instrument must have a traceable and recent calibration. NB EarthSense® may request information on the QAQC

USEPA Approved Reference Site

To support EarthSense demonstrate compliance against the United States Environment Protection Agency (USEPA) Standards, conducting a co-location trial at a USEPA approved reference station is ideal

Deployment Height

The Zephyr® sensor(s) must be mounted at (or close to) the vertical height of the sample inlet of the comparator (reference site)

Deployment Positioning

The Zephyr® sensor(s) must not be shielded by any local obstructions (i.e. mounting on a wall, where the inlets are above) – this will introduce a wind-direction dependent error to the results

Deployment Distance to Reference Site

The Zephyr® sensor(s) must be mounted in close horizontal proximity to the sample inlet of the comparator (reference site), but not so close as to obstruct either instrument's access to good airflow

Note divergence from aforementioned points on proximity to the comparator are likely to introduce further uncertainty, and will differ in severity for each pollutant

Following the completion of a co-location trial, please provide the below listed information to EarthSense®, to support the commentary on results.

- Dates
- Site photos
- Reference instrumentation used
- Reference instrument monitored data
- Date of last calibration and methods

If you or your client require any additional information regarding a co-location trial, please email our Support Team at support@earthsense.co.uk