

Journal: Atmospheric Measurement Techniques

Title: SMEARcore – Modular data infrastructure for atmospheric measurement stations

Abstract: It is adequate; nevertheless, the authors should highlight why the differences with other infrastructures are important within the conceptual frame and not just mention them.

1. Introduction: The authors follow a common thread that is easy to follow. They correctly pose the conceptual problem within data processing in air quality networks and provide an overview to potential readers on reasonably similar current structures.

Comment on the phrase: ‘To effectively operate and expand a network of atmospheric stations, the observations need to be harmonized and supported by coherent data and document management’. The observations or measurements recorded by air quality networks should be tested or validated but not harmonized. The measurement techniques used for monitoring air quality status should be harmonized to offer traceability of monitored air pollutants data.

Figure 1 is explained in section 3, making it challenging to understand at first glance. The authors should provide information concerning Figure 1 in section 2.1.1.

Figure 3. The legend should be finished.

It would be of interest whether the authors could establish a cost-benefit relation between the centralized solutions such as ICOS or ACTRIS stations and the new conceptual framework.

The English editing should be notably improved.