

Interactive comment on “CITYZER Observation Network and Data Delivery System” by Walter Schmidt et al.

Anonymous Referee #2

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1 Discussion

This paper introduce a technical presentation of the CITYZER Observation Network and Data Delivery System. CITYZER is a project funded by multiple governmental and private organizations.

It aims to provide refined and raw weather data to end user (as corporation or population) in order to enhance weather hazard policies.

The overall quality of the paper is good and the high level process description is done. As for all technical studies it's a bit frustrating to have only high level details (focused on the core system and not on the sensor side or the data), but in this case the whole

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mechanism can be apprehended well. Most of all, various implementation are presented, which can show the claimed modularity of the system and its uses day by day which is clearly an interesting point.

One of the greatest achievement of the paper is the end-to-end system of notification and polling which show the usefulness of the web service paradigm in such scientific fields, especially the OGC WS*. The use of generic container as HDF and NetCDF for the data storage is also a good message.

Another contribution could be a scientific point of view au the usefulness of such system in addition to the commercial and governmental point of view. But maybe this is dedicated to another publication as the text mention it.

This paper is then accepted with **minor revision which could improve the overall paper**. Congrats to the authors.

2 Revisions

Introduction:

The aim of the paper is well introduced but the state of the art could be enhanced with a little bit more papers about sensors systems (such as systems used in researches in kriging methods for land survey, or maximum entropy for sensor positioning, OGC based systems,, SmartCity sensing systems or even SENTINEL hazard monitoring commercial and public systems for example)

Section 1.2CITYZER ecosystem:

Fig1 : The figure 1 appears pixelated and it can be hard to link the text description and the figure elements. This comment can be done for all figures. It's not easy to link description and figures elements (mismatch in naming etc) and they are often blurred.

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Section 2

Which database are used ? PostGIS ? Does the interfaces (even if WFS is used) are in some-ways affected by any Vaisala data format ?

Section 2,5 Data flow

Authors have shown a great use of WFS web service. A mention of point to point sensors using SOS et auto declaration of sensors thanks to SPS (used or not) could be an upgrade.

Around the line 162 authors mention the synchronization of the system, it can be interesting to know what time base use the system. For example, is the platform use an unified time base acquired through GPS system? Or all the modules and sensors have their own time base? What about the models time base ?

Time monitoring in such application is a useful information to some future end users.

On the figure 5 the polling sequence appears to flow counter clockwise. Is it inverted ? If not can the frequency of isAviableData() and RequestData() functions be precised ?

Conclusions:

Even if the paper is accepted with minor revision a decent conclusion (achievement, main goal, difficulties, usages and scientific/technical contributions to the state of the art etc...) have to be included.

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