Earth Syst. Sci. Data Discuss.,
doi:10.5194/essd-2016-29-AC2, 2016

Open Access Earth System Science Data Discussions

Interactive comment on "Hydrochemical assessment of Semarang area using multivariate statistics: A sample based dataset" *by* Dasapta Erwin Irawan and Thomas Triadi Putranto

Dasapta Erwin Irawan and Thomas Triadi Putranto

erwin@fitb.itb.ac.id

Received and published: 5 October 2016

1. The aim of this MS is to understand the water quality classification and distribution in Semarang area and to explain the underlying processes. However, the MS does not provide the sufficient information about study area? In section 3, authors mentioned that the sampling points were distributed from the southern volcanic highland to the coastal area. It is better to provide the elevation in the Figure 1. Did all the wells locate in volcanic area? Or in other words, does coastal area have any volcano?

–> Author's response: Thank you for the comment. We will add the elevation information in Figure 1. Yes all the wells are located at the floodplain of a volcanic system which is located at the southern part of the area.

2. Since the data covered from 1992 to 2007, during this period the hydrological conditions may alter. I'd like to suggest the authors analyzing the data of wells sampled in 1992 and 1993, and analyzing the data of wells sampled in 2003, 2006, and 2007. And then compared these two results based on the methods of HCA and PCA.

–> Author's response: Thank you, this is a very nice suggestion to look at the data. We will work on the analysis. However, we will need the editor's advice on this matter. Whether the PCA and HCA are in the scope of "data paper".

3. In the Conclusions section, authors mentioned this study want to integrate geological, hydrogeological data, and statistical analysis to construct a hydrogeological model of the aquifer system in Semarang. I wonder do results of HCA well explain the underlying processes? If it does not, authors should divide these wells according their geological characteristics and then do HCA and PCA

–> Author's response: Thank you we will try to classify the samples based on their geological setting. However, as we have responded in the 2nd question, if the PCA and HCA are both in the scope of this journal.

Interactive comment on Earth Syst. Sci. Data Discuss., doi:10.5194/essd-2016-29, 2016.