Interactive comment on "Assessment of seawater intrusion using multivariate statistical, hydrochemical and geophysical techniques in coastal aquifer, Cha-am district, Thailand" *by* Jiraporn Sae-Ju et al.

A. Dell'Oca (Referee)

dellocaaronne@gmail.com

Received and published: 5 July 2018

In the present work some interesting methodologies (based on geophysical and geo-chemical analysis) are applied in order to investigate the occurrence of Seawater intrusion. I personally find of interest the use and combination of diverse methodologies in order to analyze groundwater dynamics, but it is my understanding that in the current paper the level of novelty (both in terms of the development of the methodologies and/or combination of current ones in an innovative fashion) is poor. Moreover, the explanation of the concepts and principles at the base of the adopted methodologies

(here I refer to the geo-physical, geo-chemistry and statistical analysis) is insufficient, e.g., I struggled in understand the Principal Component Analysis and its benefits as presented even though I already had it in my background. Furthermore, the quality of the English is poor in several sentences, which makes hard to follow the work. The quality of the figure is very low, both in terms of graphics and completeness (e. g., what is along the axes in Fig. 5b? Where is the legend?) On top of these considerations, jointly with an unsatisfactory presentation of the ideas in the work I would recommend the work to be rejected for HESS and rearranged for another journal.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2018-137, 2018.