

Pr. Mauro Giudici

Editor HESS

Avignon, Ouargla, November 28th 2016

Dear Professor Giudici,

The authors are very thankful and grateful for this valuable remarks.

The following modifications have been made:

1- The word "Captive" in line 16, signified confined.

2- The whole paragraph has been rephrase.

- Lines 19 to 27 : This system covers...

- This system covers a surface of more than one million km² (700,000 km² in Algeria, 80,000 km² in Tunisia and 250,000 km² in Libya). Due to the climatic conditions of Sahara, these formations are poorly renewed: about 1 billion m³/year essentially infiltrated in the Piedmont of the Saharan Atlas in Algeria, as well as in the Dahar and Djebel Nafusa in Tunisia and Libya respectively. However, the very large extension of the system as well as the great thickness of the aquifer layers has favored the accumulation of huge water reserves. Ouargla basin is located in the middle of the NWSAS and thus benefits from groundwater resources (Fig. 1) which are contained in the following three main reservoirs (UNESCO, 1972; Eckstein and Eckstein, 2003; OSS, 2003, 2008).

3- It has been rephrased.

- Lines 407 to 408 : From the three aquifers...

- Two of the aquifers studeied in this work, Complexe Terminal and Continental Intercalaire,...

4- It has been rephrased.

- Lines 409 to 410 : The last one...

- The last one, Phreatic aquifer, is a shallow aquifer. The chemical facies of these aquifers have long been qualitatively described.

5- The measurements units has been added on the axes in figures 3 and 5.

With our best regards,

Pr. Guilhem Bourri and Dr Rabia Slimani.