

## The EAO2 in Essouabaa, Tebessa, Algeria: An Example of Facies to Organic Matter

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**Abstract :** The solid mass of Essouabaa belongs paléogéography to the field téthysian and belonged to the area of the Mounts of Mellègue. This area was not saved by the oceanic-2 event anoxic (EAO-2) which was announced, over one short period, around the limit cénomanian-turonian. In the solid mass of Essouabba, the dominant sediments, pertaining to this period, are generally fine, dark, laminated and sometimes rolled deposits. They contain a rather rich planktonic microfaune, pyrite, and grains of phosphate, thus translating an environment rather deep and reducing rather deep and reducing. For targeting well the passage Cénomanian-Turonian (C-T) in the solid mass of Essouabaa, of the studies lithological and biostratigraphic were combined with the data of the isotopic analyses carbon and oxygen like with the contents of CaCO<sub>3</sub>. The got results indicate that this passage is marked by a biological event translated by the appearance of the "filaments" like by a positive excursion of the  $\delta^{13}C$  and  $\delta^{18}O$ . The cénomanian-turonian passage in the solid mass of Essouabaa represents a good example where during the oceanic event anoxic a facies with organic matter with contents of COT which can reach 1.36%. C E massive presents biostratigraphic and isotopic similarities with those obtained as well in the areas bordering (ex: Tunisia and Morocco) that throughout the world.

**Keywords :** limit cénomanian-turonian (C-T), COT, filaments, event anoxic 2 (EAO-2), stable isotopes, mounts of Mellègue, Algeria

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