

1 **MANUSCRIPT NUMBER: Biogeosciences Discussions 11, 13343-13387, 2014**

2 **TITLE OF THE REVISED VERSION: Records of past mid-depth ventilation:**
3 **Cretaceous Ocean Anoxic Event 2 vs. Quaternary Oxygen Minimum Zones**

4 **- Explanation of revisions -**

5 Associate Editor (Christophe Rabouille), 29 Jan 2015

6 To me, the interesting heart of your paper is the comparison between present day processes
7 and the Cretaceous OAE-2. In fact, you refer to this question in both your abstract "Particular
8 emphasis is put on the comparison of Holocene OMZ sediments from the upwelling area off
9 Peru with deposits of Cretaceous Oceanic Anoxic Event 2 from the Moroccan shelf" and at
10 the end of your introduction "Sedimentary features similar to those found in Cretaceous strata
11 were observed in deposits underlying Recent OMZs, where bottom-water oxygen levels, the
12 flux of organic matter, and benthic life are well studied. Their implications for constraining
13 past bottom-water oxygenation are addressed in this review." Therefore, I would advise you
14 that you change your title to "Records of past mid-depth ventilation: Cretaceous Ocean
15 Anoxic Event 2 vs RECENT oxygen minimum zones" instead of Quaternary which is correct
16 basically, but far from your main objective. This objective is to start with actual sediment
17 features of the OMZ and extrapolate to OAE. Please take this comment in consideration, and
18 revise your paper accordingly,.

19 **reply: - done -**