

***Interactive comment on “Historical records of eutrophication in Changjiang (Yangtze) River estuary and its adjacent East China Sea” by F. Cheng et al.***

**Anonymous Referee #1**

Received and published: 26 June 2012

This paper contains some interesting data indicating changes in the eutrophication status of the Changjiang River estuary. As this is one of the world's most waterways, draining an area of immense recent change, any results that provide evidence of the wider impacts of intense human activities on the environment are important. Given this situation and the utility of the data presented, this paper is recommended for publication, after the authors have made some minor revisions as outlined below. The approach of using diatom frustules is now receiving wide attention and the work included in this paper shows good application of the technique. The ms is generally well presented and the figures and tables are appropriate.

C2106

Suggested revisions

Page 6262

Line 7 "of nutrient status and trends in the Changjiang River"

Line 9 replace "now" with "2010"

Page 6263 Line 3

either state that the input values for nutrients are averages or give the specific year for the data listed here

Line 16 replace "discontinuity" with "discontinuous"

Line 18 " and are unable to"

Page 6265

Line 23 ". grounds in the world. Is located"

Line 25 "Suzhou and this has caused serious"

Page 6266

Line 16 "(CIC) models were adopted"

Page 6267

Line 12 replace "added" with "mixed"

Line 9 insert "and" after (1986)

Lines 25-26 need rewording ■ something like ".combined diatom species listing to help group similar samples".

Page 6268

Line 8 "A is the area"

C2107

Line 13 "equation"

Lines 20-21 The core was composed of clayey and silty black sediment and showed no evidence of

Page 6269

Line 5, delete "from"

Line 10 insert "to" after upward

Line 11 "showed similar trends with the most marked increase beginning from"

Line 17 .. Only occasionally, hence .

Line 18 insert "enough" after common

Line 21 "an increasing trend"

Line 26 "from 15 cm to the surface"

Pge 6270

Line 20 "deposited diatom frustules living in the water"

Page 6272

Line 20 "showed relatively low"

Page 6273

Lines 11-12 "showed relatively low nutrient levels in the Taizhou".

Page 6274

Line 13 "increased regularly since the mid-1970s corresponding to the period of "

Line 22 "indicating minimal disturbance"

Page 6275

C2108

Line 22 "existing" in place of existed

Lines 23-24 only for a very brief period of time, and we were able to examine them a short time after the blooms had occurred

---

Interactive comment on Biogeosciences Discuss., 9, 6261, 2012.

C2109