

## ***Interactive comment on “Extracting low frequency climate signal from GRACE data” by O. de Viron et al.***

**T. Van Dam (Editor)**

tonie.vandam@uni.lu

Received and published: 3 August 2006

below is a review solicited by the editor as the first two reviews were somewhat conflicting...

Comments on “Extracting low frequency climate signal from GRACE data” by O. de Viron et al.

This is a preliminary study of interannual variability in GRACE time variable gravity data and model estimated land water storage changes using EOF analysis. The results appear still interesting, although they are largely limited by the use of only a few years of GRACE data. However, my main concern is that this paper appears to be hastily finished. The authors may need some serious effort to improve the overall presentation

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

of the analyses and results (on top of the language and grammar issues), in order to get the paper published.

1) Does CNES really provide 86 monthly solutions (Section 2) or 86 10-day solutions (Section 1)? Please clarify. 2) CSR has released a time series much longer than the original 22 solutions. The authors may consider to update the analysis using more GRACE solutions during the revision. 3) It's not clear (at least to me) that how the authors did the EOF decomposition on GRACE data. Was the EOF decomposition performed in gravity (geoid height) domain or surface mass change domain? 4) Is ENSO really the largest global climate mode (Section 7)? I would guess that the seasonal cycle is the first and largest climate mode. 5) The caption of Figure 5 fails to provide enough information. 6) Applying a 4-month window on a time series of 2.3 years may have significant ending effect on the analysis. Could the authors give some discussions on this issue?

---

Interactive comment on eEarth Discuss., 1, 21, 2006.

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper