Hydrol. Earth Syst. Sci. Discuss., 8, C3–C4, 2011 www.hydrol-earth-syst-sci-discuss.net/8/C3/2011/ © Author(s) 2011. This work is distributed under the Creative Commons Attribute 3.0 License.



HESSD

8, C3-C4, 2011

Interactive Comment

Interactive comment on "Regional scale analysis of landform configuration with base-level maps" by C. H. Grohmann et al.

I. Florinsky

iflor@mail.ru

Received and published: 11 January 2011

1. Abstract and Page 91 "Base-level maps are usually applied in semi-detail scale (e.g., 1:50 000 or larger) morphotectonic analysis"

This is not correct. Filosofov (1960, p. 10) recommended to use 1:100 000 topographic maps with 20-m contours for platform terrains (plains). 1:50 000 and less were recommended for "poor"-manifested topography or poor topographic maps.

Also, he recommended to use 1:1 000 000 topographic maps (Filosofov, 1960, p. 86) to reveal a general tectonic composition of large territories. I do not have his later publications (and publications of his collaborators), but the Filosofov method has been applied to small scales in 1950s-1980s in the USSR. There is a need to search Soviet

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper



(petloleum) geological journals and books of those years.

2. Page 98: "The base-level map also presented a good correlation with anomalies in geophysical data, which shows that the method is sensitive enough to detect features with little topographic expression."

Again, since the Filosofov method has been used by petroleum geologists for about 30 years, such correlations has been observed and reported. Moreover, in mid-1980s Filosofov began to write a book "Theoretical Principes of Morphometry" presenting his theory of relationships between hypsometric and gravitational fields (http://www.sgu.ru/node/56524).

This book was not completed and published, but there is a paper:

Filosofov, V.P., 1988. Unity of hypsometric and gravitational fields. In: Logachev, N.A., Timofeev, D.A., and Ufimtsev, G.F. (Eds.), Problems of Theoretical Geomorphology. Nauka, Moscow, pp. 82-90 (in Russian).

Sorry, I do not have this paper. The book in the Library of Congress: http://lccn.loc.gov/89121587

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 8, 89, 2011.

HESSD

8, C3-C4, 2011

Interactive Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

