Interactive comment on “Runoff properties of extreme discharges on Paraná and Uruguay rivers” by W. Vargas et al.

Anonymous Referee #2

Received and published: 6 October 2010

The paper claims to study the runoff properties of the Parana and Uruguay river. The paper does not provide in depth interpretation and is rather descriptive. It reads like a report of these rivers rather than a scientific paper. It is difficult to see any novel scientific contribution.

Language: There are many grammatical errors, which make it very difficult to understand many parts of this paper.

The structure of the paper is confusing and mixes descriptions of the methodology with results. This is extremely hard to follow and makes it nearly impossible to read.

The introduction presents a summary of studies, but fails to make links or interpre-
The aim of the paper is not clearly laid out and cannot be understood. The Vargas and Bischoff (2000) reference in the introduction (incl. sentence) seems to have no link to the rest of the paragraph.

Figure 1: cannot be read/understood in a b&w printout

Page 2952: The explanation of how anomalies are calculated is very difficult to understand

Page 2953: Please provide an explanation and interpretation for the distribution of anomalies

Page 2953: Please explain, why the years 1970-1971 and 1980-1981 have been chosen for figure 3. Only a one sentence explanation is given, please elaborate on the reasons

Page 2953: Please explain/show how monthly precipitation anomalies link to discharge anomalies. Differences between rivers are expected, but a more detailed explanation of why they are as they are and more details on why it matters/impacts need to be added to the paper.

Page 2954: Please define 'extreme' anomalies

Section 3.1. and 3.2 again very descriptive with too little interpretation.

Section 4: It is unclear how the concept of entropy was applied.

Section 4.2 is nicely written and interesting

Section 5: The purpose of this section is unclear. Why has this precipitation station been chosen, what is its purpose and how is it representative?

Figure 6 is very small to read.

The use of the word model is unclear.

The conclusion states that different rivers behave different and offers little explanation.
It is rather unexciting and not very novel. I fail to see the wider scientific value of this study.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 7, 2949, 2010.