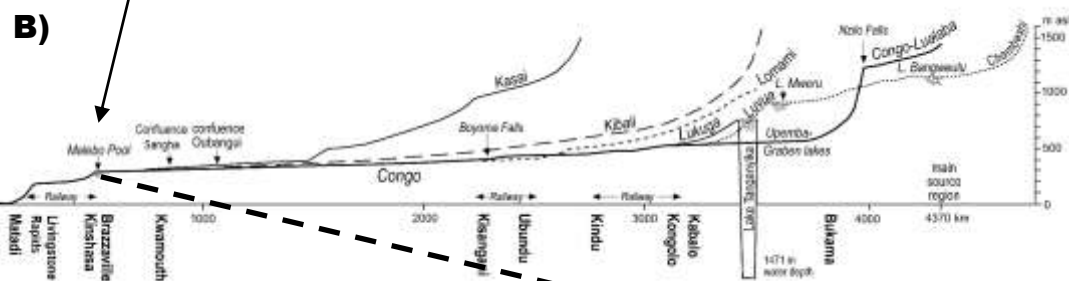
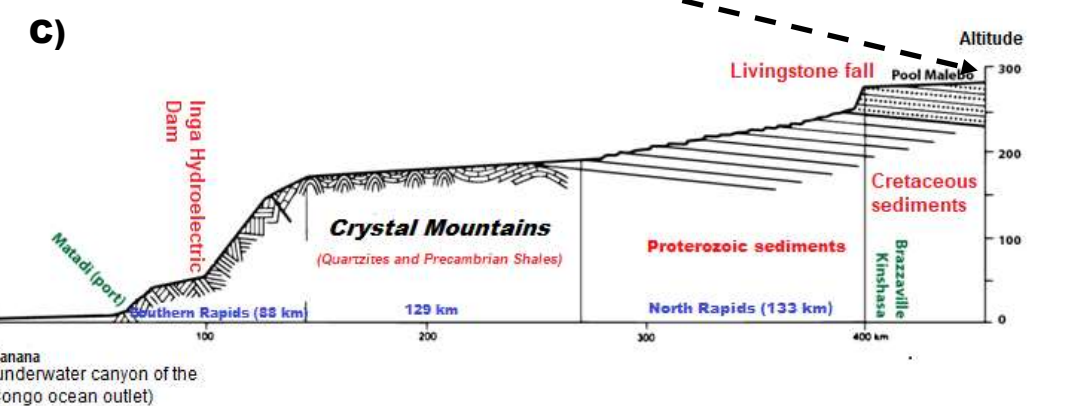


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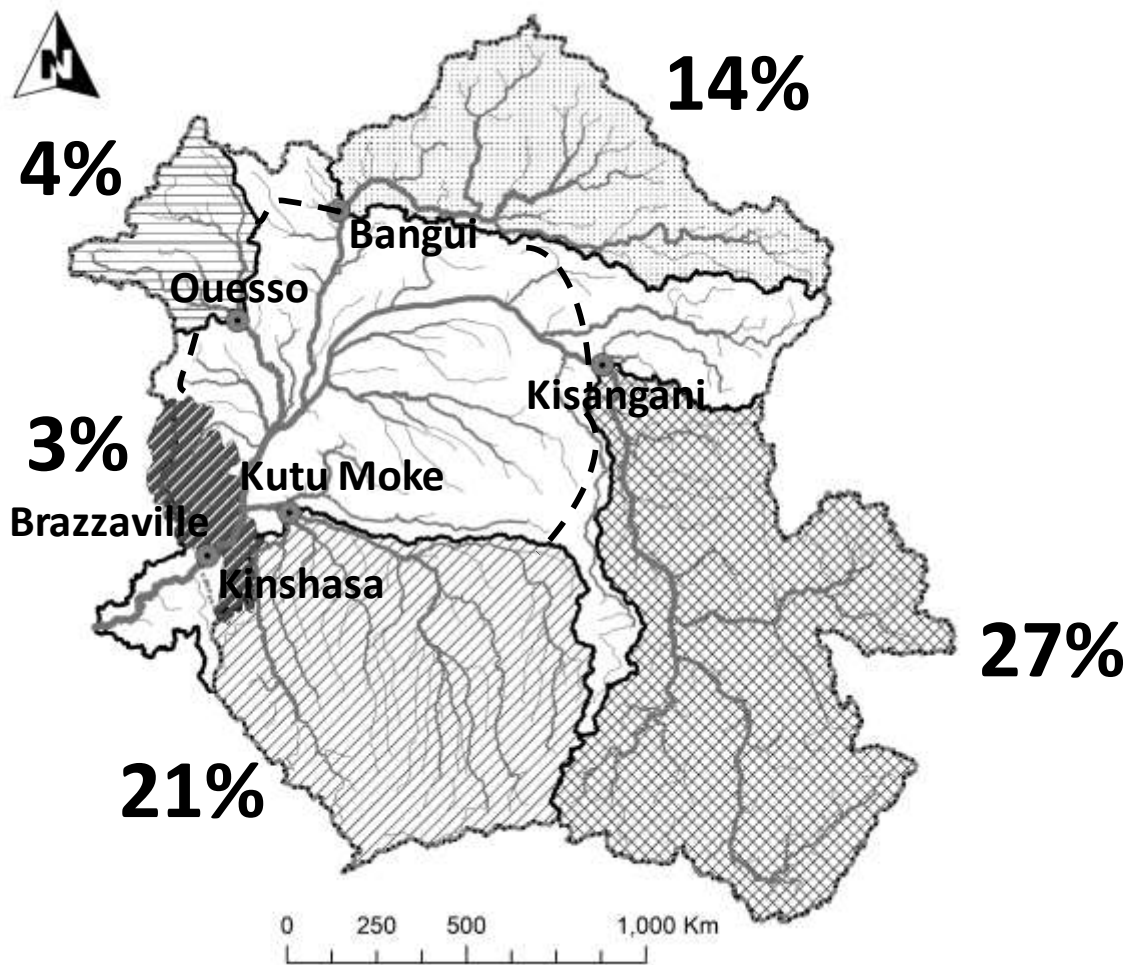


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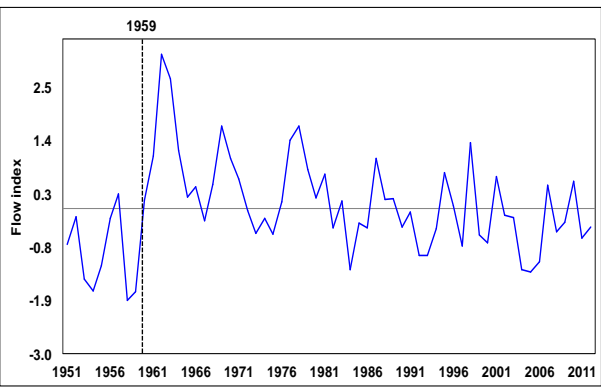
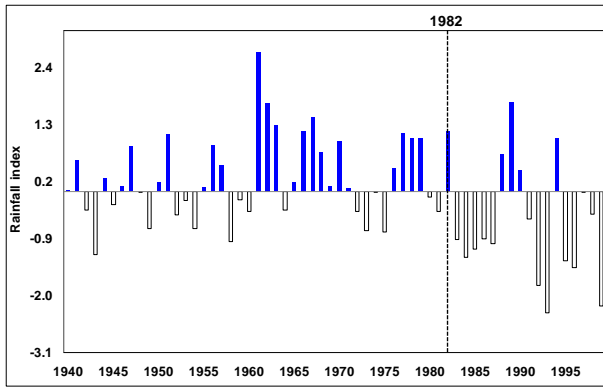


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4 Figure 1: Congo Basin; A) Situation of the Congo Basin and the five main hydrological stations
 5 studied; B) Profiles along the Congo River and its main tributaries [1A) and 1B) adapted from Runge,
 6 2007]; C) Zoom of the profile along the Congo River from the Malebo Pool to its ocean mouth at
 7 Banana level [adapted from Robert, 1946].



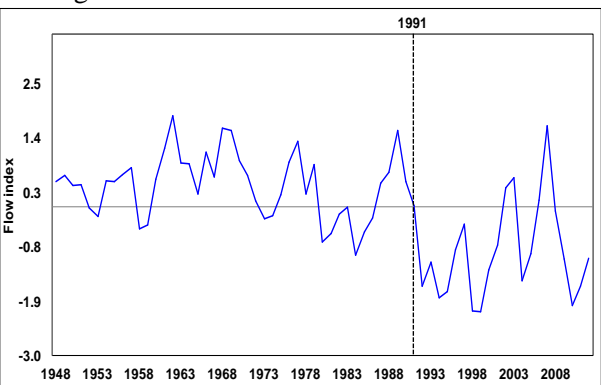
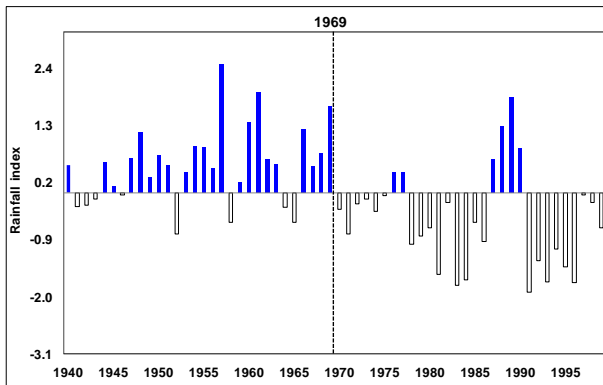
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 9 Figure 2: Congo Basin and its main drainage subsystems. The sub-basins studied are: Lualaba in
 10 Kisangani, Kasai in Kutu Moke, Sangha in Ouessou, Oubangui in Bangui and Cuvette Centrale.
 11 **Legend:** the dash encircles the Cuvette Centrale *sensu lato*. The area with inclined dark hatching is
 12 that of the Batékés plateaus.



(a)

(b)

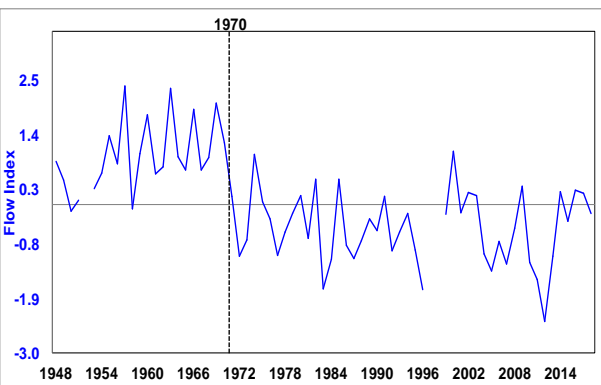
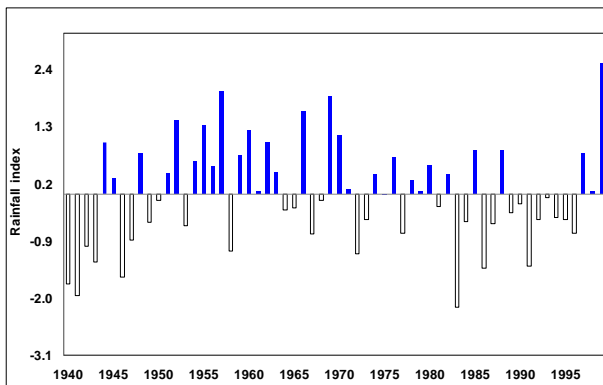
Lualaba at Kisangani



(a)

(b)

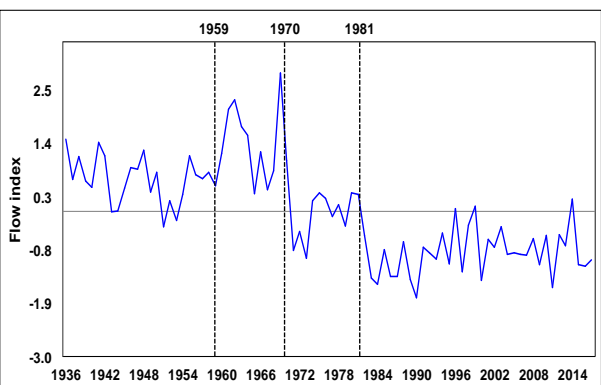
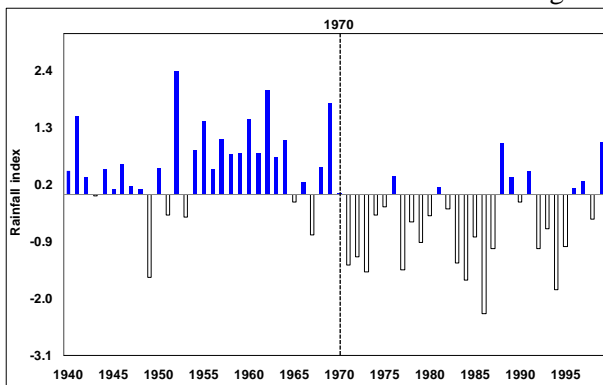
Kasai at Kutu Moke



(a)

(b)

Sangha at Ouesso

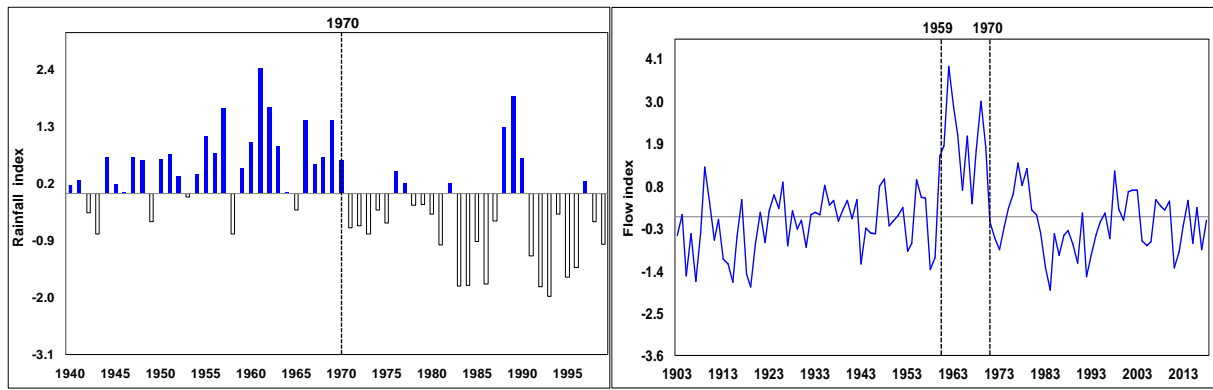


(a)

(b)

Oubangui at Bangui

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1819
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(a)

(b)

Congo Basin at BZV/KIN

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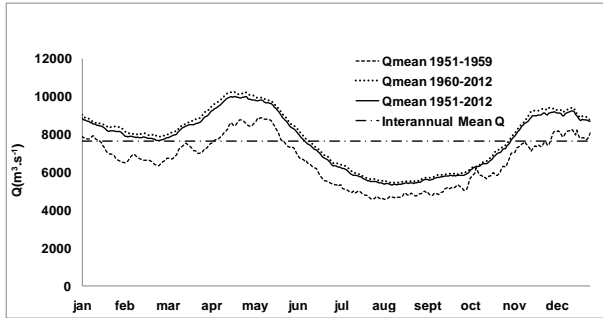
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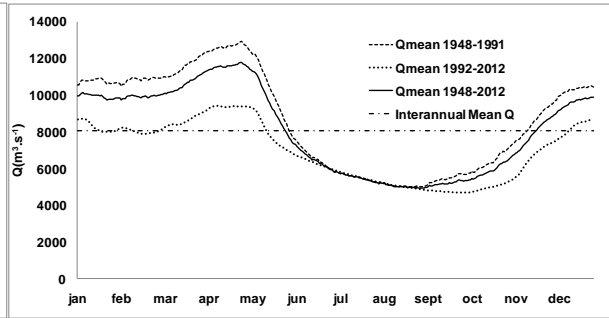
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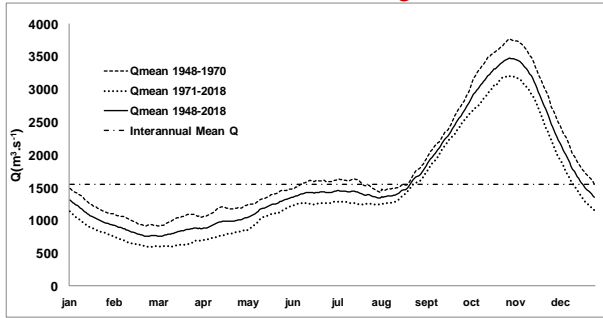
Figure 4: Sequencing of the reduced centered variables (a) rainfall for the period 1940 to 1999 and (b) runoff for the different time series available, respectively for the Lualaba to Kisangani (1951 - 2012), Kasai to Kutu Moke (1948 - 2012), Sangha to Ouessou, (1948 - 2018) Ubangi to Bangui (1936 - 2018), Congo to BZV/KIN (1903-2018).



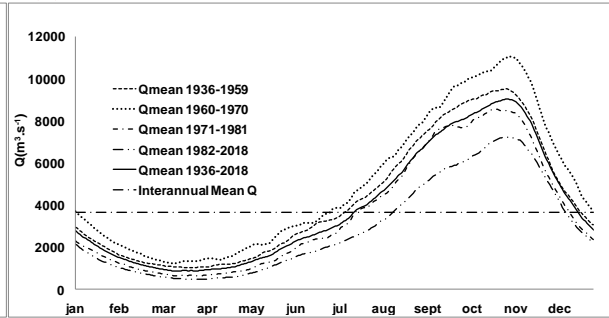
(a) Lualaba at Kisangani : 1951-2012



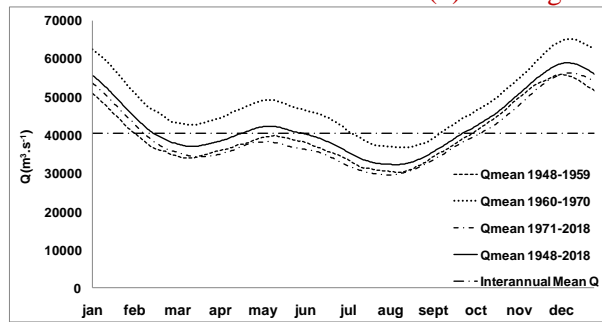
(b) Kasai at Kutu Moke : 1948-2012



(c) Sangha at Ouesso : 1948-2018



(d) Oubangui at Bangui : 1936-2018



(e) Congo at BZV/KIN: 1947-2018

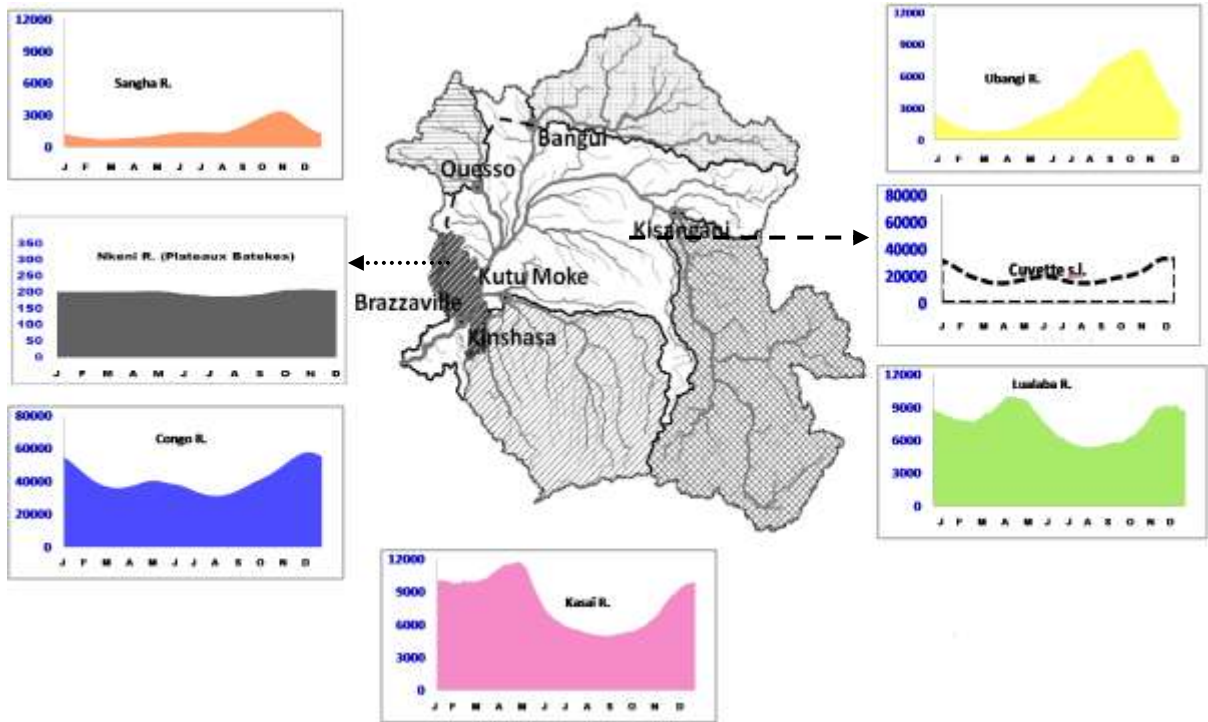
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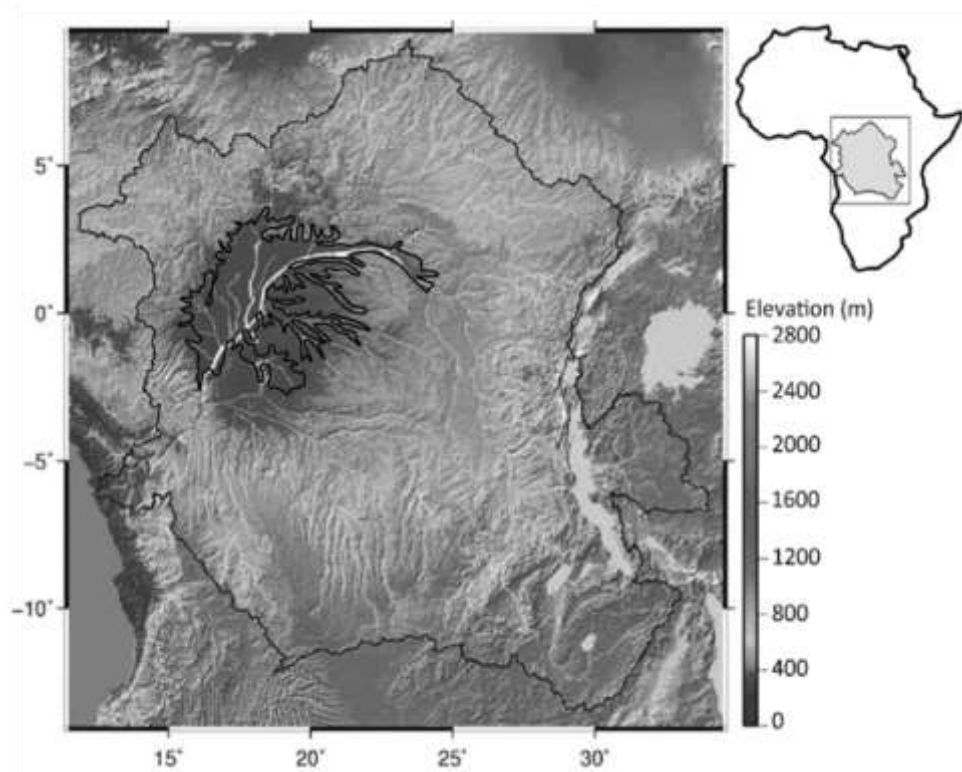
39 Figure 5: Changes in mean daily hydrological regimes by homogeneous flow periods for Lualaba in
 40 Kisangani (a), Kasai in Kutu Moke (b), Sangha in Ouesso, (c), Oubangui in Bangui (d), Congo in
 41 BZV/KIN (e). The total periods of available daily data are indicated for each station.

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Figure 6: Comparison of hydrological regimes of the 7 main drainage entities of the Congo Basin
Legend: the dash encircles the Cuvette Centrale *sensu lato*. The area with inclined dark hatching is that of the Batékés plateaus



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50 Figure 7. Topography of the Congo Basin and the flooded portion of the Central Basin. The
51 topography comes from the SRTM [Farr et al., 2007] and the flooded portion of the Central Basin
52 (the black polygon) is generalized by Bwangoy et al.[2010].

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