Interactive comment on “Three decades of research on the greater Agulhas Current” by J. R. E. Lutjeharms

Anonymous Referee #1

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This is an interesting, authoritative, well-structured and well-written review, almost entirely clear, and should be published with little revision.

Page 962 Lines 2, 18-19. A question for discussion. If the Agulhas rings are shed anyway after a long time (page 950 lines 16-17) then is there an aggregate effect of Natal Pulses in enhancing the total (circulation of?) rings shed and inter-ocean exchange?

Detailed minor comments to improve clarity:

Page 940 Line 17. The heading might more appropriately be “Historical” Introduction, or it might (perhaps preferably) end with an outline of what this paper does, and its structure (even though this would essentially repeat some of the abstract).
Page 941 Line 1 Better “.. (see Lutjeharms ..”
Page 941 Line 5 Better “.. (see e.g. Lutjeharms ..”
Page 942 Lines 12-13 Better “.. interest in the region both nationally .. internationally. One of ..”
Page 944 Line 24 “.. Natal Bight (Figure 4).” (Or other reference to show Natal Bight).
Page 947 Line 12 Better “.. precisely, a ..”
Page 947 Line 19 Better “.. features, the ..”
Page 948 Line 22 to Page 949 Line 29 Refer to Figure 6 in section 2.3.
Page 950 Lines 19-20 “.. till the late 1980s .. (Lutjeharms, 1981) ..” The paper should be after the event!
Page 951 Line 20 Better “.. more in section 6.”
Page 952 Line 10 “.. loses ..” (spelling).
Page 953 Lines 19-20 Better delete “Their detection and the discovery of”
Page 954 Line 5 Better “This ridge connects ..”. (“forms a major obstacle” prejudges and somewhat contradicts the following sentences.)
Page 954 Line 27 “berg” wind. Please give direction.
Page 955 Lines 16-17 “The most important aspect .. in this way”. I can see that this is a link sentence but in this case it comes as a surprise at the end of paragraph and would be better forming the beginning of the next paragraph.
Page 955 Lines 21, 24, 28 “10 Sv” (for direct leakage) .. “By far the greatest leakage .. shedding of rings ..7 Sv”. There seems to be inconsistency here.
Page 957 Line 13 Better “. juxtaposed with the ..”
Page 957 Line 18 Better “. shed; this agrees ..”
Page 958 Line 5 “. Agulhas Current form the inflow.”
Page 960 Lines 10-11 Either “. the winds ..” or “. the prevailing winds ..”
Page 963 Line 18 (Sea-viewing Wide Field Sensor) - delete “of”.
Page 986 Figure 9 caption “. speeds exceed 1 m/s.”