Bonjour Alban,

I have now received two reviews of the revised version of your paper.

The first review is by the same referee #1 of the previous version. The referee considers your paper can be accepted as it is.

The other review is by a new referee, identified as Referee #3. He/she considers your paper can be accepted subject to minor revisions, and makes a few suggestions. The first two of these have to do with the general conclusions of the paper rather than with specific points.

I have myself read the paper in some detail (mostly for my own instruction), and I make below a few suggestions for edition.

Please correct the paper along referee #3's suggestion, as well as along my own ones. Should you disagree with a particular comment, or decide not to follow a particular suggestion, please state precisely your reasons for that.

I thank you again for having submitted your paper to the NPG Special Issue in tribute to Anna Trevisan, and look forward to receiving a new version.

Olivier Talagrand
Editor, *Nonlinear Processes in Geophysics*

My Editor's suggestions

Line numbers refer to the version of the paper with explicit corrections (file npg-2018-15-author_response-version1.pdf)

1. You repeatedly mention the multinomial resampling and the stochastic universal (SU) sampling algorithms. But, except for a few comments (ll. 104-109), you do not apparently say much about them. It might be useful to say a little more.

2. Eqs (A17) and (A25), rhs's. I understand x should be replaced by q (vorticity)

3. Ll. 2687 and 2729, $(\delta x/L)^2 \rightarrow (L/\delta x)^2$

4. Algorithm 6, p. 28. Point 5 is unclear. Could it be possible to explain more clearly how x_V^i can be updated using Eq. (57). Maybe by introducing an intermediary equation ? And must not y_q be used also at this stage ?

5. You mention repeatedy, and denote G, the Gaspari-Cohn function. Is it always the same one (you add the attribute *piecewise rational* in l. 1363).

6. L. 1918. Reference to Fig. 18, rather than 17, seems more appropriate.

7. L. 2254, *this algorithm*. Ambiguous. Which algorithm ?