Earth Syst. Sci. Data Discuss., 7, C243–C245, 2014
www.earth-syst-sci-data-discuss.net/7/C243/2014/

Open Access Earth System Science Data Discussions

Interactive comment on "ObsPack: a framework for the preparation, delivery, and attribution of atmospheric greenhouse gas data" *by* K. A. Masarie et al.

Anonymous Referee #2

Received and published: 14 October 2014

The authors present, a new framework to archive and distribute GHG measurements and related data. It is called Obspack. The paper, lead by NOAA ESRL, manifests the continued creativity of this group in the collection and subsequent delivery of high-quality information about the GHG distribution in space and time to the research community. It reflects its long unique expertise and gathers interesting historical and prospective elements, in addition to extensively describing Obspack. It is highly relevant for ESSD and could be published as it is, but a few minor modifications could further improve its clarity.

- Title: the word "data" is ambiguous and misleading for many readers. For in-

stance, the paper does not demonstrate that Obspack is technically fit for the distribution of large-volume satellite data, of TCCON data, or of 4D model data (either from raw forward simulations or from a data assimilation process). The title should therefore be rewritten to narrow the paper scope.

- P. 496, l. 7: Data products created using Obspack actually do not all represent the next generation of value-added observation products after Globalview. For instance, an MLO measurement record available within an Obspack package is not a value-added product. There are also certainly value-added observation products that are not packaged with Obspack. The sentence should be rewritten more sharply.
- P. 497, l. 28: I suggest rephrasing as "... as *more* modellers using ** assimilation strategies". Indeed these assimilation strategies (like ensemble or variational Bayesian methods) were already well established well before 2007 and scientific papers using them for GHG measurements appeared before 2007.
- P. 498, l. 2: I suggest inserting "synthesis" between "new" and "products", in order to precise the need.
- P. 498, l. 3: the authors seem to ignore their own beneficial role or the role of WDCGG.
- P. 498, l.23: if Obspack is as successful as Globalview, most PIs will receive about 1,000 Emails each year. I doubt that this is really manageable by humans who would not dedicate a large portion of their time for this, and therefore that the communication target (as stated at the beginning of Section 5) of this procedure can be properly reached.
- P. 506, l.10: the stated obligation to discuss work with PIs at early stage may be impractical. Indeed, researchers will unlikely discuss early research ideas,

ESSDD
7, C243–C245, 2014

because such formal communication may often slow down research, may unnecessarily raise expectations for some of the PIs, and for ideas that may be later abandoned or reoriented or collected by competitors through this communication process itself. What will often likely happen in practice is that researchers will do most of their research on WDCGG-type hubs or from undeclared redistributed Obspack datasets first, before getting in the open once the paper, if there is one, is nearly ready.

- P. 511, l.19, TANSO, plus SCIAMACHY, IASI, etc. satellite retrievals are also available through ESA's portal http://www.esa-ghg-cci.org/.
- P. 512, Gloor's first initial is E. here but M. in p. 513, l. 5. But this is likely the same person.

Interactive comment on Earth Syst. Sci. Data Discuss., 7, 495, 2014.