

Interactive comment on “The historic reality of the cyclonic variability in French Antilles, 1635–2007” by E. Garnier et al.

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We want to thank the reviewer for his/her exhaustive review. In the following we will discuss the issues raised by the reviewer and hopefully answer all questions satisfactorily.

Indeed, we do not absolutely claim to reconstruct a regional chronology of cyclones for all of the Caribbean but only to give a perspective local unpublished work (French Antilles). This choice is understandable by the quality (meteorological and description of the damage contents) primary sources (textual available archives) locally (Martinique, Guadeloupe, National Archives from Aix-en-Provence). We so exploit original documents (and not compiled later) drafted by the authorities directly in charge of the management of cyclones. Compared with IBRTrACS, we bring a longer chronology (since

C1174

the 17th century) while the IBRTrACS series begins only in the middle of the 19th century. Consequently, our chronology can be considered as a new contribution for the international scientific community. As we explain it without ambiguity, our results concern only cyclones having struck the islands of French Antilles. Indeed, our archives contain especially information on the damage. They result from governors, from the French West India Company and from "préfets" (representatives of the French State on islands) in the 19th century. Consequently, our conclusions (see p 1530-1531), that is the severity, the increase of the number of cyclones between 1750 and 1850, the turning point of the 1950s then the slowing down after 1979, concern only French Antilles. We also insist on the robustness of our recent data because they result from the *Âñ Caisse Centrale de Réassurance* *Âž* (CCR) which is the Reinsurer of the French State and co-author of our paper.

Indeed, we think actually that the primary French sources are under studied. By "primary archives", we mean the textual archives and not the second hand compiled data systematically quoted since around thirty years in the scientific publications and so partially in IBRTrACS.

Most of the publications (Chenoweth, Divine, Knapp evoke sources already used by Millas (1968) as Annual Register and the Gentleman's Magazine (British newspapers). However, none primary French source appears (Chenoweth and Divine, 2008). Yet, our acquired experience for European research programs showed us that the contents of the foreign newspapers are not totally neutral when it speaks about another country. Their access to the foreign information (in particular for climatic extremes) is partial because the French authorities (as many other countries) communicate with difficulty about the gravity of a disaster. This partisan speech is often understandable by strategic reasons and economic competition. Mainly, the primary data of these papers are extracted from the US and British archives and from exclusively Anglo-Saxon newspapers or still from the meteorological data of the US Signal Corps. The rare French sources (Cotte, Morreau de Jonnès, Perrey) quoted are in reality indirect and

C1175

result from Poey (1855). In practice, never these sources compiled in 18th or 19th century were since verified because this approach implies to study the archives of time. Nevertheless, we understand perfectly your scientific reluctances and think that our approach based on new purely historical sources and a reconstruction based on the method of the Reinsurers of climatic risks confuses you. The review "Climate of the Past" is not maybe the good review to publish this type of very unusual researches and we are sorry about it. If not, we shall be happy to correct your formal remarks (grammar, etc.) concerning our text which was reviewed by a British colleague of the University of Cambridge. You are also right for Knap and al (2010). In case of CoP acceptance, we shall integrate this reference into our text.

Please also note the supplement to this comment:

<http://www.clim-past-discuss.net/11/C1174/2015/cpd-11-C1174-2015-supplement.pdf>

Interactive comment on Clim. Past Discuss., 11, 1519, 2015.