I appreciate the great efforts that the authors have made in response to my questions and concerns. The revision clarifies almost all the points I raised and helps me (and hopefully readers) understand the current manuscript. The following please find the points I think the authors may still take into account. **The referee can find our answer to his/her new comments below. We have added a sentence to the Acknowledgment section of the paper to thank the anonymous referees for their useful comments.**

2. Page 6:

"On the other hand, based on the electromagnetically observed pulsar population and the results of population synthesis modelling, e.g. [8], [9], we expect that a substantial fraction of the galactic neutron star population emits gravitational waves at frequencies below ∼100 Hz.": The ATNF catalogue shows that the spin frequencies of the electromagnetically known pulsars follow a bi-modal distribution. And there is a valley between the two modes from 10 Hz (or $f_{gw} = 20$ Hz) to 100Hz. See also, e.g. Figure 3 of "Binary and Millisecond Pulsars", Duncan R. Lorimer, living reviews in relativity (2008). So, I am not sure if electromagnetically observed pulsar population indicates 20Hz - 128Hz is "potentially promising" compared to other bands (amptiudes proportional to (smaller) frequency squared and the smaller number of (known) pulsars). If I misunderstand something (selection bias?), it may be very nice if the authors comment on why the famous bi-modal distribution in the $P-\dot{P}$ diagram does not actually reflect the true distribution. **ANSWER: In fact we refer to the population of neutron star spinning at frequency larger than about 10Hz, corresponding to a signal frequency greater than about 20Hz. Below 20 Hz detector sensitivity is strongly degraded and it is not worth- while making the analysis. Moreover, we have to keep in mind that neutron stars with no electromagnetic counterpart, which are the main target of an all-sky search, could have a spin rate distribution substantially different with respect to standard pul- sars. In particular, a potential population of electromagnetically dim neutron stars would be characterized by a slower spin-down rate, favouring higher spin frequencies for the younger objects. In the paper we have added a sentence along this line.** REPLY: The authors did not respond to my point that there is a valley in the observed pulsar distribution just in the frequency band where this paper is searching for GWs. I suggest the authors remove *"based on the electromagnetically observed pulsar population"*, as the authors expect that *"neutron stars with no electromagnetic counterpart, which are the main target of an all-sky search, could have a spin rate distribution substantially different with respect to standard pulsars."*
NEW ANSWER: ok, we have removed that sentence and slightly adjusted the corresponding paragraph.

4. Page 7, below Eq. (8):

The authors say *"Smaller relativistic effects, namely the Einstein delay*

and the Shapiro delay are not relevant for the search described in this paper, due to the use of short length FFTs, and are therfore neglected.", but in the page 13, it is said that *"where the Doppler effect, the spin-down and the Einstein delay for a source, having the same parameters as the candidate, have been corrected."*. Which statement is correct? Please correct/clarify either or both. (Perhaps, it makes the manuscript clearer to replace "in this paper" by "the incoherent steps"?) **ANSWER: Right. In fact the Einstein delay is not considered in the incoherent step of the search, while it is taken into account in the candidate followup. We have tried to clarify this at the end of Sec. II.** REPLY: Let me explain what I understand: I assume that "making a SFTDB" step is called a coherent step (as we use FFT), "combining the SFTs in the DB" step is called an incoherent step (as we use Hough counting). The current procedure consists of (1) making a short coherence time (say, 8192sec) SFT DB (coherent step), (2) incoherent sum of the short coherence time SFTDB made in the step (1) (incoherent step) (3) making a longer coherence time (say, 81920sec) SFT DB (coherent step), (4) incoherent sum of the longer coherent time SFTDB made in (3) (incoherent step). The steps (3,4) together are called a candidate follow-up step. If my understanding is correct, using "the incoherent step of the search" and "the candidate followup" on an equal footing sounds against the authors' usages of words.....? Then, *"the Einstein delay is not considered in the incoherent step of the search, while it is taken into account in the candidate followup."* sounds strange to me.
NEW ANSWER: Step (3) is possible because it comes after a coherent search done using candidate parameters (this is explained in the first paragraph of section 8). It is in this coherent search, which is part of the follow-up procedure, that the Einstein delay is taken into account. We have explained this more explicitly at the end of Sec. 2.