Interactive comment on “Where to find 1.5 million yr old ice for the IPICS “Oldest Ice” ice core” by H. Fischer et al.

Anonymous Referee #1

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This is an excellent paper presenting both the justification for a project to collect an ice core record that spans the most time possible, and the community’s current understanding of where such ice is most likely to be. It is a comprehensive and inclusive overview of the topic.

I would like to see more discussion of the possibility of distortion of the record near the bed. I am particularly concerned that the goal requires using ice that is within 100 m of the bed, a zone that is typically disrupted by ice flow. Although they discuss how to minimize the likelihood of this occurring, I feel this is a large and unpredictable risk that needs more emphasis.

Also I would stress the need for the record to be replicated from a second site before it will be widely accepted. It should be expected that ice from three sites will be required
to meet the goal of reproducing the record because it is likely one of the sites will not be usable due to stratigraphic distortions.

A technical correction on page 2791 line 16 is that the wording in the following phrase “water is refreezing downstream of the hydraulic head” does not use the term head correctly, but the meaning is clear.

Interactive comment on Clim. Past Discuss., 9, 2771, 2013.