

***Interactive comment on “Present and LGM  
permafrost from climate simulations: contribution  
of statistical downscaling” by G. Levavasseur  
et al.***

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Interesting paper that attempts to utilize the outputs of the GCMs that do not sufficiently resolve the sub-surface thermal regimes or archive those results. It is unfortunate that I was advised of this paper just a few days before the comment deadline, and have not had much time to read through the paper. I thought still it might be worth to compare the results with our effort conducted as a sub-project of PMIP2, in which a simpler statistical method was employed to map the sub-surface thermal regimes (permafrost, seasonally-frozen ground, no freezing, etc.) for 0, 6 and 21ka from the freeze and thaw indexes derived from the PMIP2 near-surface air temperature outputs.

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If you have a chance please refer to our letter paper. You might find it interesting and/or useful: Kazuyuki Saito, Sergei Marchenko, Vladimir Romanovsky, Nancy Bigelow, Kenji Yoshikawa, and John Walsh (2009): Thermally-Conditioned Paleo-Permafrost Variations from Global Climate Modeling. SOLA, 2009, Vol. 5, 101-104, doi:10.2151/sola.2009-026.

Please also note the supplement to this comment:  
<http://www.the-cryosphere-discuss.net/4/C1388/2010/tcd-4-C1388-2010-supplement.pdf>

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Interactive comment on The Cryosphere Discuss., 4, 2233, 2010.

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