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To whom it may concern,

This letter is written in support of the proposal entitled **"Shared frameworks for next-generation ice sheet modelling"**.

The Met Office is committed to the inclusion of fully coupled ice sheets (Greenland and Antarctica) in its next generation climate model, HadGEM3. Particular attention is being paid to the ocean interaction with ice sheets through ice shelves and tidewater glaciers. This will permit a more complete description of the processes driving ice sheet change than previously available, leading to new projections of sea level rise. Other climate groups, in the US, EU and Japan are pursuing the same objectives.

The supported proposal is timely in that it will exploit a wealth of experience from individual modelling groups, to build a unified framework for ice sheet coupling to GCMs. The proposal's community consultation and workshops has the potential to build an excellent framework for the next generation of coupled ice sheet models.

Within this proposal the Met Office Hadley Centre would contribute 3 months effort (Jeff Ridley), over 3 years, at a monetary value of value of £22690. Activities would include:

1. Provide input to workshops and project meetings on the experience of coupling Glimmer-CISM to HadGEM3.
2. Provide two way communications on the proposed framework, to other climate modelling groups within the FP7 Combine (ice sheet coupling) project.
3. Continuous evaluation of the proposed framework, as it develops, to insure it will be compatible with the Met Office's HadGEM3 climate model.

My own role within the Met Office is to develop and understand processes within the cryosphere of climate models. Climate interactions between the cryosphere, atmosphere and ocean, are central to this work. The proposed work has significant potential to improve the pull-through of new science associated with ice sheets and increase confidence in projections of sea level rise.

Yours faithfully,



Jeff Ridley