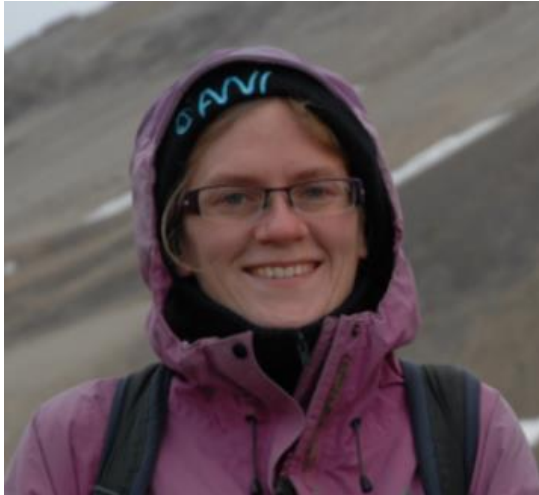


Permafrost in global climate models: improving links between field researchers and modelers

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As most PYRN members know, permafrost plays an important role in the Arctic, but also in the Earth System as a whole. This is motivating major efforts to include permafrost processes in the latest Earth System Models. Modelling permafrost on a global scale is a huge challenge. Most of the important processes happen below the ground, and so to develop, constrain and evaluate realistic models, on-the-ground data is vital. This presents challenges on both sides: global modellers are often used to using global data products, so discovering how to use local-scale observations in large-scale modelling is a new challenge for us. From the other side, most field campaigns are designed to answer particular

scientific questions and can miss out key measurements that make the data valuable for modelling. To realise the full potential of large-scale permafrost modelling is a joint effort. We need to talk and learn from each other, and the best results come from working directly together. I will discuss some great examples of successful collaborations and consider what we can do to improve on this in future.