**Message from Alex.**

I'm sorry I can't be at the meeting. I'm in Scotland at the moment. I wish you great success with the meetings,

I just wanted to say a few things about priorities

Australia is more advanced in digital soil mapping than any country in the world, and we should congratulate ourselves on that.

We obviously have a few detractors. We should not be concerned about that in the slightest. There are always detractors.

But what about priorities?

Obviously we can investigate new quantitative methods, mainly new machine learning methods, novel methods of assessing uncertainty, and we should certainly continue to do that. But I think the methods we have are very serviceable, working quite well, and using a variety of appraoches, but they essentially do the same thing.

I think the priorities are really about: What kind of digital soil maps do we want to make? And what do we want to use them for?

The first priority for me would be to produce a soil class map of Australia at high spatial resolution ( 30 m) , probably at the family level of the Australian Soil Classification System (ASCS), and of course obviously involving, the new order (Arenosols) that has been brought into the system recently. So I think it is a priority to derive a very good quality soil class map of Australia, as I said, with all the orders of the latest system, and probably at the categorical level of the family.Having done that, obviously you can generalize that to higher levels in the system (great group etc.), if necessary. But I think that a good digital soil class map is key background information for lots of assessments and interpretations that we might want to make.

Secondly, I think we need some priority on a truly digital (numeric) soil classification system. The soil classification systems we use today are from based on principles and methods from the 1950s. We really do need to think about how to make up digital soil classification system that allows us to do most of it using computer methods accessing soil information systems without much need for human intervention. So we do need to start working on how to make this Australian digital soil classification system. And I see that as a priority for the Australian digital soil mapping community of practice. Obviously we want a system that can work from the information system automatically, but also can map classes quite automatically. I think that's a good challenge for the future.

Thirdly, it's not just about soil properties, is it? As you know, we work on soil security. So I think it's about soil functions, threats to soil and soil services. So we should be mapping soil functions which more complex kinds of attributes than properties themselves, and not not just

biomass production, but all the other soil functions, including the ability to store carbon and other functions. We should also be mapping threats to soil. So these are the threats of land degradation. Where are the largest threats for erosion and soil structural decline, salinization acidification, contamination and all the other threats. We mapped these crudly back in the nineties. But now we have thedigital tools to map these at high resolution (30 m) , so that these mapping products could be used for management interventions. And finally, we should be mapping out the services that soil brings for food security and water security and energy security, energy, and the ability to mitigate climate change, so we should also be mapping those. So I think a lot of the future digital soil mapping will be about mapping soil functions, the threats to soil, and the services that soil provides for the existential challenges that we face. For all of this we will need high-quality national pedogenon and pedophenon mapping.

That's it - have a great meeting.