The GB power network suffers from regular faults with a percentage of them caused by adverse weather. With the current worry about climate change and the possibility of increased adverse weather there is a concern that this will significantly affect the reliability of the network. The Met Office’s Hadley Centre has just completed work for GB power network operators on the risk of climate change effects on the network, thus allowing network operators the chance to change their design standards or make adjustments to the way they run the network.

The Met Office’s work mainly looked at the distribution network since most fault events (caused, for example, by adverse weather) can be observed to have a direct impact on losses of supply. The impact of adverse weather on transmission is much harder to measure due to the way that it is designed and operated i.e. in a meshed fashion with a higher redundancy. This means that faults on the transmission network that cause a loss of supply are classed as low probability but high impact, they can lead to long restoration times and blackouts and therefore should not be ignored in this type of research. The research described in the poster is looking at quantifying the impact of climate change on operation of the transmission network.