Geophysical Research Abstracts Vol. 14, EGU2012-8564, 2012 EGU General Assembly 2012 © Author(s) 2012



Changes in the percentage of area under drought in Europe during this century

C. Fox Maule and P. Theill

Danish Meteorological Institute, Danish Climate Centre, Copenhagen, Denmark (pth@dmi.dk)

We have investigated how the percentage of area under drought in eight different European regions change during this century as predicted by a suite of different climate models, all part of the ENSEMBLES database. The models consist of several different regional climate models nested in a few different GCMs all giving different predictions of the future climate. All the models included in this study have a resolution of about 25 km and are run under the A1B greenhouse-gas emission scenario. To identify drought, we use two different drought indices, the Standardized Precipitation Index and the slightly more sophisticated self-calibrated Palmer Drought Severity Index. We find a clear North-South difference in the tendencies; in the southern regions the area under drought increases during this century, while in the Scandinavian region the area under drought decreases with time.