



EMS Annual Meeting Abstracts

Vol. 18, EMS2021-474, 2021

<https://doi.org/10.5194/ems2021-474>

EMS Annual Meeting 2021

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Weather and Climate Services in Africa as Digital Public Goods

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The global digitalization of societies is arguably one of the most influential drivers of change in the development, implementation and dissemination of weather and climate information. From observations and measurements, to communication of weather warnings, the value chain of Weather & Climate Services (WCS) is increasingly characterized by digital interactions. Yet, digitalization occurs at different paces across regions, depending on a wide range of (local) socio-economic factors. Access to digital information is an important indicator of socio-economic development, and as such strongly embedded in the UN's Sustainable Development Goals. Particularly in the context of objectives to provide equal access to information, education and knowledge, open weather data can provide significant benefits in developing countries, and contribute to meeting various SDGs.

Many NMHSs, including the Norwegian Meteorological Institute, currently provide access to weather data under open access licences. One of its most important open data services is MET Norway Weather API, a global location based time-series forecast service. Recently this api has formally been recognized as a Digital Public Good.

Open weather data can provide opportunities to improve the forecasting capacity of African NMHSs and improve the quality of weather and climate information in African countries. With the objective to provide leading examples of the potential of open weather data as Digital Public Good, the Norwegian Meteorological Institute has been funded by NORAD to explore this potential in a pilot project together with African NMHSs. We present insights and experiences from the pilot phase of our collaboration with NMA in Ethiopia, and DCCMS in Malawi. We reflect on the challenges and successes of the first phase of this project. Also, we present an overview of key factors that need consideration when aiming to transform open weather data into value-added services that meet user-oriented criteria of Digital Public Goods. Finally, we provide an overview of next steps to move beyond the pilot phase.