Future daily weather data for crop modelling over Europe derived from climate change scenarios

Version	1.0
Date Published	01/09/2015
PROPERTIES	
Creator	MARS-AGRI4CAST
Publisher	MARS-AGRI4CAST
Description	The resource consists of consolidated and coherent future daily weather data for Europe on a 25x25 km grid designed for crop modelling. The dataset is based on three time horizons (2000, 2020 and 2030), each represented by 30 synthetic years created using the weather generator ClimGen and the statistical distribution of meteorological variables around these time horizons. Some of these meteorological variables are taken directly from dynamically downscaled and bias-corrected regional climate simulations (from the FP6 ENSEMBLES project), while others are collected from historical series or re-estimated based on the former ensuring consistency within daily records. For more detailed information please refer to: Duveiller et al. 2015. A dataset of future daily weather data for crop modelling over Europe derived from climate change scenarios. Theoretical and Applied Climatology.
Disclaimer	http://data-staging.jrc.it/licence/com_reuse
Grid Definition	http://agri4cast.jrc.ec.europa.eu/DataPortal/Resource_Files/SupportFiles/grid25.zip
Spatial Projection	Lambert Azimuthal Equal Area
Resolution	25 km
Temporal Resolution	Daily
Time Horizons	2000,2020,2030
Number of synthetic years per time horizon	30
SRES Scenario	A1B

GCM RCMs used	DMI-HIRHAM5-ECHAM5, ETHZ-CLM-HadCM3Q0,METO-HC-HadRM3Q0-HadCM3Q0
DIMENSIONS	
Grid Spatial Projection	Lambert Azimuthal Equal Area
Grid EPSG Code	3035
Grid Resolution	25 km
RUNWINDOW	Time window of FP6 ensemble run
Year	From: 1 - To: 30
Day of Year	From: 1 - To: 366
INDICATORS	
Variables	sum of precipitation (mm/day), minimum air temperature (°C), mean air temperature (°C), total global radiation (KJ/m2/day), Reference evapotranspiration (mm/day) FAO56 , Minimum Relative Air Humidity (%), Maximum Relative Air Humidity (%), Vapour Pressure Deficit (kPa), mean daily wind speed at 10m (m/s)