FACCE-MACSUR

WPL 1. Building and exploring datasets and climate models on climate change in relation to livestock and grassland

Responsible D. Bartley (Moredun Institute, UK)

Task L1.2. National and transnational dairy cows biometeorological datasets linked to productive, reproductive and health performances data

Responsible: N. Lacetera1*(P62).

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Different datasets have been completed and are now available for the analysis of inter-annual and seasonal variations of productive, reproductive or health data relative to intensively dairy cows and also to establish the relationships between temperature humidity index (THI) and dairy cow performances. Datasets are referred to different European countries (Italy, Belgium, Luxembourg and Slovenia) with different climatic features. All these datasets have data relative to Animal Pedigree (Cow ID, Birth date, Breed, Sire ID and Dam ID), Test-day records (Cow ID, Herd ID, Parity, Calving date, Test date, Milk yield, Milk fat and protein (%), Milk somatic cell score), Reproductive events (Cow ID, Herd ID, Parity, Calving date, AI date, Sire ID, Days Open, NRR-56 day), and Daily meteorological records (Meteo station ID, Zip code of the meteo station, Observation date, Max temperature, Min temperature, Mean temperature, Max relative humidity, Min relative humidity, Mean relative humidity, Solar radiation, Wind speed). The dataset relative to Italy includes also Mortality data (Animal ID, Herd ID, Death date) and Bulk milk quality data (Herd ID, Test date, Fat & protein (%), Somatic cell score, Bacterial count, Herd latitude, Herd longitude, Herd elevation). An additional database is still under construction and will be based on Spanish data from organic dairy farms.

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