The early warning systems of the Copernicus Emergency Management Service are composed of the European Flood Awareness System (EFAS, http://www.efas.eu) and the European Forest Fire Information System (EFFIS, http://forest.jrc.ec.europa.eu/effis/). The main aim of both systems is to provide national and regional authorities as well as European Commission services with harmonized and complementary, added value information and forecasts on floods and forest fire danger at the European scale and to help monitor critical flood and fire events. The EFAS/EFFIS Meteorological Data Collection Centre (MDCC) has been designed to collect meteorological observations necessary to operate both systems. State of the Art QA/QC procedures auto validate all data upon arrival. Data completeness, spatial temporal data consistency and coverages are the main pillar of the underlying MDCC Quality Attribute System for meteorological data processing. From the quality assured observational data, gridded analyses are computed for precipitation, wind speed, minimum and maximum temperature, solar radiation and water vapour pressure at a spatial resolution of 5 km in the European domain. The gridded data products serve as input for the hydrological model Lisflood, currently running at the EFAS Computational Centre hosted by the European Centre for Medium-Range Weather Forecasts (ECMWF) and for the computation the EFFIS fire danger forecasts on the basis of the Fire Weather Index (FWI). This paper/presentation describes the setup of the MDCC, the principles in data provider management, the advanced QA/QC procedures and the interpolation scheme to produce the gridded data.