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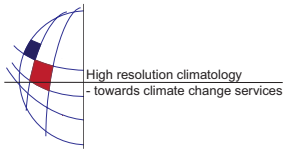

Back to MOS ?.

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Model Output Statistics (MOS) have been used, for over many years, to derive forecasts of surface weather parameters from dynamical weather prediction model, in nearly all meteorological services around the world. MOS is used mainly for two purposes, to provide forecasts of quantities that may not be explicitly predicted by the model, and to reduce errors of the raw model forecasts at a particular site. Essential improvements in numerical models and mesoscale capabilities are done during these last years. In Basque Meteorology Agency (EUSKALMET), as in others regional meteorological services, local forecast are mainly based in forecasters interpretation on our hi-resolution local area numerical models implementation, and some empirical procedures applied to global forecast models data coming from others centres. In this context, some work has be done in EUSKALMET, in order to evaluate if some MOS approach, based only on synoptical data as input, can be useful for some local daily parameters forecast.

In the MOS approach, observations of the weather element to be predicted (the predictand) are related to forecasts from a numerical weather prediction model (the predictors). A reliable source of observations are essential to the development of the MOS system, in this case the primary source of observations has been surface variables coming from the Basque Automatic Weather Stations Network. On the other hand Global Forecast System numerical model data, available for the area, are used as predictors. As predictands we focus on daily maximum and minimum temperature and daily precipitation accumulation and PoP. In the case discussed here, the statistical equations are
developed by the use of multiple linear regression in temperature case, and logistic regression in precipitation case.

In this paper, we review some of the details on the GFS-MOS system developed for the Basque Country Area , with particular emphasis on the selection on predictors from GFS model for each predictand case. Verifications results, comparing the MOS guidance with direct model output are also shown. Finally we discuss if such a MOS systems based on synoptically numerical model data, are useful or not in a operational context where hi-resolution mesoscale numerical model data are also available.