



A systematic analysis of precipitation retrieved by a Polarimetric Doppler ground radar in Central Italy

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Recently, the Italian Space Agency launched the COSMO Sky-Med programme for environmental monitoring and management of exogenous, endogenous and anthropogenic risks through X-SAR satellites. Within this programme, we are conducting an intercomparison between the statistical properties of precipitation derived by the X-SAR satellites and those derived by the CNR Polar 55C ground based radar located in Italy. This poster presents the results of the first part of the project that is aimed at the robust characterization of statistical properties of precipitation on the area of interest. Specifically the analysis is performed on a large dataset of more than 10'000 scan retrieved by the CNR Polar 55C with the objective of characterizing the statistical properties on the base of scale-invariance laws and multifractal behaviour.