



Polarimetric measurements of precipitation over urban environments

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This study presents recent results of weather radar polarimetric measurements of clouds and rainfall system over Eastern São Paulo, Brazil, more specifically in the metropolitan area of São Paulo (MASP). Local direct circulation associated to its urban heat island and sea breeze inflow tends to generate very deep convection similar to the Amazon region in a matter of minutes. It is investigated the impact of pollutants on the cloud microphysics and induced effects on downdrafts, lighting, hail and others such as flash floods.