



## Continental Tropical Low pressures over southern Africa

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Continental tropical low pressures are known to result in heavy rainfall and at times, cause devastating floods, due to their slow movement. An analysis tool has been developed to objectively identify continental tropical low pressure systems. This tool has been used to create a climatology of these weather systems over southern Africa as well as determine the rainfall contribution they have to South Africa's annual rainfall. The dynamical components of the objective tool are relative vorticity, total static energy, average column temperatures and precipitable water values. An additional component of the objective tool is that deviations from the mean are used to distinguish the continental tropical low pressure from the Angola low pressure, as the Angola low pressure frequently occurs over southern Africa. This tool has been developed so that forecasters will be able to identify continental tropical low pressures timeously and issue flood warnings well ahead of time so that mitigation measures can be put in place before the weather system develops.