A Computer based DSS (Decision Support System) for rainfall analysis

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Identification of onset of wet and dry periods and their maximum length within seasons is of paramount importance in agriculture. The knowledge on these wet and dry periods helps the farmer to adjust the cropping calendar to obtain maximum yields while managing available water efficiently for crop production.
As there is no special software package available to identify the above mentioned valuable parameters, a Decision Support System (DSS) has been developed using MS Access and VBA (Visual Basic for Application) software packages. The system is user friendly and the input of the DSS system is weekly rainfall data.

The system helps to calculate onset of wet and dry periods and their maximum length at 75% expectancy level using rainfall data in a particular region. Apart from that the DSS provides details such as length of wet periods, dry periods, number of dry weeks in the cropping seasons and records on past rainfall events.

In the system, the user has a facility to input his own criteria to demarcate wetness and dryness. The developed DSS will help researchers, students, farmers and others, who need detailed information on rainfall-climatology for decision-making in agriculture.