Project Title :

Exploratory Analysis of RainFall Data in India for Agriculture

Project Group Name :

Exploratory Analysis of RainFall Data in India for Agriculture 53GP

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Literature Survey On Exploratory Analysis Of RainFall Data in India for Agriculture

Title: Exploratory Data Analysis of Indian Rainfall Data

Author's name: Anusha Gajinkar, Vighnesh Tamse-(Article title: Exploratory Data Analysis on Indian Rainfall Data (1901–2017))

Link: https://medium.com/@anusha.gajinkar/exploratory-data-analysis-of-indian-rainfall-data-f9755f2cc81d

Describing the data:

Month	% of Rainfall
JAN	1.32
FEB	1.50
MAR	1.93
APR	3.06
MAY	6.13
JUN	16.25
JUL	24.45
AUG	20.42
SEP	13.99
OCT	6.81
NOV	2.79
DEC	1.34

Title: Frequency Analysis and Exploratory of Rainfall Variability in Bounkiling River Basin in a Context of Climate Change and Variability.

Author's Name: R Diouf, Hyacinthe Sambou, Vieux Boukhaly Traore, M L Ndiaye.

Link:https://www.researchgate.net/publication/318281448_Frequency_Analysis_and_Exploratory_of_Rainfall_Variability_in_Bounkiling_River_Basin_in_a_Context_of_Climate_Change_and_Variability

Abstract: The goal of this article is to conduct a frequency analysis and exploratory of rainfall in the

Bounkiling watershed. Usingrainfall time series of Bounkilingrain gauge, we have first conducted the frequency analysis to determine the rainfall distribution and define the future occurrence probabilities. Hydracess software is used to calculate the frequency of the rains, return periods and the coefficients of severity and irregularity. Next, we have performed exploratory analysis based on graphs to highlight the alternation between wet and dry periods. Analysis of the results allowed classifying the rainfall of Bounkilinginto four levels (very heavy rainfall, heavy rainfall, low rainfall and very low rainfall).Results also show that the gap between a wet year and a dry year of the same frequency, increases with recurrences. At the annual scale, level, the gap between the maximum and the minimum is very significant and varies greatly from year to year. Indeed, 2005 is the most surplus year in 1980 and the most deficits. At the monthly scale, August is the wettest month and May the less rainy. This study represents a real opportunities for decision makers in the management of irrigation schemes and strategies against the hydroclimatic risks.

Keywords: Frequency and exploratory analysis, Rainfall trend, climate monitoring, sustainable water
resources, Bounkiling river system, Senegal.