***ABSTRACT***

*Gorontalo Province is one of the areas in Indonesia located near the equator. Making this area has a fairly hot temperature. Gorontalo province has the highest rainfall in November that is 321,0 mm. But lately climate change suddenly as a result of global warming that causes conditions fluctuations in uncertain rainfall in recent years we often encounter. Based on research conducted by Moch. Abdul Mukid, Sugito (2013), about rainfall prediction model with Gaussian process regression approach (case study in grobogan district), using data of times series that is monthly data from 1980 until 2013 and the result can predict rainfall year 2014 from month January to December This shows that linear regression algorithm is considered as a very helpful algorithm in data prediction, so in this study using linear regression algorithm. From the above explanation, it is necessary a system that can produce prediction models about rainfall in Gorontalo province. Climate information in the form of periodic rainfall (monthly, yearly) taken from www.bmkgonlie.org so that it can be useful to the community and related parties in decision making and policy. The system in the intention of the Data Mining system to produce prediction model that can be used to predict or predict rainfall in Gorontalo province. From the results of research conducted It can be seen that Application Data Mining For Rainfall Prediction in Gorontalo Province designed can be used. This is evidenced by the results of tests conducted by White Box Tesing and Basis Path method that produces V (G) = CC value of 4, and Black Box test that describes the truth of a logic so that the logic of the flowchart is correct and produces a usable system*

***Keywords****: Rainfall, Data Mining, linear Regression, prediction*