



## **METECLOUD: A PRIVATE CLOUD PLATFORM FOR METEOROLOGICAL DATA STORAGE USING HADOOP**

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*Abstract- With the increasing popularity of open-source platform Hadoop, the meteorological industry is available to create a Meteorological Cloud (MeteCloud) platform to store and deploy applications. In this paper, we propose an idea to build the MeteCloud platform for meteorological departments using Hadoop. We also present a backup policy for meteorological data. In addition, one kind of storage process of the meteorological A-format file is presented. Furthermore, we experiment with one-year historical data on the platform by varying many related parameters such as the number of nodes, meteorological records and fields. Finally, the proposed MeteCloud platform proves to be efficient and suitable for the storage of meteorological data.*

**Index terms:** MeteCloud, Hadoop, Hive, meteorological data, transfer storage