4D Visual Delivery of Big Climate Data: A Fast Web Database Application System

4 Dimensional Visual Delivery (4DVD) is an open source web application for the visualization of climate data in a 4D space-time box. This system allows users to visualize data available from many datasets. Users can zoom in-out to help identify desired information and locations. Data can be downloaded for the desired spatial maps and historical climate time series data of a given location. These functions enables a user to quickly reach the core interested features without downloading the entire database in advance, saving both time and storage space. The 4DVD system has many graphical display options such as displaying the data on a round globe or on a 2D map with detailed topographic imagery. It can animate maps and show time series. The combination of these features makes the system a convenient and attractive multimedia tool for classrooms, museums, and households, in addition to climate research scientists, industrial applicants, and policy makers.

Julien Pierret and Samuel Shen

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