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## Applications of "Integrated Data Viewer" (IDV) in the Classroom.

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Conventionally, weather products utilized in synoptic meteorology reduce phenomena occurring in four dimensions to a 2-dimensional form. This represents a challenge to the visualization of the spatial and temporal distribution of the atmospheric conditions. Synoptic meteorology requires software for acquisition, processing, analvsis and visualization of real-time weather data and products. However, this group of software is usually UNIX based and requires advanced knowledge of computer sciences, indispensable to meteorology majors. This constitutes a road-block for nonatmospheric-science majors who need to take meteorology as a non-mathematical and complementary course to their major programs. Recently, the three-dimensional integration of meteorological data was made possible through efforts of the University Corporation for Atmospheric Research's Unidata Program Center software, Integrated Data Viewer - IDV. Developed in JAVA, IDV is platform independent, and allows data acquisition and visualization of data in the areas of geosciences. This paper presents applications of IDV in the teaching of synoptic meteorology, weather analysis, and weather map interpretation to non-science students at Western Michigan University. This study is supported by three grants: NSF grant # 0202923, the Unidata Equipment Award, and the Lucia Harrison Endowment Fund.