Development of tools for analysis and visualization of multidimensional data with the object-oriented language Ruby

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To facilitate flexible handling of numerical data in earth and planetary fluid sciences, we are developing multidimensional array and visualization classes for Ruby. Computational speed with the multidimensional array class is higher than the original array class in Ruby. Up to now we have implemented basic functions such as mathematical operations. The visualization class uses Dennou Club Library (DCL) as a low-level graphic engine and will have history function and graphical user interface. In this talk, we will present an overview, current status of development, and our future plan.