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United in Variety: The EarthServer Datacube Federation

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Datacubes form an accepted cornerstone for analysis (and visualization) ready spatio-temporal data offerings. Beyond the multi-dimensional data structure, the paradigm also suggests rich services, abstracting away from the untractable zillions of files and products - actionable datacubes as established by Array Databases enable users to ask "any query, any time" without programming. The principle of location-transparent federations establishes a single, coherent information space.

The EarthServer federation is a large, growing data center network offering Petabytes of a critical variety, such as radar and optical satellite data, atmospheric data, elevation data, and thematic cubes like global sea ice. Around CODE-DE and DIASs an ecosystem of data has been established that is available to users as a single pool, in particular for efficient distributed data fusion irrespective of data location.

In our talk we present technology, services, and governance of this unique intercontinental line-up of data centers. A live demo will show distributed datacube fusion.