Big Data Standards in Action: Spatio-Temporal Analytics with EarthServer

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In the transatlantic EarthServer initiative, a set of value-adding services on massive spatio-temporal data are being established for all Earth Sciences. Already at a volume exceeding 10 Terabyte in total, several of the services will break the 100 TB barrier this summer.

The common EarthServer platform rigorously relies on the open OGC standards only. At the heart is the core OGC Big Geo Data standard, Web Coverage Service (WCS), together with its analytics extension Web Coverage Processing Service (WCPS). We present OGC's coverage data and processing model. On the example of the WCS Core Reference Implementation, rasdaman, we discuss how scalable implementations are supported. Time and Internet permitting a live demo will be included.