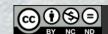rasdaman
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Intro to Earth Datacube Wrangling with Standards-Based Clients and Servers

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Roadmap

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- Concepts

- Service API standards

- Explore hands-on how to access, extract, analyze, reformat datacubes

- timeseries wrangling

- Wrap-up

After the course, ...

- Know core datacube concepts, terminology, and standards

- Understand advantage of harmonization done in datacubes & contribution to analysis-ready data

- Know sample datacube services, can work with them, with some self-chosen client

- Understand how datacubes can be built from file sets
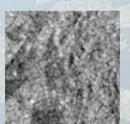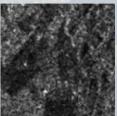
Let's jump into it!

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Summary

- Datacubes accepted as cornerstones for Analysis-Ready Data (ARD)

- ARD hot topic in datacube research:

  - OGC Testbed-19: how much ARD do coverages support already? What to add?

  - CIS has good ARD mileage but some aspects missing (uom, Pixel-in-X, Pixel-is-X, ...)
    - *Non-breaking enhancements possible, see analysis*

- Several issues generic for OGC, not coverage specific

  - GML, Sensors, ... → needs concertation

  - OGC should avoid competing non-interoperable standards

  - Data changes along time: incoherence, retrospective changes

Summary/2

- Goal of the course:

  - Know core datacube concepts, terminology, and standards

  - Understand advantage of harmonization done in datacubes
    & contribution to analysis-ready data

  - Know sample datacube services, can work with them,
    with some self-chosen client

  - Understand how datacubes can be built from file sets

- ...hope the material contributed (see links!)

- Basis: rasdaman – an Array DBMS for datacube management & analytics

- Questions & comments welcome: baumann@rasdaman.com