

Doing Science in the Cloud: Collaborative, Reproducible Workflows with DECTRIS CLOUD

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Modern instruments generate enormous datasets, but scientific insight depends on how quickly and collaboratively those data can be processed. DECTRIS CLOUD is shaping a future where researchers no longer move data, but move science into the cloud. The platform provides ready-to-use environments where experimental data, processing pipelines, and computational resources are instantly available.

Researchers can launch, share, and re-run their analyses within minutes, ensuring full reproducibility and transparent provenance. By encapsulating jobs as reusable templates, DECTRIS CLOUD turns every analysis into a living, shareable workflow instead of a one-off script.

The service fosters collaboration in the clouds: teams can co-develop and execute jobs, inspect results in real time, and reuse validated pipelines across facilities and disciplines. This approach lowers the entry barrier for advanced techniques, accelerates the path from data to insight, and promotes open, FAIR-compliant science.

We present the vision and ongoing developments that position DECTRIS CLOUD as a collaborative platform where scientists focus on doing science, not on managing infrastructure.

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