## 9th Annual Ambient Pressure X-ray Photoelectron Spectroscopy Workhop



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## Opening complex data: How FAIR data handling helps during a beamtime

## Content

Funding agencies, publishers, and governmental agencies have since long recognized the importance of making research data findable and re-usable throughout multiple stages of the data life cycle (Wilkinson 2016). More recently, our ability to connect and explore existing and newly acquired data in a flexible manner during ongoing atmospheric science campaigns is recognized among researchers as a factor that limits progress (Schmale 2021).

Here, we present approaches and customized procedures that improve the link between data collection and analysis and publication. The key aspect is an enhanced visualization of data at any stage of the research cycle. The ability to flexibly and quickly look at data, notes and meta-data opens new possibilities to analyze and discuss data collaboratively in teams and in larger collaborations such as during beamtimes.

J. Schmale et al., Nature Climate Change, 11, 95-105 (2021).

M. D. Wilkinson et al., Scientific Data, 3, 160018 (2016).

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