

# Surfacing Data Change in Scientific Work

## Scientific Achievement

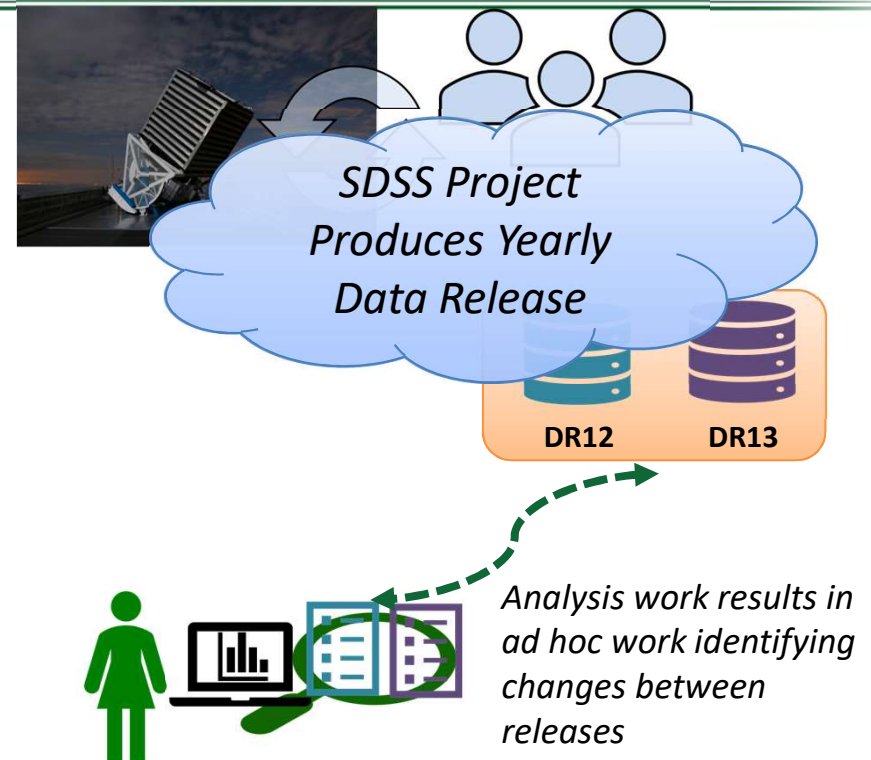
Data in scientific work constantly evolves or changes with knowledge and practices. We use qualitative research to identify opportunities and criteria to design tools and practices to support data change in scientific collaborations.

## Significance and Impact

Our work provides the foundation that allows us to change the current landscape where there is a lack of systematic tools or practices for surfacing this vital information from within the work of distributed, collaborative projects.

## Research Results

- As data volumes and complexities grow, collaborative projects need to surface the work resulting in data changes to end users
- Changes to datasets are invisible to interviewees until they manually inspect releases where they identify two broad types: *change in context* & *change in data values*
- Data change calculation tools & practices have to work throughout scientist's workflows
- Scientists reflexively think of newest datasets as best because they trust project collaborators to improve analysis techniques & add new data as work unfolds over time



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