

Data Pathfinders: A GDEX UX/UI Intern Quest Redesigning the Scientific Data Journey



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Project Background

PROJECT OBJECTIVE

This is a UX/UI study of the GDEX data portal (gdex.ucar.edu) to identify problems about the user journey and make improvements based on the data collected. This study involved a task based usability testing with 10 NCAR CISS SIParCS interns.

Key User Problems Identified

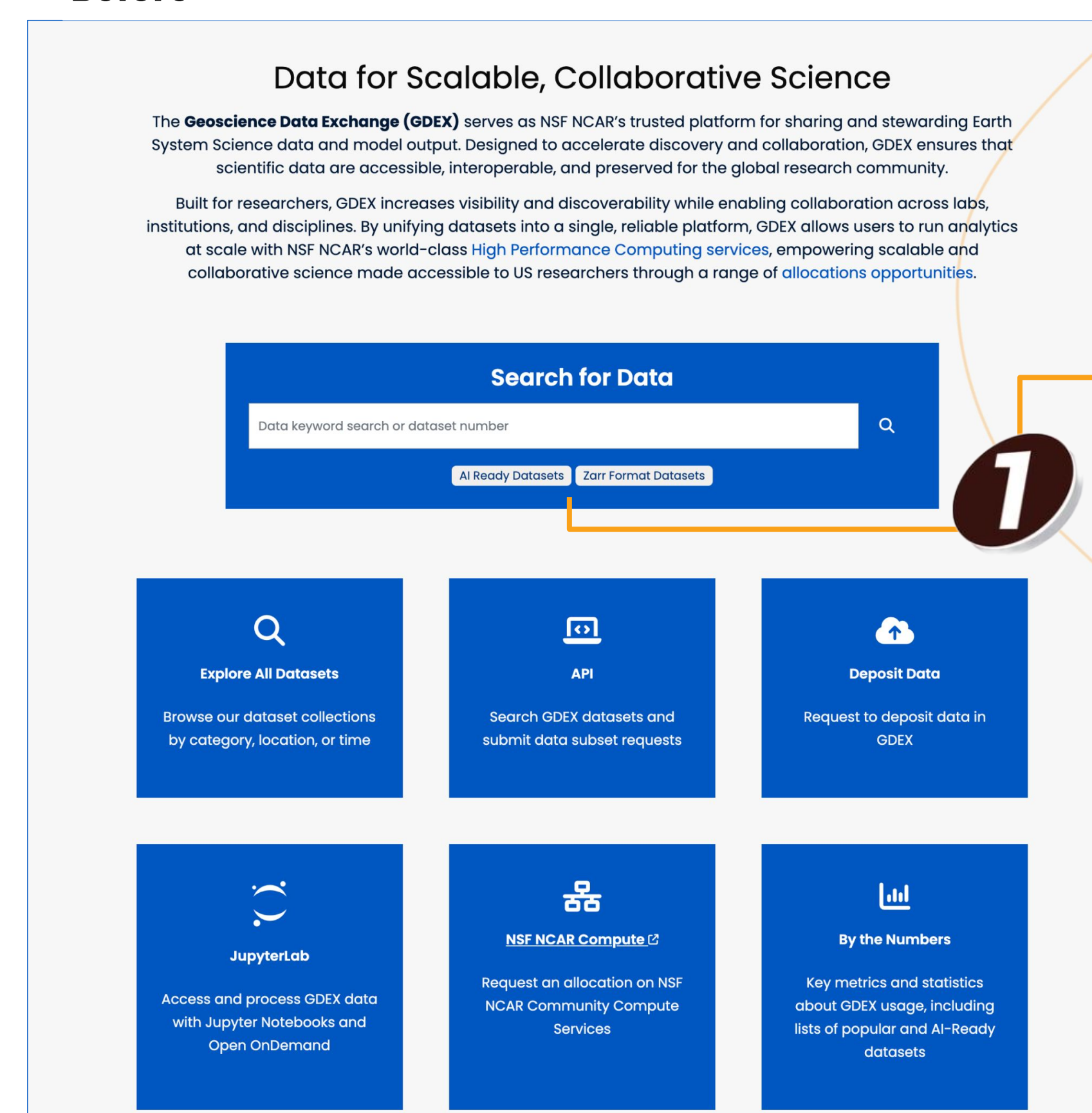
- 1 AI-ready and Zarr datasets were difficult to discover, limiting access to analysis-ready data formats.
- 2 Search filters were overcrowded and hard to navigate, making it difficult for users to narrow results efficiently.
- 3 Usage metrics and popular datasets were buried in a separate metrics page, reducing visibility of useful, high-value resources.
- 4 Important dataset information was difficult to locate, including DOI, formats, and access options
- 5 Location search filtering was unclear, making it challenging to find datasets for specific regions, states, or geographic areas.

Methodology

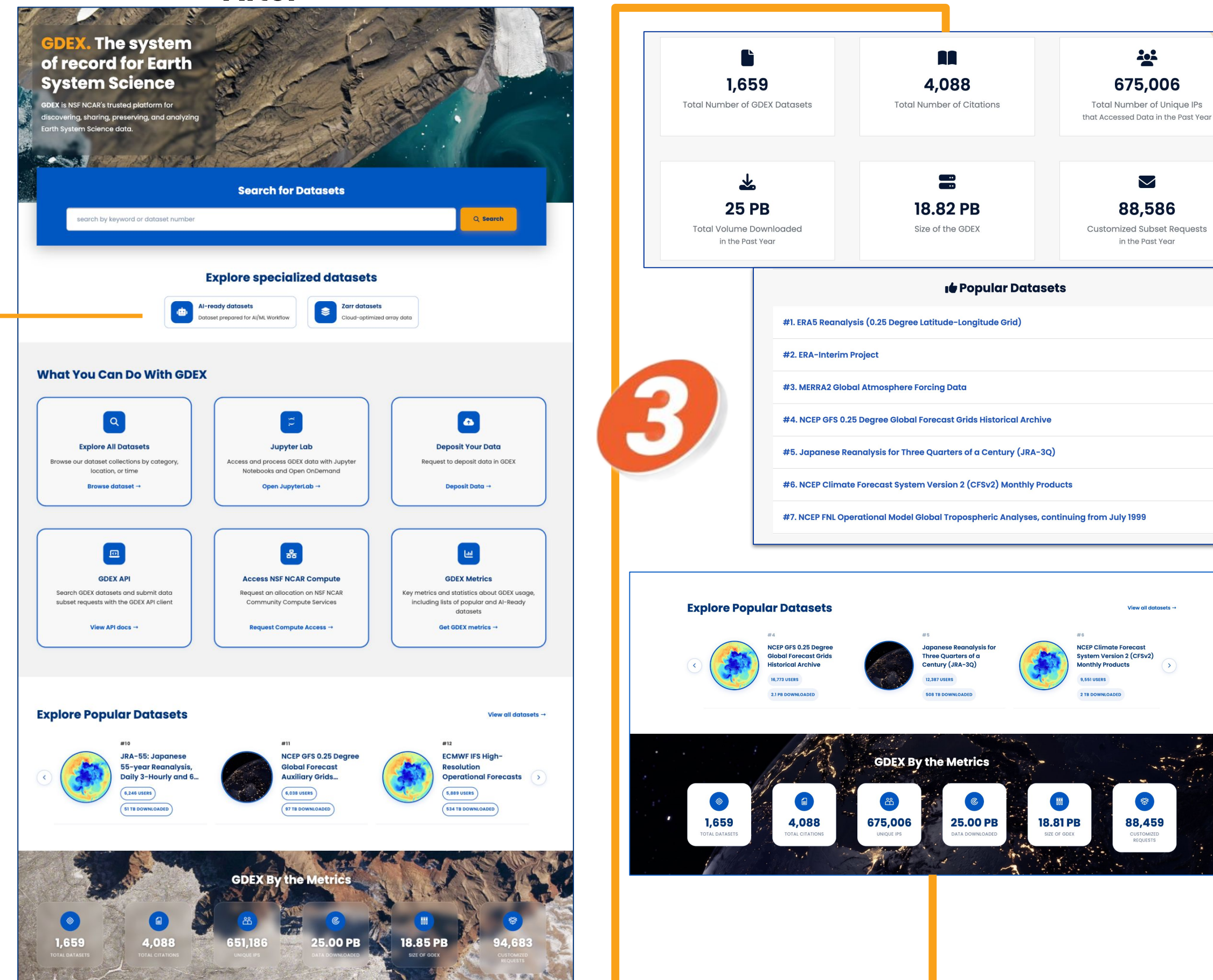


GDEX HomePage Redesign (Before → After)

Before

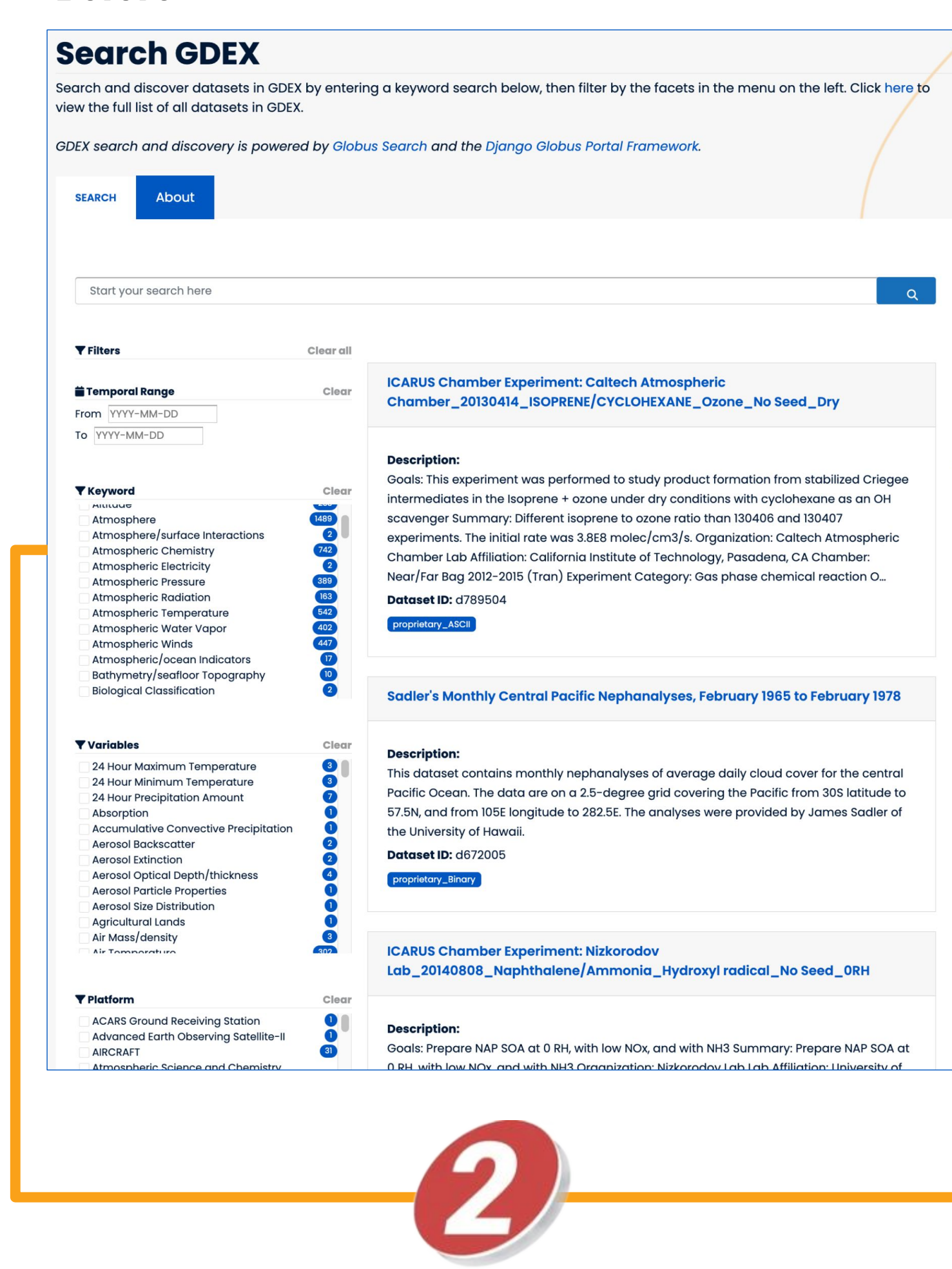


After

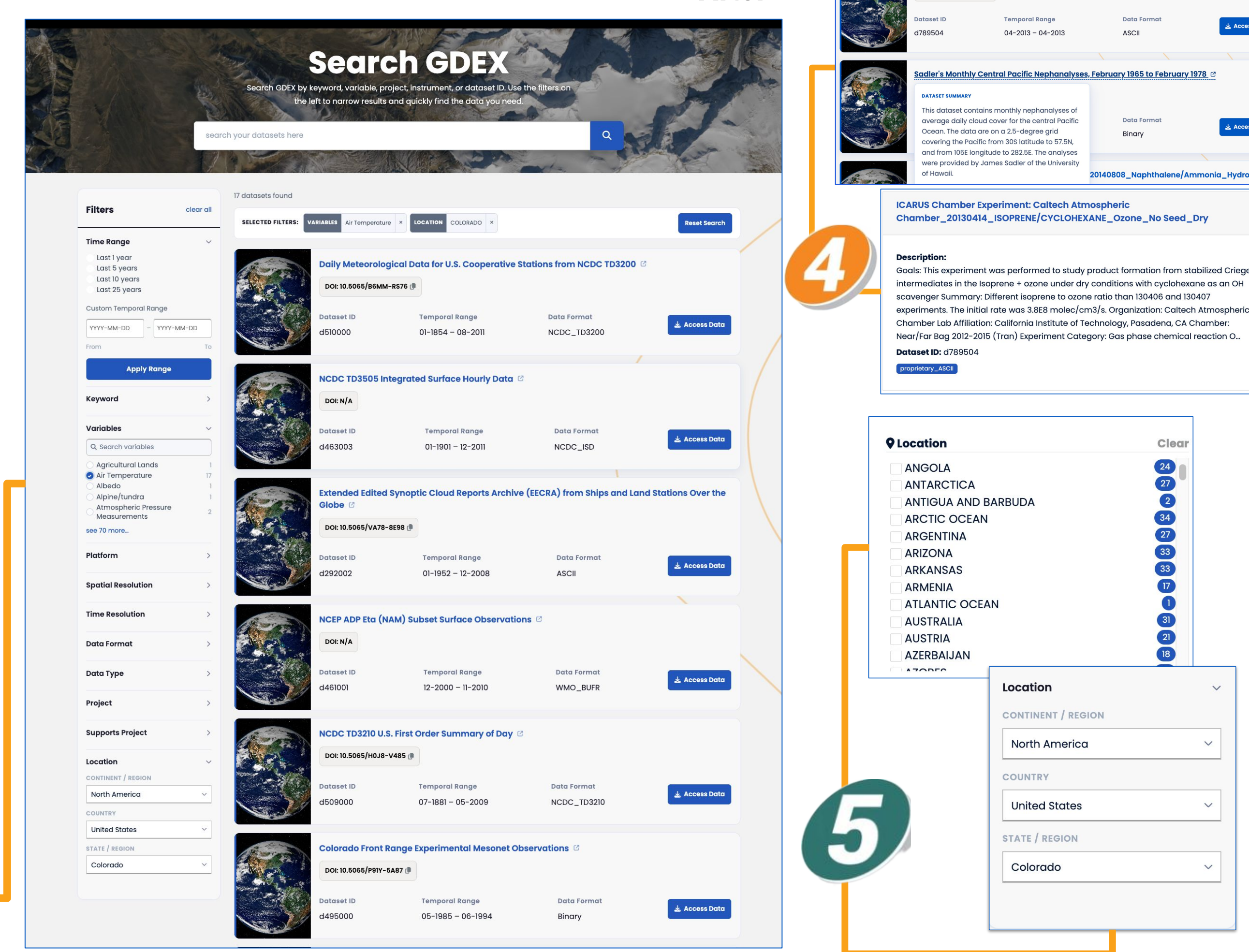


GDEX Search Page Redesign (Before → After)

Before



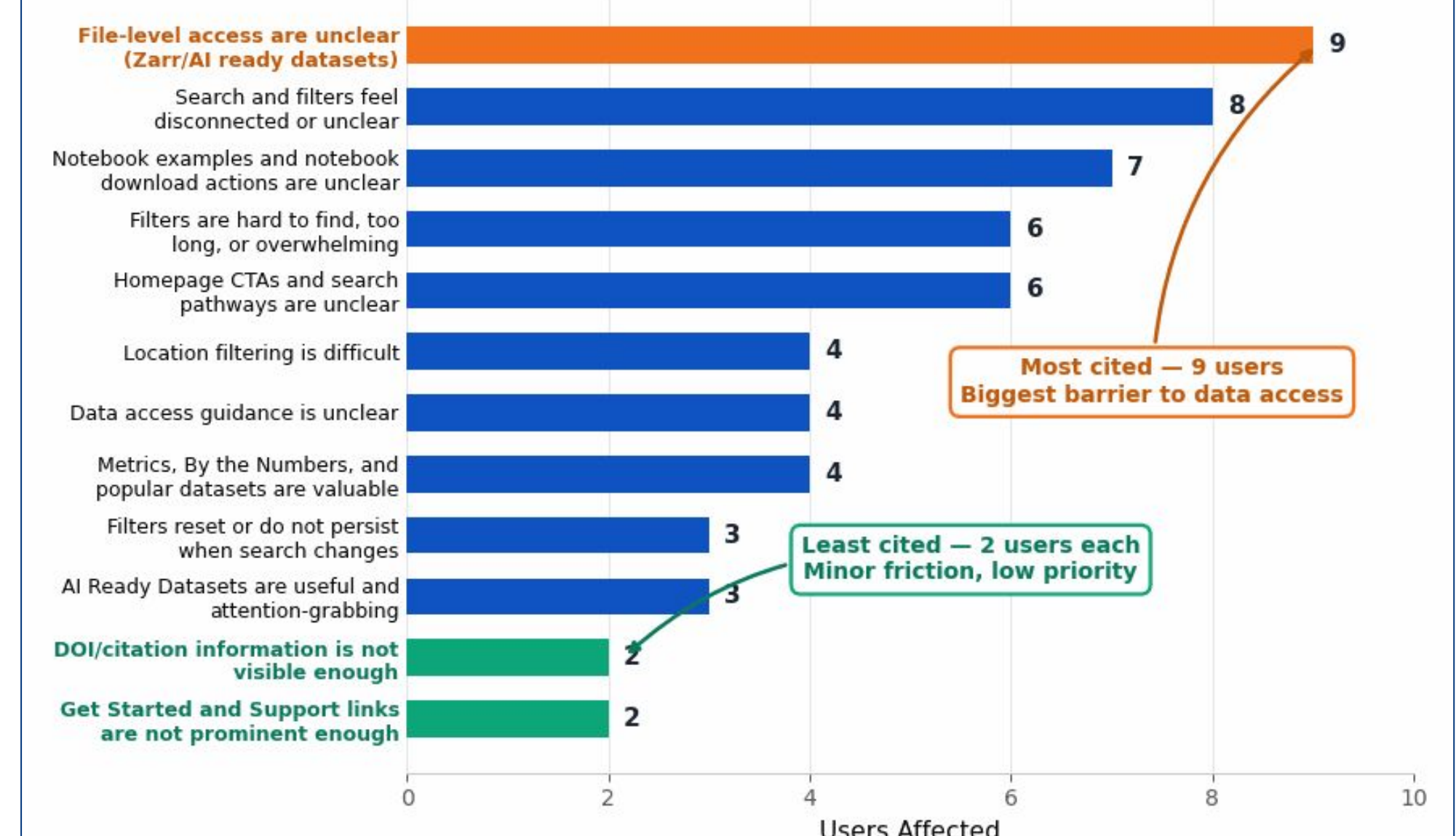
After



User Analysis Findings

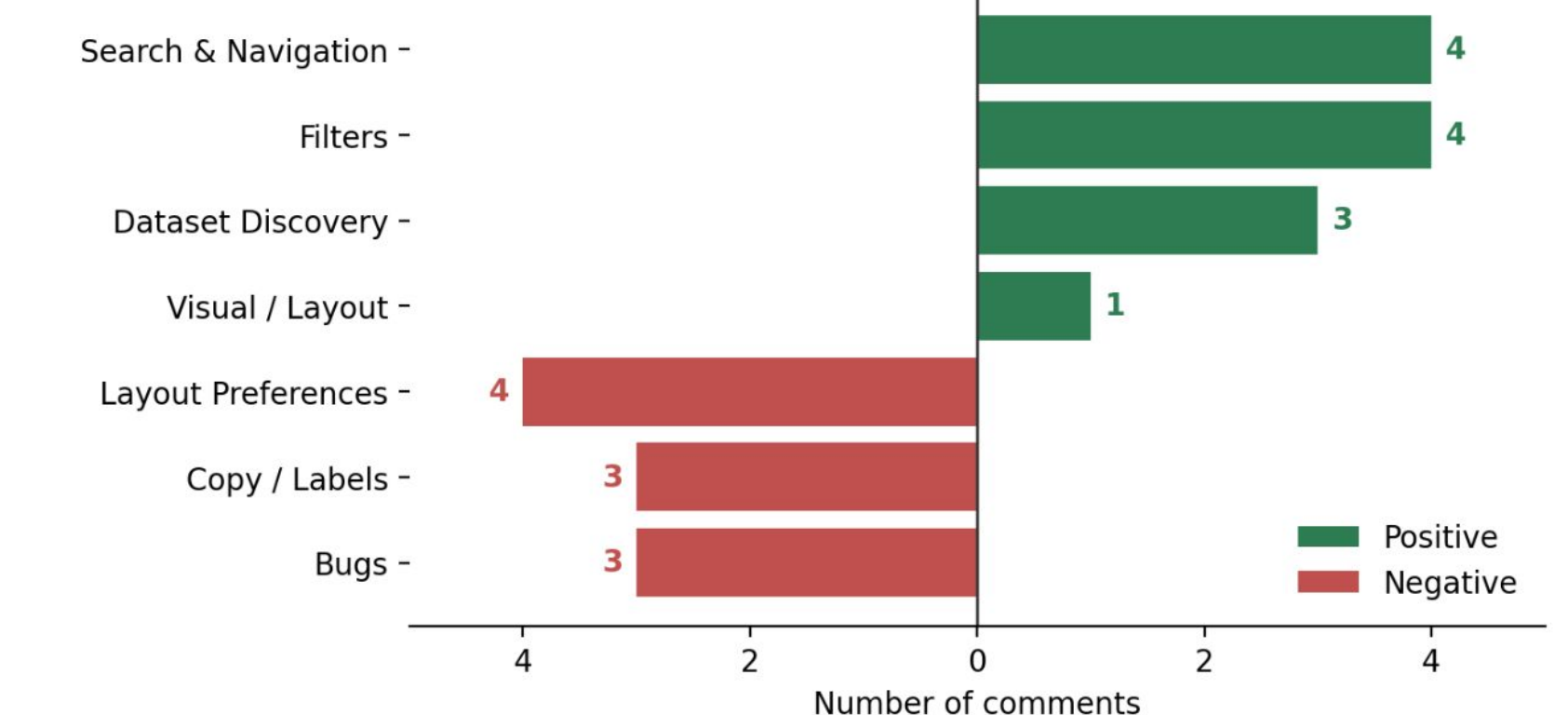
Sample Size : 10

Users Affected by Pain Point



Redesign Feedback

Sentiment by Category



Evidences based on Users Comments

