**Earthdata Search Client**

Usability review process, results, and implemented changes, using Earthdata Search Client as a case study

### Goals
- What are the key difficulties users encounter when using Earthdata Search Client?
- How important is discoverability and relevance, given user search patterns?
- Are the map and timeline useful and intuitive tools, given user search patterns?
- Is the “download all” paradigm sufficient as opposed to positive selection?

### Process

1. **Survey Participants**
2. **Tasks & Feedback**
3. **Implement Designs**
4. **Analyze Results**

### Qualitative Approach

There is great value sitting in a room with someone watching them use an application. Hearing deep breaths, watching facial expressions, and many other non-verbal communication points provides a deeper level of insight than solely relying on metric gathering. We have found that the opportunity to observe these feedback points as well as the opportunity to discuss underlying issues or desires with participants allows us to better understand how to move the application forward to meet user needs.

### Lessons Learned
- Conduct studies in user’s own space
- Ensure a wide variety of testers
- Reserve time for unstructured use
- Users prefer familiarity
- New features can generate excitement

### Results

**Natural Language Processing**

Gone are the days of having to know exact search syntax. Earthdata Search supports natural language searches!

**Expanded Map Interface**

Removing unnecessary header elements and styles made more room for the things that improve your search experience.

**Consolidated Search Summary**

Search keywords, temporal constraints, and spatial filters are now summarized in the same location.

**Clear, Colorized Call-To-Action**

Confusing iconography and ambiguous buttons have been updated to ensure user confidence.

**New Color Palette**

Color palette has been updated to provide more contrast, subconscious association, and an easier reading experience.

**More (Meaningful) Detail**

Inline collection details were added to collection lists to help users more quickly understand differences in datasets.

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