

5th Planetary Data Workshop

NASA PDSIMG

Searching the Stars with Atlas IV

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Introduction

Current Solution

- Atlas III provides effective and efficient search and access to PDS IMG's archive.
- However...
 - With an ever growing imagery collection and next-generation mission data, we need to ensure all our systems are highly available and scalable
 - Keep up with latest web technologies and design principles
 - Keep Atlas cohesive
 - Meet security and performance expectations
 - And Atlas III is almost a decade old now.
- To meet these needs, Atlas is undergoing its fourth iteration as Atlas IV.



<https://bit.ly/3h333oS>

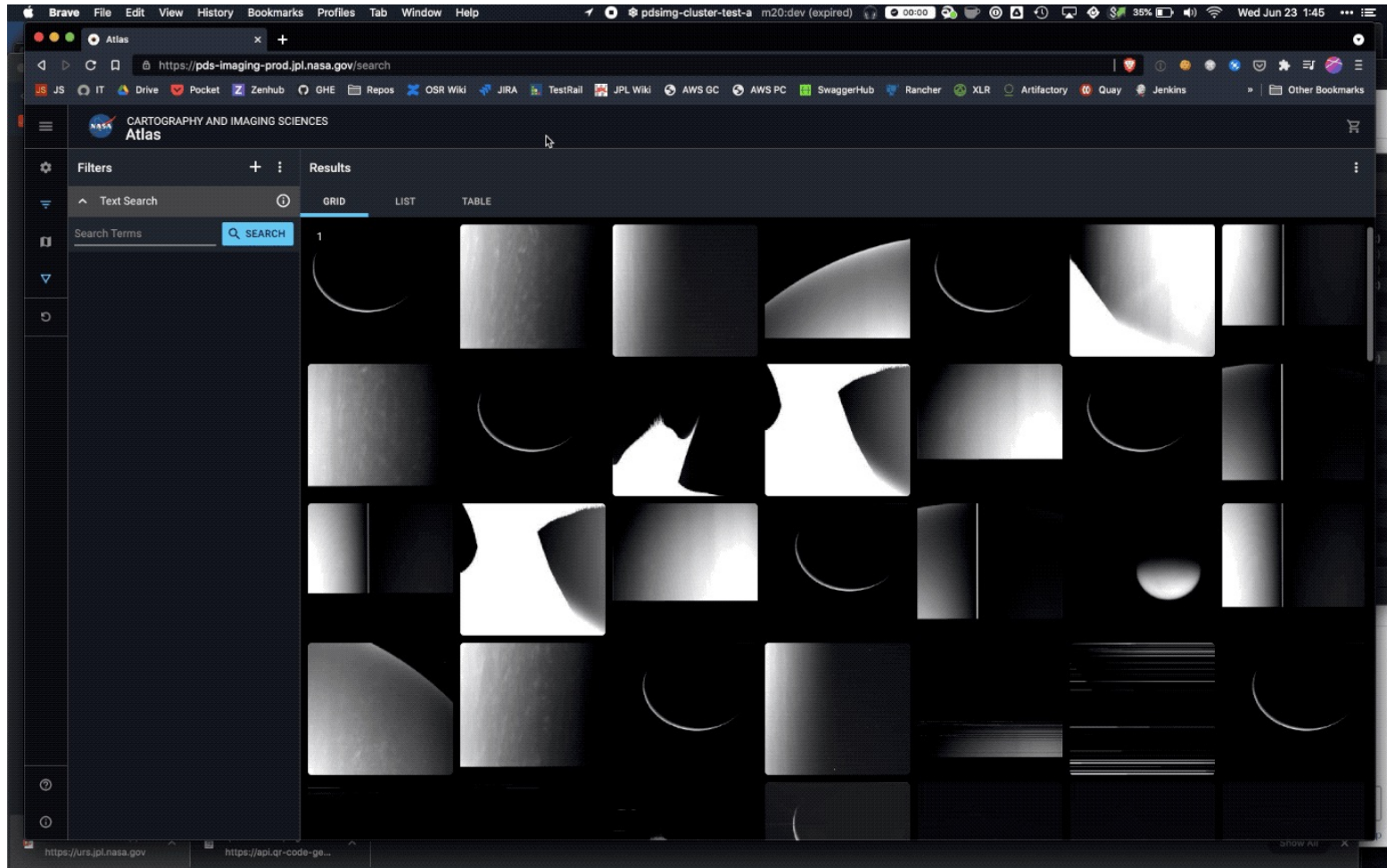
Atlas IV

Overview

- Atlas IV boasts several improvements over its predecessor and even more features
- Codebase redone in favor of modern web technologies
 - The previous JQuery-era web application is replaced with a single-page NodeJS, React, Redux, Webpack application
- Redesigned using Material UI design principles
- Mobile friendly
- Enhanced Filtering
- Improved geospatial search support
- Expanded file exploration functionalities
- Streamlined the download process
- Each image has its own dedicated and informational page
- Tighter integration with Machine Learning classifiers
- *Still a work in progress.*



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