

## Point-by-Point Response to Reviewers

I thank all reviewers for their careful evaluation and constructive suggestions. Below we address each point raised.

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### Reviewer 1

#### Recommendation: Accept

Looking at the code on GitHub, a lot of the recently added patching code is inside strings (for monkey-patching various other tools). This makes the code syntax highlight poorly, and makes linting difficult. I recommend instead this code is moved to source code files and these are loaded into the strings through file-slurping.

**Response:** Done. Patching code has been moved to separate source files in `nomad/patching/` and loaded at runtime.

This would improve the code quality. The patching code could be DRYer, for example by abstracting out the patcher as a class.

**Response:** Done. The patching logic has been refactored into a `Patcher` base class with subclasses for specific targets (SLURM prolog, job scripts, etc.).

The test coverage could also be significantly improved - perhaps by developing a Mock class for a fictional cluster.

**Response:** Done. We have implemented `MockCluster` in `nomad/testing/__init__.py` that provides: - Simulated compute nodes across multiple partitions - Mock SLURM command outputs (`scontrol`, `squeue`, `sacct`) - Synthetic job data with configurable success/failure rates - Temporary SQLite database with full schema

This enables comprehensive testing of collectors, feature engineering, and ML components without requiring HPC infrastructure.

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### Reviewer 2

#### Recommendation: Accept

While a dark mode is somehow nice for some people, it would be welcome to have a white mode as well, and use those screenshots for the article. That would allow a cleaner view for the readership.

**Response:** Done. The dashboard now includes a light theme toggle. Manuscript figures will be updated with light mode screenshots for improved print readability.

I would suggest anyway to register a DOI for every release, the way Zenodo does.

**Response:** Done. The software is archived on Zenodo with DOI: <https://doi.org/10.5281/zenodo.18614517>. Future releases will automatically receive DOIs through GitHub-Zenodo integration.

I would suggest some other form of release, especially under the Nix environment (for reproducible installations).

**Response:** Thank you for this suggestion. Nix packaging is planned for a future release. Currently, the software is available via PyPI (`pip install nomad-hpc`) and direct installation from GitHub.

Is it included in the source code? No.

**Response:** Done. All source files now include SPDX license identifiers (`SPDX-License-Identifier: AGPL-3.0-or-later`) and copyright notices.

Running “nomad edu explain 1104” should provide details about that job id but I get `NameError: name ‘_resolve_db_path’ is not defined` (a Python error) instead.

**Response:** Fixed. This was a scoping issue in the demo mode database path resolution. The `nomad edu explain` command now works correctly with demo data.

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## Reviewer 3

### Recommendation: Accept

This paper presents NØMAD, a lightweight HPC monitoring and predictive analytics system... I recommend acceptance.

**Response:** Thank you for the positive assessment. I have continued to strengthen the software with additional features (data readiness estimator, infrastructure monitoring, diagnostic tools) as described in the revised manuscript.

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## Summary of Changes

Suggestion	Status
Move patching code to separate files	Done
Abstract patching logic into class	Done
Implement MockCluster for testing	Done
Add light mode to dashboard	Done
Update figures with light mode	In progress
Register DOI on Zenodo	Done
Add Nix packaging	Future work
Add license headers to source	Done
Fix edu explain in demo mode	Done