

A Python client for the ATLAS API

¹ **Heloise F. Stevance**  ^{1,2*}, **Jack Leland**  ^{3*}, and **Ken W. Smith**  ^{1,2¶}

³ 1 Astrophysics sub-Department, Department of Physics, University of Oxford, Keble Road, Oxford, OX1 3RH, UK
⁴ 2 Astrophysics Research Center, Queen's University Belfast, Belfast, BT7 1NN, UK
⁵ 3 Oxford Research Software Engineering Group, Doctoral Training Centre, University of Oxford, Keble Road,
⁶ Oxford, OX1 3RH, UK ¶ Corresponding author * These authors contributed equally.

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⁷ Summary

⁸ The Asteroid Terrestrial-impact Last Alert System (ATLAS) is an all-sky optical sky survey
⁹ with a cadence of 24 to 48 hours ([Tonry et al., 2018](#)), and the ATLAS Transient Server ([Smith](#)
¹⁰ [et al., 2020](#)) processes the alert stream to enable the discovery and follow-up of extra-galactic
¹¹ transients. The data from the ATLAS server can be accessed through a REST API, which has
¹² allowed the development of bots that need direct access to the data to help rank alerts and
¹³ trigger follow-up observations of promising targets. Here we present the python client we have
¹⁴ developed for the ATLAS API to help connect bots and scientists to our data.

¹⁵ Statement of need

¹⁶ `atlasapiclient` is a python client that facilitates the use of the ATLAS REST API. It provides
a class-based interface to all the read-write utilities of the API and abstracts away the endpoint
URLs and the token management. The `atlasapiclient` was initially designed to be used in
our transient stream processing pipeline, particularly for the ATLAS Virtual Research Assistant
([Stevance et al., 2025](#)) ([Heloise & Smith, 2025](#)), but it can now also be used to connect other
astronomy projects to the ATLAS data and its stream. It is currently allowing the follow-up
of ATLAS alerts by the Mookodi telescope in the South African Astronomical Observatory
([Nicolas Erasmus et al., 2024](#)), which has allowed automated triggering and classification of
transients within 100 Mpc - e.g. ([N. Erasmus et al., 2025](#)), ([Wet, 2025](#))-, since early 2025. In
the future this will allow us to connect our stream to other surveys and follow-up facilities, e.g.
([Radhakrishnan Santhakumari et al., 2024](#)).

²⁷ We expect the API to evolve over time which could break the production codes that connect
to the ATLAS servers. By having a dedicated client package that includes a full set of unit
and integration tests we can release updates to the client that are compatible with the new
API but do not require users to change their existing code. Decoupling the user's code from
the implementation of the API therefore increases robustness from the users side.

³² Data Access

³³ In order to gain access to the servers, prospective users will need to fill a [Data Request Form](#)
³⁴ including a short (no longer than 1 page) science case justifying their access needs (length of
³⁵ time; Read-only or Read-Write access). We have also included data policies compliant with
³⁶ the General Data Protection Regulation (GDPR).

³⁷ Acknowledgements

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