



PERMITTING DECISION SUMMARY

Lysozyme μ -gravity Crystallisation Payload (LUCY)

The University of Canterbury

1. LUCY is a prototype microgravity protein crystallisation module developed by the University of Canterbury (UC). It was launched to the International Space Station (ISS) on 22 March 2024 and is the first payload from New Zealand to ever be carried onboard the ISS.
2. The payload is part of the same UC project as a payload permitted in 2021 (210173-PPT), which was an earlier version of the LUCY prototype.
3. Payloads are permitted in line with the [Outer Space and High-altitude Activities Act 2017](#) and the [Outer Space and High-altitude Activities \(Licences and Permits\) Regulations 2017](#).
4. Each payload has been approved by the Minister for Space, on advice from officials across agencies. When approving payloads, the Minister needs to be satisfied that:
 - a. The applicant has taken and will continue to take all reasonable steps to safely manage the operation of the payload.
 - b. The proposed operation of the payload is consistent with New Zealand's international obligations; and
 - c. The applicant has an orbital debris mitigation plan that meets prescribed requirements.
 - d. Despite being satisfied of these matters, the Minister may nevertheless decline a permit if he is not satisfied that the proposed operation of the payload is in New Zealand's national interest.

Date Granted	Authorisation Number	Payload Name	Owner or Operator	Country of Origin
14 February 2024	230432-PPT	LUCY	The University of Canterbury	New Zealand