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## **Assessment Report**

# New Zealand Scholarship Earth & Space Science 2022

#### Standard 93104

### Part A: Commentary

In Question One, a number of candidates did not explore the effects of human interactions enough for them to be awarded at least a 5 on this question. They did very well in the compare and contrast of volcanic eruptions and wildfires, and got points for this.

In Question Two, some candidates attempted to provide reasons why the carbon dioxide absorption was higher in New Zealand forests and then would explain the importance of the monitoring stations being at certain locations. However, a large number of candidates tended to largely explain the importance of the monitoring without going into too much detail about why New Zealand has higher absorption.

Finally, in Question Three, candidates tended to explain how the Kuiper Belt objects' albedos can change with distance from the Sun and would then attempt to explain how Neptune's gravity affects their orbits. But, by in large, they did not integrate these ideas together, which is why a large number were awarded Scholarship rather than Outstanding for this question. Also, some candidates

provided a discussion about the formation of the solar system, and used too much physics to explain the gravity influence of Neptune.

#### Part B: Report on performance standard

Candidates who were awarded Scholarship with **Outstanding Performance** commonly:

- used critical thinking to link and reference the resource to its fullest capacity.
  For example, discussing the implications of sea level rise and how this would affect our planet
- linked large ideas across whole questions
- applied and extended their Earth and Space knowledge from Levels 2 and 3 in the context of the question to enrich their answers rather than forcing any recalled concepts into the question
- applied the nature of science to help explain why New Zealand experiences higher than normal carbon dioxide absorption and the importance of monitoring stations at certain locations
- consistently answered each point present in the questions and the resource in an integrated manner
- wrote in a clear, logical progression without significant errors.

Candidates who were awarded **Scholarship** commonly:

- read the resource carefully and noted key words and points, for example,
  wildfire and volcanic eruptions in Question One
- linked evidence given in the resource to changing albedo of the Kuiper Belt objects, showing integration of multiple aspects of the resource, and gained understanding of the question in a wider aspect
- wrote clearly and linked answers into a single essay
- elaborated on the resource material with explanation and discussion
- answered all questions to a sufficient depth and most often used the full time of the examination
- wrote answers with minimal errors or key omissions

 showed thorough understanding of the Level 2 and Level 3 Earth and Space curriculum, as well as thinking beyond the curriculum.

#### Other candidates

Candidates who were **not** awarded Scholarship commonly:

- only partially answered some or all of the 3 questions
- wrote answers which showed a lack of understanding of important and significant Earth and Space Science concepts
- produced answers which did not relate to the unique context of the question and the resources provided
- repeated or paraphrased the resources provided without adding significant insight of their own
- wrote answers that exhibited poor literacy skills.

## Subject page

#### **Previous years' reports**

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