

Agenda Item 11– “Near-Earth Objects”

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Madam Chair, and Distinguished Delegates,

Japan recognizes the importance of the exploration of asteroids. Even though the probability of a near-earth object (NEO) collision with the Earth is low, it is important to understand the fundamental characteristics of NEOs by exploring them to avoid such a collision.

In 2010, Japan brought back samples from the asteroid Itokawa through an asteroid explorer Hayabusa developed by JAXA. This was the world’s first sample return mission from an asteroid.

This mission’s successor, Hayabusa2, was launched in December 2014 and arrived at the C-type asteroid Ryugu in June 2018. During its operation around Ryugu, Hayabusa2 conducted various critical missions. During the mission phase, a lander developed by DLR and CNES and a rover developed by JAXA were released from Hayabusa2 and landed on Ryugu to study its surface. Hayabusa2 also conducted two successful touchdowns to collect samples of Ryugu. Last December, the samples were brought back to the Earth, and the amount of the samples greatly exceeded the target yield. Hayabusa2 has extended its mission to explore another asteroid 1998 KY26.

Itokawa and Ryugu, which were the target asteroids of Hayabusa and Hayabusa2, are objects that travel near earth. Detailed data on these NEOs is valuable to investigate ways and means to avoid the collision of NEOs with the Earth. In the realm of NEO observation, JAXA has developed a method to find fast-moving celestial bodies. So far, JAXA has spotted 11 fast-moving celestial bodies moving towards the Earth by using 20cm telescopes at a remote observation site on the Siding Spring observatory in Australia, and Japan hopes to further enhance the related technology.

JAXA is a member of the Space Mission Planning Advisory Group (SMPAG) and an observer of the International Asteroid Warning Network (IAWN). Japan would like to continue contributing to their activities using its observation facilities.

Madam Chair,

Japan will continue to conduct research missions to deepen our understanding of the basic features of NEOs in order to better assess the probability of a NEO collision with the Earth. To end, I would like to reiterate the importance of international cooperation on NEOs, and Japan's commitment to continue contributing to this important issue.

Thank you for your attention.