



30 March 2023

To:

Dr. Kelly Fast

International Asteroid Warning Network Steering Committee,

Subject: JAXA participation on IAWN

On behalf of the planetary defense study group of JAXA, I am pleased to inform you about our intention to participate in the International Asteroid Warning Network. JAXA has NEO missions such as Hayabusa and Hayabusa2. In addition to this, JAXA has NEO observation facilities as shown in the table below. We have developed a new method to detect fast moving objects. Therefore, I think JAXA can contribute to the activities of IAWN.

Facility Location, Observatory code	Telescope, instruments	Contribution
Bisei Spaceguard Center Ibara, Okayama, Japan Obs. code : P93	<ul style="list-style-type: none">• 1m telescope, 1.2×2.4 deg 2k×4k CCD × 4 mosaic• 50cm telescope, 1.7×1.7 deg 2k×2k CCD	Observations of space debris and asteroids are carried out daily.
Mt.Nyukasa Observational facility Nyukasa mountain, Nagano, Japan Obs. code : 408	<ul style="list-style-type: none">• 60cm telescope, 1.17×1.17 deg• 35cm telescope, 1.2×1.2 deg• 18cm telescope × 2, 3.5×3.5 deg 2k×2K CCD 2k×1.1k CMOS	Observations of space debris and asteroids are conducted irregularly.
Chofu LEO Observational facility Chofu, Tokyo, Japan Obs. code : none	<ul style="list-style-type: none">• 35cm telescope, 0.2×0.15 deg 1.3k×1k CCD 5.3k×3.6k CMOS 4k×2.8k CMOS	Observations of space debris and asteroids are conducted irregularly.
Remote observation site at Siding Spring Observatory in Siding Spring Observatory, NSW, Australia Obs. code : Q66	<ul style="list-style-type: none">• 18cm telescope (Quadruplets) 4.22×4.22 deg, 4.3×2.4deg ×2, 3.5×3.5 deg• 18cm telescope, 3.5×3.5 deg• 25cm telescope, 2.25×2.25 deg 2k×2k CCD ×3 4k×4 CMOS 2k×1.1k CMOS×2	Remote observations of space debris and asteroids are being conducted.
Remote observation site at Zadko Observatory in Zadko observatory, WA, Australia Obs. code : to be obtained	<ul style="list-style-type: none">• 18cm telescope (twin) 4.3×2.4 deg (currently only one is working) 2k×1.1k CMOS	Remote observations of space debris and asteroids are being conducted.

Makoto Yoshikawa

Planetary Defense Study Group / JAXA