

## Outer Solar System Survey

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We carry out outer solar system survey using 2 telescopes, 1.05-m Schmidt telescope at Kiso Observatory of University of Tokyo and 8.2-m telescope at Hawaii Observatory of National Astronomical Observatory of Japan. The limiting magnitudes of these survey are 21 and 26, respectively. Our primary scientific goal is to determine the size distribution of Edgeworth-Kuiper belt object (hereafter, EKBO). Also, we search for object beyond 50 AU from the Sun, which has never been detected so far. We searched 35 sq. deg. with 1.05-m Schmidt telescope, and 1.4 sq. deg. with 8.2-m telescope. We have detected 20 new objects. The surface density of EKBO brighter than 25.25 magnitude is  $33.89 \pm 16.91$ , and the index of the cumulative luminosity function was estimated as  $0.65 \pm 0.03$ . No object having heliocentric distance of 50 AU or larger was detected. We will report the result of our survey and our plan for future observation.