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Abstract:

We propose to observe a large star forming complex recently discovered from the sensitive data of radio recombination lines (RRLs) recorded by the Galactic Plane Pulsar Snapshot (GPPS) survey. The source is located at a distance of about 15 kpc to the Sun in the first Galactic quadrant. Its physical size—is as large as ~100 pc, comparable to that of W51, making it probably the largest star forming complex in the outer Galaxy, deserving further studies to unveil its fundamental properties. However, the GPPS data is not adequate for the purpose, because of—the shortage of the flux density calibration data during the survey and the under-Nyquist sampling of the sky by observation beams. The new observation will make a complete coverage of this source through more snapshots and recording data for RRLs as well as radio continuum.