DUST CLOUDS IN ORION AND THE INTERSTELLAR NEUTRAL HYDROGEN DISTRIBUTION

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According to published examples of the far infrared observations in the Orion and its surroundings several well-defined dust clouds of different sizes and structure are present there.

For comparison of these clouds with the neutral hydrogen distribution on the area of approximately thousand square degrees the data from Pulkovo Sky Survey in the interstellar neutral Hydrogen Radio Line as well as special observations with the RATAM-600 telescope in

21 cm line were used. From the materials of Pulkovo HI Survey we took the data about the line emission at ten velocities between - 21.8 and + 25.6 km/s LSR for the structural component of the interstellar hydrogen emission.

The results given in the poster concern mainly the Orion's Great Dust Cloud and the Lambda Orionis region where the information about the situation with the dust and interstellar hydrogen is very essential for interpretation.