# On the progress in Odin's hunt for molecules

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New results from the fourth and fifth years of Odin observations - time shared 50 / 50% with aeronomy - will be presented: high S/N mapping of the $H_2O$ emission in nearby outflow sources; searches for $H_2^{18}O$, PH, ND, and the elusive $O_2$; Odin's spectral line survey of the bands 486-492 and 541-576 GHz in Orion KL; and Odin's spectral scan search for primordial molecules in the band 547-578 GHz- a search for structure formation during the dark ages of the evolving universe. Odin by now has observed five different spectral lines from water vapour: the *ortho*-$H_2O$, *ortho*-$H_2^{18}O$, *ortho*-$H_2^{17}O$ $1_{10}$-$1_{01}$ ground state rotational transitions, and also the HDO $2_{02}$-$1_{11}$ line, and the high energy ($E_u$= 867 K) *para*-$H_2O$ $6_{24}$-$7_{17}$ line. The importance of the line identification work in the Orion KL spectral scan is illustrated by the fact that the high-velocity parts of the outflow wings of the *ortho*-$H_2^{18}O$, *ortho*-$H_2^{17}O$ $1_{10}$-$1_{01}$ lines are not water vapour emission but are caused by blends with $SO_2$, $^{34}SO_2$ and CH3OH.