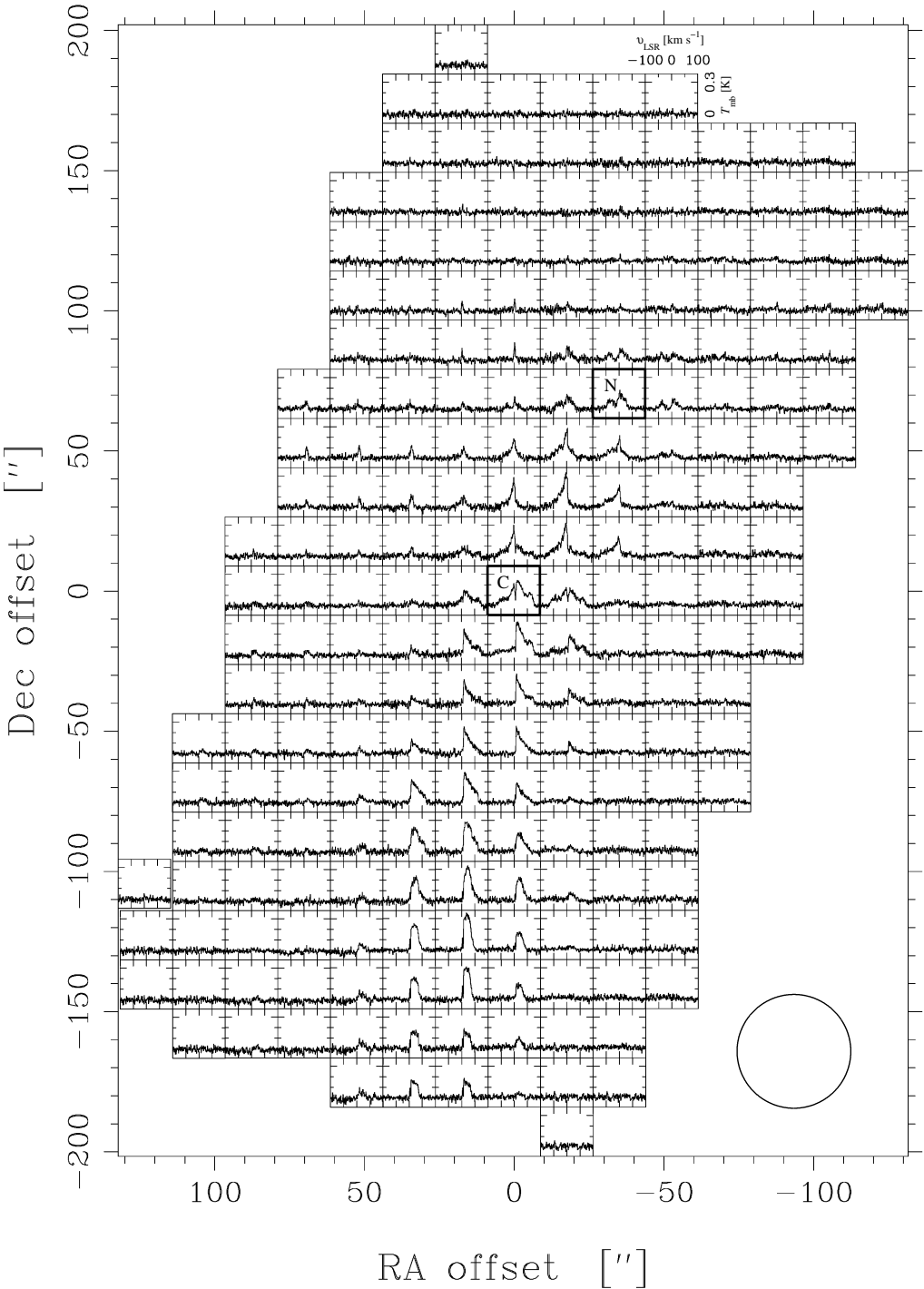1. H_2O 557 GHz spectra and velocity channel maps