Organic Chemistry of Southern Sources: Microwave Spectroscopy of Cha-MMS1 and IRAS 15194-5115

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We report new spectra of molecule-rich sources in the southern hemisphere obtained using the 22-metre Mopra telescope. Spectra and maps are presented of organic molecules detected between 30 and 50 GHz in the young Class 0 protostar Chamaeleon MMS-1. The large abundances of polyynes, cyanopolyynes and methanol may be indicative of a warm carbon chemistry in the dense gas surrounding this protostar. Spectra are also presented from a 78-96 GHz scan of the carbon-rich AGB star IRAS 15194-5115, including new detections of HC5N, CCS and C13CH.