

EVIDENCE FOR A 12 MICRON WATER-ICE ABSORPTION BAND IN THE IRAS LRS SPECTRA OF PROTOSTARS AND LATE TYPE STARS

M. de Muizon¹, L.B. d'Hendecourt² and C. Perrier³

¹Sterrewacht Leiden, Postbus 9515, 2300 RA, Leiden,
The Netherlands, and Observatoire de Paris, France

²Groupe de Physique des Solides, Universite de Paris 7,
4, Place Jussieu, 75251 Paris Cedex 05, France

³Observatoire de Lyon, 69230 Saint-Genis Laval, France

We present evidence for a 12 micron absorption band due to the librational mode of the H₂O molecule in the form of ice in some IRAS LRS spectra. This identification is based on the 3 micron spectro-photometry of these objects showing the presence of the 3 micron ice band. From these spectra, physical characteristics of the ice can be discussed.