A model interstellar medium reactivity study: Low energy electron induced chemistry of CH₃OH@H₂O

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Abstract

The typical mass spectra of the parent molecules within the sandwich layer (16 ML) are shown in Figure 1. Here, the MeOH peaks appears at ~140K while the water desorption peak is at ~160K.



Fig. 1: a) TPD of 16 ML sandwich layer [7ML H₂O / 2ML MeOH / 7ML H₂O] detected at mass 31 that reflects the parent methanol, with its multilayer peak at 140K and trapped molecules in ASW that desorb at 160K