## **Figure caption (for Supporting Information)**

**Figure 1S.** Infrared absorption spectra in the frequency regions of (a)  $D_2O$  symmetric stretching, (b)  $D_2O$  asymmetric stretching, and (c) HDO symmetric stretching. These spectra were obtained for the sample of  $O_3/(H_2O+D_2O+HDO)/Ne=8/2/4000$ . Spectra were recorded at 6K with a spectral resolution of 0.25 cm<sup>-1</sup>. Arrows indicate the band observed only for the ozone-containing sample. The band positions of non-rotating water monomers (NRMs) are also indicated by dotted lines.

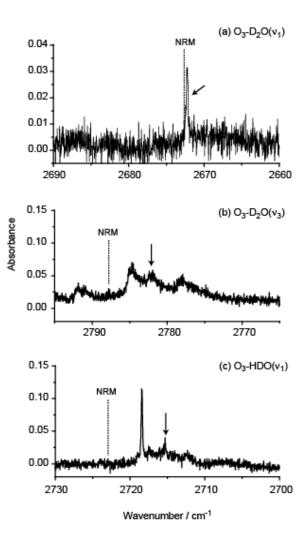


Figure 1S Tsuge et al.