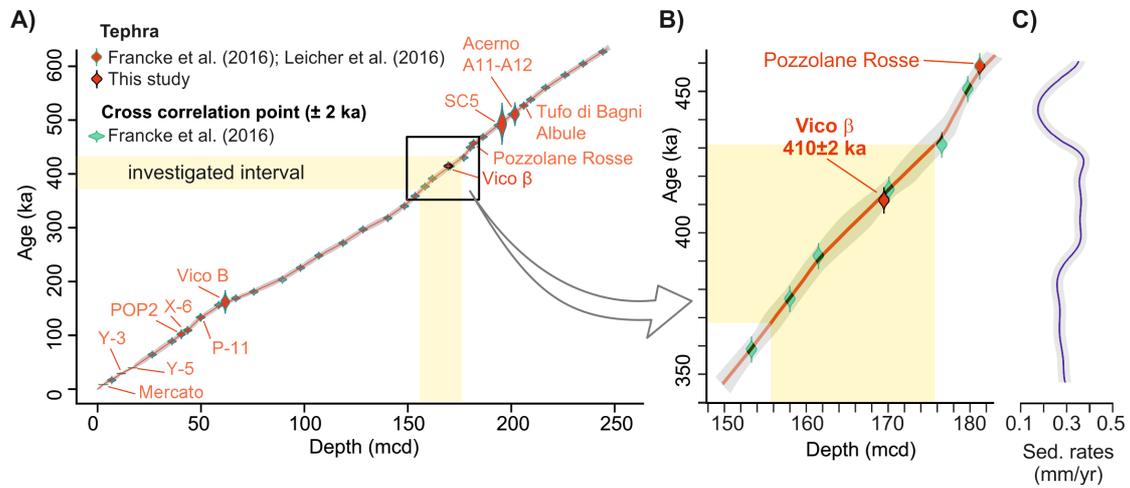
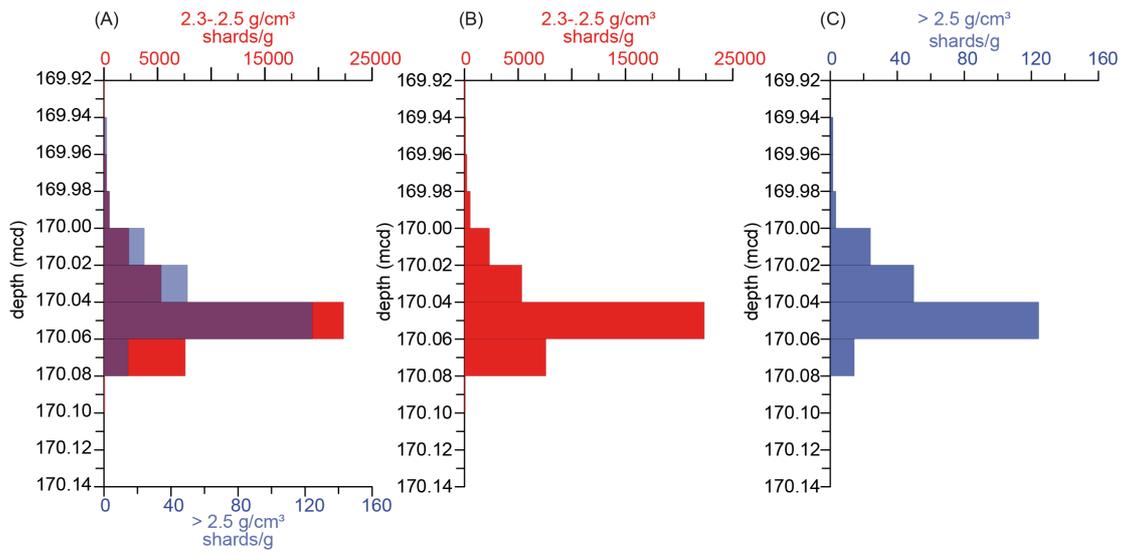


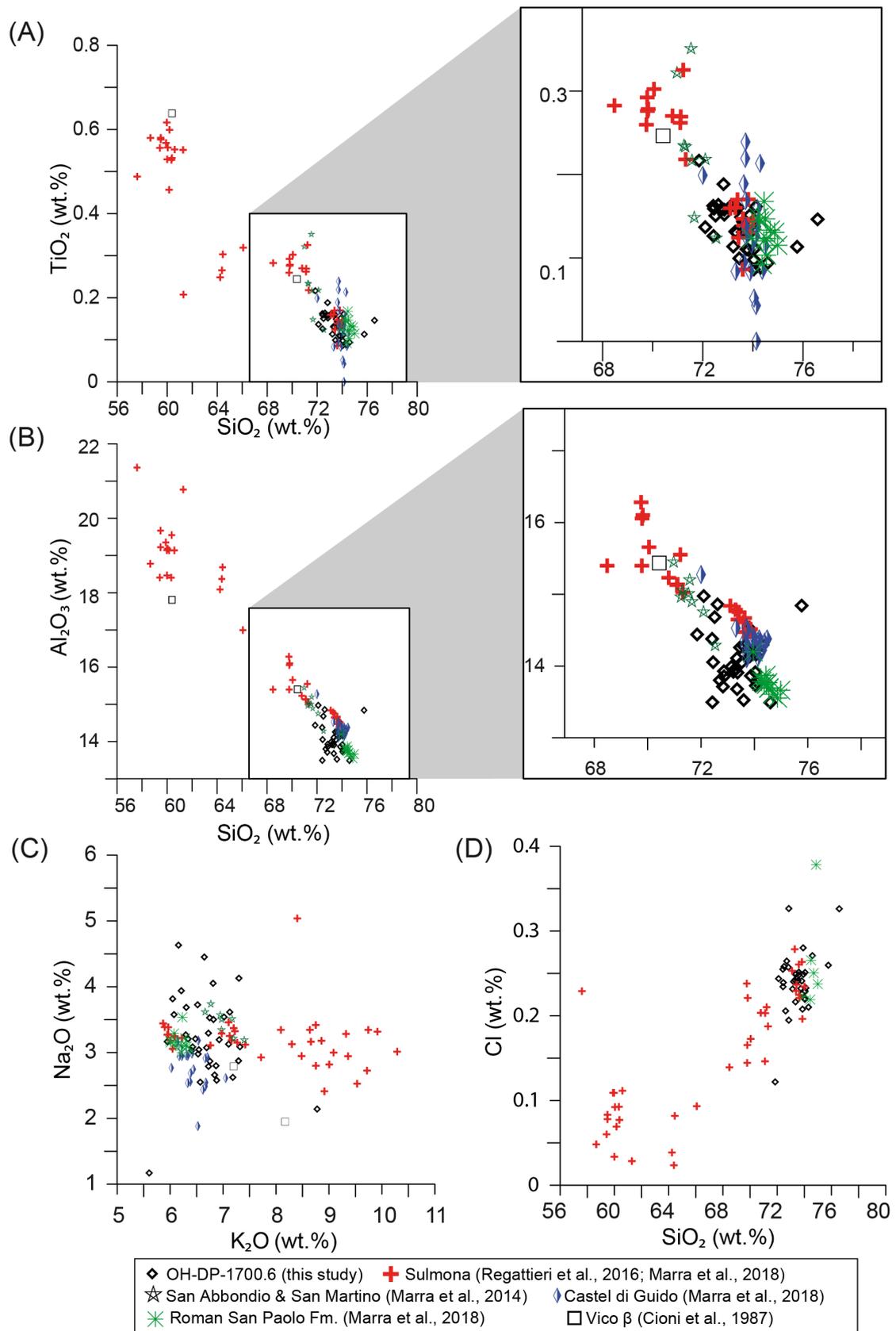
SUPPLEMENTARY INFORMATION



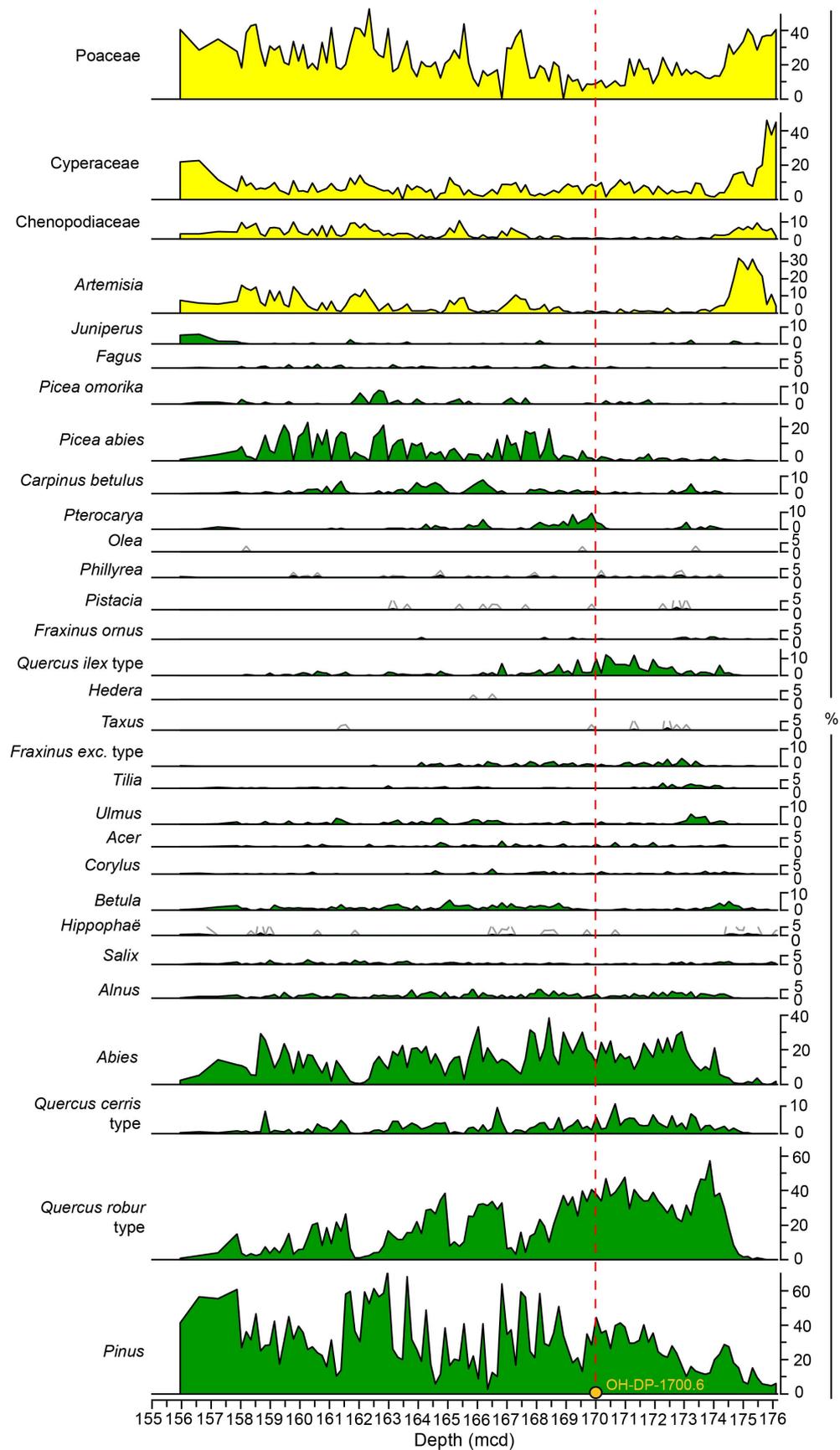
Supplementary Figure 1: Age model tie points and uncertainties of the DEEP composite record from Lake Ohrid: (A) entire sequence spanning the past 637 ka (Francke et al., 2016); (B) study interval (i.e., MIS 11) indicating the stratigraphic positions of the Pozzolane Rosse (Leicher et al., 2016) and Vico β (this study) tephra layers; (C) sedimentation rates for the study interval.



Supplementary Figure 2: Glass shard concentration in the interval 170.14–169.92 mcd plotted against depth: (A) 2.3–2.5 g/cm³ and >2.5 g/cm³ fractions combined; (B) 2.3–2.5 g/cm³ fraction; (C) >2.5 g/cm³ fraction.



Supplementary Figure 3: Bi-oxide plots of single glass shard analysis of the OH-DP-1700.6 and equivalent tephra layers correlated with the Vico β deposits.



Supplementary Figure 4: Selected pollen taxa plotted against depth. The OH-DP-1700.6 tephra at 170.06 mcd is indicated with a red dashed line. Note 10x exaggeration lines for *Hedera*, *Hippophaë*, *Olea*, *Phillyrea*, *Pistacia* and *Taxus*.

Supplementary Table 1: Glass shard concentration in the interval 170.14–169.92 mcd for the 2.3–2.5 g/cm³ and >2.5 g/cm³ fractions.

Label DEEP	sect. depth (cm)		depth (mcd)		shards/g		
	top	bottom	top	bottom	2.3-2.5 g/cm ³	>2.5 g/cm ³	total
DP1699.4	71.90	73.90	169.92	169.94	63	0	63
DP1699.6	73.90	75.90	169.94	169.96	106	2	108
DP1699.8	75.90	77.90	169.96	169.98	220	2	222
DP1700.0	77.90	79.90	169.98	170.00	526	3	530
DP1700.2	79.90	81.90	170.00	170.02	2330	24	2354
DP1700.4	81.90	83.90	170.02	170.04	5340	50	5390
DP1700.6	83.90	85.90	170.04	170.06	22349	124	22474
DP1700.8	85.90	87.90	170.06	170.08	7581	14	7596
DP1700.10	87.90	89.90	170.08	170.10	68	0	68
DP1700.12	89.90	91.90	170.10	170.12	2	0	2
DP1700.14	91.90	93.90	170.12	170.14	3	0	3