

## 1 Appendices

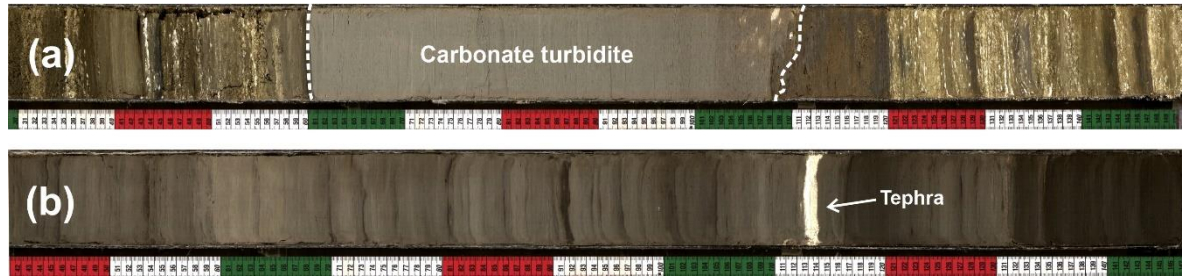
### 2 Appendix A

3 Table A1. The 32 deposits identified as "slumps" during the elaboration of the age model are shown. Due to their  
4 sedimentary nature, these materials were deposited on a short time scale (days-weeks), which is why their thickness is  
5 minimized during chronological modeling. The deposits include carbonaceous turbidites and volcanic tephtras.

Core/Section	top section cm	bottom section cm	Top depth (mcd)	Bottom depth (mcd)	Type of deposit	Thickness (cm)
2D-1H-2	29	33	1.87	1.91	Carbonate turbidite	4
2D-1H-2	35	37	1.93	1.95	Carbonate turbidite	2
2D-2H-2	50	53	5.12	5.15	Carbonate turbidite	3
2D-2H-2	137	139	5.96	5.98	Carbonate turbidite	2
2D-2H-2	142	146	6.01	6.04	Carbonate turbidite	4
2D-3H-1	8	10	6.04	6.06	Carbonate turbidite	2
2D-3H-1	135	137	7.26	7.28	Carbonate turbidite	2
2D-3H-2	40	42	7.8	7.82	Carbonate turbidite	2
2D-3H-2	55	60	7.94	7.99	Carbonate turbidite	5
2A-4H-3	56	62	8.82	8.88	Carbonate turbidite	6
2A-5H-2	28	31	11.76	11.79	Carbonate turbidite	3
2A-5H-2	39	42	11.87	11.9	Carbonate turbidite	3
2A-5H-2	66	73	12.14	12.21	Carbonate turbidite	7
2A-5H-2	100	105	12.48	12.53	Carbonate turbidite	5
2A-5H-2	118	122	12.65	12.69	Carbonate turbidite	4
2D-5H-1	89	90	13.09	13.1	Tephra	1
2D-6H-2	66	68	17.68	17.7	Tephra	2
2A-8H-2	42	44	21.4	21.42	Carbonate turbidite	2
2A-8H-2	58	61	21.56	21.59	Carbonate turbidite	3
2A-8H-2	87	89	21.85	21.87	Carbonate turbidite	2
2A-8H-2	109	111	22.07	22.09	Carbonate turbidite	2
2C-2H-2	91	99	48.15	48.23	Carbonate turbidite	8
2A-19E-2	9	10	54.45	54.46	Tephra	1
2C-6H-1	60	108	57.84	58.32	Carbonate turbidite	48
2C-6H-2	6	14	58.81	58.89	Carbonate turbidite	8
2C-6H-2	29	31	59.04	59.06	Carbonate turbidite	2
2C-6H-2	71	73	59.46	59.48	Carbonate turbidite	2
2C-6H-2	84	87	59.59	59.62	Carbonate turbidite	3
2E-4E-2	0	7	61.43	61.5	Rock	7
2C-9H-1	112	114	64.22	64.24	Tephra	2
2C-9H-2	75	79	65.31	65.35	Carbonate turbidite	4

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7 Fig. A2. High resolution photographs of two cores from the PI-2 record. Instantaneous deposits are shown: A)  
8 Carbonate turbidite (PET06-2C-6H-1 core), and B) Tephra C5 recognized by Kutterolf et al., (2016) (PET06-2C-9H-  
9 1 core).



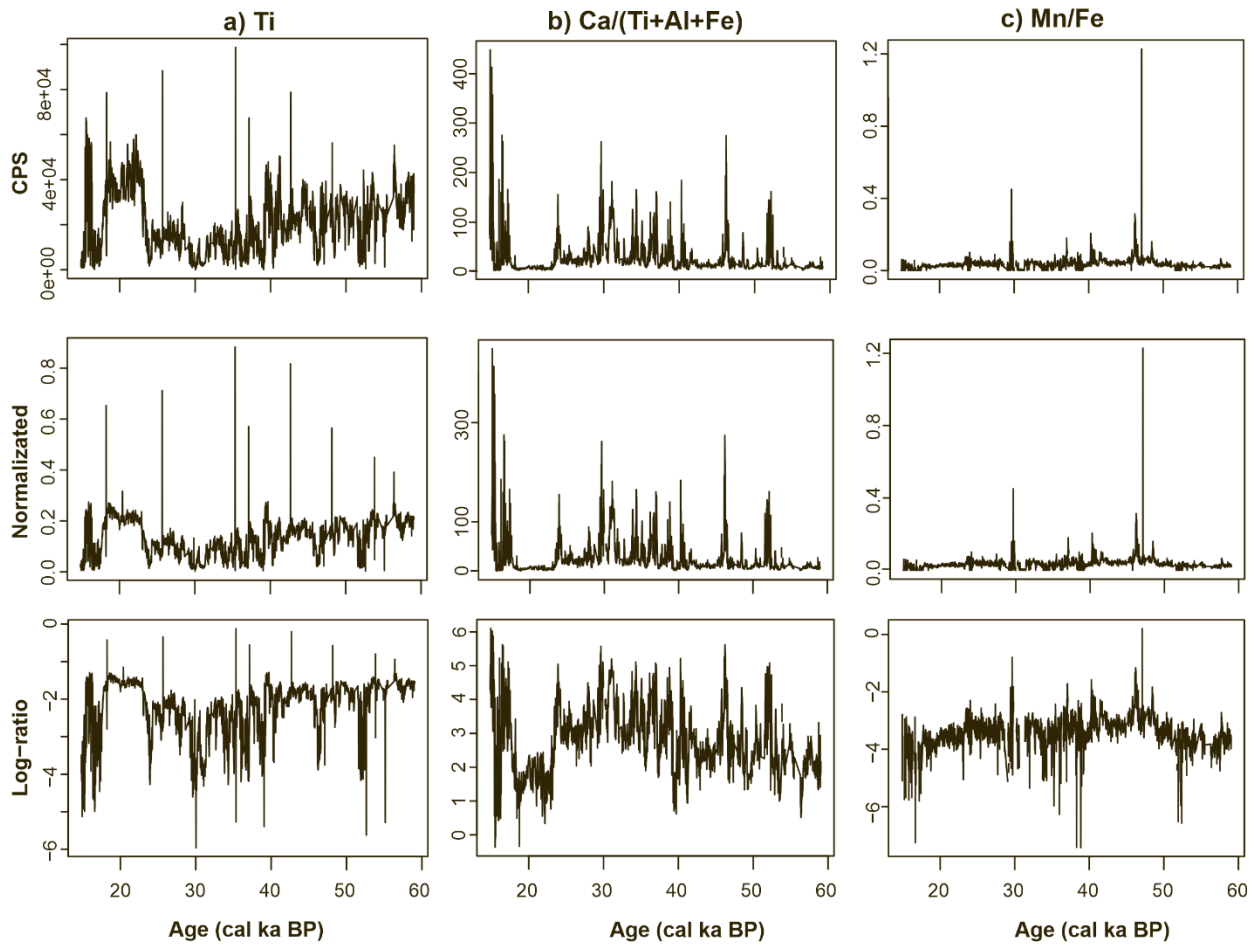
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12 **Appendix B**

13 Fig. B1. Geochemical data obtained for the Petén Itzá 02 record. Titanium,  $Ca/(Ti+Al+Fe)$  values and the Mn/Fe ratio  
14 are shown. In the three cases the un-calibrated measurements are shown as counts per second (CPS). The division of  
15 each element or ratio using the sum of Coherent+Incoherent scattering as common denominator is shown as  
16 “Normalized” values. Finally, the log-ratio calibration is displayed in the third column.

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