

Supplementary Table 1

Location of surface sediment sampling stations

<b>Site</b>	<b>Station</b>	<b>LONG</b>	<b>LAT</b>	<b>Depth (m)</b>	<b>Distance coastline (km)</b>
Callao	E2	-77.3	-12.0	92	14.8
Callao	E5	-77.6	-12.0	178	55.5
Pisco	E13	-76.4	-14.0	120	9.2
Pisco	E12	-76.4	-14.1	182	20.3
Pisco	E11	-76.5	-14.1	311	25.9

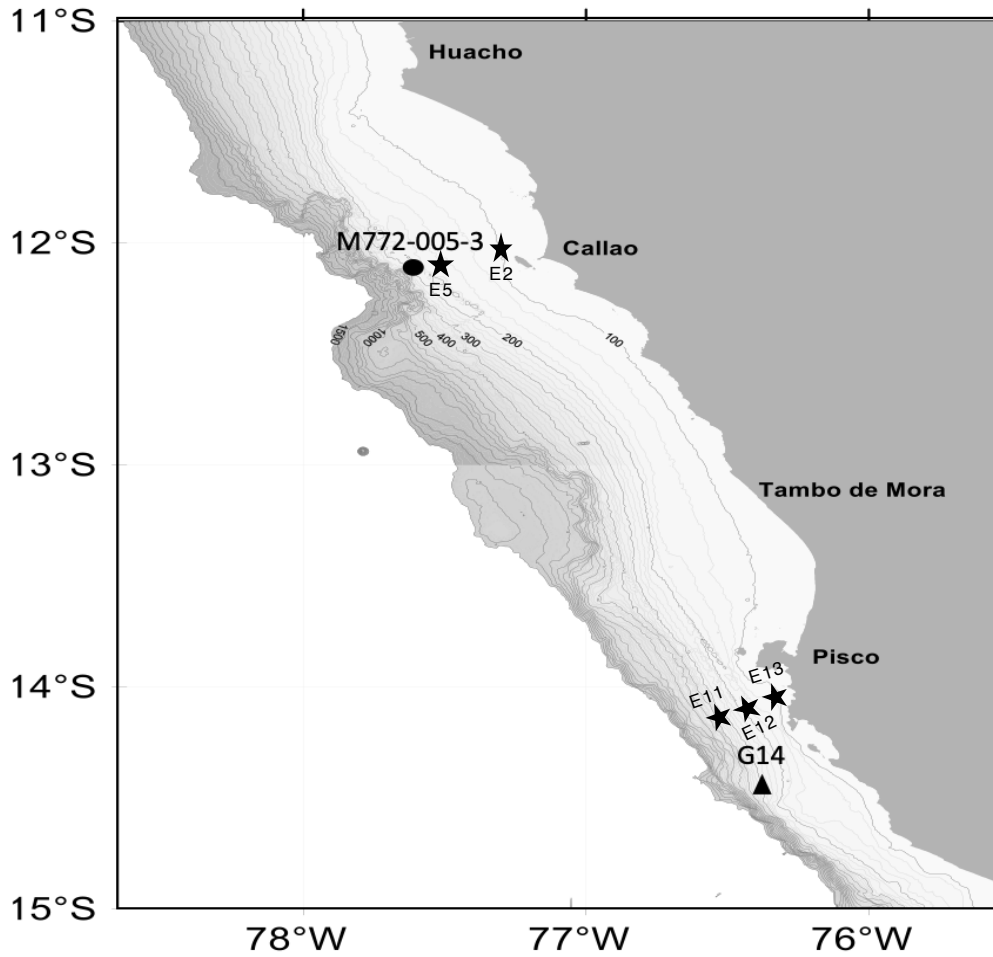
Supplementary Table 2

Uncalibrated and calibrated  $^{14}\text{C}$  ages in core M772-005-3 used to elaborate the chronological model. \* Indicate the  $^{14}\text{C}$  ages reported in Salvattecchi et al., 2019.

Depth (cm)	Uncalibrated Age BP (years)	Delta-R (years)	Age cal. BP (maximum probability)
13	1902±20	367±40	1092
52	2605±30	367±40	1841
84	3160±30	226±98	2692
*113	11646±44	511±278	12650
134	12320±60	511±278	13277
153	12690±60	511±278	13678
169	12730±70	511±278	13728
210	13150±70	511±278	14125
244	13180±70	511±278	14150
*303	13792±53	511±278	15325
319	13810±80	511±278	15346
349	13840±70	511±278	15399
378	13790±70	511±278	15316
385	13870±70	511±278	15447
*403	14449±68	511±278	16300
418	13990±70	511±278	15725
452	14100±70	511±278	15775
469	14410±70	511±278	16265
503	14510±80	511±278	16313
522	14660±80	511±278	16600
542	14780±80	511±278	16825
590	14850±80	511±278	16913
*623	15930±66	511±278	18288
647	16530±90	511±278	18838
672	17680±110	511±278	20230
700	21390±170	511±278	24663

Supplementary Figure 1

Location of the sampling of the sediment cores M772-005-3 and G14 core and surface sampling station (black stars) in the Peruvian margin.



## Supplementary Figure 2

Chronological model for Callao (M772-005-3 and 106KL) and Pisco (G-14) cores.

