Supplementary Information

The emergence of modern zoogeographic regions in Asia examined through climate—dental trait association patterns (Liu *et al.*)

 Table 1
 Data resources for the elevation estimates for the Tibetan Plateau from Figure 3.

Time interval	Site	Estimation method				
		Isotope O	Isotope C	Plant fossil	Vertebrate	e fossil
Early Miocene	Lunpola	4500–4900 m [1]	3000 m [2]	< 3190 m [3]	3000 m	[4]
	Hoh Xil	4200 m [1]		3000 m [5]		
Middle Miocene	Namling	5200 m [6]		4689 m [7] < 3000 m [8]		
early Late Miocene	Biru				< 2500 m	[9]
late Late Miocene	Gyirong	5850 m [10]	< 2900 m [11]	< 2900 m [9]	< 2900 m	[11]
Pliocene	Zanda	6000 m [12]			4000 m	[13]

Table 2 Coordinates of the corners of the rectangles used to define the study region. The first five formed the dataset considered in our previous study [14] whereas the last four have been added in the present study and constitute the northern extension of our dataset.

Name	south-west	north-east
South East	10°N, 90° E	20° N, 115°E
South West	5°N, 66° E	28° N, 90°E
North East	20°N, 80° E	35° N, 125°E
North West	28°N, 67°30′E	37°30′N, 90°E
North Mid	35°N, 80° E	40° N, 120°E
Extension North East	42°N, 130° E	50° N, 142° E
Extension North Mid	42°N, 125° E	50° N, 130° E
Extension Korea	30°N, 125° E	42° N, 130° E
Extension West	36°N, 67°30'E	50° N, 125° E

Table 3 Geographic conditions defining the groups of localities for computing and comparing dental traits and climate trends in Figure 3.

	x_1	x_2	condition	group
(A) (B) (C)	28°N 18°N, 106°E 43°N, 124°E	36°N, 70°E 24°N, 87°E	north of (A) south of (A) north-east of (B) and south-east of (I) north-east of (B) and north-west of (II)	, ,

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