

Chart 4.2 The range of key Cretaceous species for the Rotaliporidae, Globotruncanellidae, Globotruncanidae and the Rugoglobigerinidae.

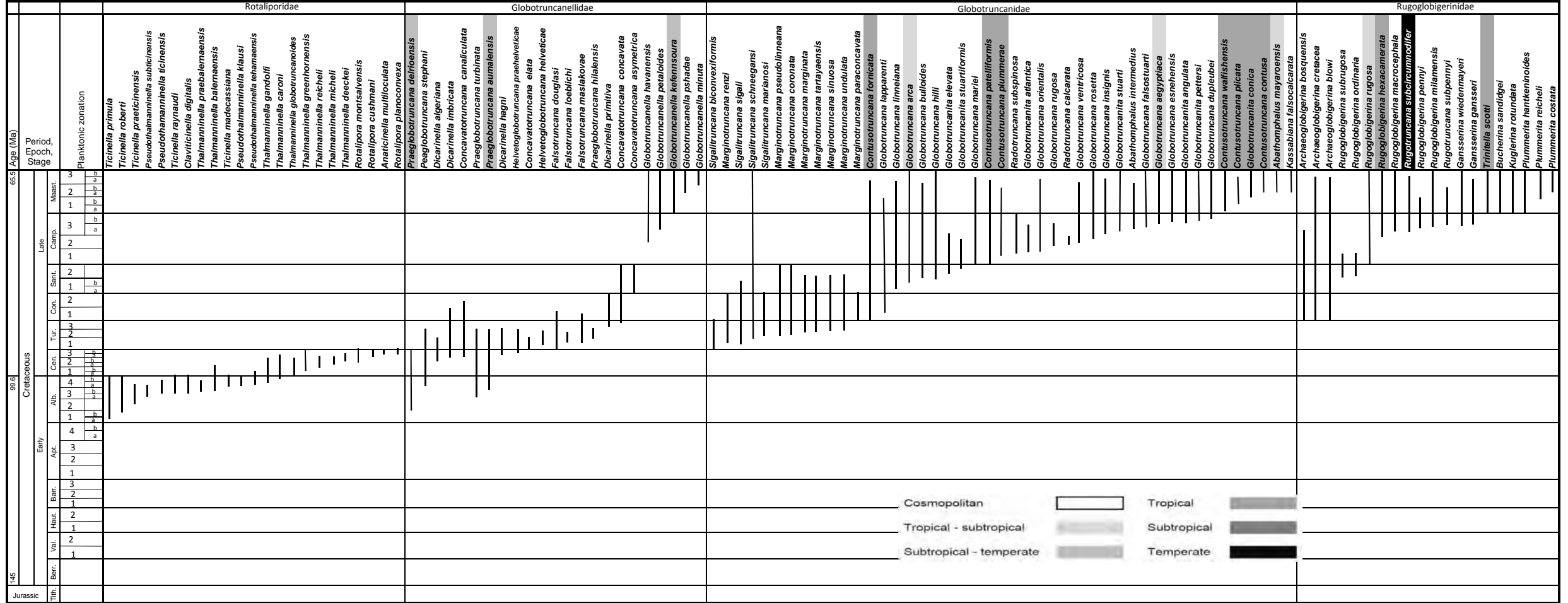


Chart 4.5. Diagnostic First and Last Occurrences of Cretaceous Planktonic Foraminifera.

Age (Ma)	Period, Epoch, Stage	Planktonic zonation	Diagnostic First Occurrence of Planktonic Foraminifera	Diagnostic Last Occurrence of Planktonic Foraminifera					
65	Cretaceous	Late	Maast.	3 b	66.7	<i>Ventilabrella multicamerata</i>	66.0	<i>Globotruncana</i> spp./ <i>Rugoglobigerina</i> spp.	
				3 a	67.0	<i>Plummerita reicheli</i>	66.2	<i>Contusotruncana plicata</i>	
				2	70.0	<i>Racemiguembelina powelli</i>	67.0	<i>Rugotruncana subpennyi</i>	
				1	b	71.0	<i>Contusotruncana plicata</i>	70.0	<i>Globotruncana lapparenti</i>
					a	72.1	<i>Plummerita hantkeninoides</i>		
				3	b	74.5	<i>Rugotruncana subpennyi</i>	72.1	<i>Radotruncana subsplnosa</i>
					a	77.0	<i>Globotruncanita stuarti</i>	74.5	<i>Globotruncanita atlantica</i>
				2		80.5	<i>Radotruncana calcarata</i> , <i>Globotruncanita atlantica</i>	77.0	<i>Radotruncana calcarata</i>
					1	83.6	<i>Globotruncana mariei</i>	80.3	<i>Rugoglobigerina subrugosa</i>
				2		84.9	<i>Rugoglobigerina subrugosa</i>	83.6	<i>Concavatotruncana asymetrica</i>
					1	85.6	<i>Globotruncana linneiana</i>		
				1	b	86.3	<i>Concavatotruncana asymetrica</i>	86.3	<i>Marginotruncana paraconcavata</i>
					a	88.0	<i>Globotruncana lapparenti</i>		
				2		89.8	<i>Marginotruncana paraconcavata</i>	89.8	<i>Sigalitroncana biconvexiformis</i>
				3		91.3	<i>Dicarinella primitiva</i>	91.3	<i>Helvetoglobotruncana helveticae</i>
					2	92.8	<i>Helvetoglobotruncana helveticae</i>	92.8	<i>Concavatotruncana elata</i>
				1		93.9	<i>Sigalitroncana biconvexiformis</i>	93.9	<i>Rotalipora cushmani</i>
				3	b	95.1	<i>Rotalipora cushmani</i>	95.1	<i>Favusella washitensis</i>
					a	99.6	<i>Thalmaninella reicheli</i>		
				2	b	99.6	<i>Thalmaninella greenhornensis</i>	99.6	<i>Alanlordella bentonensis</i>
					a	100.5	<i>Thalmaninella globotruncanoides</i>		
				1		101.5	<i>Thalmaninella gandolfi</i>	100.5	<i>Hedbergella rischi</i>
				4	a	102.2	<i>Ticinella madecassiana</i>	102.2	<i>Ticinella praeticinensis</i>
					b	104.4	<i>Pseudothalmaninella subticinensis</i>		
				3		106.7	<i>Ticinella praeticinensis</i>	106.7	<i>Blefusculana aptiana</i>
				2		109.8	<i>Ticinella roberti</i>	109.8	<i>B. maslakovae/ L. globulifera</i>
				1	b	113.0	<i>Ticinella primula</i>	113.0	<i>B. maslakovae/ L. globulifera</i>
					a	113.0	<i>Hedbergella rischi</i>		
				4	b	115.0	<i>Blefusculana kuznetsovae</i>	115.0	<i>B. maslakovae/ L. globulifera</i>
					a	116.5	<i>Lilliputianella kuhryi</i>		
				3		119.5	<i>Praehedbergella tatjanae</i>	119.5	<i>Praehedbergella ruka</i>
				2		122.9	<i>Blefusculana infracretacea</i>	122.9	<i>Gorbachikella anteroapertura</i>
1		126.3	<i>Blefusculana maslakovae</i>	126.3	<i>Gorbachikella grandiapertura</i>				
3		127.0	<i>Lilliputianella globulifera</i>	127.0	<i>Gorbachikella grandiapertura</i>				
	2	129.0	<i>Blefusculana daminiae</i>						
1		130.8	<i>B. aptiana/Pr. tuschepsensis</i>	129.0	<i>Praehedbergella tuschepsensis</i>				
2		132.5	<i>Gorbachikella anteroapertura</i>	133.9	<i>Praehedbergella handausi</i>				
	1	133.9	<i>Praehedbergella handausi</i>						
2		136.6	<i>Gorbachikella grandiapertura</i>	136.65	<i>Conoglobigerina gulekhensis</i>				
1		139.4	<i>Conoglobigerina sp. A</i>	139.4	<i>Conoglobigerina sp. A</i>				
145	Berr.	145.0	<i>Conoglobigerina gulekhensis</i>	145.0	<i>Conoglobigerina conica</i>				
Jurassic	Tith.	152.1	<i>Conoglobigerina conica</i>	145.0	<i>Conoglobigerina conica</i>				

BouDagher-Fadel, M.K. Diagnostic First and Last Occurrences of Mesozoic and Cenozoic Planktonic Foraminifera. UCL Office of the Vice-Provost Research, Professional Papers Series, No.1, 2013, pp.1-4.

Chart 5.1 The range of key Paleogene species for the Hedbergellidae, Globanomalinidae, Eoglobigerinidae, Hantkeninidae, Planomaliniidae, Globigerinitidae and Tenuitellidae

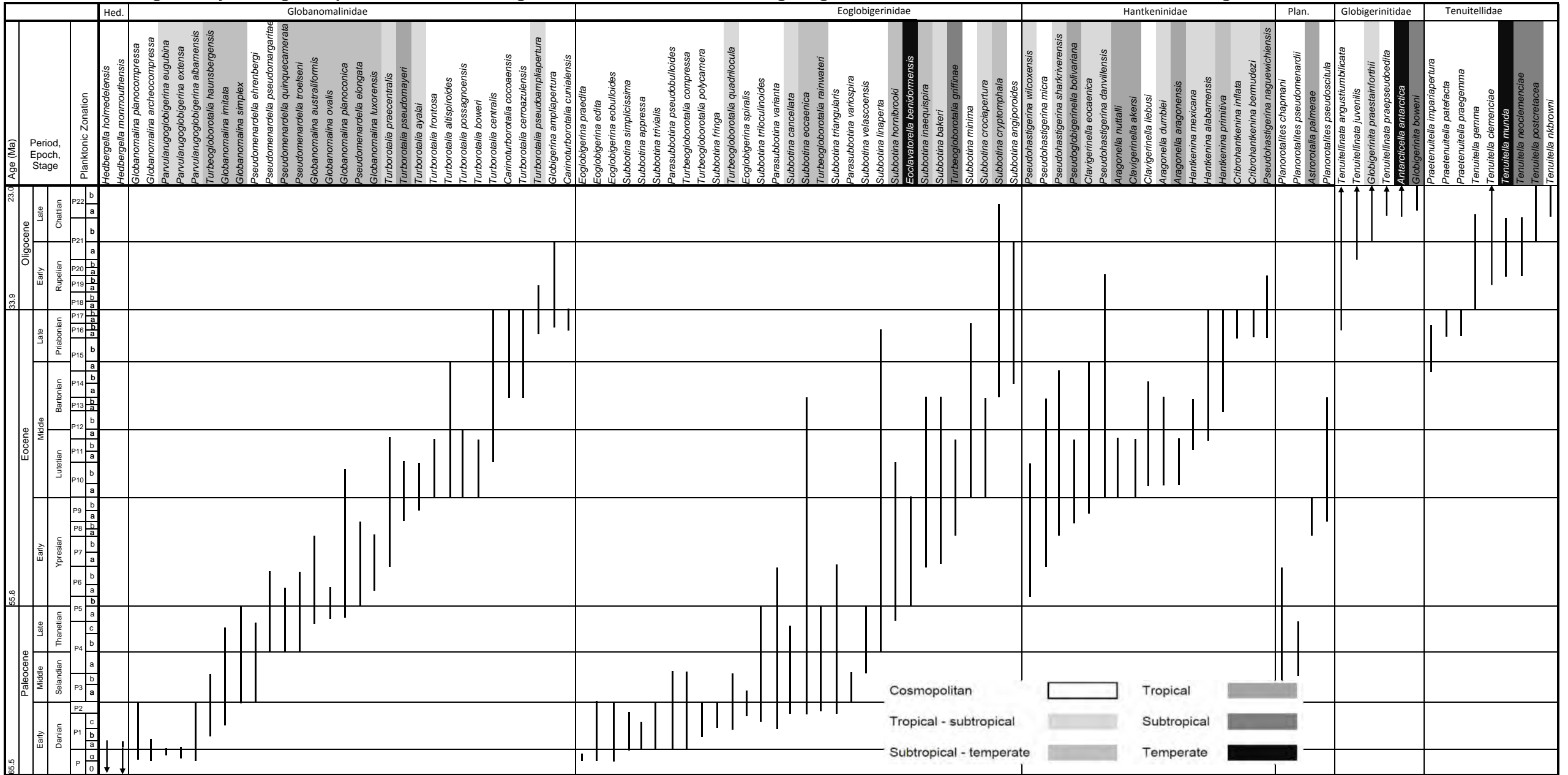
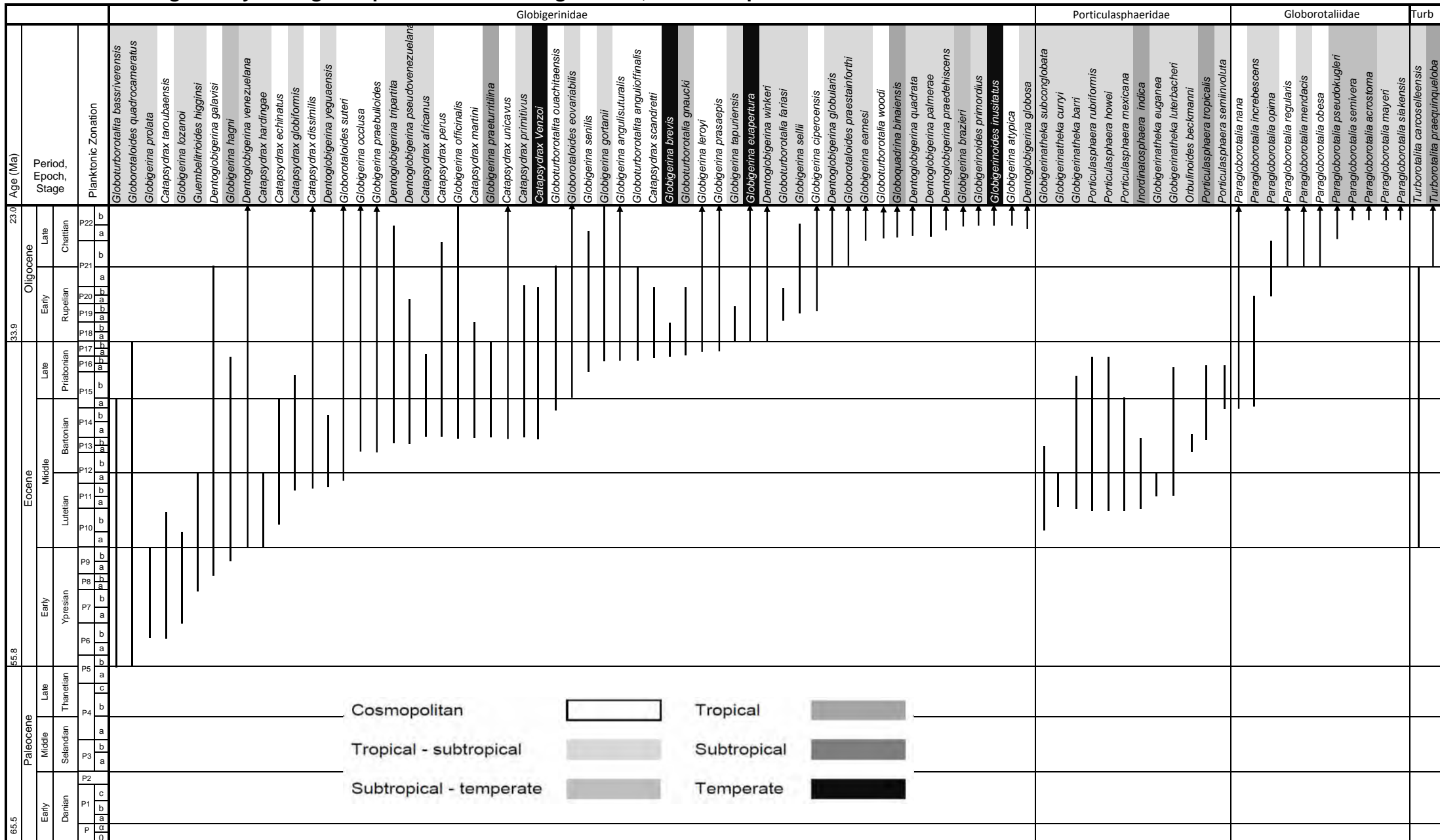


Chart 5.2 The range of key Paleogene species for the Globigerinidae, Porticulasphaeridae and Globorotaliidae



Marcelle K BouDagher-Fadel, BIOSTRATIGRAPHIC AND GEOLOGICAL SIGNIFICANCE OF PLANKTONIC FORAMINIFERA, 2013

Chart 5.3 The range of key Paleogene species for the Truncorotaloididae

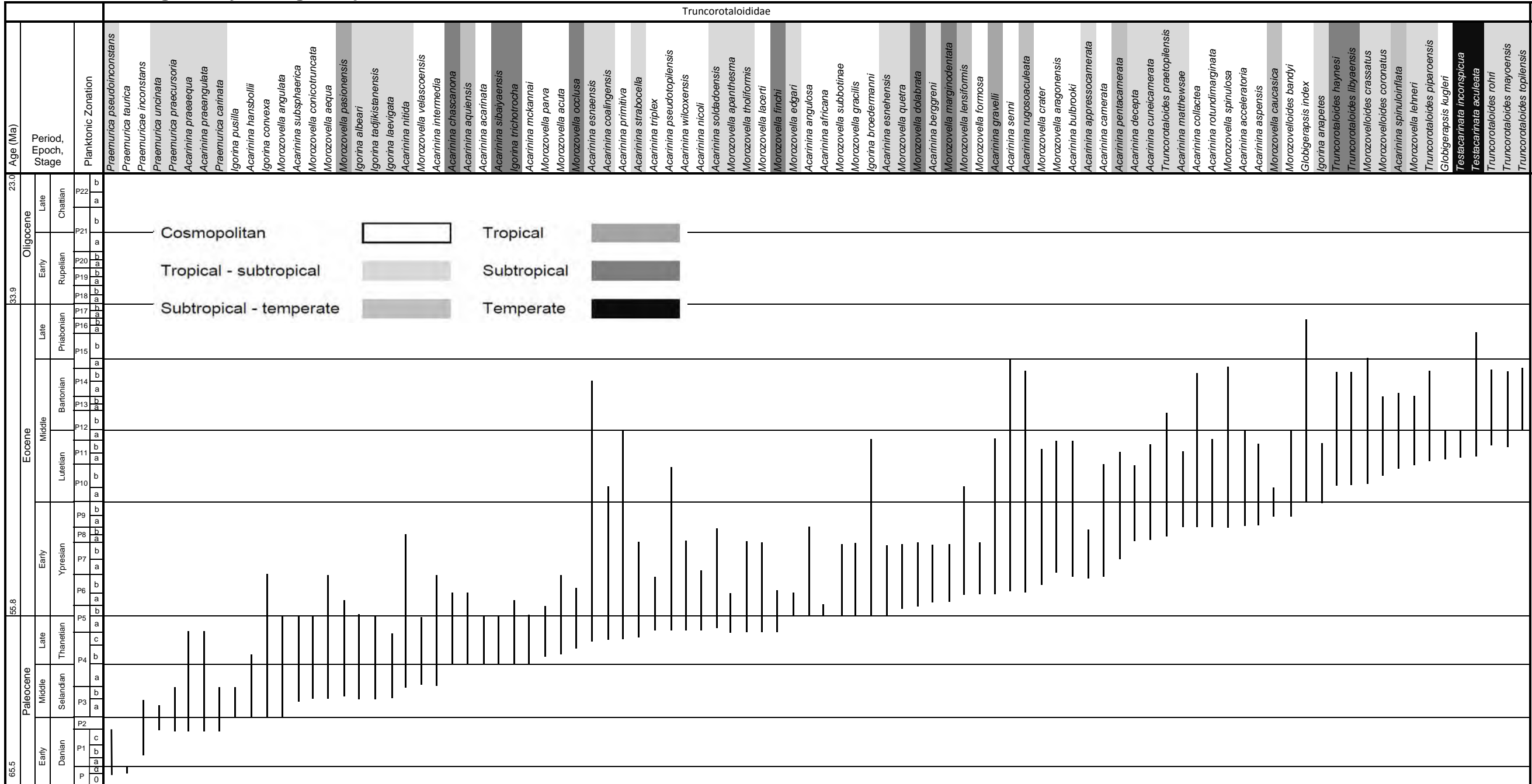
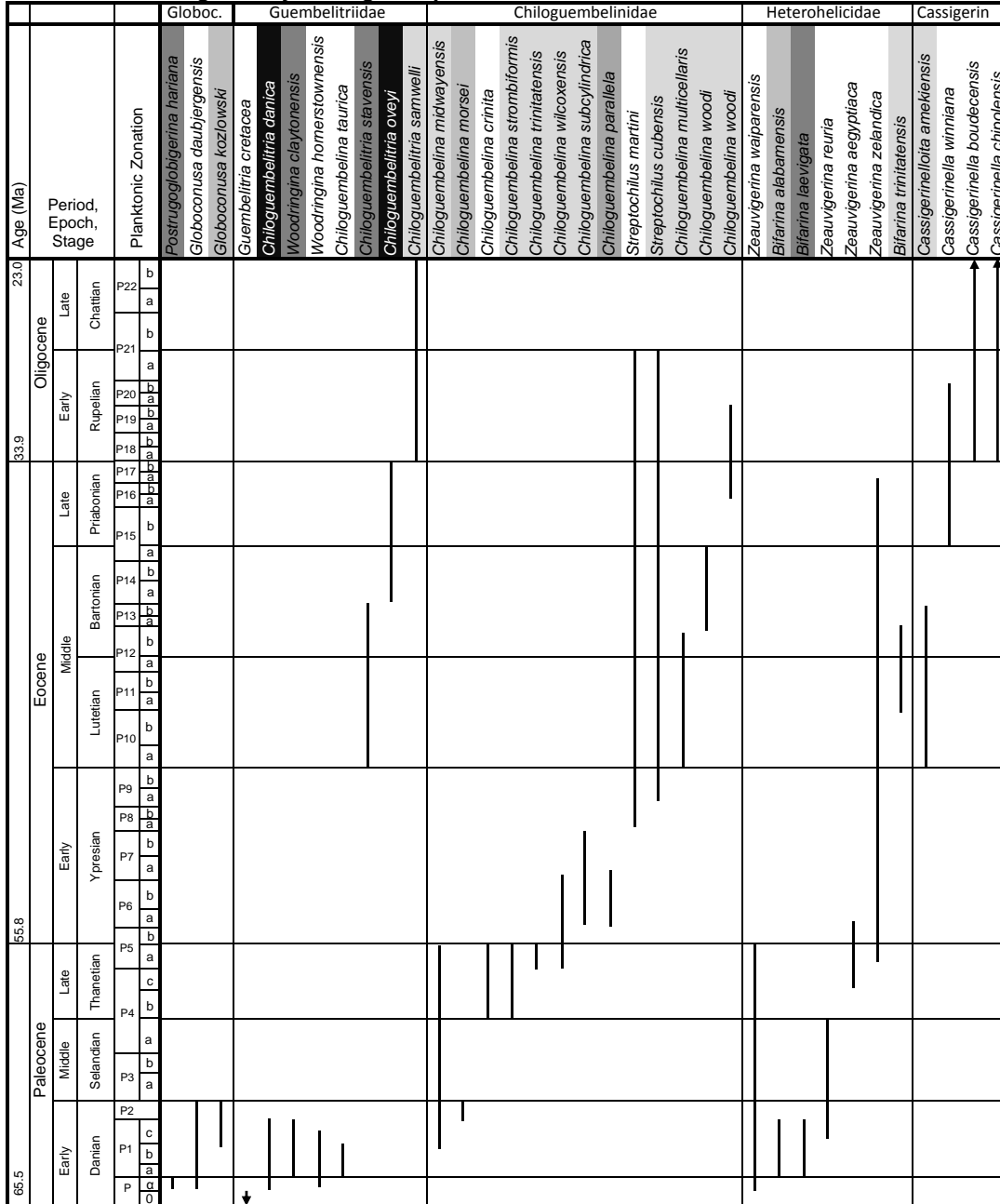


Chart 5.4 The range of key Paleogene species for the Globoconusidae, Guembeltriidae, Chiloguembelinidae, heterohelicidae and Cassigerinellidae



Cosmopolitan



Tropical



Tropical - subtropical



Subtropical



Subtropical - temperate



Temperate



Chart 6.1 The range of key Neogene species of Globigerinidae and Globigerinellidae

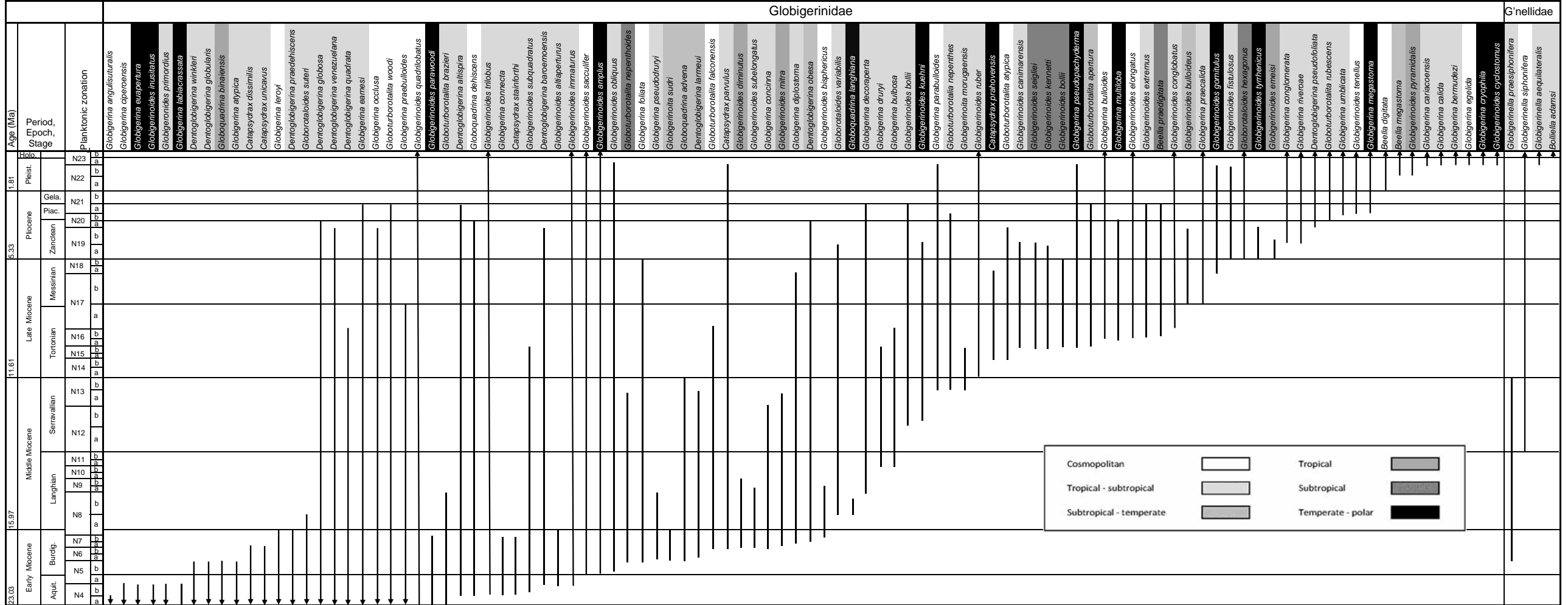


Chart 6.2 The range of key Neogene species of other Globigerinitoidea, Globigerinoidea families and those of the Heterohelicoidea.

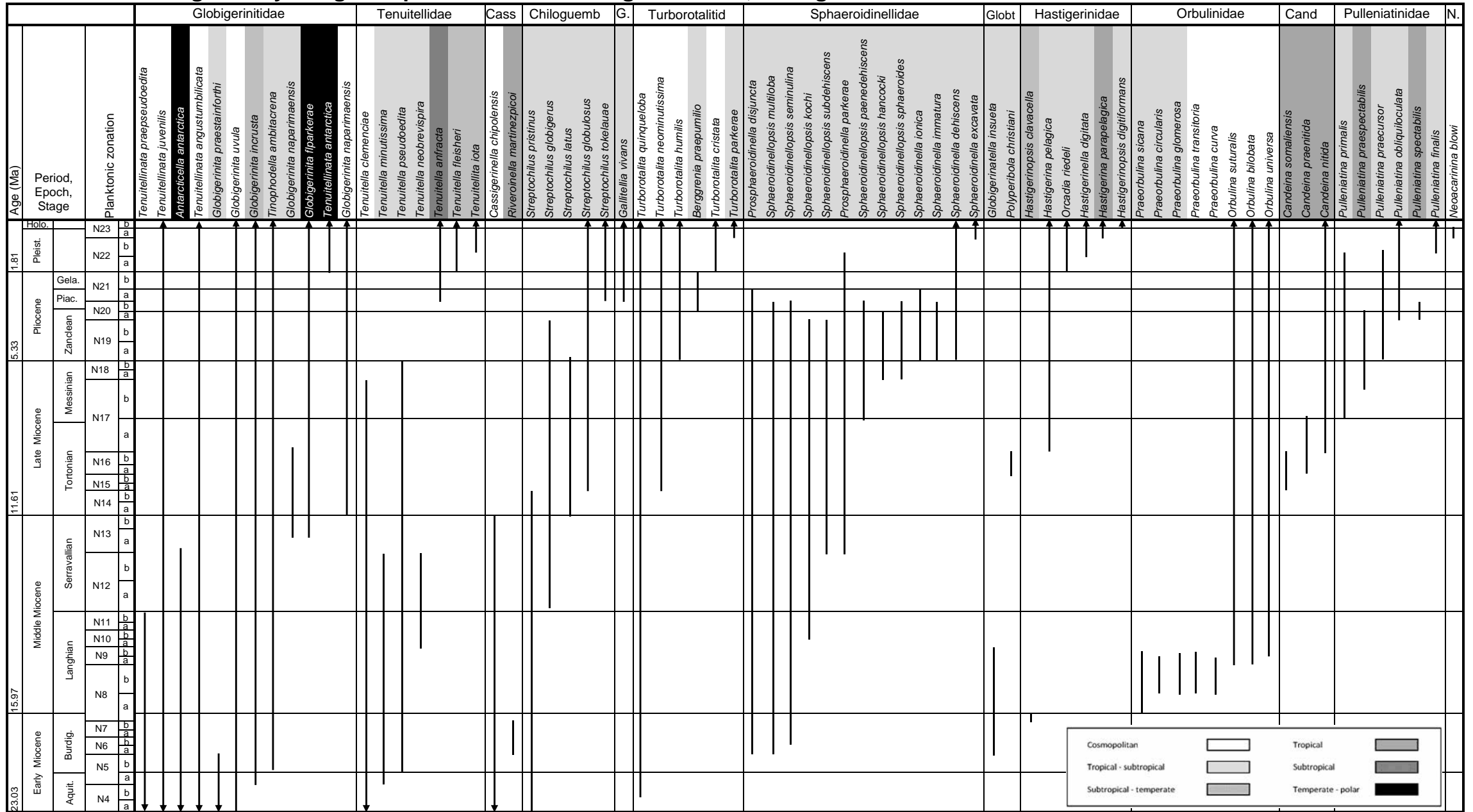


Chart 6.3 The range of key Neogene species of the Globorotaliidae

