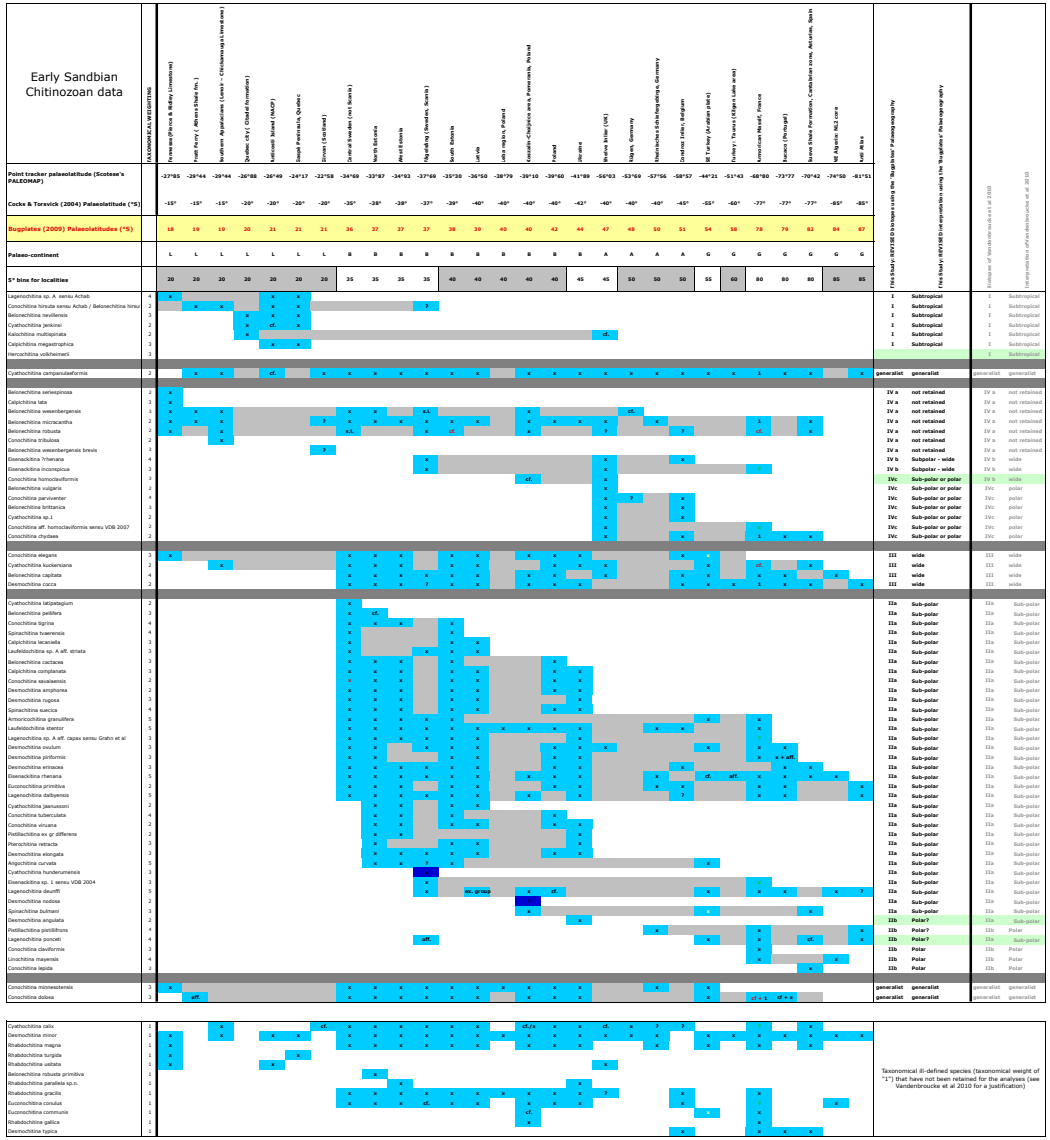

Early Sandbian Chitinozoan data	TAXONOMICAL WEIGHTING	Fernesson (Pierce & Riley Limestone)	Pratt Ferry (Athens Shale fm.)	Southern Appalachians (Lenoir – Chickamauga Limestone)	Quebec city (Citadel formation)	Kelsicoeli Island (NAOP)	Saint Pantaleon, Quebec	Sirven (Scotland)	Central Sweden (not Scania)	North Estonia	West Estonia	Nagelsberg (Sweden, Scania)	South Estonia	Latvia	Lodz region, Poland	Gosselin-Chojnice area, Pomerania, Poland	Poland	Ukraine	Bolyne Inlier (UK)	Kilgen, Germany	Rheinische Schiefergebirge, Germany	Sinaloa Tribe, Belgium	St Turkey (Arabian plate)	Turkey: Tavaras (Kilgen Lake area)	Armorican Massif, France	Rocano (Portugal)	Sierra Shale Formation, Cantabrian zone, Asturias, Spain	Vit Algeria: NL2 core	Vatt Alba	Fine Study: REVISED biotopes using the 'Bugplates' Palaeogeography	Fine Study: REVISED interpretation using the 'Bugplates' Palaeogeography	Biotopes of Vandenbroucke et al 2010	Interpretation of Vandenbroucke et al 2010
Point tracker palaeolatitude (Scotese's PALEOMAP)		-27°85	-29°44	-29°44	-26°88	-26°49	-24°17	-22°58	-34°69	-33°87	-34°53	-37°69	-35°30	-36°50	-38°79	-39°10	-39°60	-41°89	-56°03	-53°69	-57°56	-58°57	-44°21	-51°43	-68°80	-73°77	-70°42	-74°50	-81°51				
Cocks & Torsvick (2004) Palaeolatitude (°S)		-15°	-15°	-15°	-20°	-20°	-20°	-20°	-35°	-38°	-38°	-37°	-39°	-40°	-40°	-40°	-40°	-42°	-40°	-40°	-40°	-45°	-55°	-60°	-77°	-77°	-77°	-85°	-85°				
Bugplates (2009) Palaeolatitudes (°S)		18	19	19	20	21	21	21	36	37	37	37	38	39	40	40	42	44	47	48	50	51	54	58	78	79	82	84	87				
Palaeo-continent		L	L	L	L	L	L	L	B	B	B	B	B	B	B	B	B	B	A	A	A	A	G	G	G	G	G	G	G				
5° bins for localities		20	20	20	20	20	20	20	35	35	35	35	40	40	40	40	40	45	45	50	50	50	55	60	80	80	80	85	85				
Lagenochitina sp. A. sensu Achab	4	x				x	x																							I	Subtropical	I	Subtropical
Conochitina hirsuta sensu Achab / Belonechitina hirsu	2		x	x		x	x					?																		I	Subtropical	I	Subtropical
Belonechitina nevillensis	3				x	x	x																							I	Subtropical	I	Subtropical
Cyathochitina jenkinsi	2				x	cf.	x																							I	Subtropical	I	Subtropical
Kalochitina multispinata	2				x														cf.											I	Subtropical	I	Subtropical
Calpichitina megastrophica	3					x	x																							I	Subtropical	I	Subtropical
Hercochitina volkheimeri	3																															I	Subtropical
Cyathochitina campanulaeformis	2		x	x		cf.		x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	1	x	x		x	generalist	generalist	generalist	generalist
Belonechitina seriespinosa	2	x																												IV a	not retained	IV a	not retained
Calpichitina lata	3	x																												IV a	not retained	IV a	not retained
Belonechitina wesenbergensis	3	x	x	x					x	x		s.l.				x				cf.										IV a	not retained	IV a	not retained
Belonechitina micracantha	2	x	x	x				?	x	x	x	x	x	x		x	x	x	x		x				1		x			IV a	not retained	IV a	not retained
Belonechitina robusta	2	x		x					s.l.			x	cf.			x			?			?			cf.		x			IV a	not retained	IV a	not retained
Conochitina tribulosa	2			x																										IV a	not retained	IV a	not retained
Belonechitina wesenbergensis brevis	3							?																						IV a	not retained	IV a	not retained
Eisenackitina rhenana	4											x							x			x								IV b	Subpolar - wide	IV b	wide
Eisenackitina inconspicua	3											x							x											IV b	Subpolar - wide	IV b	wide
Conochitina homoclaviformis	3															cf.			x											IVc	Sub-polar or polar	IV b	wide
Belonechitina vulgaris	2																		x											IVc	Sub-polar or polar	IVc	polar
Conochitina parviventer	4																		x	?		x								IVc	Sub-polar or polar	IVc	polar
Belonechitina brittanica	3																		x			x								IVc	Sub-polar or polar	IVc	polar
Cyathochitina sp.1	2																		x			x								IVc	Sub-polar or polar	IVc	polar
Conochitina aff. homoclaviformis sensu VDB 2007	2																		x											IVc	Sub-polar or polar	IVc	polar
Conochitina chydaea	2																		x			x			1	x	x			IVc	Sub-polar or polar	IVc	polar
Conochitina elegans	3	x							x	x	x		x	x		x	x	x				x	x							III	wide	III	wide
Cyathochitina kuckersiana	2			x					x	x	x		x	x			x	x	x				x		cf.		x			III	wide	III	wide
Belonechitina capitata	4								x	x	x	x	x			x	x		x			x	x		x	x		x		III	wide	III	wide
Desmochitina cocca	2								x	x	x	?	x	x		x	x	x				x	x	x	1	x	x		x	III	wide	III	wide
Cyathochitina latipategium	2								x																					IIa	Sub-polar	IIa	Sub-polar
Belonechitina pellifera	3								x	cf.																				IIa	Sub-polar	IIa	Sub-polar
Conochitina tigrina	4								x	x	x		x																	IIa	Sub-polar	IIa	Sub-polar
Spinachitina braerensis	4								x				x																	IIa	Sub-polar	IIa	Sub-polar
Calpichitina lecaniella	3								x				x	x																IIa	Sub-polar	IIa	Sub-polar
Laufeldochitina sp. A aff. striata	3								x			x	x	x																IIa	Sub-polar	IIa	Sub-polar
Belonechitina cactacea	3								x	x	x		x				x													IIa	Sub-polar	IIa	Sub-polar
Calpichitina complanata	3								x	x	x		x	x			x	x												IIa	Sub-polar	IIa	Sub-polar
Conochitina savalaensis	2								x	x	x		x	x			x	x												IIa	Sub-polar	IIa	Sub-polar
Desmochitina amphorea	2								x	x	x		x	x			x	x												IIa	Sub-polar	IIa	Sub-polar
Desmochitina rugosa	3								x	x	x		x	x			x	x												IIa	Sub-polar	IIa	Sub-polar
Spinachitina suecica	4								x	x	x		x	x			x	x												IIa	Sub-polar	IIa	Sub-polar
Armoricochitina granulifera	5								x	x	x	x	x										x		x					IIa	Sub-polar	IIa	Sub-polar
Laufeldochitina stentor	5								x	x	x	x	x	x	x	x	x	x			x	x			x					IIa	Sub-polar	IIa	Sub-polar
Lagenochitina sp. A aff. capax sensu Grahn et al	3								x	x	x	x	x	x			x	x												IIa	Sub-polar	IIa	Sub-polar
Desmochitina ovulum	3								x	x	x	x	x	x			x	x	x				x		x	x				IIa	Sub-polar	IIa	Sub-polar
Desmochitina piriformis	3								x	x	x	x	x	x			x	x							x	x + aff.				IIa	Sub-polar	IIa	Sub-polar
Desmochitina erinacea	3								x	x	x	x	x	x			x	x				x				x	x			IIa	Sub-polar	IIa	Sub-polar
Eisenackitina rhenana	5								x	x	x	x	x	x		x	x	x			x	x	cf.	aff.	x	x	x	x		IIa	Sub-polar	IIa	Sub-polar
Euconochitina primitiva	2								x	x	x	x	x	x		x	x	x			x	x			x	x			x	IIa	Sub-polar	IIa	Sub-polar
Lagenochitina dalbyensis	5								x	x	x	x	x	x		x	x	x				?			x	x			x	IIa	Sub-polar	IIa	Sub-polar
Cyathochitina jeanussoni	2									x	x		x	x																IIa	Sub-polar	IIa	Sub-polar
Conochitina tuberculata	4									x	x		x	x			x	x												IIa	Sub-polar	IIa	Sub-polar
Conochitina vinuana	2									x	x		x	x			x	x												IIa	Sub-polar	IIa	Sub-polar
Pistillachitina ex gr differens	2									x	x		x	x			x	x												IIa	Sub-polar	IIa	Sub-polar
Pterochitina retracta	3									x	x		x	x			x	x												IIa	Sub-polar	IIa	Sub-polar
Desmochitina elongata	3									x	x	x	x	x			x	x												IIa	Sub-polar	IIa	Sub-polar
Angochitina curvata	5									x	x	?	x	x									x							IIa	Sub-polar	IIa	Sub-polar
Cyathochitina hundenumensis	3											x																		IIa	Sub-polar	IIa	Sub-polar
Eisenackitina sp. 1 sensu VDB 2004	3											x																		IIa	Sub-polar	IIa	Sub-polar
Lagenochitina deuriffi	5											x		ex. group		x	cf.						x		x	x		x	?	IIa	Sub-polar	IIa	Sub-polar
Desmochitina nodosa	2															x														IIa	Sub-polar	IIa	Sub-polar
Spinachitina bulmani	3															x							x				x			IIa	Sub-polar	IIa	Sub-polar
Desmochitina angulata	2																	x												IIb	Polar?	IIa	Sub-polar
Pistillachitina pistillifrons	4																				x				x				x	IIb	Polar?	IIb	Polar
Lagenochitina poncetii	4											aff.											x		x		cf.		x	IIb	Polar?	IIa	Sub-polar
Conochitina claviformis	3																								x					IIb	Polar	IIb	Polar
Linochitina mayensis	4																								x			x		IIb	Polar	IIb	Polar
Conochitina lepida	2																										x			IIb	Polar	IIb	Polar
Conochitina minnesotensis	3	x							x	x	x	x	x	x	x	x	x	x			x		x							generalist	generalist	generalist	generalist
Conochitina dolosa	3		aff.						x	x	x	x	x	x		x	x	x					x		cf = 1	cf = x				generalist	generalist	generalist	generalist
Cyathochitina calix	1			x				cf.	x	x	x	x	x	x		cf./x	x	x	cf.	x	?	?					x						
Desmochitina minor	1	x		x		x	x		x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x				
Rhabdochitina magna	1	x							x	x	x	x	x	x		x	x	x			x		x		x		x						
Rhabdochitina turgida	1	x					x																										
Rhabdochitina usitata	1	x				x													x														
Belonechitina robusta primitiva	1									x																							
Rhabdochitina parallela sp.n.	1										x							x															
Rhabdochitina gracilis	1								x	x	x	x	x	x	x	x	x	x	?			x			x								
Euconochitina conulus	1								x	x	x	cf.	x	x		x	x	x				x			x			x					
Euconochitina communis	1															cf.							x		x								
Rhabdochitina gallica	1															x									x								
Desmochitina typica	1																					x			x	x	x						

Taxonomical ill-defined species (taxonomical weight of "1") that have not been retained for the analyses (see Vandenbroucke et al 2010 for a justification)