

SUPPLEMENTARY MATERIAL TO:

Łapcik, P., 2024. Evolution of a turbidite system in a narrow basin setting: the Ropianka Fm (Campanian–Paleocene) in the Skole Nappe of the Polish Carpathians. *Annales Societatis Geologorum Poloniae*, 94: 139–174.

Table S1

Results of grain-size analysis for the Janowice section, stage S3.
See Figure 7 for detailed sedimentary log of the sampled section.

Janowice section				
Bed	Sample	Dx 10 µm	Dx 50 µm	Dx 90 µm
1	1	8.21	59.9	195
	2	9.91	82.9	235
	3	9.37	105	287
	4	10.5	95.7	229
	5	10.1	99.2	297
	6	9.84	97.8	293
2	7	6.93	41.1	116
	8	9.86	98.3	251
	9	9.67	95.3	281
	10	10.3	100	254
3	11	8.3	48.8	116
	12	10.7	109	256
	13	10.7	111	291
	14	9.58	101	297
	15	10.7	118	356
	16	11.3	107	272
	17	4.87	25.3	79.9
4	18	10.4	108	299
	19	11.5	125	361
	20	9.92	97.2	296
	21	11.4	98.8	298
	22	9.2	95.5	274
	23	9.93	88.9	240
	24	9.8	98.8	236
5	25	7.69	77.8	212
	26	7.81	67.7	189
	27	6.16	50.2	149
	28	4.74	38.3	139
	29 dark	5.16	35.5	119
	29 light	5.25	37.5	100

Table S2

Results of micropalaeontological analysis with sample locations.

Section	Sample	GPS coordinates	Nannoplankton	Nannoplankton dating	Foraminifera	Foraminiferal dating
Dunajec	DUN M1	N49°55'22.2" E20°51'04.04"	<i>Watznaueria barnesiae</i> , <i>Micula staurophora</i> , <i>Eiffelithus eximus</i> , <i>E. tur-</i> <i>riseiffelii</i> , <i>Staurolithites</i> <i>imbricatus</i> , <i>Arkhangelskiel-</i> <i>la cymbiformis</i> , <i>Prediscos-</i> <i>phaera cretacea</i> , <i>P. grandis</i> , <i>Nephrolithus frequens</i> , <i>Chiastozygus bifarius</i> , <i>Reinhardtites levius</i> , <i>Broinsonia parca</i> subsp. <i>parca</i> , <i>Calculites obscurus</i>	Upper Maastrichtian UC20b-d BP (occurrence of <i>Nephrolithus</i> <i>frequens</i>)	<i>Ammodiscus tenuissimus</i> Grzybowski, <i>Archaeoglobigerina cretacea</i> (d'Orbigny), <i>Caudammina excelsa</i> (Dylążanka), <i>Caudammina gigantea</i> (Grzybowski), <i>Caudammina ovuloides</i> (Grzybowski), <i>Globotruncana</i> sp., <i>Globotruncana cf. arca</i> (Cushman), <i>Hedbergella</i> sp., <i>Nothis robusta</i> (Grzybowski), <i>Psammosiphonella cylindrica</i> (Glaessner), <i>Spiroplectinella dentata</i> (Alth)	Upper lower Campanian– Maastrichtian (range of occurrence of <i>C. gigantea</i>)
Dunajec	DUN M2	N49°55'21.94" E20°51'04.08"	<i>Watznaueria barnesiae</i> , <i>Micula staurophora</i> , <i>Eiffelithus eximus</i> , <i>E. pa-</i> <i>rallelus</i> , <i>Prediscosphaera cretacea</i> , <i>P. grandis</i> , <i>P. strovei</i> , <i>Arkhangelskiella cymbiformis</i> , <i>A. maastrichtiensis</i> , <i>Nephrolithus frequens</i> , <i>Chiastozygus</i> sp., <i>Reinhardtites levius</i> , <i>Broinsonia parca</i> subsp. <i>parca</i> , <i>Calculites obscurus</i> , <i>C.</i> <i>ovalis</i> , <i>Zeugrhabdotus embergeri</i> , <i>Ahmuellerella</i> sp.	Upper Maastrichtian UC20c-d BP (occurrence of <i>Arkhangelskiel-</i> <i>la maastricht-</i> <i>tiensis</i>)	<i>Ammodiscus peruvianus</i> Berry, <i>Ammosphaeroidina pseudopauciloculata</i> (Mjatliuk), <i>Caudammina gigantea</i> (Grzybowski), <i>Dorothia crassa</i> (Marsson), <i>Eponides</i> sp., <i>Globotruncana cf. fornicate</i> (Plummer), <i>Globigerinelloides prairiehil-</i> <i>lensis</i> (Pessagno), <i>Globotruncana</i> sp., <i>Globotruncana cf. arca</i> (Cushman), <i>Karrerulina horrida</i> (Mjatliuk), <i>Nothis robusta</i> (Grzybowski), <i>Psammosiphonella cylindrica</i> (Glaessner), <i>Rzebakina inclusa</i> (Grzybowski), <i>Spiroplectinella dentata</i> (Alth)	Maastrichtian without its latest part (range of occurrence of <i>G. prairiehil-</i> <i>lensis</i> and <i>K. horrida</i>)

Dunajec	DUN M3	N49°55'20.99" E20°51'04.42"	<i>Watznaueria barnesiae</i> , <i>Micula M. staurophora</i> , <i>M. murus</i> ?, <i>Eiffelithus eximus</i> , <i>E. paralelus</i> , <i>E. turriseifelii</i> , <i>Prediscosphaera cretacea</i> , <i>P. grandis</i> , <i>P. strovei</i> , <i>Biscutum</i> sp., <i>Arkhangelskiella cymbiformis</i> , <i>Nephrolithus frequens</i> , <i>Reinhardtites levius</i> , <i>Broinsonia parca</i> subsp. <i>parca</i> , <i>Calculites obscurus</i> , <i>C. ovalis</i> , <i>Staurolithites minutus</i> , <i>Ceratolithoides</i> sp., <i>Chiastozygus synquadriperforatus</i>	Upper Maastrichtian UC20b-d BP (occurrence of <i>Nephrolithus frequens</i>); possible Upper upper Maastrichtian UC20b TP (occurrence of <i>Micula murus</i> (?)	<i>Ammodiscus</i> sp., <i>Ammodiscus tenuissimus</i> (Grzybowski), <i>Bolivina</i> sp., <i>Caudammina gigantea</i> (Grzybowski), <i>Caudammina ovuloides</i> (Grzybowski), <i>Caudammina ovula</i> (Grzybowski), <i>Eponides</i> sp., <i>Gavelinella</i> sp., <i>Globotruncana cf. arca</i> (Cushman), <i>Globigerinelloides aspers</i> (Ehrenberg) <i>Globotruncana cf. bulloides</i> (Vogler), <i>Globigerinelloides prairiehilensis</i> (Pessagno), <i>Globotruncana fornicata</i> (Plummer), <i>Glomospira</i> sp., <i>Gyroidinoides</i> sp., <i>Hedbergella</i> sp., <i>Heterohelix striata</i> (Ehrenberg), <i>Nothia robusta</i> (Grzybowski), <i>Nothia excelsa</i> (Grzybowski), <i>Psammosiphonella cylindrica</i> (Glaessner), <i>Praebulimina</i> sp., <i>Rhabdammina</i> sp., <i>Rzebakina inclusa</i> (Grzybowski), <i>Rzebakina lata</i> Cushman and Jarvis	Upper lower Campanian–Maastrichtian without its latest part (range of occurrence of <i>G.prairiehilensis</i>)
Dunajec	DUN 8MP	N49°55'19.81" E20°51'04.25"	<i>Micula staurophora</i> , <i>Watznaueria barnesiae</i>	-	-	-
Dunajec	DUN 9MP	N49°55'19.81" E20°51'04.25"	<i>Micula staurophora</i> , <i>Watznaueria barnesiae</i>	-	<i>Caudammina gigantea</i> (Grzybowski), <i>Dorothia crassa</i> (Marsson), <i>Globotruncana arca</i> (Cushman), <i>Globotruncana bulloides</i> Vogler, <i>Globotruncana cf. ventricosa</i> White, <i>Glomospira</i> sp., <i>Hormosina velascoensis</i> (Cushman), <i>Nothia robusta</i> (Grzybowski), <i>Nothia excelsa</i> (Grzybowski), <i>Saccammina placenta</i> (Grzybowski)	Campanian–Maastrichtian without its latest part (range of co-occurrence of <i>C. gigantea</i> , <i>G. arca</i> and <i>G. bulloides</i>)

Dunajec	DUN M4	N49°55'09.58" E20°51'02.50"	<i>Watznaueria barnesiae</i> , <i>Micula staurophora</i>	-	<i>Ammobaculites jarvisi</i> Cushman and Renz, <i>Ammodiscus</i> sp., <i>Ammodiscus tenuissimus</i> Grzybowski, <i>Ammodiscus peruvianus</i> Berry, <i>Budashavaella</i> cf. <i>trinitatis</i> (Cushman and Renz), <i>Glomospira charoides</i> (Jones and Parker), <i>Ammosphaeroidina pseudopauciloculata</i> (Mjatliuk), <i>Glomospira</i> sp., <i>Haplophragmoides kirki</i> Wickenden, <i>Nothia excelsa</i> (Grzybowski), <i>Psammosphaera irregularis</i> Grzybowski, <i>Subreophax scalaris</i> (Grzybowski), <i>Trochamminoides proteus</i> (Karrer), <i>Trochamminoides subcoronatus</i> (Grzybowski)	Maastrichtian–?Paleocene
Dunajec	DUN M5	N49°55'09.04" E20°51'02.21"	<i>Watznaueria barnesiae</i> , <i>Uniplanarius gothicus</i> , <i>Zeugrhabdotus</i> sp., <i>Chiastozygus</i> sp., <i>Retecapsa angustiforata</i> ?, <i>Reinhardtites levis</i> , <i>Staurolithites</i> sp., <i>Placozygus fibuliformis</i> , <i>Chiasmolithus</i> sp. (?), <i>Neocrepidolithus neocrassus</i> ?	Upper Campanian–middle Paleocene UC15b BP - NP4 (occurrence of <i>Uniplanarius gothicus</i> , <i>Reinhardtites levis</i> , <i>Neocrepidolithus neocrassus</i> (?) and <i>Chiasmolithus</i> sp. (?)	<i>Ammobaculites jarvisi</i> Cushman and Renz, <i>Ammodiscus tenuissimus</i> Grzybowski, <i>Budashevaella</i> sp., <i>Caudammina ovula</i> (Grzybowski), <i>Glomospira charoides</i> (Jones and Parker), <i>Glomospira</i> sp., <i>Glomospira diffundens</i> Cushman and Renz, <i>Lenticulina</i> cf. <i>concava</i> (Grzybowski), <i>Lenticulina velascoensis</i> White, <i>Nothia excelsa</i> (Grzybowski), <i>Rhabdammina</i> sp., <i>Pleurostomella wadowicensis</i> Grzybowski, <i>Spirolectammina spectabilis</i> (Grzybowski), <i>Spirolectinella subhaerin-gensis</i> (Grzybowski), <i>Trochamminoides variolarius</i> (Grzybowski)	Maastrichtian–Paleocene (range of occurrence of <i>A. jarvisi</i> and <i>S. subhaerin-gensis</i>)
Dunajec	DUN 7MP	N49°55'09.04" E20°51'02.21"	<i>Watznaueria barnesiae</i>	-	-	-
Dunajec	DUN 6MP	N49°55'06.6" E20°51'00.8"	<i>Watznaueria barnesiae</i> , <i>Micula staurophora</i> , <i>Eiffelithus</i> sp. div. (including <i>E. eximus</i>), <i>Biscutum</i> sp., <i>Retecapsa</i> sp.	Early Turonian–middle/upper Campanian UC8a–15UC (occurrence of <i>E. eximus</i>)	-	-
Dunajec	DUN B1 MP	N49°55'24.95" E20°51'25.02"	<i>Watznaueria barnesiae</i>	-	-	-

Janowice	JAN 1 MP	N49°54'19.58" E20°49'52.29"	-	-	<i>Caudammina gigantea</i> (Grzybowski), <i>Dorothia crassa</i> (Marsson), <i>Haplophragmoides</i> sp., <i>Nothia robusta</i> (Grzybowski), <i>Paratrochamminoides</i> cf. olszewski (Grzybowski), <i>Psammosiphonella cylindrica</i> (Glaessner), <i>Psammosphaera irregularis</i> (Grzybowski), <i>Recurvoides</i> sp., <i>Subreophax pseudoscalaris</i> (Samuel), <i>Spiroplectinella dentata</i> (Alth)	Campanian - Maastrichtian (range of occurrence of <i>C. gigantea</i> and <i>D. crassa</i>)
Janowice	JAN 3 MP	N49°54'19.58" E20°49'52.29"	<i>Micula staurophora</i> , <i>Watznaueria</i> sp. div. (including <i>W. bernesiae</i>), <i>Micula</i> sp. <i>murus</i> , <i>M. swastica</i> , <i>Lucianorhabdus</i> sp., <i>Ceratholithoides</i> sp., <i>Uniplanarius</i> sp. div. (including <i>U. gothicus</i> ?), <i>Zeugrhabdotus</i> sp., <i>Reinhardtites</i> sp. div. (including <i>R. levius</i>), <i>Calculites</i> sp. div. (including <i>C. obscurus</i>), <i>Arkhangelskiella</i> sp. div. (including <i>A. cymbiformis</i>), <i>Prediscosphaera</i> sp. div. (including <i>P. cretacea</i>), <i>Quadrum</i> sp. div. (including <i>Q. gartnei</i> , <i>Q. svabenickae</i>), <i>Neocrepidolithus</i> sp. div. (including <i>N. watkinsi</i>).	Upper Maastrichtian UC20b-d (occurrence of <i>Micula murus</i>)	<i>Ammosphaeroidina pseudopauciloculata</i> (Mjatljiuk), <i>Archaeoglobigerina</i> cf. <i>cretacea</i> (d'Orbigny), <i>Nothia excelsa</i> (Grzybowski), <i>Placentammina placenta</i> (Grzybowski), <i>Rhabdammina</i> sp., <i>Spiroplectinella dentata</i> (Alth)	Campanian- Maastrichtian (range of occurrence of <i>A. cf cretacea</i> and <i>A. pseudopauciloculata</i>)
Dąbrówka Szcze-panowska (D.SZ 631–633)	D.SZ 1MP	N49°55'40.38" E20°51'18.25"	<i>Watznaueria barnesiae</i> , <i>Micula staurophora</i> , <i>Broinsonia parca</i> subsp. <i>parca</i> , <i>Eiffelithus</i> sp. div. (including <i>E. eximus</i> , <i>E. turriseiffelii</i>), <i>Staurolithites</i> sp. div. (including <i>S. imbricatus</i>), <i>Arkhangelskiella</i> sp. div. (including <i>A. cymbiformis</i> , <i>A. maastrichtiensis</i>), <i>Prediscosphaera</i> sp. div. (including <i>P. cretacea</i> , <i>P. grandis</i>), <i>Nephrolithus</i> sp. div. (including <i>N. frequens</i>), <i>Ceratholithoides</i> sp., <i>Lucianorhabdus</i> sp., <i>Zeugrhabdotus</i> sp., <i>Chiastozygus</i> sp., <i>Reinhardtites</i> sp. div. (including <i>R. levius</i>), <i>Calculites</i> sp. div. (including <i>C. obscurus</i>), <i>Retecapsa</i> sp. div. (including <i>R. angustiforata</i>), <i>Markalius</i> sp. div. (including <i>M. inversus</i> ?)	Upper Maastrichtian UC20b-d (oc- currence of <i>Nephroli- thus frequens</i>); possible upper boundary NP2 (occurrence of <i>Markalius inversus</i> (?))	<i>Caudammina gigantea</i> (Grzybowski), <i>Globotruncana bulloides</i> Vogler, <i>Globotruncana</i> cf. <i>arca</i> (Cushman), <i>Globigerinelloides prairiehill- ensis</i> Pessagno, <i>Gyroidinoides</i> sp., <i>Heterohelix navarroensis</i> Loeblich, <i>Kalamopsis grzybowskii</i> (Dylązanka), <i>Karrerulina horrida</i> (Mjatljiuk), <i>Nothia excelsa</i> (Grzybowski), <i>Psammosiphonella cylindrica</i> (Glaessner), <i>Saccammina grzybowskii</i> (Schubert)	Upper lower Campanian- Maastrichtian (range of occurrence of <i>C. gigantea</i> and <i>Globi- gerinelloides prairiehillen- sis</i>)

Dąbrówka Szczepanowska (D.SZ 631–633)	D.SZ 5MP	N49°55'40.65" E20°51'15.64"	<i>Watznaueria barnesiae</i> , <i>Micula staurophora</i> , <i>Eiffelithus</i> sp. div. (including <i>E. turriseifelii</i>), <i>Arkhangelskiella</i> sp. div. (including <i>A. cymbiformis</i>), <i>Reinhardtites</i> sp. div. (including <i>R. levius</i>), <i>Calculites</i> sp. div. (including <i>C. obscurus</i>), <i>Ceratholithoides</i> sp., <i>Uniplanarius</i> sp. div. (including <i>U. trifidus</i>)	Middle Campanian–lower Maastrichtian UC15d–17 (occurrence of <i>Uniplanarius trifidus</i>)	<i>Ammodiscus peruvianus</i> Berry, <i>Ammodiscus tenuissimus</i> Grzybowski, <i>Caudammina gigantea</i> (Grzybowski), <i>Caudammina ovula</i> (Grzybowski), <i>Dorothia crassa</i> (Marsson), <i>Globotruncana cf. arca</i> (Cushman), <i>Globigerinelloides prairiehillensis</i> Pessagno, <i>Globotruncana</i> sp., <i>Karrerulina horrida</i> (Mjatluk), <i>Lenticulina</i> sp., <i>Nothis robusta</i> (Grzybowski), <i>Nothis excelsa</i> (Grzybowski), <i>Placentammina placenta</i> (Grzybowski), <i>Planoheterohelix striata</i> (Ehrenberg), <i>Psammosiphonella cylindrica</i> (Glaessner), <i>Psammosphaera irregularis</i> Grzybowski, <i>Rzeħakina cf. fissistomata</i> (Grzybowski), <i>Spiroplectinella dentata</i> (Alth), <i>Trochamminoides subcoronatus</i> (Grzybowski)	Maastrichtian (range of occurrence of <i>G. prairiehillensis</i> , <i>K. horrida</i> , <i>Rzeħakina fissistomata</i> and <i>C. gigantea</i>)
Dąbrówka Szczepanowska (D.SZ 631–633)	D.SZ 6MP	N49°55'40.65" E20°51'15.64"	<i>Watznaueria barnesiae</i> , <i>Micula staurophora</i> , <i>Micula</i> sp. div. (including <i>M. praemurus</i>), <i>Eiffelithus</i> sp. div. (including <i>E. turriseifelii</i>), <i>Prediscosphaera grandis</i> , <i>Arkhangelskiella</i> sp. div. (including <i>A. cymbiformis</i>), <i>Reinhardtites</i> sp. div. (including <i>R. levius</i>), <i>Broinsonia</i> sp. div. (including <i>B. parca</i> subsp. <i>parca</i>), <i>Calculites obscurus</i> , <i>Ceratolithoides</i> sp., <i>Chiastozygus</i> sp., <i>Retecapsa</i> sp. div. (including <i>R. angustiforata</i>)	Lower Campanian–Maastrichtian UC14d–20d (occurrence of <i>Reinhardtites levius</i> and <i>Micula praemurus</i>)	<i>Archaeoglobigerina cretacea</i> (d'Orbigny), <i>Archaeoglobigerina australis</i> Huber, <i>Arenobulimina</i> sp., <i>Dorothia crassa</i> (Marsson), <i>Globotruncana arca</i> (Cushman), <i>Globotruncana</i> sp., <i>Heterohelix</i> sp., <i>Nothis excelsa</i> (Grzybowski)	Turonian–Campanian (range of occurrence of <i>G. arca</i> and <i>A. cretacea</i>)
Dąbrówka Szczepanowska (D.SZ 636)	D.SZ 7MP	N49°55'19.76" E20°51'28.37"	-	-	-	-
Dąbrówka Szczepanowska (D.SZ 636)	D.SZ 8MP	N49°55'19.76" E20°51'28.37"	-	-	<i>Ammodiscus</i> sp., <i>Nothis excelsa</i> (Grzybowski)	-

Dąbrówka Szczepanowska (D.SZ 636)	D.SZ 9MP	N49°55'19.76" E20°51'28.37"	<i>Micula staurophora</i>	-	<i>Ammodiscus tenuissimus</i> Grzybowski, <i>Caudammina gigantea</i> (Grzybowski), <i>Caudammina ovula</i> (Grzybowski), <i>Caudammina ovuloides</i> (Grzybowski), <i>Dorothia crassa</i> (Marsson), <i>Eponides</i> sp., <i>Glomospira diffundens</i> (Cuschman and Renz), <i>Nothia robusta</i> (Grzybowski), <i>Nothia excelsa</i> (Grzybowski), <i>Paratrochamminoides gorayskii</i> (Kaminski and Geroch), <i>Spiroplectammina navaricana</i> (Gradstein and Kaminski), <i>Spiroplectinella dentata</i> (Alth)	Campanian–Maastrichtian (range of occurrence of <i>C. gigantea</i> and <i>D. crassa</i>)
Dąbrówka Szczepanowska (D.SZ 636)	D.SZ 10MP	N49°55'19.76" E20°51'28.37"	<i>Watznaueria barnesiae</i> , <i>Micula staurophora</i> , <i>Eiffelithus</i> sp. div. (including <i>E. gorkae</i> , <i>E. eximus</i>), <i>Prediscosphaera</i> sp. div. (including <i>P. grandis</i>), <i>Biscutum</i> sp. div. (including <i>B. melaniae</i> , <i>B. coronum</i>), <i>Arkhangelskiella</i> sp. div. (including <i>A. cymbiformis</i>), <i>Reinhardtites</i> sp. div. (including <i>R. levis</i>), <i>Broinsonia</i> sp. div. (including <i>B. parca</i> subsp. <i>parca</i>), <i>Calculites</i> sp. div. (including <i>C. obscurus</i> , <i>C. ovalis</i>), <i>Cribrosphaerella</i> sp. div. (including <i>C. ehrengergii</i>), <i>Chiastozygus</i> sp. div. (including <i>Ch. quadriperforatus</i>), <i>Staurolithoides</i> sp. div. (including <i>S. zoensis</i> , <i>S. imbricatus</i>), <i>Retecapsa</i> sp. div. (including <i>R. angustiforata</i>), <i>Placozygus</i> sp. div. (including <i>P. fibuliformis</i>), <i>Tranolithus</i> sp. div. (including <i>T. minimus</i>), <i>Uniplanarius</i> sp. div. (including <i>U. trifidus</i>), <i>Tegumentum</i> sp. div. (including <i>T. stradrei</i>), <i>Gartnerago</i> sp. div. (including <i>G. segmentatum</i>), <i>Quadrum</i> sp., <i>Lucianorhabdus</i> sp., <i>Necropidolithus watkinsi</i> (?)	Upper Campanian–lower Maastrichtian UC15d–17 (occurrence of <i>U. trifidus</i>)	<i>Dorothia crassa</i> (Marsson), <i>Globotruncana</i> sp., <i>Nothia robusta</i> (Grzybowski), <i>Nothia excelsa</i> (Grzybowski), <i>Nuttalides</i> sp., <i>Placentammina placenta</i> (Grzybowski), <i>Spiroplectinella dentata</i> (Alth)	Campanian–Maastrichtian (range of occurrence of <i>D. crassa</i> and <i>S. dentata</i>)
Dąbrówka Szczepanowska (D.SZ 636)	D.SZ 11MP	N49°55'19.76" E20°51'28.37"	-	-	<i>Caudammina ovula</i> (Grzybowski), <i>Nothia excelsa</i> (Grzybowski), <i>Nothia robusta</i> (Grzybowski)	-

Rychwald	RY 1MP	N49°54'20.89" E20°56'23.46"	<i>Watznaueria barnesiae</i> , <i>Micula staurophora</i> , <i>Reinhardtites levii</i> , <i>Calculites obscurus</i> , <i>Eiffelithus eximus</i> , <i>Staurolithites imbricatus</i>	Lower/middle Campanian– middle/late Campanian UC14d–UC15 (occurrence of <i>E. eximus</i> and <i>R. levii</i>)	-	-
Rychwald	RY 2MP	N49°54'20.89" E20°56'23.46"	<i>Watznaueria barnesiae</i> , <i>Micula staurophora</i> , <i>Eiffelithus</i> sp. div. (including <i>E. turrieffelii</i> , <i>E. eximus</i>), <i>Broinsonia</i> sp. div. (including <i>B. parca</i> subsp. <i>parca</i>), <i>Calculites</i> sp. div. (including <i>C. obscurus</i>), <i>Reinhardtites</i> sp. div. (including <i>R. levii</i>), <i>Staurolithites</i> sp. div. (including <i>S. integer</i>), <i>Ceratolithoides</i> sp.	Middle/upper Campanian UC15 (occurrence of <i>B. parca</i> subsp. <i>parca</i> , <i>E. eximus</i> and <i>Ceratolithoides</i> sp.)	<i>Ammodiscus peruvianus</i> Berry, <i>Caudammina gigantea</i> (Grzybowski), <i>Caudammina ovula</i> (Grzybowski), <i>Caudammina ovuloides</i> (Grzybowski), <i>Hormosina velascoensis</i> (Cushman), <i>Kalamopsis grzybowskii</i> (Dylązanka), <i>Karrerulina horrida</i> (Mjatluk), <i>Nothia robusta</i> (Grzybowski), <i>Nothia excelsa</i> (Grzybowski), <i>Recurvoides</i> sp., <i>Reophax pilulifer</i> Brady, <i>Rzebakina fissistomata</i> (Grzybowski), <i>Rzebakina minima</i> Cushman and Renz, <i>Trochamminoides subcorolatus</i> (Grzybowski), <i>Trochamminoides variolarius</i> (Grzybowski), ? <i>Globotruncana</i>	Maastrichtian (range of occurrence of <i>C. gigantea</i> and <i>Rz. fissistomata</i>)
Rychwald	RY 3MP	N49°54'17.19" E20°56'07.72"	<i>Watznaueria barnesiae</i> , <i>Micula staurophora</i> , <i>Eiffelithus</i> sp. div. (including <i>E. eximus</i>), <i>Prediscosphaera</i> sp. div. (including <i>P. grandis</i>), <i>Biscutum</i> sp. div. (including <i>B. melanieae</i>), <i>Arkhangelskiella</i> sp. div. (including <i>A. cymbiformis</i>), <i>Reinhardtites</i> sp. div. (including <i>R. levii</i>), <i>Broinsonia</i> sp. div. (including <i>B. parca</i> subsp. <i>parca</i>), <i>Calculites</i> sp. div. (including <i>C. obscurus</i>), <i>Cribrosphaerella</i> sp. div. (including <i>C. ehrenbergii</i>), <i>Placozygus</i> sp. div. (including <i>P. fibuliformis</i>), <i>Lucianorhabdus</i> sp. div. (including <i>L. maleformis</i>)	Lower/middle Campanian– middle/upper Campanian UC14d–UC15 (occurrence of <i>B. parca</i> subsp. <i>parca</i> , <i>E. eximus</i> and <i>R. levii</i>)	<i>Ammodiscus cretaceus</i> Reuss, <i>Ammodiscus peruvianus</i> Berry, <i>Ammodiscus tenuissimus</i> Grzybowski, <i>Archaeoglobigerina cretacea</i> (d'Orbigny), <i>Caudammina gigantea</i> (Grzybowski), <i>Caudammina ovula</i> (Grzybowski), <i>Dorothia crassa</i> (Marsson), <i>Globotruncana bulloides</i> Vogler, <i>Globotruncana</i> cf. <i>ventricosa</i> White, <i>Glomospira</i> sp., <i>Hormosina velascoensis</i> (Cushman), <i>Kalamopsis grzybowskii</i> (Dylązanka), <i>Lenticulina</i> sp., <i>Nothia robusta</i> (Grzybowski), <i>Nothia excelsa</i> (Grzybowski), <i>Reophax</i> sp., <i>Rzebakina</i> sp.	? Upper Campanian– Maastrichtian (range of occurrence of <i>C. gigantea</i> , <i>A. cretacea</i> , <i>G. bulloides</i> and <i>G. ventricosa</i>)

Rychwałd	RY 4MP	N49°54'14.59" E20°56'08.65"	-	-	<i>Caudammina gigantea</i> (Grzybowski), <i>Glomospira gordialis</i> (Jones and Parker), <i>Nothia robusta</i> (Grzybowski), <i>Nothia excelsa</i> (Grzybowski), <i>Placentammina placenta</i> (Grzybowski), <i>Saccammina grzybowskii</i> (Schubert)	Campanian–Maastrichtian (range of occurrence of <i>C. gigantea</i>)
Rychwałd	RY 5MP	N49°54'13.37" E20°56'09.63"	-	-	<i>Ammodiscus peruvianus</i> Berry, <i>Caudammina gigantea</i> (Grzybowski), <i>Caudammina ovula</i> (Grzybowski), <i>Dorothia crassa</i> (Marsson), <i>Glomospira</i> sp., <i>Nothia excelsa</i> (Grzybowski), <i>Paratrochamminoides</i> sp., <i>Paratrochamminoides heteromorphus</i> (Grzybowski), <i>Rhabdammina linearis</i> (Grzybowski), <i>Trochammina globigeriniformis</i> (Parker and Jones)	Maastrichtian (range of occurrence of <i>C. gigantea</i> and <i>D. crassa</i>)
Rychwałd	RY 6MP	N49°53'59.47" E20°55'52.28"	<i>Micula staurophora</i> , <i>Watznaueria</i> sp. div. (including <i>W. barnesiae</i>), <i>Broinsonia</i> sp. div. (including <i>B. parca</i> subsp. <i>parca</i> , <i>B. enormis</i>), <i>Ceratolithoides</i> sp. div. (including <i>C. quasiarctatus</i> , <i>C. brevicorniculans</i>), <i>Lithastrinus</i> sp. div. (including <i>L. quadricuspis</i>), <i>Placozygus</i> sp. div. (including <i>P. fibuliformis</i>), <i>Uniplanarius</i> sp. div. (including <i>U. gothicus</i>)	Middle Campanian–upper Campanian UC15b–15d (occurrence of <i>B. parca</i> subsp. <i>parca</i> and <i>L. quadricuspis</i>)	<i>Ammodiscus cretaceus</i> Reuss, <i>Ammodiscus peruvianus</i> Berry, <i>Caudammina gigantea</i> (Grzybowski), <i>Caudammina ovula</i> (Grzybowski), <i>Dorothia crassa</i> (Marsson), <i>Glomospira gordialis</i> (Grzybowski), <i>Glomospira glomerata</i> (Grzybowski), <i>Glomospira serpens</i> (Grzybowski), <i>Glomospira</i> sp., <i>Gyroidinoides globosa</i> (Hagenov), <i>Hormosina velascoensis</i> (Cushman), <i>Kalamopsis grzybowskii</i> (Dylązanka), <i>Nothia robusta</i> (Grzybowski), <i>Nothia excelsa</i> (Grzybowski), <i>Paratrochamminoides gorayskii</i> (Grzybowski), <i>Placentammina placenta</i> (Grzybowski), <i>Rhabdammina</i> sp., <i>Reophax duplex</i> Grzybowski, <i>Rzebakina fissistomata</i> (Grzybowski), <i>Rzebakina epigona</i> (Grzybowski), <i>Saccammina grzybowskii</i> (Schubert), <i>Subreophax scalaris</i> (Grzybowski), <i>Spiroplectammina dentata</i> (Alth), <i>Spiroplectinella subhaerinensis</i> (Grzybowski)	Maastrichtian (range of co-occurrence of <i>C. gigantea</i> and <i>D. crassa</i>)

Szczepanowice	SZCZ 1MP	49°56'12.87'' 20°53'29.42"E	-	-	? <i>Caudammina gigantea</i> (Grzybowski), <i>Globotruncana bulloides</i> Vogler, <i>Globotruncana</i> sp., <i>Nothis excelsa</i> (Grzybowski)	Santonian–Maastrichtian (range of occurrence of <i>G. bulloides</i>)
Szczepanowice	SZCZ 2MP	N49°56'12.87'' E20°53'29.42"	<i>Watznaueria barnesiae</i> , <i>Micula</i> sp. div. (including <i>M. murus</i>), <i>Eiffelithus</i> sp. div. (including <i>E. turriseiffelii</i>), <i>Broinsonia</i> sp. div. (including <i>B. parca</i> subsp. <i>parca</i> , <i>B. enormis</i>), <i>Cribrosphaerella</i> sp. div. (including <i>C. ehrenbergii</i>), <i>Retecapsa</i> sp., <i>Placozygus</i> sp. div. (including <i>P. fibuliformis</i>), <i>Lucianorhabdus</i> sp., <i>Zeugrhabdotus</i> sp.	Upper Maastrichtian Uc20b–d (occurrence of <i>M. murus</i>)	? <i>Archaeoglobigerina cretacea</i> (d'Orbigny), <i>Bolivinoides</i> sp., <i>Contusotruncana fornicata</i> (Plummer), <i>Dorothia crassa</i> (Marsson), <i>Gaudryina pyramidata</i> Cushman, <i>Globotruncana aegyptiaca</i> Nakkady, <i>Globotruncana arca</i> (Cushman), <i>Globotruncana lapparenti</i> Brotzen, <i>Globotruncana linneiana</i> (d'Orbigny), <i>Globotruncana ventricosa</i> White, <i>Globotruncana</i> div. sp.	Upper Maastrichtian without its latest part (range of co-occurrence of div. Sp. <i>Globotruncana</i>)
Szczepanowice	SZCZ 3MP	N49°56'22.72'' E20°53'35.81"	<i>Watznaueria barnesiae</i> , <i>Micula staurophora</i> , <i>Prediscosphaera</i> sp. div. (including <i>P. grandis</i>), <i>Biscutum</i> sp., <i>Arkhangelskiella</i> sp. div. (including <i>A. cymbiformis</i>), <i>Broinsonia</i> sp. div. (including <i>B. parca</i> subsp. <i>parca</i>), <i>Calculites</i> sp. div. (including <i>C. obscurus</i>), <i>Quadrum</i> sp. div. (including <i>Q. gartneri</i>), <i>Lucianorhabdus</i> sp. div. (including <i>L. maleformis</i>), <i>Necropidolithus</i> sp. div. (including <i>N. watkinsi</i> , <i>N. ruegensis</i> (?)), <i>Cyclagelosphaera</i> sp. div. (including <i>C. reinhardtii</i>), <i>Cyclicargolithus</i> sp. div. (including <i>C. abisectus</i>), <i>Discorhabdus</i> sp. div. (including <i>D. ignotus</i>), <i>Pontosphaera</i> sp. div. (including <i>P. enormis</i> , <i>P. pectinata</i> , <i>P. rimosa</i>), <i>Rhagodiscus</i> sp. div. (including <i>R. achlyostaurion</i>), <i>Toweius</i> sp. div. (including <i>T. selandianus</i>), <i>Zeugrhabdotus</i> sp. div. (including <i>Z. sigmoides</i>), <i>Bomolithus</i> sp., <i>Reticulofenestra</i> sp. div. (including <i>R. bisecta</i> , <i>R. umbilicus</i>)	Upper Oligocene–lower Miocene NP23–NN1 (occurrence of <i>C. abisectus</i>)	<i>Bulimina elongata elongata</i> (d'Orbigny), <i>Casidulina</i> sp., <i>Globigerina bulloides</i> d'Orbigny, <i>Globigerina</i> sp., <i>Turborotalia quinqueloba</i> (Natland)	Miocen

Szczepanowice	SZCZ 4MP	N49°56'17.09" E20°53'31.57"	<i>Watznaueria barnesiae</i> , <i>Zeugrhabdotus</i> sp. div. (including <i>Z. sigmoides</i>), <i>Reinhardtites</i> sp. div. (including <i>R. levius</i> (?)), <i>Broinsonia</i> sp. div. (including <i>B. parca</i> subsp. <i>Parca</i>), <i>Necropidolithus</i> sp.	Upper Campanian– lower Eocene UC15d–NP9 (occurrence of <i>Z. sigmoides</i>)	<i>Ammodiscus</i> sp., <i>Ammobaculites</i> sp., <i>Ammosphaeroidina</i> <i>pseudopauciloculata</i> (Mjatljiuk), <i>Archaeoglobigerina cretacea</i> (d'Orbigny), <i>Caudammina gigantea</i> (Grzybowski), <i>Glomospira</i> sp., <i>Glomospira charoides</i> (Jones and Parker), <i>Haplophragmoides xcavates</i> Cushman and Waters, <i>Haplophragmoides kirki</i> Wickenden, <i>Karrerulina horrida</i> (Mjatljiuk), <i>Nothia robusta</i> (Grzybowski), <i>Nothia excelsa</i> (Grzybowski), <i>Recurvoides</i> sp., <i>Spirolectammina navarroana</i> (Gradstein and Kaminski), <i>Subreophax pseudoscalaris</i> (Samuel), <i>Trochaminopsis altiformis</i> (Cushman and Renz)	Campanian– Paleocene (co-occur- rence of <i>A. cretacea</i> * and <i>C. gigantea</i> ; <i>Trochaminop- sis altiformis</i>)
Szczepanowice	SZCZ 5MP	N49°56'03.83" E20°53'16.88"	<i>Watznaueria barnesiae</i> , <i>Micula</i> sp. div. (including <i>M. staurophora</i>), <i>Reinhardtites</i> sp. div. (including <i>R. levius</i>), <i>Broinsonia</i> sp. div. (including <i>B. parca</i> subsp. <i>constricta</i>), <i>Lucianorhabdus</i> sp., <i>Chiastozygus</i> sp. div. (in- cluding <i>Ch. platurhethus</i>).	Lower Campanian - boundary to Campanian/ Maastrichtian UC14b–UC16 (occurrence of <i>B. parca</i> subsp. <i>Constricta</i>)	<i>Archaeoglobigerina cretacea</i> (d'Orbigny), <i>Caudammina excelsa</i> (Grzybowski), <i>Haplophragmoides</i> sp., <i>Karrerulina horrida</i> (Mjatljiuk), <i>Nothia robusta</i> (Grzybowski), <i>Nothia excelsa</i> (Grzybowski), <i>Spirolectammina navarroana</i> (Gradstein and Kaminski),	Turonian– Campanian (range of occurrence of <i>A. cretacea</i>)
Szczepanowice	SZCZ 6MP	N49°55'58.35" E20°53'17.10"	<i>Watznaueria barnesiae</i> , <i>Micula staurophora</i> , <i>Eiffelithus</i> sp. div. (including <i>E. gorkae</i>), <i>Prediscosphaera</i> sp. div. (including <i>P. grandis</i> , <i>P. cretacea</i>), <i>Biscutum</i> sp. div. (including <i>B. ellipticum</i>), <i>Arkhangelskiella</i> sp. div. (including <i>A. cymbiformis</i>), <i>Calculites</i> sp. div. (including <i>C. obscurus</i>), <i>Chiastozygus</i> sp. div. (including <i>Ch. bifarius</i> , <i>Ch. litterarius</i>), <i>Retecapsa</i> sp. div. (including <i>R. crenulata</i>), <i>Zeugrhabdotus</i> sp. div (in- cluding <i>Z. bicrescenticus</i>), <i>Cyclagelosphaera</i> sp., <i>Gartnerago</i> sp. div. (includ- ing <i>G. segmentatum</i>), <i>Necropidolithus cohenii</i> (?)	Lower Campanian– Maastrichtian UC13–UC20d (occurrence of <i>A. cymbiformis</i>)	<i>Globotruncana</i> aff. <i>arca</i> (Cushman), <i>Globotruncana</i> div sp., <i>Kalamopsis grzybowskii</i> (Dylążanka), <i>Nothia excelsa</i> (Grzybowski)	Santonian– Maastricht- ian without its latest part (occurrence of <i>G. arca</i>)

Szczepanowice	SZCZ 7MP	N49°55'46.14" E20°53'11.92"	-	-	<i>Ammosphaeroidina pseudopauciloculata</i> (Mjatljiuk), <i>Archaeoglobigerina cretacea</i> (d'Orbigny), <i>Kalamopsis grzybowskii</i> (Dylążanka), <i>Nothia robusta</i> (Grzybowski), <i>Nothia excelsa</i> (Grzybowski), <i>Recurvooides</i> sp.	Turonian–Campanian (range of occurrence of <i>A. cretacea</i>)
Szczepanowice	SZCZ 8MP	N49°55'10.60" E20°53'35.46"	<i>Watznaueria barnesiae</i> <i>Micula staurophora</i> , <i>Zeugrhabdotus</i> sp. div. (including <i>Z. diplogrammus</i>), <i>Broinsonia</i> sp., <i>Staurolithites</i> sp. div. (including <i>S. imbricatus</i>), <i>Chiastozygus</i> sp. div. (including <i>Ch. synquadriforatus</i>), <i>Eiffellithus</i> sp. div. (including <i>E. eximus</i>), <i>Uniplanarius gothicus</i> , <i>Doscorhabdus</i> sp. (?)	Lower Turonian–upper Campanian UC8a–UC15 (occurrence of <i>E. eximus</i>)	<i>Ammosphaeroidina pseudopauciloculata</i> (Mjatljiuk), <i>Nothia exelsa</i> (Grzybowski), <i>Paratrochamminoides</i> sp.	-
Szczepanowice	SZCZ 9MP	N49°56'10.19" E20°53'25.0"	<i>Micula staurophora</i> , <i>Watznaueria barnesiae</i>	-	-	-
Szczepanowice	SZCZ 10MP	N49°56'08.73" E20°53'19.65"	<i>Micula staurophora</i>	-	-	-