

SUPPLEMENTARY DATA 2

**Unriddling an old dolphin: platanistoid *Notocetus vanbenedeni* Moreno, 1892 from the
early Miocene of Patagonia (Argentina)**

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Supplementary Data 2. List of supplementary tables

Table S1. Table of skull measurements of *Notocetus vanbenedeni* (in mm), from additional specimens. Symbols: *=measurement from the opposite side; +=nearly complete; ~=uncertainty in the measurement taken.

Measurements	MLP 5-10	MLP 5-17	MPEF-PV 681	MPEF-PV 1117	MPEF-PV 1118	MPEF-PV 1119	MPEF-PV 1121
Total length, from the most anterior point to posterior margin of condyles	497+	-	319+	560+	-	-	164.5+
Length of rostrum	365+	-	192.5+	340+	211+	186+	-
Width of rostrum at base	102	-	93+	139	-	-	-
Width of rostrum at half its length	40	-	-	51	-	-	-
Width of premaxilla at rostrum half length	24	-	-	29	-	-	-
Width of maxilla at rostrum half length	37	-	-	14	-	-	-
Distance from tip of rostrum to external nares	-	-	-	425+	-	-	-
Distance from tip of rostrum to internal nares	-	-	-	405+	-	-	-
Anteroposterior length of antorbital notch (right and left, respectively)	8~ -	- -	11~ -	- -	- -	- -	- -
Lateromedial width of antorbital notch (right and left, respectively)	9 -	- -	8~ -	- -	- -	- -	- -
Length of left premaxillary foramen	-	-	-	10	-	-	-
Width of left premaxillary foramen	-	-	-	5	-	-	-
Width of premaxillae at a line across posterior limit of antorbital notches	74	-	68	97	-	-	-
Width of premaxillary sac fossa (right and left, respectively)	42 32+	- -	- -	- -	- -	- -	- -
Greatest preorbital width	162+	-	126+	-	-	-	-
Greatest postorbital width	-	-	135+	-	-	-	-
Length of left orbit, from apex of preorbital process to apex of postorbital process	-	-	38~ (*)	62	-	36	30~ (*)

Measurements	MLP 5-10	MLP 5-17	MPEF-PV 681	MPEF-PV 1117	MPEF-PV 1118	MPEF-PV 1119	MPEF-PV 1121
Greatest anterior width of nasals	-	-	-	36	-	-	-
Greatest length of nasals	-	-	-	18.5	-	-	-
Greatest length of frontal at vertex	-	-	16	22	-	25	21+
Greatest width of frontal at vertex	-	-	18	22	-	-	18
Left squamosal length, from anterior tip of zygomatic process to ventral tip of postglenoid process	-	-	-	-	-	87+	88+
Number of teeth, upper row (right and left, respectively)	23	4+	10+	21+	-	-	-
	23	5+	5+	23+	-	-	-
Number of teeth in mandible (right and left, respectively)	17+	14+	-	-	17+	-	-
	16+	15+	11+	-	12+	-	-
Greatest length of left ramus	213+	192+	-	-	-	-	-
Length of left mandibular fossa	135+	125+	-	-	-	-	-
Length of mandibular symphysis	206+	116.5+	-	-	165+	-	-
Breadth of mandible at base of symphysis	40	36	-	-	52+	-	-

Table S2. Table of periotic measurements of *Notocetus vanbenedeni* (in mm), from additional specimens. Symbols: *=measurement from the opposite side; +=nearly complete; ~=uncertainty in the measurement taken.

Measurements	MPEF-PV 1118	MPEF-PV 1375-5	MPEF-PV 1375-6	MPEF-PV 1375-7	MLP IX-2-5	MPEF-PV 2579
Maximum anteroposterior length, from anterior apex of anterior process to apex of posterior process	42+	43	38+	35+	42+	44
Width of periotic across cochlear portion and superior process, at the level of internal acoustic meatus	18	17	?	18	18	24
Least distance between the margins of fundus of internal auditory meatus and aperture of vestibular aqueduct	2	2	2	3	2	2
Least distance between the margins of fundus of internal auditory meatus and aperture of cochlear aqueduct	1	1.5	-	2	2	2
Length of articular facet of the posterior process of the periotic for the posterior process of tympanic bulla	13.5	12+	-	-	13	13
Antero-posterior length of cochlear portion	14	15	-	13+	16	16
Dorsoventral depth at level of fovea epitubaria	12	14+	-	11	11	12
Transverse width of pars cochlearis from internal edge to fenestra ovalis	11	11	10+	9	10	12
Maximum width of anterior process at base	13.5	12	10	12	-	13
Length of anterior process from anterior apex to level of posterior of malleal fossa	26	13	23	22	26	25
Length of posterior process	14+	13+	-	-	-	15

Table S3. Table of tympanic bulla measurements of *Notocetus vanbenedeni* (in mm), from additional specimens. Symbols: +=nearly complete; ~=
uncertainty in the measurement taken.

Measurements	MPEF-PV 1117	MPEF-PV 1118	MPEF-PV 1120	MPEF-PV 1375-3	MPEF-PV 1375-4	MLP 87- XII-20-1
Standard length of tympanic bulla, distance from anterior tip to posterior end of outer posterior prominence	50+	53+	51+	48	54+	53+
Distance from anterior tip to posterior end of inner posterior prominence	49+	51+	48+	46	52.5+	54+
Distance from postero-ventral tip of outer posterior prominence to tip of sigmoid process	35	35	33	-	-	-
Distance from postero-ventral tip of outer posterior prominence to tip of conical process	29	27	27	-	-	-
Width of tympanic bulla at the level of the sigmoid process	28~	28	28	-	-	-
Height of tympanic bulla, from tip of sigmoid process to ventral keel	31	35	33	-	-	-
Width across inner and outer posterior prominence	29	30	30	30+	31.5+	32
Greatest depth of interprominential notch	7	7	5	-	-	-
Width of upper border of sigmoid process	13	13	14	-	-	-
Maximum width of the ventral side of tympanic	30	-	35.5	-	-	31
Maximum length of tympanic, including posterior process	-	-	-	-	-	-
Maximum length of posterior process	-	-	-	-	-	-
Length of anterior spine	7+	-	6+	-	-	-

Table S4. List of teeth and alveoli measurements of *Notocetus vanbenedeni* (in mm), all from the left side. When the tooth or alveoli position is indicated with a letter, it is because it is unknown. Symbols: *=unknown side; +=nearly complete; ~=estimated measurement.

Tooth position	Upper tooth row				Lower tooth row			
	Maximum length of alveolus	Maximum width of alveolus	Diastema	Dorsoventral height of crown	Maximum length of alveolus	Maximum width of alveolus	Diastema	Dorsoventral height of crown
MLP 5-5 (holotype)								
1	7+	4+	6	-	7+	6+	6	-
2	9	5.5+	4	-	7	6	7	-
3	12	9+	3	-	9	5	9	-
4	9	10+	?	-	8	5	7	-
5	15+	7+	11	-	8	5	7.5	-
6	6+	5.5+	8	-	9	5.5	8	-
7	9	8	7	-	9	6	7	-
8	8	4	7	-	13	7	5	-
9	9	5	4	-	10	6.5	9	-
10	6	4	8	-	8	4	10	-
11	7	4	8	-	8	7	10	-
12	6	5	5	-	7	6	9	-
13	10	7	9	-	7	5	9	-
14	8	7	6.5	-	7	6	10	-
15	9	6	9	-	6	4	8	-
16	7	6	7	-	8	5	6.5	-
17	9	5.5	8	-	7	5	-	-
18	6.5	7.5	4	-	-	-	-	-

Upper tooth row					Lower tooth row			
Tooth position	Maximum length of alveolus	Maximum width of alveolus	Diastema	Dorsoventral height of crown	Maximum length of alveolus	Maximum width of alveolus	Diastema	Dorsoventral height of crown
19	8	6	3	-	-	-	-	-
20	10	6	3	-	-	-	-	-
21	7	5	3	-	-	-	-	-
22	8	4.5	-	-	-	-	-	-
MLP 5-10								
1	?	?	?	-	?	?	3	-
2	?	?	?	-	9	5	3	-
3	11	8	6	10	11	6	7	-
4	8	7	9	5+	8	6	8	11
5	7	6.5	7	11	9	6	9	11
6	7	6	8	11	11	7	11	11
7	7	8	7	-	7	8	11	9
8	7	6.5	8.5	11	9	9	?	9
9	7	6	10	10+	?	?	?	-
10	8	8	10.5	10	9	8	?	7
11	8	6	15	9+	?	?	?	-
12	8	6	10	9	9	6	8.5	8
13	9	8	10	8	8	7	11	-
14	7.5	8	9.5	8+	9	8	6	8
15	8	8	6	7.5	7	5	7	-
16	8.5~	10~	6	10	10	8	-	-
17	9	8+	6	7	-	-	-	-
18	6.5	4.5+	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-

Upper tooth row					Lower tooth row			
Tooth position	Maximum length of alveolus	Maximum width of alveolus	Diastema	Dorsoventral height of crown	Maximum length of alveolus	Maximum width of alveolus	Diastema	Dorsoventral height of crown
20	7	7	-	6	-	-	-	-
MLP 5-17								
1	7	5	4	-	10	-	-	-
2	6	4	5	-	10.5	9	5	-
3	9	5	4	-	8	7	?	-
4	8	5	5	-	8.5~	6.5~	?	-
5	5	6	-	-	8~	7	8	-
6	-	-	-	-	7	6	7	-
7	-	-	-	-	8	7	6	-
8	-	-	-	-	9	8~	8	-
9	-	-	-	-	8	8	9	-
10	-	-	-	-	8	6	10	-
11	-	-	-	-	8	5.5	9	-
12	-	-	-	-	7	7	-	-
MPEF-PV 1660								
2	11	7.5~	3	-	-	-	-	-
3	17	11	2	-	-	-	-	-
4	20	11	4	-	-	-	-	-
5	16	11	-	-	-	-	-	-
6	16	11.5	5	-	-	-	-	-
7	12	10	7	-	-	-	-	-
8	14	10	5	-	-	-	-	-
9	14	11	?	-	-	-	-	-

Upper tooth row					Lower tooth row			
Tooth position	Maximum length of alveolus	Maximum width of alveolus	Diastema	Dorsoventral height of crown	Maximum length of alveolus	Maximum width of alveolus	Diastema	Dorsoventral height of crown
10	12.5	10	5	-	-	-	-	-
11	13	10	5	-	-	-	-	-
12	13	10	5	-	-	-	-	-
13	20	14~	6	-	-	-	-	-
14	15	12	5	-	-	-	-	-
15	14	10	5	-	-	-	-	-
16	14	-	-	-	-	-	-	-
17	16~	-	-	-	-	-	-	-
18	11	9	2.5	-	-	-	-	-
19	12	8	3	-	-	-	-	-
20	9	5	-	-	-	-	-	-
MPEF-PV 1117								
2	-	-	5.5	-	-	-	-	-
3	9	7.5	6	-	-	-	-	-
4	7	6	7	-	-	-	-	-
5	8	7	5	-	-	-	-	-
6	-	-	6~	-	-	-	-	-
7	8~	6~	5	-	-	-	-	-
8	7	6	5	-	-	-	-	-
9	8	6	6	-	-	-	-	-
10	9	7	6.5	-	-	-	-	-
11	8	7	7	-	-	-	-	-
12	7	7	6	-	-	-	-	-

Upper tooth row					Lower tooth row			
Tooth position	Maximum length of alveolus	Maximum width of alveolus	Diastema	Dorsoventral height of crown	Maximum length of alveolus	Maximum width of alveolus	Diastema	Dorsoventral height of crown
13	8	6	5	-	-	-	-	-
14	8	8	6	-	-	-	-	-
15	8	7	4	-	-	-	-	-
16	9	7	5	-	-	-	-	-
17	9	7	4	-	-	-	-	-
18	12	9	4	-	-	-	-	-
19	11	9	3~	-	-	-	-	-
20	8~	9	-	-	-	-	-	-
21	9~	9~	-	-	-	-	-	-
22	-	7~	-	-	-	-	-	-
23	-	-	8~	-	-	-	-	-
MPEF-PV 2580								
1	10	9	11	-	-	-	-	-
2	10	9	10	-	-	-	-	-
3	11	8.5	10	-	-	-	-	-
4	11	8	8	-	-	-	-	-
5	12	8	7	-	-	-	-	-
6	13.5	9	7	-	-	-	-	-
7	13	8	4	-	-	-	-	-
8	12.5	11	7	-	-	-	-	-
9	11	8	2	-	-	-	-	-
10	13	7.5	-	-	-	-	-	-
11	8	11	2	8	-	-	-	-
12	12	6	1	-	-	-	-	-
13	8	5	-	-	-	-	-	-

Table S5. List of additional post-cranial measurements of *Notocetus vanbenedeni* (in mm). **Measurements of AMNH 9485 are taken from True (1910).** Symbols: *=unknown position; +=nearly complete; ~=uncertainty in the measurement taken.

Measurements	MLP 5-5 (holotype)	MPEF-PV 1121	MPEF-PV 1804	AMNH 9485
Cervical vertebrae A (*)				
Greatest height	99	65.5+	-	-
Greatest width	90+	91+	-	-
Vertebral body length	22	25	25	-
Vertebral body height	40	-	41	-
Vertebral body width	40	-	-	-
Cervical vertebrae B (*)				
Greatest height	75+	-	-	-
Greatest width	84+	-	-	-
Vertebral body length	24	-	26	-
Vertebral body height	35	-	38	-
Vertebral body width	40	-	-	-
Cervical vertebrae C (*)				
Greatest height	81	-	-	-
Greatest width	54.5	-	-	-
Vertebral body length	26	-	27	-
Vertebral body height	35	-	36	-
Vertebral body width	39	-	-	-
Cervical vertebrae D (*)				
Vertebral body length	-	-	35	-
Vertebral body height	-	-	34	-
Thoracic vertebrae A (*)				
Vertebral body length	-	-	34	26
Vertebral body height	-	-	39	39
Vertebral body width	-	-	9+	45
Neural spine inclination	-	-	104	-
Thoracic vertebrae B (*)				
Vertebral body length	-	-	39	33
Vertebral body height	-	-	39	36
Vertebral body width	-	-	8+	48
Neural spine inclination	-	-	103	-
Thoracic vertebrae C (*)				
Vertebral body length	-	-	37	33
Vertebral body height	-	-	42	35
Vertebral body width	-	-	11+	50
Neural spine inclination	-	-	112	-
Thoracic vertebrae D (*)				
Vertebral body length	-	-	38	40
Vertebral body height	-	-	42	35
Vertebral body width	-	-	10+	45
Neural spine inclination	-	-	124	-

Measurements	MLP 5-5 (holotype)	MPEF-PV 1121	MPEF-PV 1804	AMNH 9485
Thoracic vertebrae E (*)				
Vertebral body length	-	-	42	44
Vertebral body height	-	-	45~	35
Vertebral body width	-	-	11+	46
Neural spine inclination	-	-	117	-
Thoracic vertebrae F (*)				
Vertebral body length	-	-	46	45
Vertebral body height	-	-	37	38
Vertebral body width	-	-	10+	42
Neural spine inclination	-	-	101	-
Thoracic vertebrae I (*)				
Vertebral body length	-	-	50	-
Vertebral body height	-	-	35	-
Vertebral body width	-	-	10+	-
Neural spine inclination	-	-	95	-
Thoracic vertebrae J (*)				
Vertebral body length	-	-	52	-
Vertebral body height	-	-	38	-
Vertebral body width	-	-	8+	-
Neural spine inclination	-	-	100	-
Thoracic vertebrae K (*)				
Vertebral body length	-	-	59	-
Vertebral body height	-	-	42	-
Vertebral body width	-	-	12+	-
Neural spine inclination	-	-	102	-
Thoracic vertebrae L (*)				
Vertebral body length	-	-	60	-
Vertebral body height	-	-	41	-
Vertebral body width	-	-	11+	-
Neural spine inclination	-	-	112	-
Lumbar vertebrae A (*)				
Vertebral body length	-	-	63	-
Vertebral body height	-	-	47	-
Vertebral body width	-	-	8+	-
Neural spine inclination	-	-	101	-
Lumbar vertebrae B (*)				
Vertebral body length	-	-	71	-
Vertebral body height	-	-	48	-
Vertebral body width	-	-	8.5+	-
Neural spine inclination	-	-	89	-
Lumbar vertebrae C (*)				
Vertebral body length	-	-	72	-
Vertebral body height	-	-	49	-
Vertebral body width	-	-	8+	-
Neural spine inclination	-	-	96	-
Lumbar vertebrae D (*)				
Vertebral body length	-	-	69	-
Vertebral body height	-	-	47	-
Vertebral body width	-	-	8.5+	-

Measurements	MLP 5-5 (holotype)	MPEF-PV 1121	MPEF-PV 1804	AMNH 9485
Neural spine inclination	-	-	92	-
Lumbar vertebrae E (*)				
Vertebral body length	-	-	74	-
Vertebral body height	-	-	52	-
Vertebral body width	-	-	11+	-
Neural spine inclination	-	-	87	-
Lumbar vertebrae F (*)				
Vertebral body length	-	-	76	-
Vertebral body height	-	-	54	-
Vertebral body width	-	-	6+	-