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## SUPPLEMENTARY ONLINE MATERIAL FOR

### **Isometry in mesosaurs: implications for growth patterns in early amniotes**

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#### **Supplementary Online Material**

Table 1. List and description of the specimens studied in the manuscript Núñez Demarco et al. 2022.

Table 2. Statistical results for the log data resampled 100 000 times.

AMNH, American Museum of Natural History, New York, USA;

FC-DPV, Fossil Vertebrates of the Facultad de Ciencias, Montevideo, Uruguay;

GP/2E and PF, Instituto de Geociências (Palaeontology Sector) of the São Paulo University, Brazil;

GSN-F, National Earth Science Museum at the Geological Survey of Namibia, Windhoek Namibia;

MCN, Museu de Ciências Naturais (SEMA), Porto Alegre, Brazil;

MN, Museu Nacional-Universidade Federal do Rio de Janeiro, Brazil;

MNHN, Museum National d'Histoire Naturelle of Paris, France;

NSM-PV, National Museum of Nature and Science, Tokyo, Japan;

PIMUZ, Palaeontological Institute and Museum, University of Zurich, Switzerland;

SMF-R, Senckenberg Institute, Frankfurt, Germany.

Index	Specimen	Description	Comments and references
1	SMF-R 4513 1 y	Slab with associated juvenile (j) and adult (a) individuals. The adult specimen is a partially articulated skeleton. Skull, first cervical vertebrae and almost all caudal vertebrae are missing. The torso rotates its position from lateral position in the shoulders to dorsal position in the sacral region. Forelimbs and hindlimbs are poorly preserved. Only humerus is well-preserved. Right hindlimb preserves femur, tibia, partial fibula, astragalus, and calcaneum.	Piñeiro et al. (2016)
2	SMF-R 4513 1 a	The juvenile individual preserves cranial and postcranial region articulated in dorsal view; caudal vertebrae almost complete. Left forelimb almost complete, without carpal elements. Radio, ulna and fragmentary humerus preserved in the right forelimb. Pelvic girdle elements clearly visible, due the absence of the sacral vertebrae. Almost complete right and left forelimbs and pes, no tarsal elements preserved.	Piñeiro et al. (2016)
3	SMF-R 4528	Almost complete and articulated adult individual, preserved as part and counterpart. Skull is preserved in dorso-lateral position. Torso is preserved in dorsal view, last caudal vertebrae are missing. Shoulder girdle partial visible below the column. forelimbs and hindlimbs almost complete with carpal and tarsals elements preserved, but not all phalanges preserved. Right hindlimb has tarsal elements disarticulated. Elements of the pelvic girdle are partially visible in the right side.	Villamil et al. (2015)
4	SMF-R 4710	Almost complete and articulated adult skeleton. Skull is preserved in lateral view. Torso is preserved in dorsal view. Last caudal vertebrae are missing. Shoulder girdle partially visible below the ribs and column. Forelimbs and hindlimbs almost complete with carpal and tarsals elements preserved. Almost all phalanges preserved. Left forelimb absent. Left femur and fibula and elements of the pelvic girdle are partially visible below the vertebrae.	Piñeiro et al. (2016)
5	SMF-R- 4934	Almost complete and articulated adult individual. Skull and torso are preserved in dorsal view. Anterior part of the caudal region curled and partially disarticulated. Elements of the shoulder girdle not completely discernible. Right and left forelimbs are preserved but distorted, four carpal elements and four metacarpals preserved. Right and left hindlimbs preserved, rounded astragalus and calcaneum suggest that it is a young individual. Left hindlimb has 3 metatarsals, right pes has the five metatarsals and some phalanx. Elements of the pelvic girdle can be identified.	Piñeiro et al. (2016)
6	SMF-R 4470	Posterior skeleton of an adult specimen: left hindlimb; left pelvic girdle; and anterior part of the tail; left pes almost complete; fifth distal tarsal absent; phalanx of fingers iii, iv and v are absent.	Piñeiro et al. (2016)
7	SMF-R- 4935	Partial articulated young adult individual. Skull and cervical region is present. Torso is preserved articulated in dorsal position. First vertebrae of the caudal region are preserved but covered by sediment. Elements of the shoulder girdle discernible. Forelimbs preserved but left manus is disarticulated and poorly preserved, right manus is articulated but not well preserved. Hindlimbs are articulated but incomplete.	
8	SMF-R 4512	Almost complete juvenile individual, preserved in lateral view over the left side: snout tip is not visible; posterior portion of the tail is missing. Left humerus is partially covered by the body, right femur, left tibia, fibula and some metatarsals are preserved.	

9	SMF-R 4496	Partial articulated adult individual: posterior portion of the torso and anterior half of the tail; pelvic girdle preserved; right pes is partially preserved as moulds; only one rounded tarsal element preserved.	Piñeiro et al. (2016)
10	SMF-R 4477	Partial adult skeleton: vertebral region proximal to the hindlimb; right pelvic girdle; partially articulated right hindlimb with tarsal elements.	
11	SMF-R 4485	Partially articulated subadult or young adult specimen preserved as part and counterpart: cervical and thoracic regions well preserved, probable ossified tendons and muscles; right and left forelimbs and part of the neck; both manus, partially preserved; three carpal bones identified in each manus.	
12	SMF-R 4712	Almost complete and articulated adult cast. Skull in lateral position. Torso preserved in dorsal position. Great part of the caudal vertebrae. forelimbs partially covered by the ribs. Both hindlimbs almost complete and articulated, with tarsal elements well ossified. Phalanx poorly preserved.	Villamil et al. (2015)
13	SMF-R 4921	Cast of an almost complete skeleton. Skull in dorsal position. Torso preserved in dorsal position. Right arm almost complete. Left forelimb: humerus and one zeugopodium. Elements of the Shoulder and pelvic girdle. Both femora and zeugopodia. Tarsals metatarsals and phalanx absent or poorly preserved	
14	SMF-R 4480	Partial skeleton preserved as part and counterpart: dorsal region preserved in ventral? view; first caudal vertebrae; discernible shoulder girdle and pelvic elements; right humerus and both femora disarticulated. Sacral region well-preserved and partial caudal region disarticulated.	
15	SMF-R 4488	Partially articulated adult specimen: 13 dorsal, 2 sacrals, 3 caudal vertebrae; right hindlimb: femur, tibia, fibula, centralia almost fused to astragalus, two metatarsals.	
16	SMF-R 4482	Articulated posterior dorsal, sacral and caudal region of an ?adult specimen in dorsal view: two dorsal, two sacral and 14 caudal vertebrae; both hind limbs preserved as molds. Impression of the right astragalus; some metatarsals and phalanges.	
17	SMF-R 4493	Partial articulated adult individual: posterior portion of the torso; pelvic girdle preserved; right femur, parts of the zeugopodium and left femur; disarticulated ribs.	
18	SMF-R 4492	Partial articulated adult individual: Partial thoracic region and one fore limb almost complete.	
19	SMF-R 391	Complete skull in dorsal view	
20	SMF-R 5040	Partial skull in dorsal view with first cervical vertebrae.	
21	AMNH 23794	Slab with an almost complete juvenile specimen. Skull is preserved in lateral position. Torso rotates from lateral position to dorsal position in the hip. Anterior portion of the tail. Some shoulder girdle and forelimbs are discernible. Gastralia. not completely discernible pelvic elements. Forelimbs poorly preserved. both femora, tibia, fibula, metatarsals and almost all phalanx are discernible. tarsal elements are not present.	
22	AMNH 23795	Slab with an almost complete juvenile specimen. Skull is preserved in dorsal view. Torso is in dorso lateral position, the right side is covered by sediment. Parts of the shoulder girdle are preserved and some elements of the left and right hindlimbs, with one rounded tarsal element only preserved.	Piñeiro et al. (2016)

23	AMNH 23796	Fragmented slab with a partial skeleton. Skull in lateral view and poorly preserved. Torso in dorsal position. Gastralia and anterior portion of the tail were preserved, as well as part of the pelvic girdle and some elements of the right hindlimb.	
24	AMNH 23799	Slab with an almost complete young specimen. Skull and torso preserved in dorsal position. cervical ribs. fragmentary elements of the left forelimb. Some elements of the left hindlimb. Right hindlimb: femur, tibia, fibula, one rounded tarsal element, four metatarsals, some poorly preserved phalanx.	
25	PIMUZ A-III 591	Almost complete and articulated subadult specimen. Skull, torso and tail are preserved in dorso-lateral position, the hip area is in ventral position. Gastralia and shoulder girdle well-preserved. Right humerus. Left forelimb almost complete and manus with three rounded carpal elements. Fragmentary pubis and ischia, incomplete left femur. Right hindlimb almost complete. two tarsal elements preserved: astragalus and calcaneum.	Nuñez Demarco et al. (2018), Fig.1
26	PIMUZ A-III 192	Almost complete and articulated young adult or subadult specimen. Skull is preserved in dorso-lateral view and it has incompletely preserved the snout. Torso rotates from dorsal to lateral position at the hip. Gastralia. Left humerus, and discernible radio and ulna. Elements of the pelvic girdle. Hindlimbs superimposed and almost complete, excepting phalanx.	Silva et al (2017), Fig.13.
27	PIMUZ A-III 801	Almost complete specimen, skull absent. Posterior cervical ribs. Torso preserved in ventral position, and parts of the shoulder girdle. Left forelimb and right hindlimb almost complete except phalanges. Some bones are preserved fragmented or as molds.	
28	PIMUZ A-III 513	Partial anterior and dorsal skeleton and partial tail. Skull with the snout incomplete, fragmented or covered by sediments at the level of the anterior margin of nasal bone. Cervical ribs preserving mineralized muscles and/or tendons, anterior part of the torso, and tail poorly preserved as well as elements of the shoulder girdle. Left humerus with well preserved ectepicondylar foramen. Right and left forelimbs superimposed.	
29	FC-DPV 2653	Partial articulated specimen. Dorsal section. Humerus, femur and tibia.	Piñero (2002)
30	FC-DPV 2058	Almost complete hindlimb except phalanx. Femur poorly preserved. Impression of the sacral and first caudal vertebrae and ribs not well defined.	Piñero et al. (2016)
31	FC-DPV 2531	Almost complete foot, preserved as part and counterpart.	
32	FC-DPV 2041	Almost complete hind limb and first caudal vertebrae.	Piñero (2002, 2004)
33	FC-DPV 2497	Almost complete pes. Disarticulated femur. Caudal section.	Piñero et al. (2016)
34	FC-DPV 1455	Almost complete hindlimb.	
35	FC-DPV 3531	Almost complete pes.	
36	FC-DPV (IM4495)	Disarticulated elements. Carpal and metacarpal I articulated.	
37	FC-DPV (IM6125)	Almost complete manus	
38	FC-DPV (IM3413)	Impressions of disarticulated elements. Vertebrae and astragalus with fused navicular	
39	FC-DPV (IM1227)	isolated Astragalus	
40	FC-DPV (IM1097)	isolated Astragalus	

41	FC-DPV 2058	Disarticulated elements. Isolated Astragalus.	
42	FC-DPV (IM84)	isolated Calcaneum	
43	FC-DPV (IM60)	isolated Astragalus	
44	FC-DPV 1502	isolated Astragalus	Piñero et al. (2016), Fig. 8
45	FC-DPV 2504	Almost complete unborn individual curled as within an egg	The oldest known amniote egg found in Uruguay (Piñero et al. 2012a, 2016)
46	FC-DPV 2534	Part and counterpart of a very well preserved skull of an adult individual in dorsal view.	Piñero et al. (2012b)
47	FC_DPV 1461	Skull in dorsal position	
48	FC_DPV 1467	isolated Astragalus	
49	FC-DPV 2061	Impression of a skull of an adult individual in dorsal (internal) view with the bones in natural anatomical position.	Piñero et al. (2012 b). "Elizabeth"
50	MN-2184	Associated partially preserved four individuals. Articulated vertebral segments, dorsal and caudal ribs, articulated and disarticulated. Two articulated pes, partially preserved as molds. Several disarticulated elements.	
51	MN-7148	Adult individual almost complete but badly preserved. Skull and cervical vertebrae partially incomplete in dorsal view. Forelimbs and hindlimbs partially preserved, carpus with all eight bones, and tarsus with only the astragalus with navicular already abutted and three bones of the distal line (1, 2 and 3) preserved.	
52	MN 4741	Almost complete but badly preserved skeleton, skull preserved in ventral view but incomplete. Cervical region almost missing and dorsal region complete but not	Piñero et al. (2016).
53	MN 2197	Partial articulated specimen. Dorsal section and first caudal vertebrae. Right hindlimb complete except by phalanx. Some disarticulated ribs.	
54	PF IPL 220011/0 4 770	Almost complete adult specimen. Skull in dorsal position; cervical dorsal and almost all caudal vertebrae. Cervical dorsal and caudal ribs articulated. Elements of the shoulder and pelvic girdle; Almost complete fore- and hind limbs.	
55	PF 3530	Almost complete specimen. Skull in apparently dorsal position. Cervical dorsal and almost all caudal vertebrae. Cervical dorsal and caudal ribs articulated. Almost complete fore- and hind limbs. No carpals nor tarsals preserved.	
56	PF S/N (IM1743)	Almost complete young specimen. Skull in dorsal position. Cervical, dorsal and caudal vertebrae almost complete. Fore and hind-limbs almost complete, carpal and tarsal elements partially ossified. Articulated ribs and Gastralia. Elements of the shoulder and pelvic girdle poorly preserved.	
57	GP2E 5816	Partial articulated skeleton. Cervical, dorsal and first caudal vertebrae. Fore and hind- limbs partially and poorly preserved.	Piñero et al. (2016).
58	GP2E 5764	Articulated adult individual in ventral view. Skull and neck absent. Both forelimbs and hindlimbs almost completely preserved. Tail with only eight vertebrae.	

59	GP2E 5610	Partial articulated adult skeleton. Dorsal and caudal vertebrae. Torso in lateral position. Articulated ribs. not completely discernible pelvic elements. One hindlimb discernible femur, partial tibia, partial fibula, tarsals, metatarsals, and some phalanx. Poorly preserved	Piñeiro et al. (2016).
60	GP2E 5641	Partial articulated adult skeleton. Cervical, Dorsal and first caudal vertebrae. Torso in lateral position. some ribs articulated, most preserved as moulds, some ribs disarticulated. both humerus. pelvic elements. One hindlimb discernible femur, fibula, and some tarsal elements	
61	GP2E 653a	Posterior dorsal region and part of the tail of an adult in dorsal view. Both hindlimbs are almost completely preserved, tarsus complete.	
62	GP2E 62	Dorsal, sacral and caudal region of an articulated adult individual in possible ventral view. Left and right hindlimbs are preserved but the left one is more complete.	
63-65	GP2E 63a	Partial skeleton of at least three articulated specimens of different size over imposed (A, B, C) . With three partially complete forelimbs (of different individuals)	
66	GP2E 65	Partial skeleton of an adult individual in ventro-lateral view. Dorsal ribs partially articulated and also disarticulated. Sacral vertebrae and ribs well-preserved. Left hindlimb almost complete.	
67	GP2E 272	Almost complete and articulated young specimen. Skull and cervical region absent. Torso and tail are preserved in ventro-lateral view, with the hip area in ventral position. Poorly preserved elements of the shoulder and pelvic girdle. Fore- and hindlimbs almost complete. no carpal or tarsal elements fossilised.	Piñeiro et al. (2016). Villamil et al. (2015) figure 1F.
68	GP2E 114a	Partially articulated adult skeleton. Skull and almost all cervical vertebrae are missing. Torso is preserved in ventral view. Last caudal vertebrae are missing. Shoulder girdle partially preserved, scapulo-coracoid probably fused. Forelimbs and hindlimbs almost complete with carpal and tarsals elements preserved, but not all phalanges preserved. Elements of the pelvic girdle.	Piñeiro et al. (2016).
69	GP2E 5740	Partial skeleton of five articulated mesosaurs of different sizes. Part and counterpart. Elements of four pelvic girdles of four individuals. Seven almost complete hindlimbs (except phalanx) from five individuals.	Piñeiro et al. (2016).
70	GP2E 5203	Partial articulated skeleton. Dorsal, sacral and first caudal vertebrae. Torso in dorsal position. Articulated and disarticulated dorsal ribs. One hindlimb discernible femur, tibia, fibula, tarsals and proximal end of the metatarsals. Left hindlimb poorly preserved.	
71	GP2E 639	Posterior portion of an adult specimen. Six dorsal, two sacral, and 15 caudal vertebrae. Articulated fragments of the pelvic girdle. Hindlimbs almost complete. Right humerus absent. Left pes partially disarticulated. Isolated element of the pelvic girdle.	
72	GP2E 6576 (or 657b)	Partial adult specimen. Posterior part of the torso, mostly ribs, vertebra poorly preserved. One hindlimb almost complete except phalanx. Slab fractured in 2 parts	Piñeiro et al. (2016).
73	GP2E 664	Posterior portion of an adult specimen. Dorsal and proximal caudal vertebrae fragments of the pelvic girdle. Right hindlimb preserved as an impression, femur, tibia, fibula, astragalus and metatarsals. Left humerus.	

74	GP2E 5637	Partially articulated skeleton of an adult individual, tail missing. Skull in dorsal view and cervical and dorsal sections in dorsal view. Cervical and dorsal ribs articulated. Elements of the shoulder girdle. Both forelimbs, poorly preserved metatarsals and phalanx. Pelvic girdle elements. Proximal portion of the right femur.	
75	GP2E 5633	Anterior portion of an adult skeleton. Cervical and anterior dorsal section. Posterior portion of the skull poorly preserved. Humerus.	
76	GP2E 675	Adult individual in ventral view, with skull preserved under the thorax and cervical region well-preserved. Both forelimbs almost complete.	
77	GP2E 669	Partial adult specimen. Skull in lateral position, torso in dorsal position. Elements of the shoulder and pelvic girdle. Right humerus, radio, ulna, some carpal bones. Right femur, tibia fibula and astragalus. Gastralia and remains of soft tissue. Slab is broken in three pieces (a,b,c).	Nuñez Demarco et al. (2018); Fig.1
78	GP2E 644	Partial specimen. Skull in lateral position well-preserved. Torso in dorsal position. Elements of the shoulder and pelvic girdle. One forelimb almost complete. Right femur, tibia and fibula. Part of the left femur.	
79	GP2E 486	Partially articulated skeleton badly preserved. Dorsal and first caudal vertebrae. Ribs articulated. Some appendicular elements.	
80	GP2E 296	Almost complete skeleton of an adult individual. Skull in ventral view and cervical region in ventro-lateral view. Fore-and hindlimbs well preserved but distorted by a fracture, tail complete.	
81	GP2E 284	Almost complete and articulated specimen. Skull in latero-ventral view, poorly preserved. Torso in dorsal position. Elements of the shoulder and pelvic girdle. Both humerus, radio and ulnas. Left manus with carpals and some metacarpals, right manus poorly preserved. both femora, tibia and fibula, astragalus and calcaneus. right pes with metatarsals and some phalanges,	
82	GP2E 232	Partial anterior skeleton badly preserved. Skull in lateral position, cervical vertebrae and first dorsal vertebrae and ribs.	
83	GP2E 5628	Partially preserved individual. Skull badly preserved in lateral position. Cervical vertebrae and some dorsal. One pes almost complete except by the phalanx. Partially preserved elements of the other hindlimb.	
84- 85	GP2E 674a,b,c, d	Partial skeleton of at least four articulated specimens of different size over imposed (A, B, C, D) . Two left humerus. One complete forelimb. One incomplete forelimb. Two part slab	
86	GP2E 5736	Articulated adult specimen in dorsal view, preserving dorsal, sacral and caudal region. Skull and most cervical region not preserved, just the last two cervicals are present. Sacral vertebrae and ribs and partial pelvic girdle. Only right hind limb is articulated and the left one is disarticulated and partially preserved.	
87	GP2E 5812a (or 661)	Partially articulated adult individual in dorsal and lateral view. Shoulder girdle (scapulo-coracoid and interclavicle) in anatomical position. Pelvic girdle also in place, pubis and ischia. Partial hindlimb.	
88	GP2E 5596 (or 596)	Articulated adult individual in dorsal view. Right hindlimb and manus preserved. Tail absent.	
89	GP2E 680	Partial specimen. Dorsal and first caudal vertebrae. Ribs and some appendicular elements badly preserved.	

90	GP2E 660	Partial adult specimen. Posterior part of the torso and anterior portion of the tail (disarticulated in the distal end). Elements of the pelvic girdle. Both hindlimbs almost complete but in part disarticulated and below the body.	
91	GP2E 683	Pelvic girdle, partial right foot and tail of an adult individual in ventral view.	
92	GP2E 5647	Skull badly preserved. cervical and dorsal section partially preserved with some ribs	Villamil et al. (2015)
93	GP2E 6515 A	Slab with eight partially complete specimens, Named from top counter clockwise A, B, C, D, E, F, G, H. <b>Specimen A</b> . Partial adult specimen. Articulated skull, cervical, dorsal and caudal vertebrae. Disarticulated ribs. Both hindlimbs almost complete.	
94	GP2E 6515 B	Slab with eight partially complete specimens, Named from top counter clockwise A, B, C, D, E, F, G, H. <b>Specimen B</b> . Partial adult specimen. Articulated skull, cervical, dorsal, caudal vertebrae and ribs. Both fore- and hindlimbs almost complete but partially over imposed with the body.	
95	GP2E 6515 C	Slab with eight partially complete specimens, Named from top counter clockwise A, B, C, D, E, F, G, H. <b>Specimen C</b> . Partial adult specimen. Articulated skull, cervical, dorsal, caudal vertebrae and ribs. Right forelimb almost complete, left hindlimb: femur, tibia and fibula.	
96	GP2E 6515 D	Slab with eight partially complete specimens, Named from top counter clockwise A, B, C, D, E, F, G, H. <b>Specimen D</b> . Partial adult specimen. Skull is discernible but cover/imposed by specimens C and E. Articulated, cervical, dorsal, caudal vertebrae and ribs. appendicular elements poorly preserved.	
97	GP2E 6515 E	Slab with eight partially complete specimens, Named from top counterclockwise A, B, C, D, E, F, G, H. <b>Specimen E</b> . Partial adult specimen. Skull is discernible but over imposed by specimens C and D. Articulated, cervical, dorsal, caudal vertebrae and ribs. both forelimbs partially preserved. one hindlimb almost complete. it is the only specimen with an opposite orientation.	
98	GP2E 6515 F	Slab with eight partially complete specimens, Named from top counterclockwise A, B, C, D, E, F, G, H. <b>Specimen F</b> . Partial adult specimen. Skull an neck are not discernible. Articulated, cervical, dorsal, caudal vertebrae and ribs. Both forelimbs almost complete but partially over imposed with the body. Both hindlimbs almost complete, one over imposed to specimen G.	
99	GP2E 6515 G	Slab with eight partially complete specimens, Named from top counterclockwise A, B, C, D, E, F, G, H. <b>Specimen G</b> . Partial adult specimen. Dorsal and caudal vertebrae. Disarticulated ribs. One hindlimb not completely discernible.	
100	GP2E 6515 H	Slab with eight partially complete specimens, Named from top counterclockwise A, B, C, D, E, F, G, H. <b>Specimen H</b> . Partial adult specimen. Articulated Skull, cervical, dorsal and caudal vertebrae. Skull partially hide below the torso. Articulated and disarticulated fragmentary ribs. No appendicular elements	
101	GSN F 1643	Partially preserved young individual. Almost complete left hindlimb, and partial right hind limb. First caudal series preserved. Elements of the pelvic girdle.	
102	GSN F 1640	Partially preserved skeleton. Skull is in lateral position cervical and thoracic vertebrae. Articulated ribs. Almost complete right forelimb, and partial left forelimb. Almost complete right hindlimb but poorly preserved. Mostly preserved as impressions.	



103	GSN F 1636	Almost complete individual. Skull preserved in ventral view. Cervical, thoracic and considerable portion of the caudal vertebrae preserved. Ribs articulated. Elements of the shoulder and pelvic girdle discernible. Fore and hind limbs almost complete but poorly preserved particularly the phalanx	
104	GSN F 189	Articulated femur, fibula and tibia. Some ribs series and gastralia.	
105	GSN F S/N; (IM06735)	Partial specimen. Specimen slab is fragmented in 6 fragments. Cervical, thoracic and first caudal vertebrae. Articulated ribs. Right hindlimb almost complete. Left hindlimb partially preserved.	Owner Mr. Giel Steenkamp. Farm Spitzkoppe no. 159
106	MNHN AC1865- 77A	Skull, cervical and dorsal region of an adult individual preserved in ventral view. Forelimbs well-preserved including both manus. Scapulo-coracoids and interclavicle partially visible.	This is the type specimen of <i>Mesosaurus tenuidens</i> Gervais, 1865. South Africa. Silva et al. (2017); Fig.11.
107	MCN-PV 2172	Complete skull and mandible and neck of an adult individual in dorsal view.	
108	MCN-PV 2238	Radius and ulna plus complete carpus.	
109	NSM-PV 21867	Partially preserved skeleton in dorso-lateral view of a subadult or young adult individual. Skull preserved but snout fractured at the level of anterior margin of nasal bone. Tail not preserved. Forelimb partially preserved and two bones in the carpus.	Type specimen of <i>Brazilosaurus sanpauloensis</i> , Shikama and Ozaki (1966)

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Table 2. Statistical results for the log data resampled 100000 times: mean of the coefficient  $a$ , its 95% confidence interval, mean correlation coefficient, percentage of resampled set that include 1 in its confidence interval (i.e. that are isometric). SkL-SnL: Skull length minus snouth length. PBO-PBS: length between the posterior border of orbit and the posterior border of the skull. CI-CV: Metacarpals. TI-TV: Metatarsals.

$a$	0.95% Confidence interval		Mean correlation coefficient	resampling % that include 1	interpretation
	lower	upper			

### Skull

Snout width:Skull length	0,8771	0,6049	1,3453	0,9045	88,6%	Isometric
Snout length:Skull length	1,0818	0,2477	2,0684	0,9898	99,9%	Isometric
SkL-SnL:Skull length	1,49	-1,1931	2,5689	0,9642	100%	Isometric
Orbit length:Skull length	0,7426	0,3039	1,2535	0,8413	41,1%	Isometric
PBO-PBS length:Skull length	0,9695	0,414	1,6734	0,8403	93,8%	Isometric
maximum Skull width:Skull length	0,8711	-0,8682	1,5011	0,923	88%	Isometric
maximum width:Orbit length	1,3738	0,7341	2,3662	0,961	100%	Isometric

### Femur

length:proximal width	0,8548	0,2119	1,5643	0,7356	99,8%	Isometric
length:central width	0,8578	0,1487	1,6157	0,738	100%	Isometric
length:distal width	0,8111	0,1957	1,4778	0,7592	99,5%	Isometric

### Fibula

length:proximal width	1,161	0,2039	2,1885	0,8706	100%	Isometric
length:central width	0,9329	0,2142	1,72	0,8337	100%	Isometric
length:distal width	1,1861	0,227	2,2155	0,9352	100%	Isometric

### Tibia

length:proximal width	1,1166	0,2638	2,0526	0,7718	100%	Isometric
length:central width	1,1195	0,2807	2,0396	0,742	100%	Isometric
length:distal width	0,940	0,297	1,670	0,6806	99,9%	Isometric

### Astragalus

length:proximal width	0,8006	0,1711	1,473	0,8495	5%	Isometric
length:central width	0,8029	0,1981	1,456	0,8143	32%	Isometric
length:distal width	0,981	0,2788	1,7735	0,8612	98%	Isometric

### Calcaneus

length:width	1,0487	0,3311	1,865	0,8998	100%	Isometric
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### Humero

length:proximal width	0,9668	0,3122	1,7118	0,7517	99,9%	Isometric
length:central width	0,8273	0,1973	1,5155	0,8748	100%	Isometric
length:distal width	0,9458	0,1536	2,0311	0,9458	100%	Isometric

### Radius

length:proximal width	1,0575	0,3328	1,9086	0,8624	99,9%	Isometric
length:central width	1,1271	0,2685	2,0626	0,8786	100%	Isometric
length:distal width	0,9638	0,2201	1,784	0,8838	100%	Isometric

### Ulna

length:proximal width	1,2063	0,4223	2,1444	0,8829	100%	Isometric
length:central width	0,9868	0,3661	1,7274	0,8458	100%	Isometric
length:distal width	1,0994	0,3166	1,978	0,8912	100%	Isometric

#### Relationship between bones' length

Femur:Tibia	0,9262	0,0632	1,8036	0,9839	50%	Isometric
Femur:Fibula	0,9477	0,0877	1,8346	0,972	63%	Isometric
Femur:TI	1,1285	0,1898	2,1355	0,9375	100%	Isometric
Femur:TII	1,0598	0,1971	1,9779	0,9563	99,9%	Isometric
Femur:TIII	1,0436	0,1573	1,974	0,9693	99,9%	Isometric
Femur:TIV	1,039	0,1933	1,9425	0,9668	99,5%	Isometric
Femur:TV	1,1097	0,2247	2,0439	0,9658	100%	Isometric
Femur:Astragalus	1,5563	0,4775	2,7803	0,8542	100%	Isometric
Femur:Humerus	0,9108	0,1776	1,7006	0,9019	100%	Isometric
Humerus:Ulna	0,9136	0,1222	1,7402	0,9728	50%	Isometric
Humerus:Radius	0,9229	0,1319	1,7505	0,968	52%	Isometric
Humerus:C1	1,0431	0,3565	1,8352	0,9347	99,9%	Isometric
Humerus:CII	0,8929	0,2113	1,6751	0,9427	97,9%	Isometric
Humerus:CIII	0,9183	0,2263	1,6727	0,9379	37%	Isometric
Humerus:CIV	0,8013	0,2828	1,4178	0,9232	60,0%	Isometric
Humerus:CV	0,8755	0,3975	1,4921	0,8364	37,9%	Isometric

Femur+Tibia:TI	0,5748	0,1	1,086	0,9413	99,9%	Isometric
Femur+Tibia:TV	0,5729	0,1139	1,0515	0,973	66,80%	Isometric
Humerus+Radio:C1	0,5585	0,2189	0,9823	0,939	98,10%	Negative allometry
Humerus+Radio:CV	0,4643	0,2199	0,7969	0,85	19,30%	Negative allometry

Skull length:Mean vertebral length	1,4561	-0,0597	2,3553	0,7119	99,9%	Isometric
Femur length:Mean vertebral length	1,0171	0,2499	1,8745	0,8773	99,9%	Isometric
Femur length:Skull length	1,5472	0,9031	2,4602	0,7908	100%	Isometric
Humerus length:Skull length	1,472	-0,9549	2,4054	0,6987	100%	Isometric