



[http://app.pan.pl/SOM/app58-Garcia\\_Salgado\\_SOM.pdf](http://app.pan.pl/SOM/app58-Garcia_Salgado_SOM.pdf)

## SUPPLEMENTARY ONLINE MATERIAL FOR

### **The titanosaur sauropods from the Allen Formation (late Campanian-early Maastrichtian) of Salitral Moreno (Patagonia, Río Negro, Argentina)**

Rodolfo A. Garcia and Leonardo Salgado

Published in *Acta Palaeontologica Polonica* 2013 58 (2): 269-284.  
<http://dx.doi.org/10.4202/app.2011.0055>

**SOM 1.** *Aeolosaurus* sp., measurements in cm.

**SOM 2.** *Rocasaurus muniozi* Salgado and Azpilicueta, 2000, measurements in cm.

**SOM 3.** Titanosauria gen. et sp. indet. 1, measurements in cm.

**SOM 4.** Titanosauria gen. et sp. indet. 2, measurements in cm.

**SOM 5.** Titanosauria gen. et sp. indet. 4, measurements in cm.

# SOM 1

*Aeolosaurus* sp., measurements in cm.

Caudal vertebrae (MPCA-Pv)	27174 anterior	27174 mid	27174 mid-posterior
Centrum length	15.5	16.3	15
Heighth (with neural spine)	23 (without neural spine)	26	19.7
Centrum width (at medial portion)	9.5	9.2	8.4
Distance between prezygapophyses and postzygapophyses (from their most distal limit)	7.5	16.8	15.8

Humerus (MPCA-Pv)	27176
Length	81.5
Width (proximal end)	30.5 (deltpectoral crest incomplete)
Minimum width	14
Width (at condyles)	25.5

Ulna (MPCA-Pv)	27174	27180	27175
Length	48.6	32.5 (without olecranon)	53.5
Width (proximal end)	18.9	13.5 (without olecranon)	25.5
Minimum width	8.5	6.2	10.1

Radius (MPCA-Pv)	27174
Length	39
Width (proximal end)	12.4
Minimum width of the diafisis	6.7

Metacarpal (MPCA-Pv)	27174
Length	18.6
Width	3.4

Femur (MPCA-Pv)	21777
Length	103
Minimum midshaft width	19.8
Width (at lateral budge)	24
Width (at condyles)	32
Midshaft anteroposterior diameter	9.5
M.A. index	2.08
Robustness index	0.19

Ischium (MPCA-Pv)	27174
Length	57.2
Width (distal end)	17

## SOM 2

*Rocasaurus muniozi* Salgado and Azpilicueta, 2000, measurements in cm.

Cervical vertebrae (MPCA-Pv)	46/1	859	860
Centrum length	14.5	14	—
Total height (to the neural spine base)	—	13	11 (from pleurocel)
Centrum width (at posterior articulation)	7.3	7	—
Distance between prezygapophyses and postzygapophyses (from their most distal limit)	—	17.5	—
 Caudal vertebrae (MPCA-Pv)	 46/9	 46/10	 47
Centrum length	13	12	12.7
Centrum height (to the neural spine base)	9.3	8.2	9.5
Centrum width (at anterior*, medial** portion)	9*	8 *	13.9*
Distance between prezygapophyses and postzygapophyses (from their most distal limit)	15	12	—
 Dorsal vertebrae (MPCA-Pv)	 46/7	 46/8	 49
Centrum length	13	14.3	12.9
Total height	—	8.7	10
Centrum width	—	5.3	—
 Femur (MPCA-Pv)	 46/16	 57	 58
Length	78	—	60
Minimum midshaft width	12.3	—	—
Width (at lateral budge)	17.8	—	—
Width (at condyles)	21.5	—	—
Midshaft anteroposterior diameter	6.7	—	—
M.A. index	1.83	—	—
Robustness index	0.16	—	—
 Ilion (MPCA-Pv)	 46/12	 57	 58
Length	62.5	—	—
Height (at the pubic peduncle)	38.5	—	—

## SOM 3

*Titanosauria gen. et sp. indet. 1*, measurements in cm.

Caudal vertebrae (MPCA-Pv)	867
Centrum length	12.5
Heighth (with neural spine)	17.5
Centrum heighth (at anterior articulation)	8.9
Centrum width	6.5
distance between prezygapophyses and Postzygapophyses (from their most distal limit)	13.5

Tibia (MPCA-Pv)	33/1
Length	56.5
Width (at cnemial crest)	19.5
Minimal width	9

Femur (MPCA-Pv)	33/2
Length	89
Minimum midshaft width	13.3
width (at lateral budge)	20
width (at condyles)	24
midshaft anteroposterior diameter	8.5
M.A. index	1.56
Robustness index	0.15

## SOM 4

*Titanosauria gen. et sp. indet. 2*, measurements in cm.

Caudal vertebrae (MPCA-Pv)	88/B	88/C	88/D
Centrum length	13.4	12	10
Centrum heighth	13.5	14	12.5
Centrum width	16.5	19	13.5

Humerus (MPCA-Pv)	88/A
Length	90
Width (proximal end)	32.5 (deltpectoral crest incomplete)
Minimum width	15
Width (at condyles)	29.5

## SOM 5

*Titanosauria gen. et sp. indet. 4*, measurements in cm.

Caudal vertebrae (MPCA-Pv)	861	862	863	864
Centrum length	13.3	14.2	17.4	17.2
Centrum width (medial portion)	7.5	7.6	11.5	10.5
Centrum heighth	7.4	7	11	10.5
Width (at the posterior articulation)	10	9.7	12.8	14

M.A. index: mediolateral/anteroposterior

Robustness index: minimum midshaft width/length