

# Body reconstruction and size estimation of plesiosaurs

## references for data

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This file contains the references of the datasets used in this study.

### Neck-SKL regression.xlsx

<i>Libonectes morgani</i>	Welles, 1949 [1]
<i>Meyerasaurus victor</i>	Smith & Vincent, 2010 [2]
<i>Sachicasaurus vitae</i>	Páramo-Fonseca et al, 2018 [3]
<i>Kaiwhekea katiki</i>	Cruickshank & Fordyce, 2002 [4]
<i>Ophthalmothule cryostea</i>	Roberts et al, 2021 [5]
<i>Trinacromerum bentonianum</i>	Thurmond, 1968 [6]
<i>Thalilua longicollis</i>	Bardet et al, 2003 [7]
<i>Hauffiosaurus tomistomimus</i>	Benson et al, 2011 [8]
<i>Styxosaurus</i> SDSM 451	Welles & Bump, 1949 [9]
<i>Dolichorhynchops osborni</i>	Carpenter, 1999 [10]; Bonner, 1964 [11]
<i>Hydrotherosaurus alexandrae</i>	Welles, 1943 [12]
<i>Thalassomedon haningtoni</i>	Welles, 1943 [12]
<i>Styxosaurus browni</i>	Welles, 1952 [13]
<i>Edgarosaurus muddi</i>	Drunkenmiller, 2002 [14]
<i>Microcleidus homalospondylus</i>	Benson et al, 2012 [15]
<i>Plesiopterys wildi</i>	O'Keefe, 2004 [16]
<i>Plesiosaurus dolichodeirus</i>	O'Keefe, 2004 [16]
<i>Thalassiodracon hawkinsi</i>	O'Keefe, 2004 [16]
<i>Brancasaurus brancai</i>	Sachs et al, 2016 [17]
<i>Atychodracon megacephalus</i>	Smith, 2015 [18]
<i>Macroplata tenuiceps</i>	Ketchum & Smith, 2010 [19]
<i>Brachauchenius lucasi</i>	McHenry, 2009 [20]
<i>Kronosaurus queenslandicus</i>	McHenry, 2009 [20]
<i>Luskhan itilensis</i>	Fischer et al, 2023 [21]
<i>Attenborosaurus conybeari</i>	Benson et al, 2012 [15]
<i>Simolestes vorax</i>	O'Keefe, 2002 [22]
<i>Muraenosaurus leedsii</i>	O'Keefe, 2002 [22]

<i>Cryptoclidus eurymerus</i>	Brown, 1980 [23]
<i>Serpentisuchops pfisterae</i>	Persons et al, 2022 [24]
<i>Callawayasaurus colombiensis</i>	Welles, 1962 [25]
<i>Abyssosaurus nataliae</i>	Berezin, 2011 [26]; Berezin, 2019 [27]
<i>Nakonanectes bradti</i>	Serratos et al, 2017 [28]
<i>Rhomaleosaurus cramptoni</i>	O’Keefe, 2002 [22]
<i>Archaeonectrus rostratus</i>	Benson et al, 2012 [15]
<i>Microcleidus tournemirensis</i>	Bardet et al, 1999 [29]
<i>Thaumatodracon wiedenrothi</i>	Smith & Araújo, 2017 [30]
<i>Liopleurodon ferox</i>	Linder, 1913 [31]
<i>Peloneustes philarchus</i>	Linder, 1913 [31]
“Monquirasaurus” boyacensis	Noè & Gómez-Pérez, 2022 [32]
<i>Nichollssaura borealis</i>	Nagesan, 2017 [33]

## Trunk-Rib regression.xlsx

<i>Macroplata tenuiceps</i>	Ketchum & Smith, 2010 [19]
<i>Atychodracon megacephalus</i>	Smith, 2007 [34]
<i>Rhomaleosaurus cramptoni</i>	Smith, 2007 [34]
<i>Archaeonectrus rostratus</i>	Owen, 1865 [35]
<i>Peloneustes philarchus</i>	Linder, 1913 [31]
<i>Sachicasaurus vitae</i>	Páramo-Fonseca et al, 2018 [3]
<i>Stenorhynchosaurus munozi</i>	Páramo-Fonseca et al, 2016 [36]
“Monquirasaurus” boyacensis	Noè & Gómez-Pérez, 2022 [32]
<i>Liopleurodon ferox</i>	Vincent et al, 2024 [37]
<i>Plesiosaurus dolichodeirus</i>	Storrs, 1997 [38]
<i>Seeleyosaurus guilelmiimperatoris</i>	Dames, 1895 [39]
<i>Microcleidus homalospondylus</i>	Owen, 1865 [35]
<i>Cryptoclidus eurymerus</i>	Richards, 2011 [40]
<i>Abyssosaurus nataliae</i>	Berezin, 2019 [27]
<i>Tatenectes laramiensis</i>	O’Keefe et al, 2011 [41]
<i>Nichollssaura borealis</i>	Nagesan, 2017 [33]
<i>Dolichorhynchops osborni</i>	Willison, 1907 [42]
<i>Mauriciosaurus fernandezi</i>	Frey et al, 2017 [43]
<i>Wapuskanectes betsynichollsae</i>	Henderson, 2024 [44]
<i>Kaiweheka katiki</i>	Cruikshank & Fordyce, 2002 [4]
<i>Albertonectes vanderveldei</i>	Henderson, 2024 [44]
<i>Vegasaurus molyi</i>	O’Gorman et al, 2015 [45]
<i>Hydrotherosaurus alexandrae</i>	Welles, 1943 [12]

## Tail regression.xlsx

<i>Albertonectes vandervelde</i>	Kubo et al, 2012 [46]
<i>Macroplata tenuiceps</i>	Ketchum & Smith, 2010 [19]
<i>Rhomaleosaurus cramptoni</i>	Smith, 2007 [34]
<i>Rhomaleosaurus zetlandicus</i>	Vincent & Smith, 2009 [47]
<i>Archaeonectrus rostratus</i>	Owen, 1865 [35]
<i>Plesiosaurus dolichodeirus</i>	Storrs, 1997 [38]
<i>Seeleyosaurus guilelmiimperatoris</i>	Dames, 1895 [39]
<i>Meyerasaurus victor</i>	Smith & Vincent, 2010 [2]
<i>Hauffiosaurus zanoni</i>	Vincent et al, 2011 [48]
<i>Atychodracon megacephalus</i>	Smith, 2015 [18]
<i>Thalassiodracon hawkinsi</i>	Smith, 2007 [34]
<i>Eoplesiosaurus antiquior</i>	Benson et al, 2012 [15]
<i>Hauffiosaurus tomistomimus</i>	Benson et al, 2011 [8]
<i>Microcleidus brachypterygius</i>	Huene, 1923 [49]
<i>Brancasaurus brancai</i>	Sachs et al, 2016 [17]
<i>Cryptoclidus eurymerus</i>	Andrews, 1910 [50]
<i>Nichollssaura borealis</i>	Nagesan, 2017 [33]
<i>Dolichorhynchops osborni</i>	Willison, 1907 [42]
<i>Wapuskanectes betsynichollsae</i>	Henderson, 2024 [44]
<i>Plesionectes longicollum</i>	Sachs & Madzia, 2025 [51]
<i>Plesiopterys wildi</i>	Marx et al, 2025 [52]

## Proxy for Mass.xlsx

<i>Abyssosaurus nataliae</i>	Berezin, 2011 [26]; Berezin, 2019 [27]
<i>Albertonectes vandervelde</i>	Kubo et al, 2012 [46]
<i>Aristonectes quiriquinensis</i>	Otero et al, 2014 [53]; Otero et al, 2018 [54]
<i>Brancasaurus brancai</i>	Sachs et al, 2016 [17]
<i>Cryptoclidus eurymerus</i>	Andrews, 1910 [50]; Richards, 2011 [40]
<i>Dolichorhynchops osborni</i>	Bonner, 1964 [11]
<i>Hydrotherosaurus alexandrae</i>	Welles, 1943 [12]
<i>Kronosaurus queenslandicus</i>	Romer & Lewis, 1959 [55]; McHenry, 2009 [20]
<i>Liopleurodon ferox</i>	Linder, 1913 [31]
<i>Macroplata tenuiceps</i>	Ketchum & Smith, 2010 [19]
<i>Martinectes bonneri</i>	Adams, 1997 [56]
<i>Mauriciosaurus fernandezii</i>	Frey et al, 2017 [43]
<i>Meyerasaurus victor</i>	Smith & Vincent, 2010 [2]
<i>Microcleidus tournemirensis</i>	Bardet et al, 1999 [29]
<i>“Monquirasaurus” boyacensis</i>	Noè & Gómez-Pérez, 2022 [32]

<i>Nichollssaura borealis</i>	Nagesan, 2017 [33]
<i>Peloneustes philarchus</i>	Linder, 1913 [31]
<i>Plesiopterys wildi</i>	Marx et al, 2025 [52]
<i>Pliosaurus funkei</i>	Knutsen et al, 2012 [57]
<i>Pliosaurus cf. kevani</i>	Tarlo, 1959 [58]
<i>Sachicasaurus vitae</i>	Páramo-Fonseca et al, 2018 [3]
<i>Seeleyosaurus guilelmiimperatoris</i>	Sachs et al, 2025 [59]
<i>Stenorhynchosaurus munozi</i>	Páramo-Fonseca et al, 2016 [36]
<i>Styxosaurus</i> SDSM 451	Welles & Bump, 1949 [9]
<i>Thalassomedon haningtoni</i>	Welles, 1943 [12]
<i>Vegasaurus molyi</i>	O’Gorman et al, 2015 [45]

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