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A new diminutive fossil ziphiid from the deep-sea floor off northern Chile and some remarks on the body size evolution and palaeobiogeography of the beaked whales

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The evolutionary history of the beaked whales (Ziphiidae), odontocetes nowadays adapted to deep diving, is well known thanks to a significant fossil record mainly from the deep ocean floors. A partial cranium of a ziphiid recovered from Plio-Pleistocene deep sea deposits (about 1000 m) off the port of Pisagua, northern Chile, during fishing activity is here described and referred to the new species *Ihlengesi changoensis*. *Ihlengesi changoensis* differs from the type species *Ihlengesi saldanhae*, from the sea floor off South Africa, by having a more elongated premaxillary sac fossa and consequently a more anteriorly located premaxillary foramen; dorsal margin of each premaxillary crest sloping markedly ventrolaterally and generating an acute dorsal profile of the vertex in anterior view; less anterolateral extension of the right nasal forming part of the premaxillary crest; lateral margins of the nasals not anteriorly diverging but weakly convex; nasofrontal suture anteriorly pointed. The phylogeny supports a sister-taxon relationship between *I. changoensis* and *I. saldanhae*, both members of the crown ziphiids Hyperoodontinae. *Ihlengesi changoensis* shares with *I. saldanhae* and other fossil ziphiids a small body size (estimated length 3.5 m) supporting the hypothesis that in the past small beaked whales (