

## Updated distribution maps for neotropical bats in the superfamily Noctilionoidea

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**Abstract.** The IUCN provides a spatial database for many species, including terrestrial mammals. This database includes shapefiles with taxonomic information and the extent of occurrence for each species, and has been used in hundreds of studies in ecology, biogeography and conservation. Here we provide updated distribution maps that comprise the extent of occurrence of the neotropical bat species in the superfamily Noctilionoidea (Mammalia: Chiroptera) after a thorough research of new records published between January 2008 and March 2018. The main motivation for this update was the inclusion of spatial and climatic variables in explaining the ecological and taxonomic diversity of noctilionoid bats. The core of the superfamily (246 species distributed in five families out of 250 species) occurs in the Neotropics and shows ecological diversity unparalleled among mammals. This clade also shows the only evolutionary shift towards higher speciation rates within the order Chiroptera. Updating the range maps for these bats resulted in the modification of maps of 94 species, and the creation of new maps for 37 species missing from the IUCN database. From the 94 modified maps, 55 species increased their latitudinal range and 38 increased their longitudinal range. These modifications did not change the overall extent of occurrence of the clade. Altogether, modified and new maps represent 53% of Noctilionoidea. No copyright or proprietary restrictions are associated with the use of this data set other than citation of this Data Paper.

**Key words:** extent of occurrence; *Furipteridae*; *Mormoopidae*; *Noctilionidae*; *Phyllostomidae*; *Thyropteridae*.

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