

***DOSIDICUS GIGAS* FISHING GROUNDS IN THE EASTERN PACIFIC AS REVEALED BY
SATELLITE IMAGERY OF THE LIGHT-FISHING FLEET**

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ABSTRACT: *Dosidicus gigas* (the Jumbo flying squid) supports a major fishery in the Eastern Pacific. The commercial fishery consists of a multinational jigging fleet, and the emission of light from these vessels can be observed using satellite-derived imagery obtained by the United States Defence Meteorological Satellite Program - Operational Linescan System (DMSP-OLS). Using a Geographic Information System (GIS), the location of the fleet (derived from DMSP-OLS data) was examined for the region 20°N to 20°S; 75 to 100°W, covering the central part of the species' distribution. Satellite imagery of the light-fishing fleet revealed fishing grounds to be situated off the coast of Peru (2 to 10°S), with fishing on the high seas observed off both Peru (3 to 18°S), and Central America (5 to 10°N). The distribution of the fleet was not associated with bathymetry or proximity to coastal regions, but is likely to be linked to upwelling events in the Eastern Pacific. DMSP-OLS data can be used to provide synoptic imagery of the fleet for time periods from a single day to several years, and enables the study of fleet activity across management and political boundaries.