

 <p data-bbox="231 533 470 571">Agreement on the Conservation of Albatrosses and Petrels</p>	<p data-bbox="550 241 1385 324"><b>Sixth Meeting of the Population and Conservation Status Working Group</b></p> <p data-bbox="702 342 1385 380"><i>Virtual meeting, 24 – 25 August 2021 (UTC+10)</i></p> <p data-bbox="510 459 1380 660"><b>Satellite image use for albatross population monitoring in the future – a case study using Japan’s Short-tailed albatrosses <i>Phoebastria albatrus</i> at the Senkaku Islands</b></p> <p data-bbox="518 750 1372 795"><b><i>Nigel Brothers, Catherine Bone &amp; Alexia Wellbelove</i></b></p>
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### SUMMARY

Accurate world-wide monitoring of vulnerable albatross populations is essential to their conservation. This study was carried out in the interests of exploring the prospect of monitoring one particular albatross species population that is unable to be visited, and with a view to promoting expansion of accurate monitoring world-wide for vulnerable albatross populations.

We used a high-resolution satellite image to count nesting Short-tailed albatrosses *Phoebastria albatrus* on two islands of the Senkaku island group located in the west North Pacific Ocean, where conventional population monitoring has not occurred for 19 years due to geopolitical territory dispute.

Despite count uncertainties across rocky terrain, many birds appeared to be clearly discernible in a ‘colony’ in the highest resolution image available of Minami-kojima, resulting in a count of approximately 132 (109-162) nesting pairs in the 2020/21 breeding season, by comparison to around 52 when last counted in 2002. On Kita-kojima there were zero counted in the 2019/20 and 2020/21 breeding season images where one chick was counted in 2002. If accurate, these counts are inconsistent with the projections of increasing abundance (190 breeding pairs by 2018/19) used to help determine the conservation status of this species.

Reliable satellite image-based albatross counts independent of ground verification is considered an ideal goal, and achievable if image capture is of the highest possible resolution, with angle and timing of capture optimised for the specifics of breeding sites. It is necessary to standardize procedures and methodologies in order to establish dependable and efficient satellite image-based population trend monitoring. The Working Group of the Agreement on the Conservation of Albatrosses and Petrels could serve this purpose.

This study proposes that satellite image-based albatross population monitoring – efficient and low cost, with no detrimental impacts to the birds – can also supplement conventional monitoring for conservation management in certain instances.