

Figure S1. Frequency distribution of dive depths per 10 m-bins of Magellanic penguins rearing chicks on Vernacci Este in 2016 (n = 11 birds, 8676 dives) and 2017 (n = 5 birds, 5747 dives).

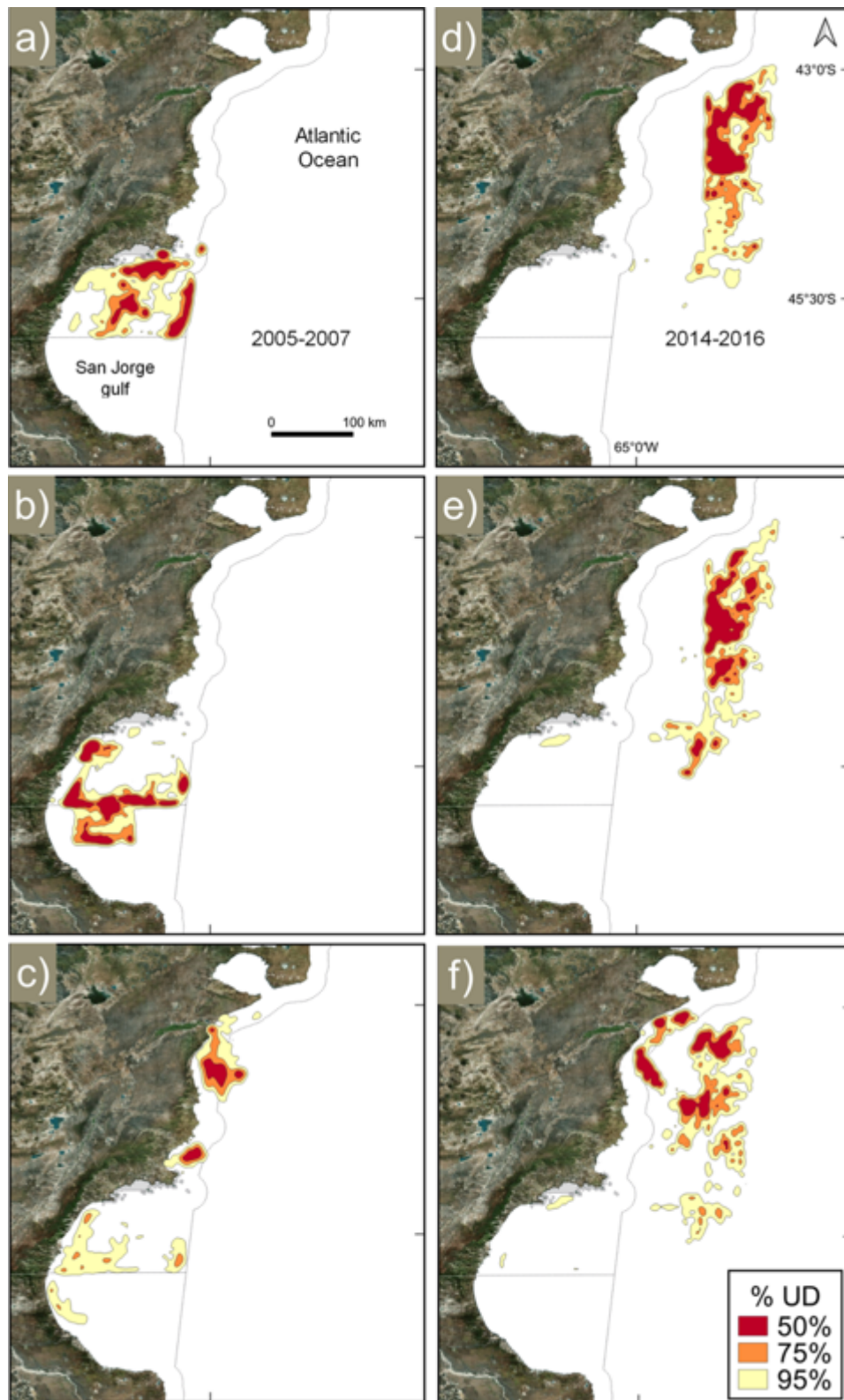


Figure S2. Spatial distribution of fishing effort in the study area during October. Panels (a), (b) and (c) show the distribution for the period 2005-2007 (three years pooled) made by freezer, high-sea ice and coastal trawlers, respectively. Panels (d), (e) and (f) show the distribution for the period 2014-2016 (three years pooled) made by freezer, high-sea ice and coastal trawlers, respectively.

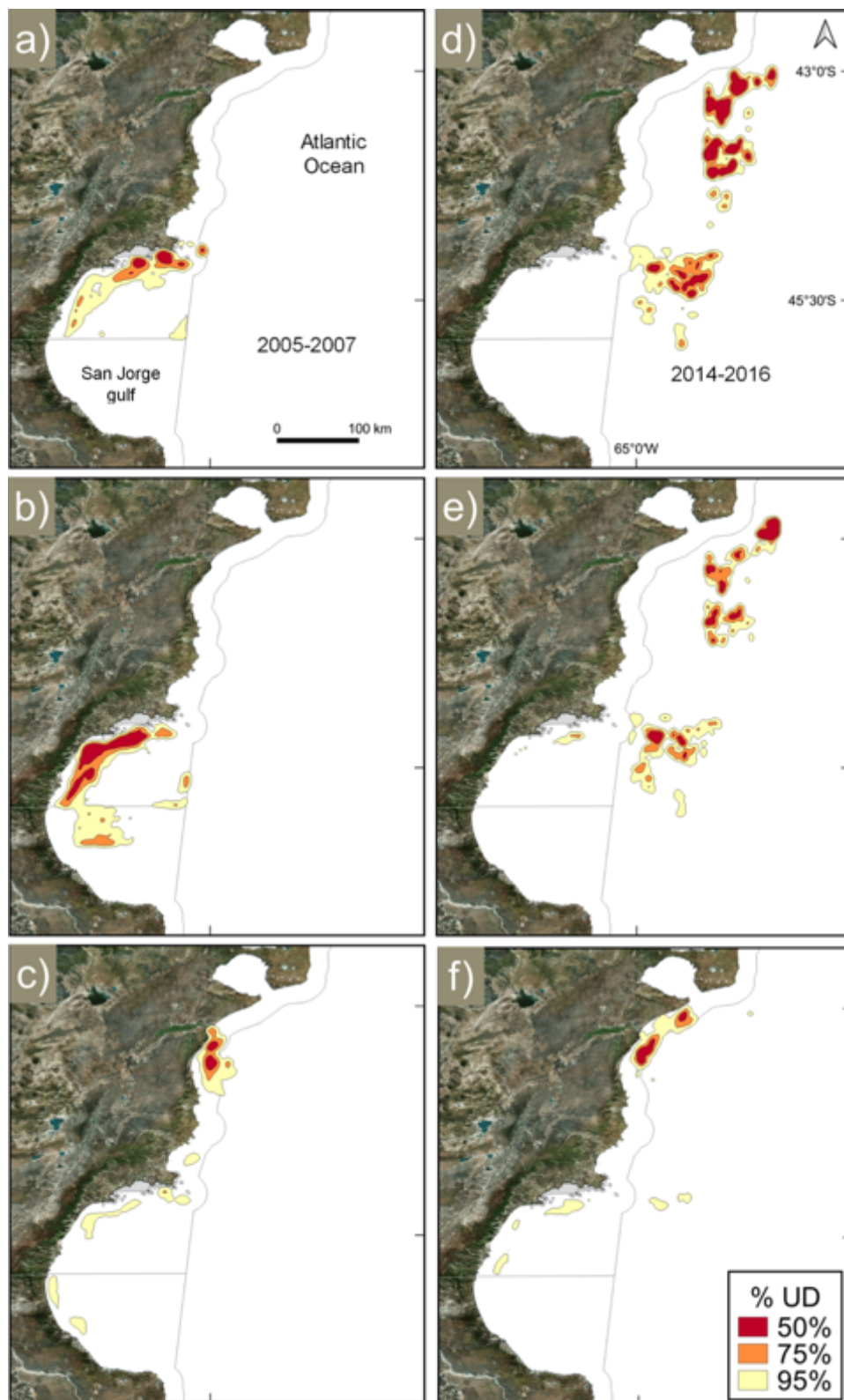


Figure S3. Spatial distribution of fishing effort in the study area during November. Panels (a), (b) and (c) show the distribution for the period 2005-2007 (three years pooled) made by freezer, high-sea ice and coastal trawlers, respectively. Panels (d), (e) and (f) show the distribution for the period 2014-2016 (three years pooled) made by freezer, high-sea ice and coastal trawlers, respectively.

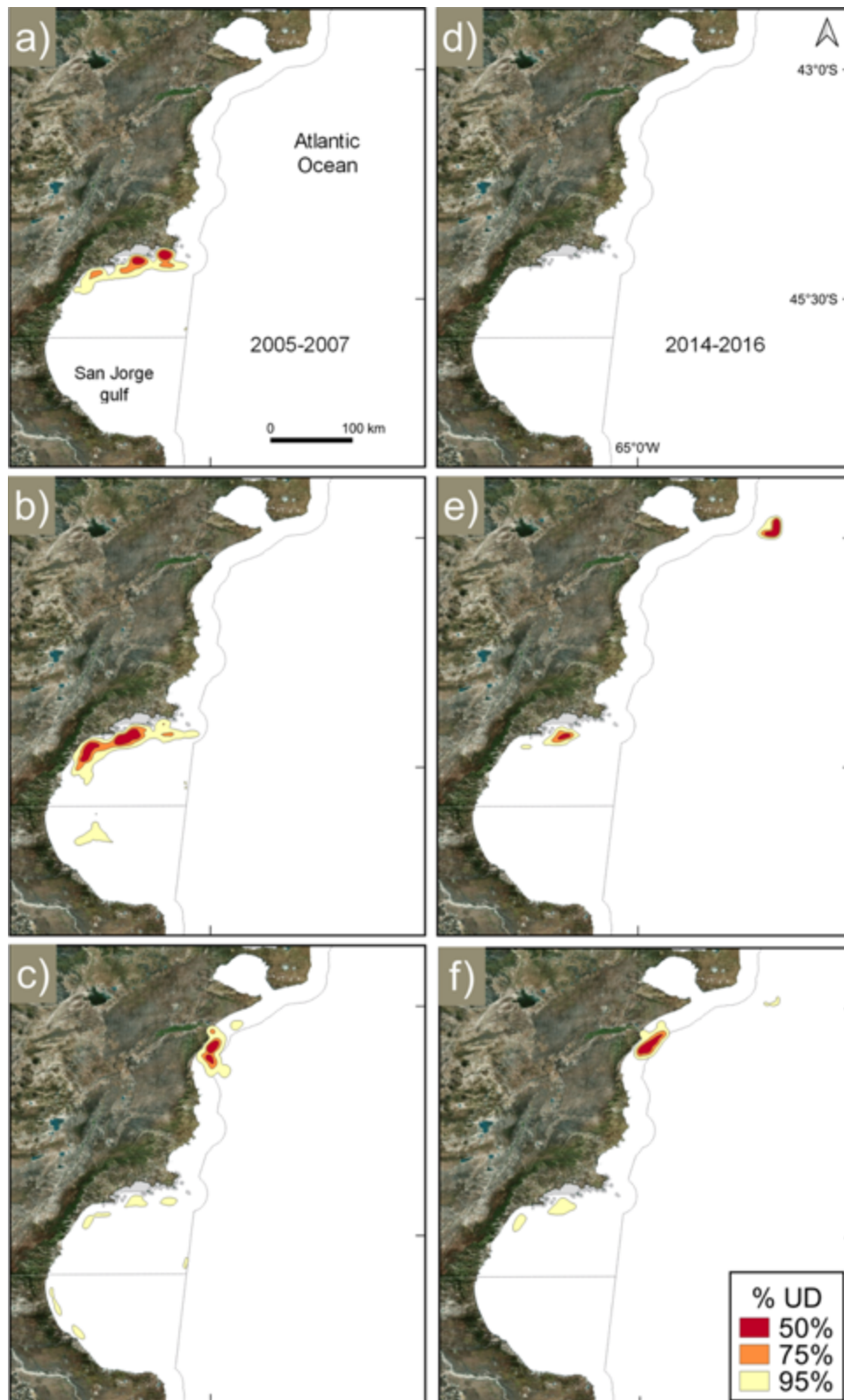


Figure S4. Spatial distribution of fishing effort in the study area during December. Panels (a), (b) and (c) show the distribution for the period 2005-2007 (three years pooled) made by freezer, high-sea ice and coastal trawlers, respectively. Panels (d), (e) and (f) show the distribution for the period 2014-2016 (three years pooled) made by freezer, high-sea ice and coastal trawlers, respectively.



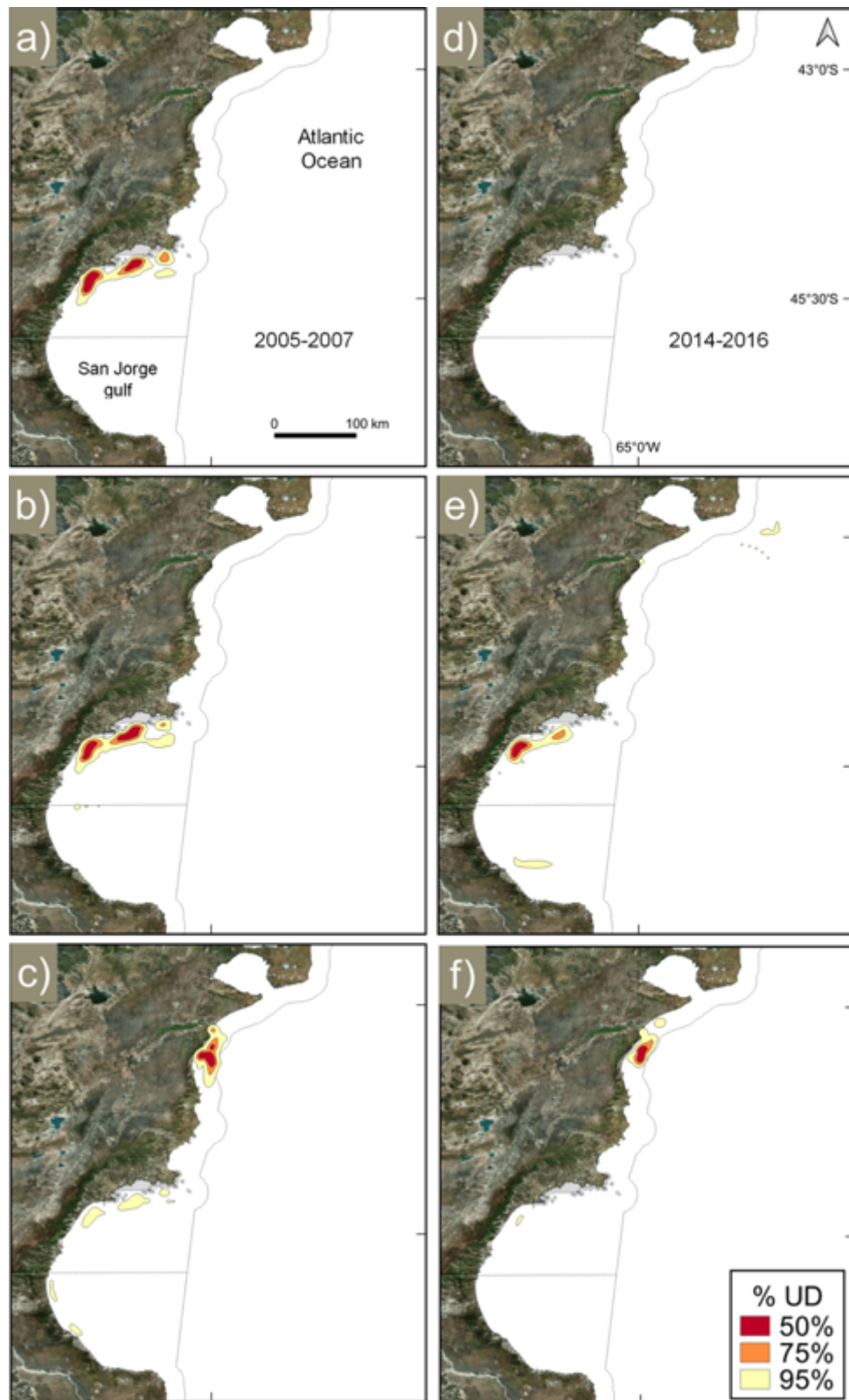


Figure S5. Spatial distribution of fishing effort in the study area during January. Panels (a), (b) and (c) show the distribution for the period 2005-2007 (three years pooled) made by freezer, high-sea ice and coastal trawlers, respectively. Panels (d), (e) and (f) show the distribution for the period 2014-2016 (three years pooled) made by freezer, high-sea ice and coastal trawlers, respectively.

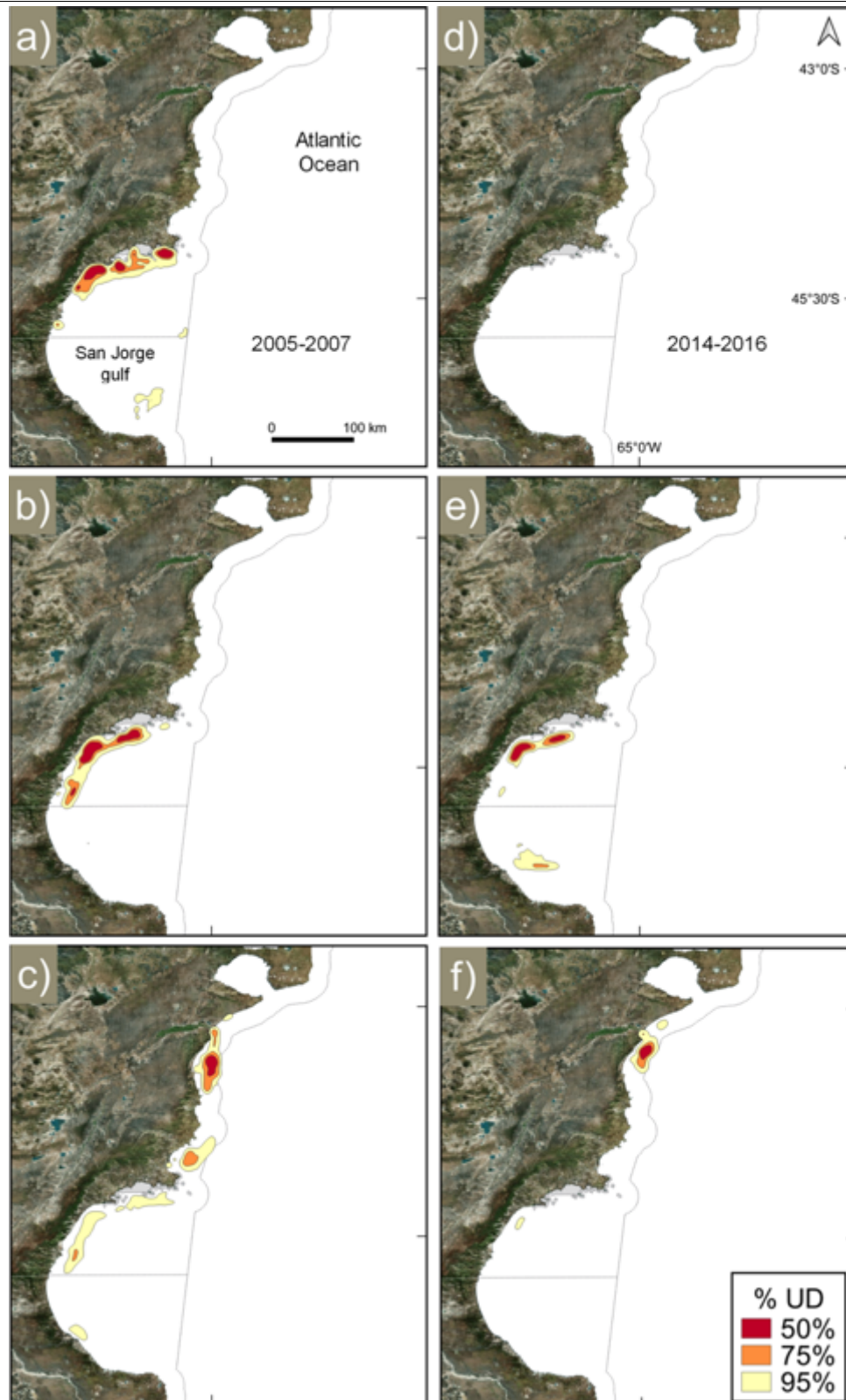


Figure S6. Spatial distribution of fishing effort in the study area during February. Panels (a), (b) and (c) show the distribution for the period 2005-2007 (three years pooled) made by freezer, high-sea ice and coastal trawlers, respectively. Panels (d), (e) and (f) show the distribution for the period 2014-2016 (three years pooled) made by freezer, high-sea ice and coastal trawlers, respectively.

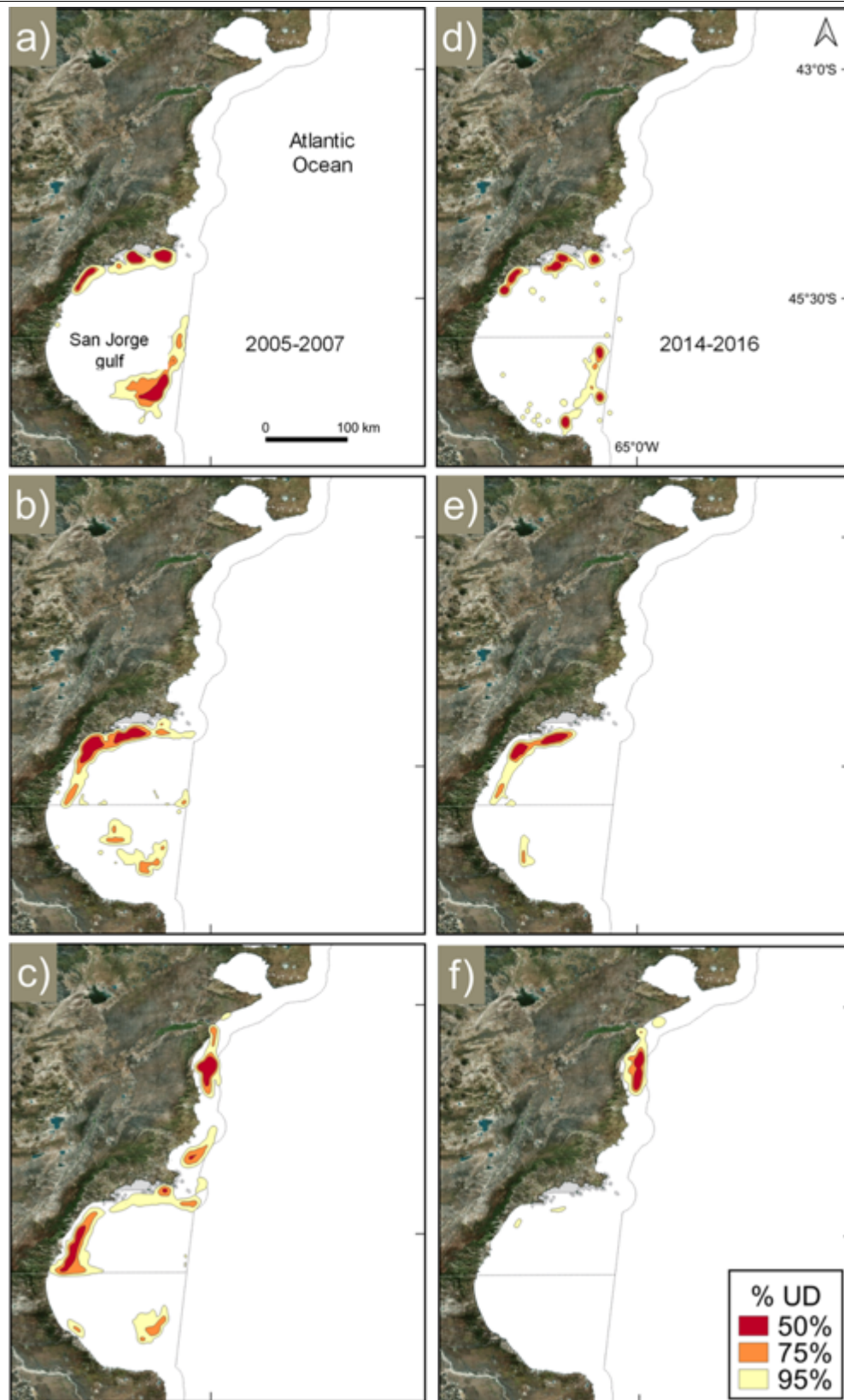


Figure S7. Spatial distribution of fishing effort in the study area during March. Panels (a), (b) and (c) show the distribution for the period 2005-2007 (three years pooled) made by freezer, high-sea ice and coastal trawlers, respectively. Panels (d), (e) and (f) show the distribution for the period 2014-2016 (three years pooled) made by freezer, high-sea ice and coastal trawlers, respectively.



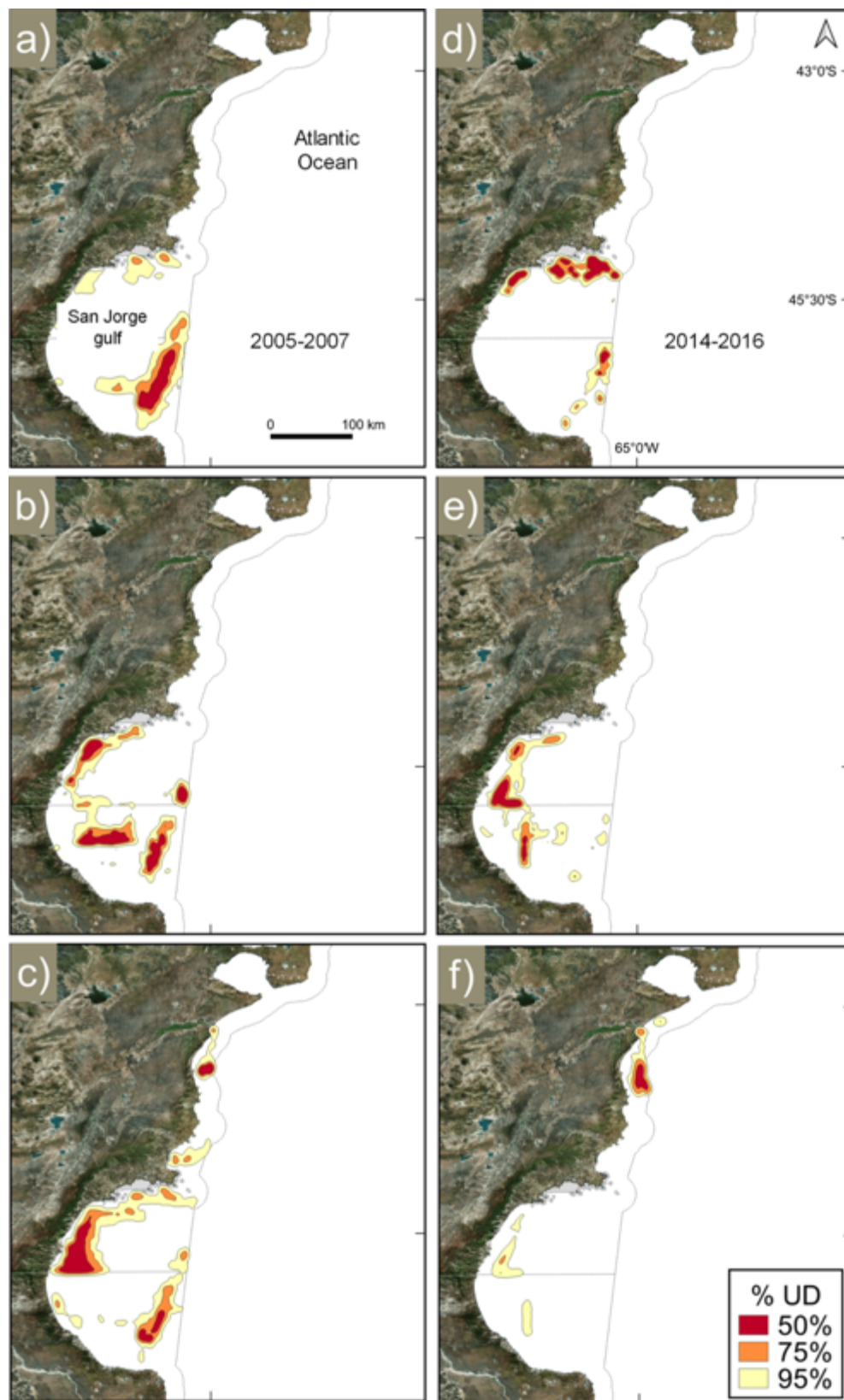


Figure S8. Spatial distribution of fishing effort in the study area during April. Panels (a), (b) and (c) show the distribution for the period 2005-2007 (three years pooled) made by freezer, high-sea ice and coastal trawlers, respectively. Panels (d), (e) and (f) show the distribution for the period 2014-2016 (three years pooled) made by freezer, high-sea ice and coastal trawlers, respectively.



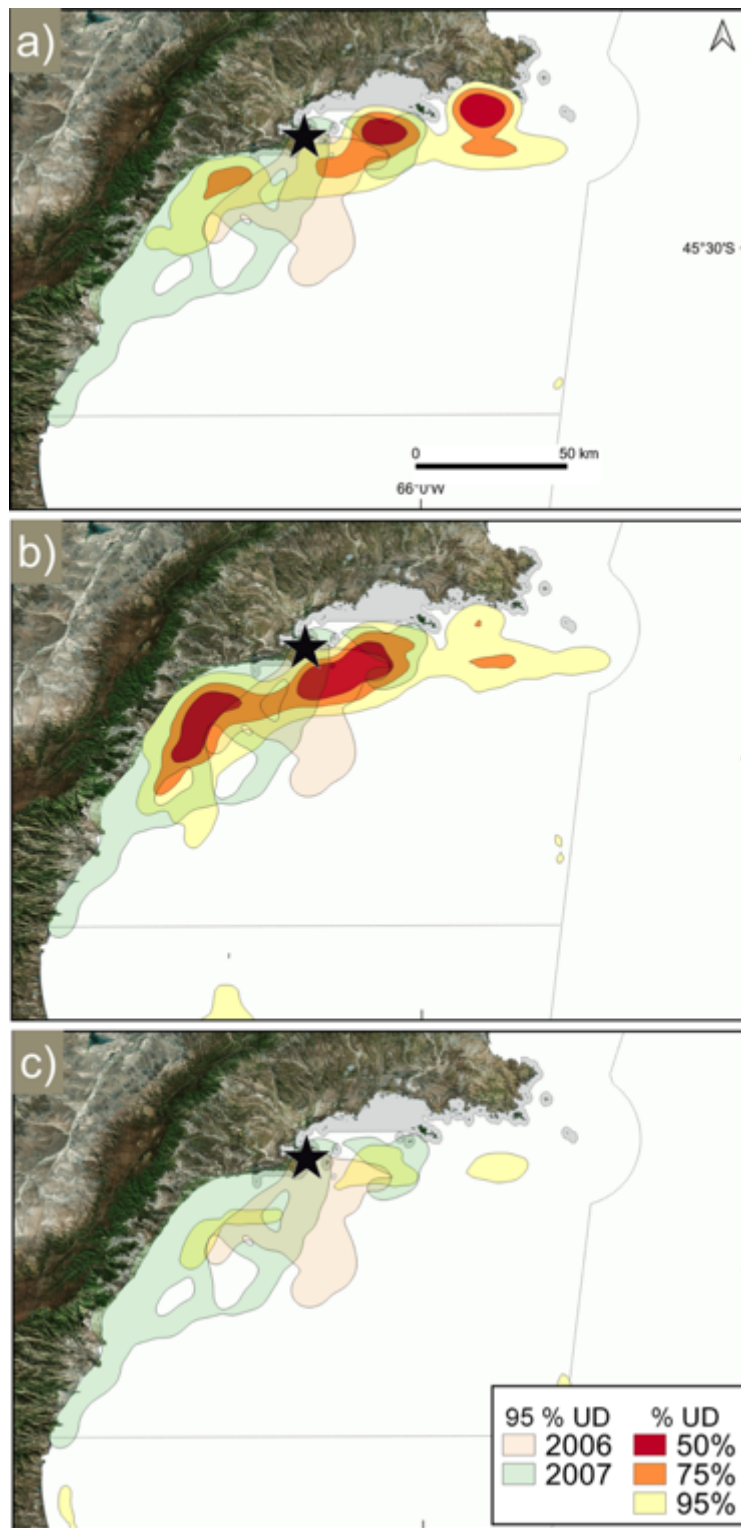


Figure S9. At-sea distribution of foraging Magellanic penguins equipped with GPS at Isla Vernaci Este during the early chick stage of 2006 and 2007 (years represented with different colours) and spatial distribution of fishing effort for the period 2005–2007 (three years pooled) made by (a) freezer trawlers, (c) high-sea ice trawlers and (e) coastal trawlers operating in the study area during December. Black star: breeding colony. Magellanic penguin foraging areas shown as the 95% kernel utilization distributions (see text) and fishing areas as 50, 75 and 95% kernel utilization distributions.