The following supplement accompanies the article

Incorporating feasibility and collaboration into large-scale planning for regional recovery of coral reef fisheries

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Table S1. Targets for sustainable fishing and conservation zones, and cost values used in spatial prioritization analysis objectives.

Objective Name	*Sustainable Fishing Target*	*Conservation Target*	*Values to be minimized in Marxan with Zones*	*Data sources*
a) Lost fishing opportunity baseline objective	50% of reef area	20% of reef area	Artisanal fish landings	Halpern et al. (2015)
b) Time-to-recovery objective	50% of reef area	20% of reef area	Fish biomass recovery time	McClanahan et al. (2016)
c) Feasibility objective	50% of reef area	20% of reef area	Fish biomass recovery values, modified using management feasibility equation	McClanahan et al. (2016); Levin et al. (2018); Rocliffe et al. (2014); Burke et al. (2011)

Table S2. Fleiss' kappa (***K***) values comparing selection frequency of planning units across the fishing opportunity baseline, time to recovery and management feasibility objectives, for each management zone. A value of 1 indicates that the combination of planning units selected is identical under each objective, and 0 indicates that all scenarios are distinct.

Management Zone	***K***
Sustainable Fishing	0.253
Conservation	0.476
Not Selected	0.402

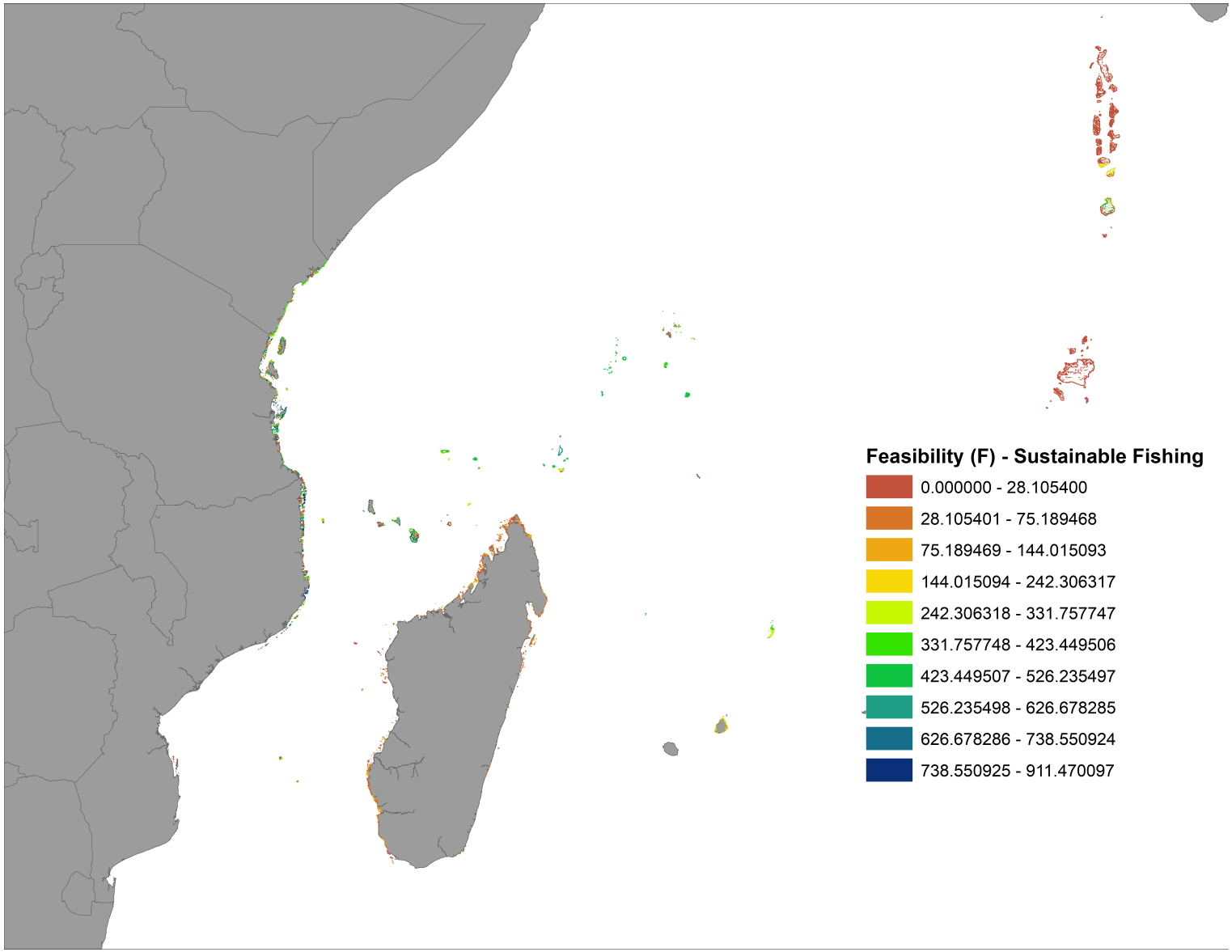

Figure S1. Management feasibility (F) values per planning unit for sustainable fishing zones. These values were minimized in Marxan with Zones analysis.

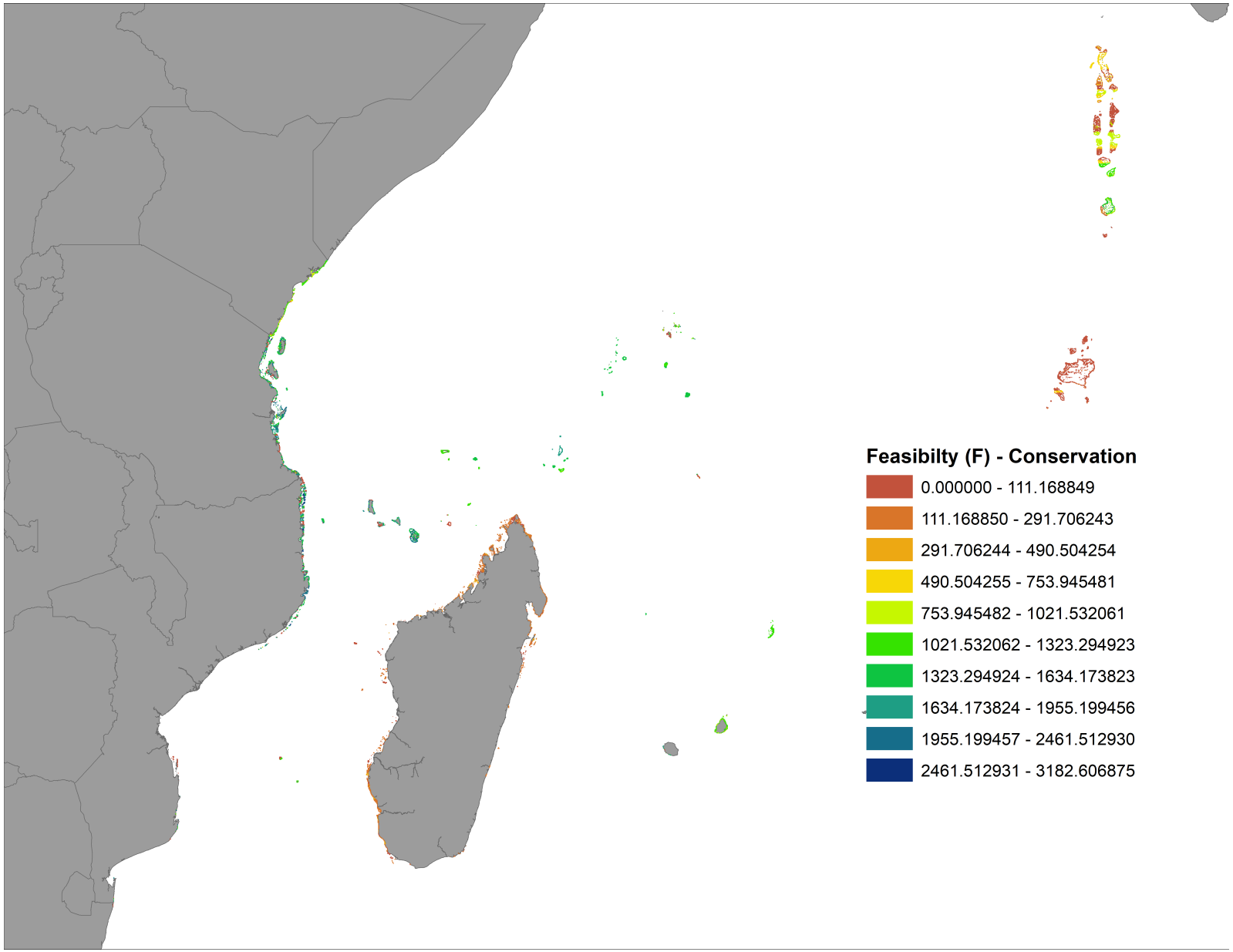

Figure S2. Management feasibility (F) values per planning unit for conservation zones. These values were minimized in Marxan with Zones analysis.

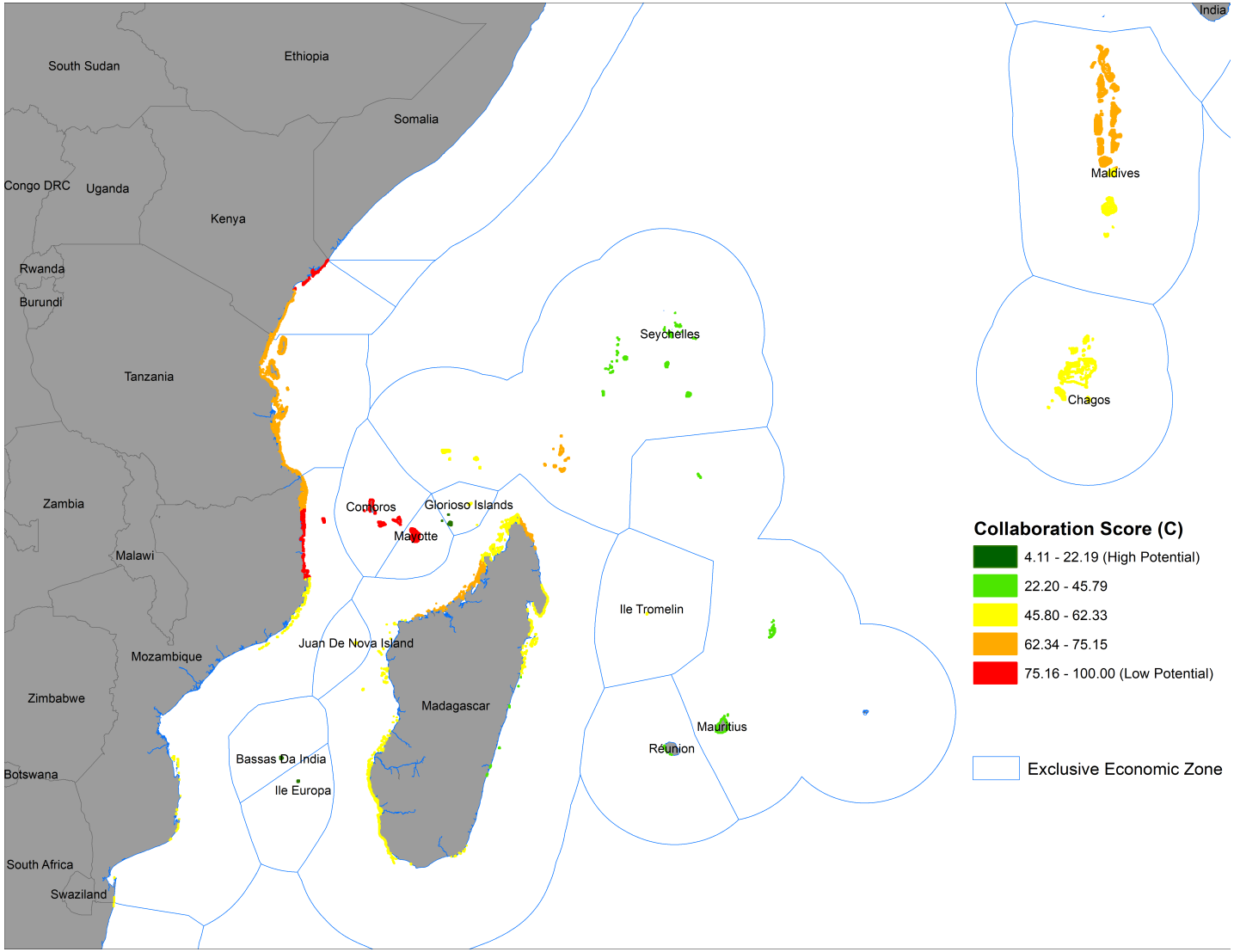

Figure S3. Collaboration Score (C) values per planning unit, as used in management feasibility calculations. Raw values were taken from Levin et al (2018) and rescaled between 0-100 using a fuzzy logic linearly decreasing membership function. Low values represent greater collaboration potential.

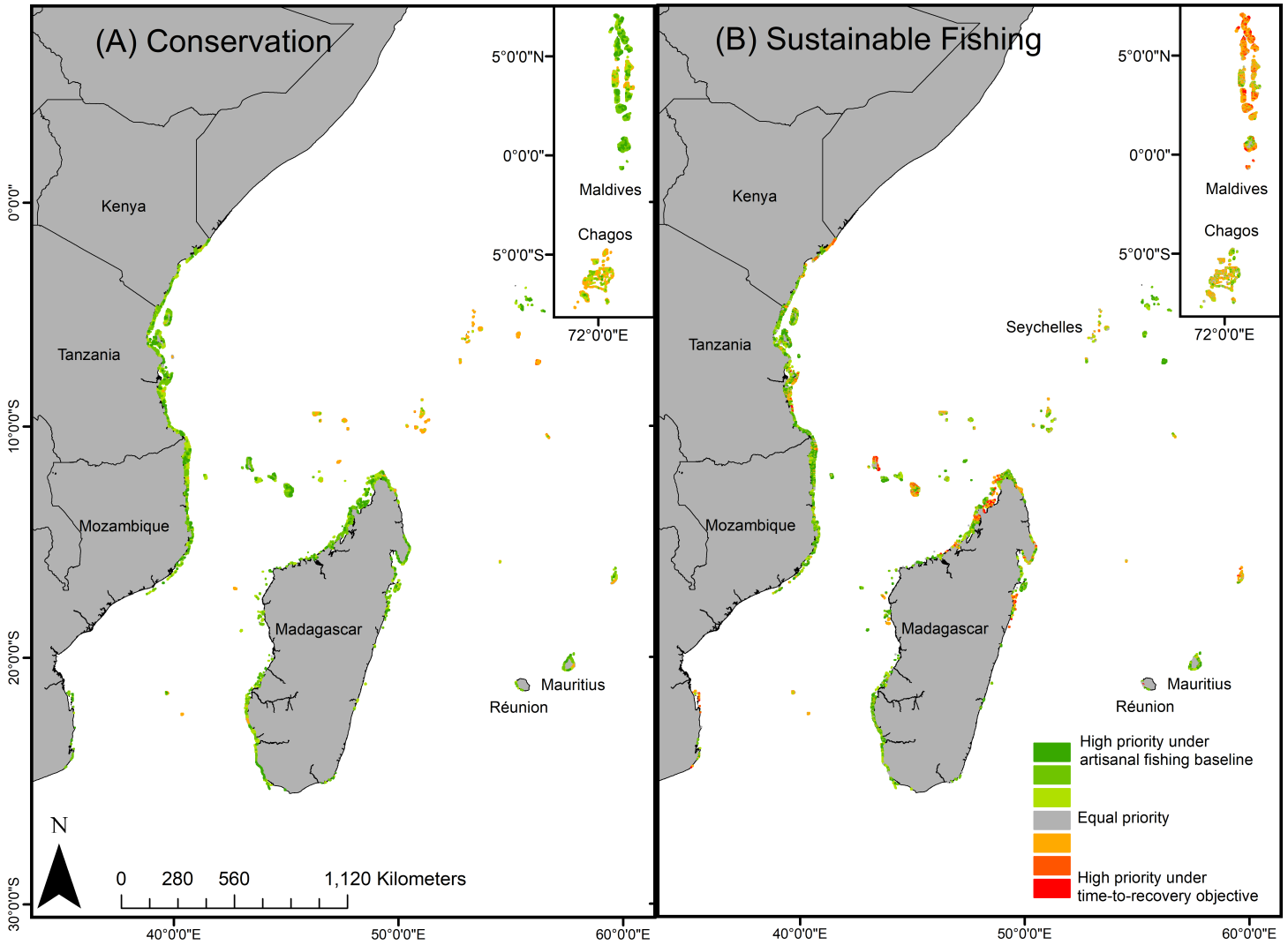

Figure S4. Difference in planning unit selection frequency for A) Conservation zones, and B) Sustainable fishing zones under the fishing opportunity baseline and time-to-recovery objectives, from 10 'best solution' Marxan with Zones outputs. Planning units are grey if they had equal selection frequencies under both objectives.

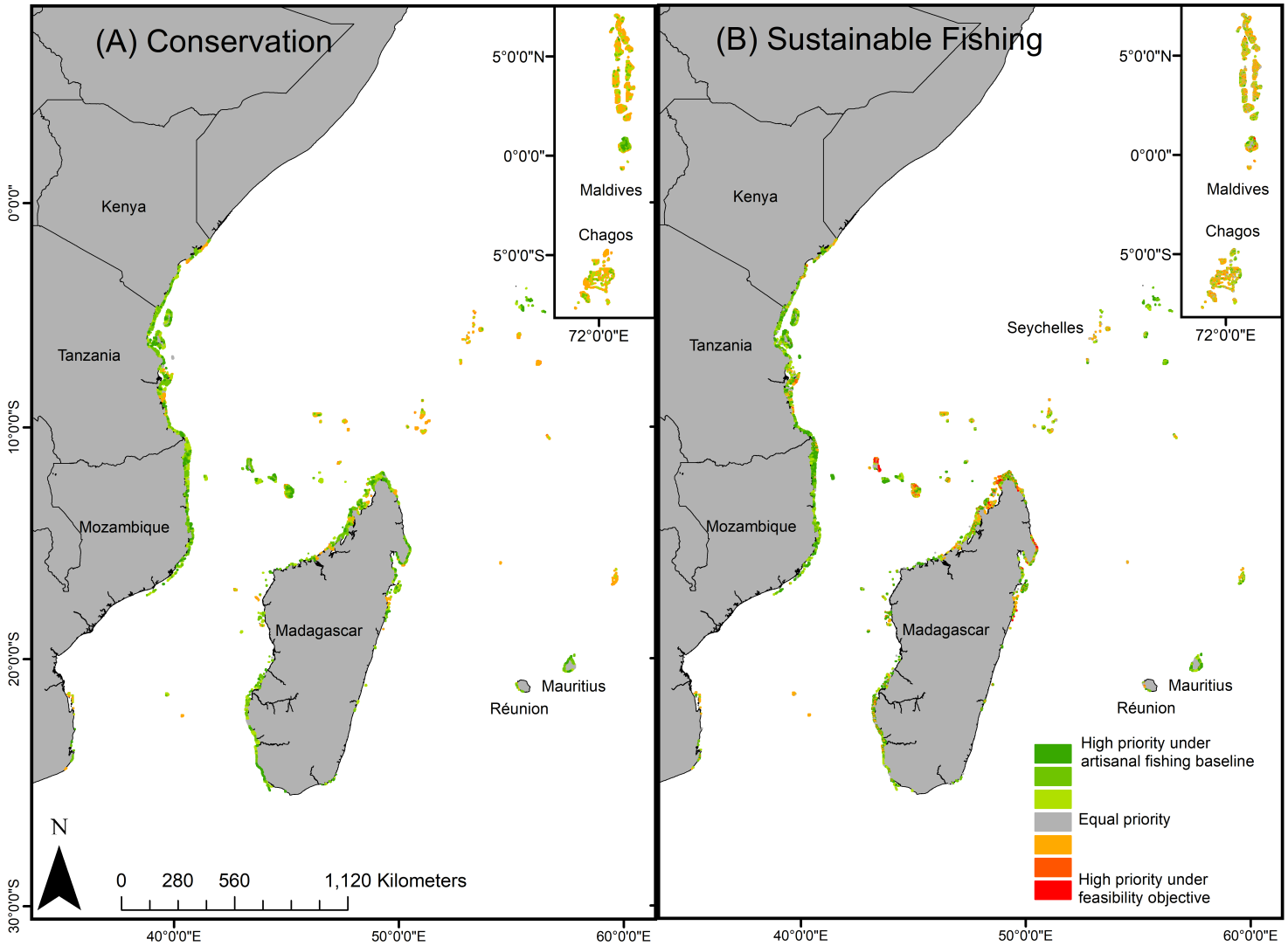

Figure S5. Difference in planning unit selection frequency for A) Conservation zones, and B) Sustainable fishing zones under the fishing opportunity baseline and feasibility objectives, from 10 'best solution' Marxan with Zones outputs. Planning units are grey if they had equal selection frequencies under both objectives.