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Impacts of global warming on fish resources in North Pacific

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Some recent researches reported global warming impact to marine ecosystem. Cheung et al. (2013) estimated the impacts in global ocean using a habitat model. The model provided the future distributions of fishes due to preferred environments and logistic function. However, they deal no components for ecosystem as predation (e.g. primary production) and a few scenario. We develop a habitat model referred from Cheung et al. (2008; 2013) and estimate the impacts to fishes resources using the results of climate model. We deal primary productions for preferred environment to ecosystem component and some RCP scenarios. In this presentation, we show the results calculated by a climates model: MIROC-ESM.

Keywords: fishery resources, global warming, climate model, habitat model