

## 地球温暖化に伴う水温上昇および海洋酸性化が日本近海のサンゴ分布に及ぼす影響 ～CO<sub>2</sub>排出シナリオの違いから～

### Projected shift of coral habitats around Japan under different future CO<sub>2</sub> emission scenarios

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We estimate the effects of both global warming and ocean acidification on potential habitats for corals around Japan under different future CO<sub>2</sub> emission scenarios (SRES A2 and B1), based on published estimates and newly developed datasets on sea surface temperatures (SSTs) and aragonite saturation states (OMEGA<sub>arag</sub>). The difference in the future coral habitats caused by higher SSTs and lower OMEGA<sub>arag</sub> between the two scenarios was significant, suggesting possible conserve coral habitats under the A2 and B1 scenarios, respectively. We conclude that both reducing CO<sub>2</sub> emissions and setting up conservation plans to reduce direct anthropogenic effects would be required to save corals in the future.

キーワード: サンゴ, 地球温暖化, 海洋酸性化, 気候モデル, CO<sub>2</sub> 排出シナリオ

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