A dynamic bioenergetic model for coral-Symbiodinium symbioses and coral bleaching as an alternate stable state

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Highlights

- A dynamic model of coral symbiosis including photo-oxidative stress is presented.
- Coral bleaching is an alternate stable state of systemic carbon-limitation.
- Light, feeding, and nutrients interactively affect coral bleaching responses.
- Open source R code advances theoretical tools in coral biology and ecology.