

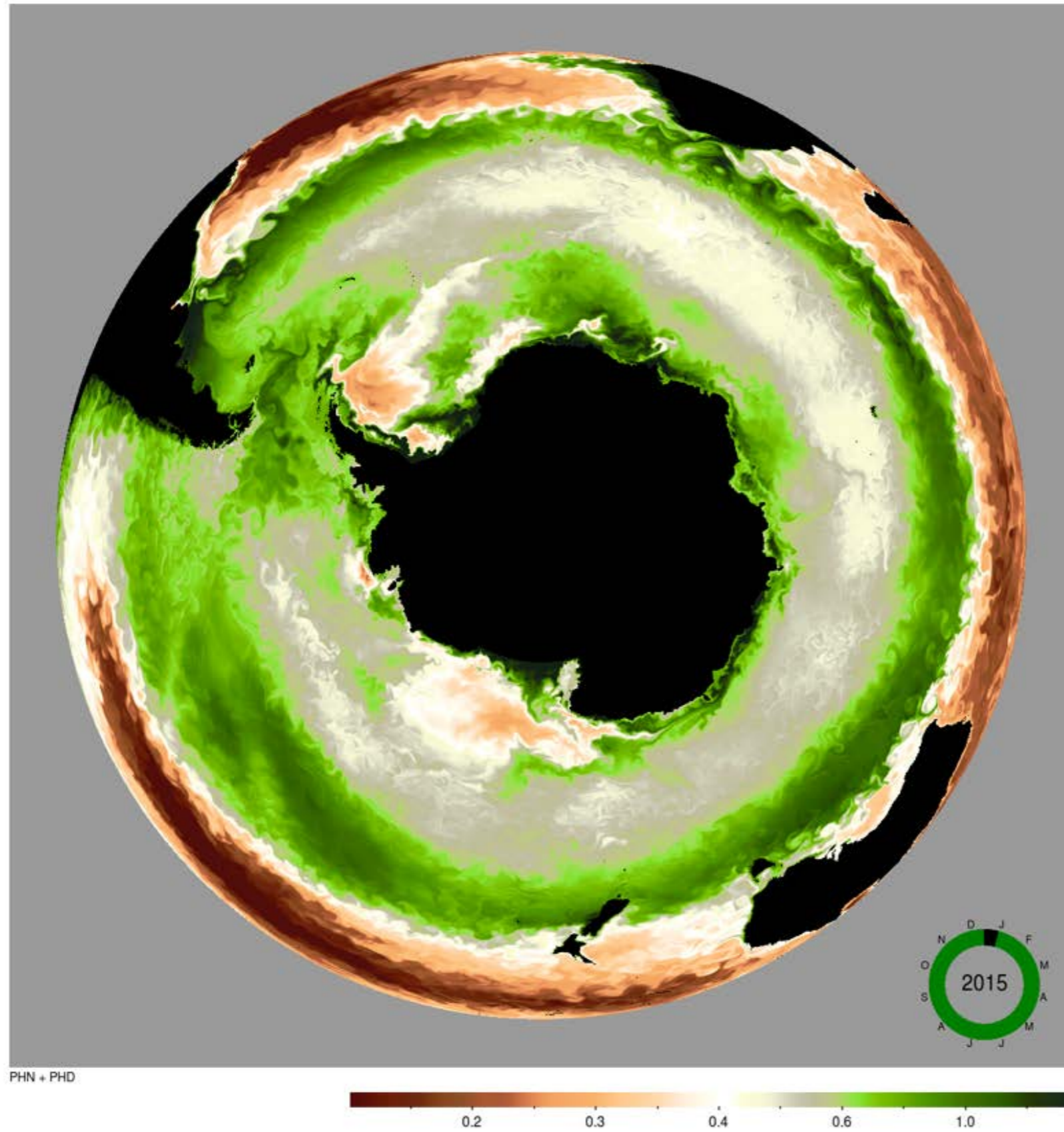
# NOC modelling interests relevant to RoSES

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1. MEDUSA in ORCA  $1/12^\circ$  ,  $1/4^\circ$  ,  $1^\circ$   
–26 year hindcast runs 1990–2016
2. MEDUSA in UKESM
3. CMIP5/6 and UKESM analysis in ORCHESTRA
4. Improved treatment of iron in MEDUSA  
– development funded by UKESM  
– following French BGC model PISCES; Tagliabue et al. (2016), GMD.
5. Add MEDUSA to ORCHESTRA sector models
6. Physical and bio-geochemical drivers (winds etc.)

# Global ORCA12-MEDUSA hindcast

Total Surface Phytoplankton (mmol-N/m<sup>3</sup>)



January 2015  
after 25 years