

## **B07-P14**

### **MAGNITUDE AND VARIATION OF UNDER ICE PRIMARY PRODUCTION IN THE ARCTIC OCEAN**

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The Arctic Ocean is experiencing dramatic changes in the last decades. Some of the changes, such as the declining sea ice cover, rising ocean temperature and increased open water production, are observed by remote sensing, but under ice primary production have been barely observed and investigated. Here we present a modeling study of magnitude and variation of the under ice primary production with the coupled ice-ocean-ecosystem model POP-CICE, the ocean and sea ice component of the NCAR's CESM climate model. The model simulation is forced by NCEP reanalysis data from 1958-2009. The mean magnitude and trend of changes of the under ice production are calculated and underlining mechanisms are discussed.