

Interactive comment on “The Arctic Sea ice in the CMIP3 climate model ensemble – variability and anthropogenic change” by L. K. Behrens et al.

Anonymous Referee #2

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This paper is a mixture of topics. It starts with too much review of known information from previous papers that it takes as its own conclusions in the Abstract. I do like that it divides the Arctic world in to total, central basin and Barents Sea, and looks at sea ice sensitivity and the range of the annual cycle. One obvious question is why they only look at CMIP3 relative to CMIP5 and only one ensemble member per model. They should put some of there quantitative conclusions on sensitivity in the Abstract rather than just saying that the topic is discussed. Because they cover such a broad scope, Barents Sea does not get the detail it deserves. When the reviewer looked at CMIP3 results for Barents Sea, only a couple models seemed to get the general idea, while most of them were way too cold, as the ocean current inflow was way too weak in the coarse resolution GCMs. So if I wanted to use CMIP3 for the Barents Sea and influence on Scandinavia, which models do you recommend?

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Interactive comment on The Cryosphere Discuss., 6, 5317, 2012.