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Interactive comment on "Microbial food web dynamics during spring phytoplankton blooms in the naturally iron-fertilized Kerguelen area (Southern Ocean)" *by* U. Christaki et al.

Anonymous Referee #1

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This manuscript is part of the studies of the upwelling system around the Kerguelen Islands introducing iron to the photic zone; termed "natural iron fertilization experiments" to emphasize the link to the "artificial iron experiments". I see the point, but do not like the terminology since this, strictly speaking is an observational study and not an experiment. The results reported here concerns the abundance of heterotrophic prokaryote and the rates of production (leucine incorporation, respiration) and losses to grazing (calculated from counts of heterotrophic flagellates and viral lysis. This gives a comprehensive set of data valuable both for the specific iron-fertilization context and as a study quantifying both the production and loss process of the heterotrophic prokaryotes. It is a bit easy as reviewer to wish for more things that could have been done, but

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I have always wondered whether bacteria in the HNLC areas are limited by organic-C or by Fe. Bioassays or other tests for this were apparently not included and the authors can therefore not conclude whether the stimulation of bacteria is direct (Fe-limitation) or indirect (organic-C produced by Fe-stimulated phytoplankton). The authors have chosen to put their data into the text rather than using tables or graphs). For me, this made it somewhat laborious to get an overview of the data. My feeling when reading was that much of the data were suitable for presentation in table(s) ?

Typo p. 7004: " Substracting"

Interactive comment on Biogeosciences Discuss., 11, 6985, 2014.