

Interactive
Comment

***Interactive comment on* “The effects of clouds and aerosols on net ecosystem CO₂ exchange over semi-arid Loess Plateau of Northwest China” by X. Jing et al.**

Anonymous Referee #1

Received and published: 8 July 2010

General comments: The major contribution of this paper is to presents CO₂ flux measurements for over semi-arid grassland at the Loess Plateau of Northwest China and explores how these fluxes vary with variations in diffuse radiation, cloud cover and aerosol loading. The data are unique and it is the first attempt to assess carbon cycle over the Loess Plateau. The analyses show significant potential. In general, I found the paper well written and appropriate for an ACP audience. My primary criticism is that the authors spend too little time discussing the difference of the effect of temperature on NEE at SACOL site with that in forests and crops. My specific comments are listed as following:

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

Interactive
Comment

Specific comments: 1. Page 13338, line 5, author should give the full name of NEE. 2. Page 13341, lines 11-12, change "and it has" to be "with". 3. Page 13342, line 19, change "in" to be "at" and delete "at" before "wavelengths". Note: this type of minor editing is needed on occasion throughout the manuscript. 4. Page 13344, line 12, change "increase" to be "increasing" 5. Page 13350, line 1, the sentence is poorly worded. 6. Page 13352, lines 13-14, the sentence is confusing. 7. Page 13353, line 6, please change "it corresponds" to "they correspond". 8. Page 13356, line 3, change "reach" to be "reached". 9. Page 13356, line 10, correct it to have "optically thick clouds".

Interactive comment on Atmos. Chem. Phys. Discuss., 10, 13337, 2010.

[Full Screen / Esc](#)[Printer-friendly Version](#)[Interactive Discussion](#)[Discussion Paper](#)