As it stands, this Ms is well short of the required standard. The Ms quickly becomes turgid and unreadable. It largely repeats the substance of other recent reviews, but with far less clarity or substance. Taking any one section, it is obvious that a more thorough and insightful account could be prepared - the authors have instead opted for a more superficial listing approach (lists of papers) that precludes the reader from gaining insight other than to go away and re-read the primary references again. In some places, obvious examples and insights from recent publications have been ignored (or are not known) while the work of the current authors features overly strongly. The result is that the Ms appears as a polemic, rather than a balanced discussion (of some value) or review (more value, but this piece is so far away from this status for it to be unobtainable).
If a drastically changed Ms were to be prepared, then detailed review would be warranted. At present, such an (impossible) task is just not justified. Other than pointing out the typos and other failures of language, there is nothing to review.

Interactive comment on Biogeosciences Discuss., 8, 2659, 2011.