

Comments on USGCRP Introduction and Overview

1 Page 55, line 26: For clarity it would help if there were an indication that each of the
2 topics is covered in a separate chapter.

3 **MICHAEL MACCRACKEN, LLNL (RETIRED)**

4
5 Page 56 line 32. Global Carbon Cycle, Need to link the N and P cycles as all are part of
6 one another, N₂O is not considered. Impacts on water bodies are as much by P and N
7 compounds as are Carbon inputs. N & P help drive the carbon cycle and they seem to be
8 lost.

9 **SOIL SCIENCE, GLASENER**

10
11 Page 56, last paragraph, line 33. insert the word “Spatial” in front of variability. I assume
12 that spatial variability is what is intended rather than temporal variability.

13
14 I find the first and second paragraph on page 90 to be vague. It badly needs some
15 examples for clarification. For example, it states in paragraph two that “The combination
16 of climate and land use change may have profound effects on the habitability of the
17 planet in more significant ways than either acting alone”. In order for this to be a
18 believable statement, it would help greatly if an example were given.

19 **SOIL SCIENCE, KISSEL**

20
21 Page 57 - It needs noted that the main way science goes forward is through interactions of
22 individual scientists, not institutions.

23 **RONALD STOUFFER, GFDL/NOAA**

24
25 Page 57, Line 2-3: Specific Comment [page 57, line 2-3]. A second potential of hyper-
26 spectral imaging is the detection of "how natural and human-induced changes affect the
27 functioning of ecosystems at a range of spatial and temporal ranges". These changes
28 include impacts of water supply on agricultural systems.

29 **OSMOND, COLUMBIA UNIVERSITY**

30
31 Page 57, line 15: Indicating that there are or will be regional and sectoral assessments
32 without mentioning the National Assessment process is really inappropriate. That effort,
33 which helped to get such studies going, should be referenced and lessons from its efforts
34 mentioned.

35 **MICHAEL MACCRACKEN, LLNL (RETIRED)**

36
37 Page 57, line 22ff: There needs to be a paragraph added here referring to chapters 13 and
38 15.

39 **MICHAEL MACCRACKEN, LLNL (RETIRED)**

40