

*Comments on Kidd and Levizzani manuscript for **HESS-2010-219**, “Status of Satellite Precipitation Retrievals”*

General Comments

The authors have extensive background in the field and are well-qualified to write this review article on satellite precipitation estimation. At several points it seemed as if the authors had compressed the discussion to fit a word count, I would suggest some important points and details as outlined below.

Specific Comments

1. *What’s operational versus research?* The manuscript needs to inform users of what is actually available for their routine use, and where to get it.
2. *Abstract* “dissemination” and “availability” are mentioned in the abstract, but not in the text. However, these are important points that should be discussed. Also, the abstract fails to mention that selected applications are also covered.
3. *VIS is only a research product (Section 2.1)* Despite the apparent advantages, I don’t think there are any operational products that incorporate VIS data.
4. *Other difficult surfaces (Section 2.2)* complex terrain, snow/ice, coast.
5. *It would be helpful to give the approximate detectability limits (p.8164, l.1).*
6. *Should REFAME be mentioned as another cloud development approach? (p.8165,l.7-15).*
7. *There are lots of other hydrology studies (Section 3.1)* Adler, Lettenmaier, Anagnostou, Su, Hossain, etc.
8. *Global averages are stated without any sense of what might be right (Section 3.4)* I think an opinion is in order.
9. *Uncertainty in validation data (p.8169,l.17-21)* what about the VRF from Krajewski and collaborators?
10. *Error studies (p.8170,l.16-20)* have a much longer and richer history than shown here.
11. *Future concepts (p.8171,l.9-28)* could be strengthened by referencing the IPWG5 – the comments here actually reflect some community consensus.
12. *Future satellites (p.8172,l.1-11)* could also include GCOM-W and Megha-Tropiques.

Technical Comments

13. *p.8158,l.2-3* text gives the unwarranted impression that WWW was only established for satellites.
14. *p.8159,l.5-6* “... they rotate around the Earth at the same speed as the Earth turns, thus ...”
15. *p.8159,l.16* it is the unfavorable viewing angle that limits polar coverage by GEO satellites.
16. *p.8159,l.24-26* DMSP is actually operational, not research.
17. *p.8162,l.1* I think the parenthetical should be “hence may be observed ‘passively’”.
18. *p.8164,l.22* The “A” in TMPA is “Analysis”.
19. *p.8172,l.4-7* is a sentence fragment.