**Geoscientific
Model Development
Discussions**

Interactive comment on "A web service based tool to plan atmospheric research flights" by M. Rautenhaus et al.

Anonymous Referee #2

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This work is an important contribution to the planning of air born measurement campaigns. The tool presented, enables in an easy and flexile way the query of important information required to plan a measurement flight. The client server architecture allows to make use of the tool even when the connection to the server is limited in bandwidth. Due to its modular architecture it could be applied to various types of aircrafts, and perhaps with some minor modifications, is not limited to airplanes alone.

The overall quality of the paper is very good. I would welcome more details in the flight planning section 3.2 & 4 and recommend publication after considering minor revisions.

Introduction
2126/11..19 : "Although commonplace in Geographic Information Systems (GIS), the WMS standard has not been widely used in the atmospheric domain. ...handle vertical

cross sections"
I would suggest to focus the introduction on the requirements and on the principle architecture and move the details of why WMS standard is now feasible into a later section.

Section 2.2
The line of argumentation would be clearer if the paragraph and arguments are sorted accordingly. I would suggest to move the paragraph starting
2129/10..16 : "While poviding...." after 2129/22 as you describe web based services with more or less preset/calculated information. As your argument started in 2129/10 is also valid for RTMM/WPT

Section 3.2 & 4
It would be interesting to know in more detail how the waypoints can specified. It would be helpful if this can be done in an interactive manner on the map rather then only defining the waypoints in the table view. The caption of fig. 9 indicates that it is could be done like that, but I miss the corresponding field to specify the FL. Helpful as well, while planning in fig. 9 the waypoints would be a display of current flight time, remaining fuel and using the ZFGW to estimate, a lower limit ascent rate a reasonable max FL. For the interactive flight planning a short response time could be useful. To what extend can parts of the flight planning be included in the client rather than in the server to avoid sluggish response without giving up of the principle of the client server architecture ?

Interactive comment on Geosci. Model Dev. Discuss., 4, 2123, 2011.