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6, S1412-S1413, 2006

Interactive Comment

## Interactive comment on "Technical note: Recursive rediscretisation of geo-scientific data in the Modular Earth Submodel System (MESSy)" by P. Jöckel

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Received and published: 27 June 2006

I very much appreciated the attempt to have a rigorous mathematical formulation of the regridding algorithm described in this paper. Nevertheless, the description seems to be misleading in one point. In equation (22), the author claims that  $P_{\vec{n},\vec{m}}$  is the element-wise product of "sub-matrices"  $P_{n_i,m_i}$ , i ranging from 1 to K. But,  $P_{n_i,m_i}$  are elements of the sub-matrices that where not defined explicitly. The right-hand side should be intepreted as the multiplication of the matrixelements  $P_{n_i,m_i}$  corresponding to the vector indices  $(\vec{n},\vec{m})$  and not as a element-wise multiplication of matrices.

The definitions at the beginning of section 2 may become clearer by explaining  $A \subset \mathbb{R}^K$ 

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as a collection of subsets $A_n$ :	such that $\cup A_n = A$ and $A_i \cap A_j = \emptyset$ .	The measure should
be the Lebesgue measure.		

Interactive comment on Atmos. Chem. Phys. Discuss., 6, 4673, 2006.

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