

1 Response to the 4th Review of "Evaluation of the ECHAM family radiation codes  
2 performance in the representation of the solar signal" by T. Sukhodolov et al.

3  
4 Paragraph on Page 9, lines 16-23

5  
6 Changed as suggested by the reviewer.

7  
8 "temporal modelling" means transient simulation with varying SSI, the term is  
9 corrected.

10  
11 Coefficients do not vary with time, because parameterizations are already the  
12 functions of irradiance and the relative deviations of the E5c and E6 solar signal to  
13 the reference solar signal, which are filled by the extra heating parameterizations, are  
14 almost constant during the solar cycle. The relative behavior of extra heating  
15 parameterizations during the solar cycle is also similar.

16 We suppose that for other schemes situation is the same and for the transient  
17 simulation one will need only one set of scaling coefficients.

18

19 **List of relevant changes**

- 20 1. Section 4  
21 2. Section 4.1  
22 3. Acknowledgments  
23 4. X-axis title of Figure 1