Geoscientific
Model Development
Discussions

Interactive comment on "Photolysis rates in correlated overlapping cloud fields: Cloud-J 7.3" *by* M. J. Prather

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I would like to make two minor remarks regarding the code and the naming convention:

- I am a little bit confused about the names Fast-J, Fast-JX, and Cloud-J. In the Code availability section you write that the code can be downloaded from:
  ftp://128.200.14.8/public/prather/fastJX/
  However, this has apparently been renamed to:
  ftp://128.200.14.8/public/prather/Fast-J/
  The name Fast-JX does not appear in the GMDD article at all but in the file fjx-c.f90 it is mentioned that "Cloud-J now uses the latest Fast-JX version with a cloud wrapper". Could you write a few lines explaining the differences between

Fast-J, Fast-JX, and Cloud-J?

- Thanks very much for providing Cloud-J in the supplement! I was able to compile the code with the open source Fortran compiler g95. Unfortunately, I get a segmentation fault in SUBROUTINE ICA_ALL. Here, the array IGNR is defined from index 1 to NRG. A few lines later, the value IGNR(NRG+1) is used even though it has not been defined. Could you please check this?

```
do G = 1,NRG
  IGNR(G) = mod(II-1, GNR(G)) + 1
  II = (II-1)/GNR(G) + 1
enddo
do G = 1,NRG
  IG1 = IGNR(G)   ! working on MAX-GRP = G, member IG1
  IG2 = IGNR(G+1) ! member of MAX-GRP = G+1 for this ICA
  ...
```

Interactive comment on Geosci. Model Dev. Discuss., 8, 4051, 2015.