

CCMVal-2 Questionnaire: Radiation Schemes

1. Identification

- * 1. Please enter your memorable word - eg the name of your model. This is used to enable us to link the submissions you make in the different parts of the CCMVal questionnaire.

2. Shortwave Radiation: Description

Spectral bands covered by the radiation scheme

Processes included in the radiation scheme

Gases included in the radiation scheme

2. Enter the number of shortwave spectral bands

Number of bands

3. Enter the shortwave radiation scheme spectral bands (microns)

eg. 0.15-0.69

1	<input type="text"/>
2	<input type="text"/>
3	<input type="text"/>
4	<input type="text"/>
5	<input type="text"/>
6	<input type="text"/>
7	<input type="text"/>
8	<input type="text"/>
9	<input type="text"/>
10	<input type="text"/>

4. What processes are included in the shortwave radiation scheme?

Absorption

Emission

Scattering

Other (please enter as a comma separated list)

5. What gases are included in the shortwave radiation scheme?

Water Vapour

Oxygen

Halocarbons

Carbon Dioxide

Methane

Ozone

Nitrous Oxide

Other (please enter as a comma separated list)

6. Is Albedo considered by the shortwave radiation scheme?

Yes

No

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3. Shortwave Radiation: Basic Approximation and Solution Method

References for the basic approximation and solution method

7. Enter a short description of the basic approximation used by the shortwave radiation scheme

8. Enter a reference for the basic approximation

doi	<input type="text"/>
Author(s)	<input type="text"/>
Year	<input type="text"/>
Title	<input type="text"/>
Journal	<input type="text"/>
Volume	<input type="text"/>
Pages	<input type="text"/>

9. Is the reference a book?

Yes

No

10. Enter a short description of the solution method used for the shortwave radiation scheme

11. Enter a reference for the solution method

doi	<input type="text"/>
Author(s)	<input type="text"/>
Year	<input type="text"/>
Title	<input type="text"/>
Journal	<input type="text"/>
Volume	<input type="text"/>
Pages	<input type="text"/>

12. Is the reference a book?

Yes

No

13. Enter a link to a web page with further information

4. Shortwave Radiation: Clouds

How are clouds treated in the shortwave radiation scheme?

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14. What cloud processes are included in your shortwave radiation scheme?

Absorption by liquid clouds

Absorption by ice clouds

Other (please enter as a comma separated list)

15. Enter a short description about the way clouds are treated in the shortwave radiation scheme

16. Enter a reference about clouds in the shortwave radiation scheme

doi	<input type="text"/>
Author(s)	<input type="text"/>
Year	<input type="text"/>
Title	<input type="text"/>
Journal	<input type="text"/>
Volume	<input type="text"/>
Pages	<input type="text"/>

17. Is the reference a book?

Yes

No

18. Enter a link to a web page with further information

5. Shortwave Radiation: Aerosols

How are aerosols treated in the shortwave radiation scheme?

19. What aerosols are included in your shortwave radiation scheme?

Sulphate

Soot

NAT

Sea Salt

Biomass Aerosols

Other (please enter as a comma separated list)

20. Enter a short description about the way aerosols are treated in the shortwave radiation scheme

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21. Enter a reference about aerosols in the shortwave radiation scheme

doi

Author(s)

Year

Title

Journal

Volume

Pages

22. Is the reference a book?

Yes

No

23. Enter a link to a web page with further information

6. Longwave Radiation: Description

Spectral bands covered by the radiation scheme

Processes included in the radiation scheme

Gases included in the radiation scheme

24. Enter the number of longwave spectral bands

Number of bands

25. Enter the longwave radiation scheme spectral bands (microns)

eg. 0.15-0.69

1	<input type="text"/>
2	<input type="text"/>
3	<input type="text"/>
4	<input type="text"/>
5	<input type="text"/>
6	<input type="text"/>
7	<input type="text"/>
8	<input type="text"/>
9	<input type="text"/>
10	<input type="text"/>
11	<input type="text"/>
12	<input type="text"/>
13	<input type="text"/>
14	<input type="text"/>
15	<input type="text"/>

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26. What processes are included in the longwave radiation scheme?

Absorption

Emission

Scattering

Other (please enter as a comma separated list)

27. What gases are included in the longwave radiation scheme?

Water Vapour

Oxygen

Halocarbons

Carbon Dioxide

Methane

Ozone

Nitrous Oxide

Other (please enter as a comma separated list)

28. Is Albedo considered by the longwave radiation scheme?

Yes

No

7. Longwave Radiation: Basic Approximation and Solution Methods

References for the basic approximation and solution method

29. Enter a short description of the basic approximation used by the longwave radiation scheme

30. Enter a reference for the basic approximation

doi

Author(s)

Year

Title

Journal

Volume

Pages

31. Is the reference a book?

Yes

No

32. Enter a short description of the solution method used for the longwave radiation scheme

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33. Enter a reference for the solution method

doi	<input type="text"/>
Author(s)	<input type="text"/>
Year	<input type="text"/>
Title	<input type="text"/>
Journal	<input type="text"/>
Volume	<input type="text"/>
Pages	<input type="text"/>

34. Is the reference a book?

Yes

No

35. Enter a link to a web page with further information

8. Longwave Radiation: Clouds

How are clouds treated in the longwave radiation scheme?

36. What cloud processes are included in your longwave radiation scheme?

Absorption by liquid clouds

Absorption by ice clouds

Other (please enter as a comma separated list)

37. Enter a short description about the way clouds are treated in the longwave radiation scheme

38. Enter a reference about clouds in the longwave radiation scheme

doi	<input type="text"/>
Author(s)	<input type="text"/>
Year	<input type="text"/>
Title	<input type="text"/>
Journal	<input type="text"/>
Volume	<input type="text"/>
Pages	<input type="text"/>

39. Is the reference a book?

Yes

No

40. Enter a link to a web page with further information

9. Longwave Radiation: Aerosols

CCMVal-2 Questionnaire: Radiation Schemes

How are aerosols treated in the longwave radiation scheme?

41. What aerosols are included in your longwave radiation scheme?

Sulphate

Biomass Aerosols

Sea Salt

NAT

Soot

Other (please enter as a comma separated list)

42. Enter a short description about the way aerosols are treated in the longwave radiation scheme

43. Enter a reference about aerosols in the longwave radiation scheme

doi

Author(s)

Year

Title

Journal

Volume

Pages

44. Is the reference a book?

Yes

No

45. Enter a link to a web page with further information

10. Thank you

Thank you for completing the Radiation Schemes part of the CCMVal questionnaire.