

Interactive comment on “Solar Backscatter UV (SBUV) total ozone and profile algorithm” by P. K. Bhartia et al.

Anonymous Referee #2

Received and published: 13 October 2012

GENERAL COMMENTS

This paper provides a detailed description of the version 8.6 retrieval algorithm for SBUV ozone profiles. It is a very well written paper that provides a thorough description of the key elements of the SBUV retrieval. I am very pleased to see this paper being published. Such papers seldom garner the level of attention paid to papers that present new science and yet they are absolutely essential for providing key details of retrieval algorithms. Too often it is found that exactly what was done resided only in the head of the person who did it and once they have left the field, or been buried in the field, that knowledge is lost. The authors are to be commended for providing this essential information in a readily accessible form. I have very few comments and just a few

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grammatical and typographical corrections as detailed below.

SPECIFIC COMMENTS

There are many acronyms used in this paper and they are not always defined. Please define all acronyms at the first occurrence.

Page 2, line 20: Why are the AE-E BUV data not available for your use?

Page 4, line 8: Should this be 'optimal estimation' rather than 'optimum estimation'?

Sometimes you use the term 'total column ozone' and at other times just 'total ozone'. For consistency, and to avoid potential confusion, the same term should be used throughout.

Page 9, line 22: Do you mean *in* the MZM files?

Page 12, line 2: It is not clear to me what the 'it' refers to in 'have corrected it'.

Page 14, line 19: What does 'quite well' mean? This will likely mean different things to different people.

GRAMMAR AND TYPOGRAPHICAL ERRORS

Page 8, line 22: Replace 'thruth profile' with 'true profile' and elsewhere.

Page 9, line 8: Replace 'at mid point of the layer' with 'at the mid point of the layer'.

Page 9, line 10: Replace 'of variety of different' with 'of a variety of different'.

Page 9, line 15: Replace 'the upper upper stratospheric' with 'the upper stratosphere'.

Page 9, line 24: Replace 'refer W' with 'refer to W'.

Figure 4 caption: Either 'Variation in DFS is' or 'Variations in DFS are'.

Page 11, line 9: Replace 'get lot of' with 'get a lot of'.

Page 13, line 20: Replace 'effect of stratospheric aerosols are' with 'effect of strato-

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spheric aerosols is’.

Page 14, line 4: Replace ‘radiometers (MWR) radiometers’ with ‘radiometers (MWR)’.

Interactive comment on Atmos. Meas. Tech. Discuss., 5, 5913, 2012.

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