Interactive comment on “Effects of polar stratospheric clouds in the Nimbus-7 LIMS version 6 data set” by Ellis Remsberg and V. Lynn Harvey

Anonymous Referee #1

Received and published: 25 April 2016

Review of “Effects of Polar stratospheric clouds in the Nimbus 7 LIMS version 6 dataset” by E. Remsberg and V. Lynn Harvey

This paper thoroughly discusses LIMS version 6 data in regard to observations of PSCs during the Arctic winter of 1978-1979. PSC detection is achieved from an examination of O3 profile enhancements. This paper will be indispensable to those you want to place the 1978-1979 PSCs in relation to PSC observations in later years. The paper is very carefully written with many valuable details.

Only minor revisions are needed, and no further review is necessary prior to publication.
Minor comments
Page 4, line 78. State the southernmost latitude sensed by LIMS.
Page 4, line 96 and Page 20, line 552-553. The sentence on page 4,
“Finally, we report that there is almost no interference from PSCs in the distribution of
the Level 3 HNO3”
and on page 20,
“However, it is also possible that the retrieved HNO3 was contaminated (high) slightly
due to excess emissions from the PSCs themselves”
are not consistent. Please revise to have a consistent statement of the situation.
Page 8, line 206 “is judged to be of good quality”
Page 10, line 271. Spell out the acronym RTO in the text.
Page 11, line 297. ‘are considered to be “false positives” for PSCs’
Page 12, line 321 “at pressure levels”
Page 24, line 657 “occurs within a day or so for particles”