Icarus Review Submission(02/25/02 at 07:34:27 EST)

MANUSCRIPT: I08179
AUTHORS: Hahn et al.
SHORT TITLE: Clementine observations of the Zodiacal light

The reviewer wishes to remain anonymous.

REVIEW SUMMARY

(a). Do you recommend that this manuscript be accepted for publication?
Yes, but only after moderate revisions (supervised by the editor)

(b). The overall length of the text in this manuscript is:
NOT SELECTED

(c). The amount of display material (tables and figures) is:
NOT SELECTED

COMMENTS FOR THE AUTHORS

The authors have included reference to another volume scattering function beside the one by Hong. However, using the Lamy and Perrin volume scattering function the line-of-sight integral is not constant - as the authors have assumed - but it varies by factors of 2 and 1.5 over elongations from 3 to 30 deg., for nu = 1 and 1.45 respectively. Therefore, the brightness varies accordingly and the best fit radial exponent, nu, is generally lower than 1.45 when the Lamy and Perrin scattering function is used. Therefore, most previous authors used values of nu = 1.0 to 1.3. Since zodiacal light observations a 1 AU can not uniquely determine both the scattering function and the radial dust density distribution it would be fair if the authors give two exponents, nu, for the two scattering functions assumed. The subsequent discussion of the contributions to the zodiacal cloud should be adjusted accordingly.