

Sky Brightness Summary

Table 1: Sky brightness measurements for Carrs Mill, West Friendship, and Alpha Ridge, in V-mag/arcsec²

| Altitude (deg) | Carrs Mill (10/14/06) | | | | West Friendship (10/14/06) | | | | Alpha Ridge (10/21/06, adjusted by +0.06 mag) | | | |
|----------------|-----------------------|-------|-------|-------|----------------------------|-------|-------|-------|---|-------|-------|-------|
| | North | East | South | West | North | East | South | West | North | East | South | West |
| 90 | 19.73 | 19.73 | 19.73 | 19.73 | 19.71 | 19.71 | 19.71 | 19.71 | 19.44 | 19.44 | 19.44 | 19.44 |
| 60 | 19.61 | 19.49 | 19.51 | 19.64 | 19.51 | 19.32 | 19.42 | 19.54 | 19.32 | 19.10 | 19.18 | 19.37 |
| 45 | 19.41 | 19.11 | 19.14 | 19.28 | 19.31 | 18.94 | 19.08 | 19.31 | 19.11 | 18.60 | 18.85 | 19.10 |
| 30 | 18.97 | 18.47 | 18.57 | 18.84 | 18.96 | 18.43 | 18.54 | 18.98 | 18.54 | 17.75 | 18.12 | 18.60 |

Note: Carrs Mill and West Friendship data from 10/14/2006, Alpha Ridge from 10/21/2006. The Alpha Ridge values have been adjusted higher (darker) by 0.06 mag/arcsec² based on a single West Friendship zenith measurement from 10/21/2006. This single measurement resulted in a value of 19.65 V-mag/arcsec², 0.06 mag brighter than the 10/14/2006 measurement, so the Alpha Ridge data have been offset by this amount to make the comparison more correct. The 0.06 mag difference is either a measurement "error", or it reflects different atmospheric conditions (and thus more scattered light) on 10/21/06 compared to 10/14/06.

Table 2: West Friendship and Alpha Ridge relative brightness normalized to the Carrs Mill measurement

| Altitude | West Friendship Relative to Carrs Mill | | | | Alpha Ridge (adjusted) Relative to Carrs Mill | | | |
|----------|--|------|-------|------|---|------|-------|------|
| | North | East | South | West | North | East | South | West |
| 90 | 1.02 | 1.02 | 1.02 | 1.02 | 1.30 | 1.30 | 1.30 | 1.30 |
| 60 | 1.10 | 1.17 | 1.09 | 1.09 | 1.30 | 1.43 | 1.36 | 1.28 |
| 45 | 1.09 | 1.17 | 1.06 | 0.97 | 1.32 | 1.60 | 1.31 | 1.18 |
| 30 | 1.01 | 1.03 | 1.03 | 0.88 | 1.48 | 1.94 | 1.52 | 1.25 |

Table 3: Relative brightness normalized to Carrs Mill zenith measurement

| Altitude (deg) | Carrs Mill Relative to Carrs Mill Zenith | | | | West Friendship Relative to Carrs Mill Zenith | | | | Alpha Ridge (adjusted) Relative to Carrs Mill | | | |
|----------------|--|------|-------|------|---|------|-------|------|---|------|-------|------|
| | North | East | South | West | North | East | South | West | North | East | South | West |
| 90 | 1.00 | 1.00 | 1.00 | 1.00 | 1.02 | 1.02 | 1.02 | 1.02 | 1.30 | 1.30 | 1.30 | 1.30 |
| 60 | 1.12 | 1.25 | 1.22 | 1.09 | 1.22 | 1.46 | 1.33 | 1.19 | 1.46 | 1.79 | 1.67 | 1.40 |
| 45 | 1.35 | 1.77 | 1.72 | 1.52 | 1.48 | 2.07 | 1.83 | 1.48 | 1.78 | 2.83 | 2.26 | 1.79 |
| 30 | 2.01 | 3.20 | 2.91 | 2.27 | 2.03 | 3.30 | 3.00 | 2.00 | 2.98 | 6.21 | 4.43 | 2.84 |

| | | | |
|-----------|--------------------------|--------------------------|--------------------------|
| Average | 1.59 (all 16 values) | 1.65 (all 16 values) | 2.29 (all 16 values) |
| Av Bright | 19.23 (all 16 values) | 19.18 (all 16 values) | 18.83 (all 16 values) |
| Average | 1.73 (13 unique values) | 1.80 (13 unique values) | 2.52 (13 unique values) |
| Av Bright | 19.14 (13 unique values) | 19.09 (13 unique values) | 18.73 (13 unique values) |