

**CORRECTION TO LATITUDE FOR DIFFERENTIAL REFRACTION.  $\frac{1}{2} (r-r')$ .**  
 (The sign of the correction is the same as that of the micrometer difference).

| $\frac{1}{2}$ diff.<br>Zen. Dist. | Zenith Distances. |     |     |     |     |     |      |      |
|-----------------------------------|-------------------|-----|-----|-----|-----|-----|------|------|
|                                   | 0°                | 10° | 20° | 25° | 30° | 35° | 40°  | 45°  |
| 20                                | .34               | .35 | .38 | .41 | .45 | .50 | .57  | .67  |
| 20.5                              | .34               | .35 | .39 | .42 | .46 | .51 | .58  | .68  |
| 21                                | .35               | .36 | .40 | .43 | .47 | .52 | .60  | .70  |
| 21.5                              | .36               | .37 | .41 | .44 | .48 | .54 | .61  | .72  |
| 22                                | .37               | .38 | .42 | .45 | .49 | .55 | .63  | .74  |
| 22.5                              | .38               | .39 | .43 | .46 | .50 | .56 | .64  | .75  |
| 23                                | .38               | .40 | .44 | .47 | .51 | .57 | .66  | .77  |
| 23.5                              | .39               | .41 | .45 | .48 | .52 | .59 | .67  | .79  |
| 24                                | .40               | .41 | .46 | .49 | .54 | .60 | .69  | .81  |
| 24.5                              | .41               | .42 | .47 | .50 | .55 | .61 | .70  | .82  |
| 25                                | .42               | .43 | .47 | .51 | .56 | .62 | .71  | .84  |
| 25.5                              | .42               | .44 | .48 | .52 | .57 | .63 | .72  | .85  |
| 26                                | .43               | .45 | .49 | .53 | .58 | .65 | .74  | .87  |
| 26.5                              | .44               | .46 | .50 | .54 | .59 | .66 | .75  | .89  |
| 27                                | .45               | .46 | .51 | .55 | .60 | .67 | .77  | .90  |
| 27.5                              | .46               | .47 | .52 | .56 | .61 | .69 | .78  | .92  |
| 28                                | .47               | .48 | .53 | .57 | .62 | .70 | .80  | .94  |
| 28.5                              | .48               | .49 | .54 | .58 | .64 | .71 | .81  | .96  |
| 29                                | .49               | .50 | .55 | .59 | .65 | .72 | .83  | .97  |
| 29.5                              | .49               | .51 | .56 | .60 | .66 | .74 | .84  | .99  |
| 30                                | .50               | .52 | .57 | .61 | .67 | .75 | .86  | 1.01 |
| 30.5                              | .51               | .52 | .58 | .62 | .68 | .76 | .87  | 1.02 |
| 31                                | .52               | .53 | .59 | .63 | .69 | .77 | .88  | 1.04 |
| 31.5                              | .53               | .54 | .60 | .64 | .70 | .78 | .90  | 1.05 |
| 32                                | .53               | .55 | .61 | .65 | .71 | .80 | .91  | 1.07 |
| 32.5                              | .54               | .56 | .62 | .66 | .72 | .81 | .93  | 1.09 |
| 33                                | .55               | .57 | .63 | .67 | .74 | .82 | .94  | 1.11 |
| 33.5                              | .56               | .58 | .64 | .68 | .75 | .84 | .96  | 1.12 |
| 34                                | .57               | .59 | .64 | .69 | .76 | .85 | .97  | 1.14 |
| 34.5                              | .58               | .60 | .65 | .70 | .77 | .86 | .99  | 1.16 |
| 35                                | .59               | .60 | .66 | .71 | .78 | .87 | 1.00 | 1.17 |
| 35.5                              | .59               | .61 | .67 | .72 | .79 | .89 | 1.01 | 1.19 |
| 36                                | .60               | .62 | .68 | .73 | .80 | .90 | 1.02 | 1.20 |
| 36.5                              | .61               | .63 | .69 | .74 | .81 | .91 | 1.04 | 1.22 |
| 37                                | .62               | .64 | .70 | .75 | .82 | .92 | 1.05 | 1.24 |
| 37.5                              | .63               | .65 | .71 | .76 | .84 | .93 | 1.07 | 1.26 |
| 38                                | .64               | .65 | .72 | .77 | .85 | .95 | 1.08 | 1.27 |
| 38.5                              | .64               | .66 | .73 | .78 | .86 | .96 | 1.10 | 1.29 |
| 39                                | .65               | .67 | .74 | .80 | .87 | .97 | 1.11 | 1.31 |
| 39.5                              | .66               | .68 | .75 | .81 | .88 | .99 | 1.13 | 1.32 |

NOTE.—If the altitude of the station is such that the barometer reading is below 27 inches, the tabulated values should be reduced by 10 per cent.