

## (1) CERES

| M d<br>2021 | Wsch.             | Kulm. | Zach.              | A           | $\alpha$          | $\delta$        | V   | $\Delta$ |
|-------------|-------------------|-------|--------------------|-------------|-------------------|-----------------|-----|----------|
|             | $\lambda=0^\circ$ |       | $\varphi=50^\circ$ |             | 0 <sup>h</sup> UT |                 |     |          |
|             | h m               | h m   | h m                | $\pm^\circ$ | h m               | $^\circ \prime$ | m   | $^\circ$ |
| I 0         | 11 41             | 16 25 | 21 09              | 66          | 23 06.2           | - 15 59         | 9.2 | 62       |
| 8           | 11 12             | 16 02 | 20 53              | 68          | 23 15.2           | - 14 43         | 9.2 | 57       |
| 16          | 10 43             | 15 40 | 20 38              | 70          | 23 24.6           | - 13 25         | 9.3 | 51       |
| 24          | 10 14             | 15 19 | 20 23              | 72          | 23 34.5           | - 12 06         | 9.3 | 46       |
| II 1        | 9 46              | 14 57 | 20 09              | 74          | 23 44.6           | - 10 45         | 9.3 | 41       |
| 9           | 9 18              | 14 36 | 19 55              | 76          | 23 55.1           | - 9 23          | 9.2 | 36       |
| 17          | 8 51              | 14 15 | 19 41              | 78          | 0 05.7            | - 8 01          | 9.2 | 31       |
| 25          | 8 23              | 13 55 | 19 27              | 81          | 0 16.6            | - 6 38          | 9.2 | 26       |
| III 5       | 7 56              | 13 34 | 19 13              | 83          | 0 27.6            | - 5 15          | 9.1 | 21       |
| 13          | 7 29              | 13 14 | 18 59              | 85          | 0 38.8            | - 3 53          | 9.1 | 17       |
| 21          | 7 03              | 12 54 | 18 45              | 87          | 0 50.1            | - 2 32          | 9.0 | 13       |
| 29          | 6 36              | 12 34 | 18 32              | 89          | 1 01.5            | - 1 12          | 8.9 | 9        |
| IV 6        | 6 10              | 12 14 | 18 18              | 91          | 1 13.0            | 0 07            | 8.9 | 7        |
| 14          | 5 44              | 11 54 | 18 04              | 93          | 1 24.6            | 1 24            | 8.9 | -8       |
| 22          | 5 18              | 11 34 | 17 50              | 95          | 1 36.2            | 2 39            | 9.0 | -11      |
| 30          | 4 53              | 11 14 | 17 36              | 97          | 1 47.8            | 3 52            | 9.0 | -15      |
| V 8         | 4 27              | 10 54 | 17 22              | 99          | 1 59.5            | 5 02            | 9.1 | -19      |
| 16          | 4 02              | 10 34 | 17 07              | 100         | 2 11.1            | 6 09            | 9.1 | -23      |
| 24          | 3 37              | 10 14 | 16 53              | 102         | 2 22.7            | 7 13            | 9.2 | -28      |
| VI 1        | 3 12              | 9 54  | 16 38              | 104         | 2 34.3            | 8 14            | 9.2 | -32      |
| 9           | 2 47              | 9 34  | 16 22              | 105         | 2 45.8            | 9 11            | 9.2 | -37      |
| 17          | 2 22              | 9 14  | 16 07              | 107         | 2 57.1            | 10 05           | 9.2 | -41      |
| 25          | 1 58              | 8 54  | 15 50              | 108         | 3 08.3            | 10 55           | 9.2 | -46      |
| VII 3       | 1 33              | 8 33  | 15 34              | 109         | 3 19.3            | 11 40           | 9.2 | -51      |
| 11          | 1 09              | 8 13  | 15 16              | 110         | 3 30.0            | 12 22           | 9.2 | -56      |
| 19          | 0 45              | 7 52  | 14 59              | 111         | 3 40.4            | 12 60           | 9.1 | -61      |
| 27          | 0 20              | 7 30  | 14 40              | 112         | 3 50.4            | 13 34           | 9.1 | -66      |
| VIII 4      | 23 52             | 7 08  | 14 21              | 113         | 3 60.0            | 14 03           | 9.0 | -71      |
| 12          | 23 28             | 6 45  | 14 00              | 114         | 4 08.9            | 14 29           | 9.0 | -76      |
| 20          | 23 02             | 6 22  | 13 39              | 114         | 4 17.2            | 14 51           | 8.9 | -82      |
| 28          | 22 37             | 5 58  | 13 17              | 115         | 4 24.6            | 15 10           | 8.8 | -88      |
| IX 5        | 22 10             | 5 33  | 12 53              | 115         | 4 31.1            | 15 26           | 8.7 | -94      |
| 13          | 21 43             | 5 07  | 12 28              | 116         | 4 36.5            | 15 38           | 8.6 | -100     |
| 21          | 21 14             | 4 40  | 12 01              | 116         | 4 40.7            | 15 49           | 8.5 | -107     |
| 29          | 20 45             | 4 11  | 11 33              | 116         | 4 43.5            | 15 57           | 8.3 | -114     |
| X 7         | 20 14             | 3 41  | 11 04              | 116         | 4 44.7            | 16 04           | 8.2 | -122     |
| 15          | 19 41             | 3 09  | 10 32              | 116         | 4 44.2            | 16 10           | 8.0 | -130     |
| 23          | 19 07             | 2 35  | 9 59               | 117         | 4 42.0            | 16 16           | 7.8 | -138     |
| 31          | 18 31             | 1 60  | 9 24               | 117         | 4 38.0            | 16 21           | 7.7 | -147     |
| XI 8        | 17 53             | 1 23  | 8 47               | 117         | 4 32.5            | 16 27           | 7.5 | -156     |
| 16          | 17 14             | 0 44  | 8 10               | 117         | 4 25.6            | 16 33           | 7.3 | -165     |
| 24          | 16 34             | 0 05  | 7 31               | 117         | 4 17.9            | 16 40           | 7.0 | -174     |
| XII 2       | 15 54             | 23 21 | 6 53               | 117         | 4 09.9            | 16 48           | 7.1 | 173      |
| 10          | 15 14             | 22 42 | 6 14               | 118         | 4 02.1            | 16 59           | 7.3 | 164      |
| 18          | 14 34             | 22 03 | 5 37               | 118         | 3 55.2            | 17 12           | 7.4 | 154      |
| 26          | 13 56             | 21 27 | 5 02               | 119         | 3 49.5            | 17 29           | 7.6 | 145      |
| 2022 I 3    | 13 18             | 20 51 | 4 28               | 119         | 3 45.4            | 17 49           | 7.8 | 136      |