

Hourly Astronomical Tide Level at Kashima-ko, Ibaraki Pref. in 2011 (unit: centimeter) Issued by JMA

| Date | Moon | Time | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|------|---------------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|
| | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
| 1-Jun | W | 25 | 37 | 46 | 47 | 37 | 18 | -7 | -34 | -58 | -74 | -77 | -68 | -48 | -23 | 2 | 23 | 35 | 38 | 33 | 24 | 13 | 5 | 3 | 9 | |
| 2-Jun | Th | New Moon | 20 | 33 | 45 | 51 | 47 | 32 | 8 | -20 | -48 | -71 | -82 | -80 | -65 | -42 | -15 | 11 | 30 | 39 | 39 | 31 | 21 | 10 | 4 | 6 |
| 3-Jun | F | 14 | 27 | 41 | 51 | 53 | 44 | 24 | -3 | -33 | -60 | -79 | -86 | -78 | -59 | -33 | -5 | 19 | 34 | 40 | 37 | 28 | 17 | 8 | 5 | |
| 4-Jun | Sa | 9 | 20 | 34 | 47 | 54 | 52 | 38 | 15 | -14 | -43 | -68 | -83 | -84 | -71 | -49 | -23 | 4 | 25 | 37 | 39 | 34 | 24 | 13 | 6 | |
| 5-Jun | Su | 6 | 13 | 25 | 39 | 49 | 53 | 47 | 31 | 6 | -22 | -50 | -71 | -81 | -77 | -62 | -39 | -12 | 12 | 29 | 38 | 37 | 30 | 19 | 10 | |
| 6-Jun | M | 5 | 7 | 15 | 28 | 40 | 48 | 49 | 40 | 23 | -2 | -28 | -52 | -68 | -73 | -66 | -50 | -27 | -3 | 18 | 32 | 37 | 34 | 25 | 15 | |
| 7-Jun | Tu | 6 | 3 | 6 | 15 | 26 | 36 | 42 | 42 | 32 | 15 | -6 | -29 | -48 | -60 | -62 | -53 | -36 | -15 | 7 | 24 | 34 | 36 | 31 | 21 | |
| 8-Jun | W | 11 | 2 | -1 | 2 | 10 | 19 | 28 | 33 | 33 | 25 | 11 | -7 | -25 | -40 | -48 | -47 | -38 | -22 | -3 | 15 | 29 | 36 | 35 | 28 | |
| 9-Jun | Th | First Quarter | 17 | 6 | -3 | -7 | -6 | 0 | 8 | 17 | 22 | 23 | 19 | 9 | -3 | -17 | -28 | -33 | -32 | -23 | -9 | 8 | 23 | 34 | 38 | 35 |
| 10-Jun | F | 26 | 13 | 1 | -10 | -17 | -18 | -14 | -6 | 3 | 11 | 16 | 12 | 4 | -5 | -14 | -18 | -17 | -9 | 3 | 17 | 30 | 38 | 40 | | |
| 11-Jun | Sa | 35 | 24 | 9 | -6 | -20 | -30 | -33 | -30 | -21 | -10 | 2 | 11 | 17 | 18 | 14 | 7 | 0 | -4 | -4 | 2 | 13 | 26 | 36 | 43 | |
| 12-Jun | Su | 43 | 36 | 23 | 5 | -15 | -32 | -45 | -49 | -46 | -35 | -20 | -4 | 11 | 21 | 25 | 24 | 18 | 11 | 6 | 6 | 11 | 21 | 32 | 42 | |
| 13-Jun | M | 48 | 47 | 38 | 21 | -1 | -25 | -45 | -60 | -65 | -59 | -46 | -27 | -6 | 13 | 27 | 33 | 32 | 27 | 19 | 13 | 12 | 17 | 27 | 38 | |
| 14-Jun | Tu | 48 | 53 | 50 | 38 | 18 | -8 | -35 | -58 | -73 | -76 | -68 | -51 | -28 | -3 | 18 | 33 | 39 | 38 | 31 | 22 | 16 | 15 | 21 | 31 | |
| 15-Jun | W | 44 | 54 | 58 | 53 | 37 | 13 | -16 | -45 | -69 | -83 | -83 | -72 | -51 | -24 | 2 | 25 | 39 | 43 | 40 | 31 | 22 | 15 | 16 | 23 | |
| 16-Jun | Th | Full Moon | 35 | 48 | 58 | 61 | 53 | 34 | 7 | -24 | -54 | -77 | -87 | -84 | -69 | -45 | -17 | 10 | 31 | 42 | 44 | 38 | 28 | 18 | 13 | 15 |
| 17-Jun | F | 25 | 38 | 52 | 61 | 61 | 50 | 28 | -1 | -32 | -61 | -80 | -86 | -79 | -60 | -35 | -7 | 18 | 36 | 43 | 42 | 34 | 23 | 13 | 10 | |
| 18-Jun | Sa | 15 | 27 | 41 | 54 | 61 | 58 | 44 | 20 | -9 | -39 | -64 | -79 | -80 | -68 | -47 | -22 | 5 | 26 | 39 | 42 | 38 | 28 | 16 | 8 | |
| 19-Jun | Su | 7 | 15 | 28 | 42 | 54 | 58 | 52 | 35 | 11 | -17 | -44 | -64 | -73 | -69 | -54 | -32 | -7 | 16 | 33 | 40 | 39 | 32 | 20 | 9 | |
| 20-Jun | M | 3 | 5 | 15 | 28 | 41 | 50 | 52 | 43 | 25 | 2 | -23 | -45 | -59 | -62 | -54 | -37 | -15 | 7 | 26 | 37 | 40 | 35 | 25 | 13 | |
| 21-Jun | Tu | 4 | 0 | 4 | 13 | 26 | 37 | 43 | 42 | 32 | 15 | -5 | -26 | -42 | -50 | -48 | -37 | -19 | 0 | 19 | 33 | 40 | 38 | 30 | 19 | |
| 22-Jun | W | 7 | -1 | -3 | 1 | 10 | 21 | 30 | 34 | 31 | 22 | 7 | -9 | -24 | -35 | -37 | -32 | -20 | -3 | 14 | 29 | 38 | 40 | 35 | 26 | |
| 23-Jun | Th | Last Quarter | 14 | 2 | -5 | -7 | -3 | 4 | 13 | 20 | 24 | 21 | 14 | 3 | -9 | -19 | -24 | -23 | -16 | -5 | 10 | 24 | 35 | 40 | 39 | 32 |
| 24-Jun | F | 22 | 9 | -2 | -10 | -12 | -10 | -4 | 3 | 10 | 14 | 14 | 10 | 3 | -4 | -9 | -12 | -10 | -3 | 8 | 20 | 31 | 38 | 40 | 37 | |
| 25-Jun | Sa | 30 | 18 | 5 | -7 | -16 | -20 | -20 | -14 | -7 | 1 | 7 | 10 | 10 | 8 | 4 | 1 | 0 | 2 | 8 | 16 | 26 | 34 | 40 | 41 | |
| 26-Jun | Su | 36 | 28 | 15 | 0 | -14 | -25 | -31 | -31 | -25 | -16 | -5 | 4 | 11 | 15 | 15 | 14 | 11 | 10 | 10 | 15 | 22 | 30 | 37 | 41 | |
| 27-Jun | M | 41 | 36 | 26 | 11 | -7 | -23 | -36 | -43 | -42 | -34 | -21 | -7 | 6 | 17 | 22 | 24 | 22 | 19 | 16 | 15 | 18 | 25 | 32 | 39 | |
| 28-Jun | Tu | 44 | 43 | 37 | 23 | 5 | -16 | -35 | -49 | -54 | -51 | -40 | -23 | -5 | 12 | 24 | 31 | 32 | 28 | 23 | 19 | 17 | 20 | 27 | 35 | |
| 29-Jun | W | 43 | 48 | 46 | 36 | 19 | -3 | -27 | -48 | -62 | -65 | -57 | -41 | -20 | 1 | 20 | 33 | 38 | 37 | 31 | 24 | 18 | 17 | 21 | 30 | |
| 30-Jun | Th | 40 | 49 | 52 | 48 | 35 | 13 | -13 | -40 | -61 | -72 | -72 | -60 | -39 | -14 | 10 | 29 | 41 | 43 | 39 | 30 | 22 | 16 | 17 | 23 | |

* Note that tide levels in the calendar are astronomical tide levels. During an intense low pressure system's approaching, tide levels can be higher by a few to tens centimeters than the values in the calendar.

Hourly Astronomical Tide Level at Kashima-ko, Ibaraki Pref. in 2011 (unit: centimeter) Issued by JMA

| Date | Moon | Time | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|------|---------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|
| | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
| 1-Jul | F | New Moon | 34 | 46 | 55 | 57 | 49 | 31 | 5 | -24 | -52 | -72 | -80 | -74 | -57 | -32 | -5 | 20 | 38 | 46 | 45 | 37 | 27 | 18 | 13 | 16 |
| 2-Jul | Sa | | 25 | 39 | 51 | 60 | 59 | 48 | 26 | -4 | -34 | -61 | -79 | -82 | -71 | -50 | -22 | 6 | 30 | 45 | 49 | 44 | 33 | 21 | 12 | 10 |
| 3-Jul | Su | | 15 | 28 | 43 | 56 | 63 | 59 | 44 | 18 | -12 | -43 | -67 | -80 | -78 | -63 | -38 | -9 | 18 | 39 | 49 | 48 | 39 | 27 | 14 | 6 |
| 4-Jul | M | | 6 | 15 | 29 | 45 | 57 | 62 | 55 | 37 | 11 | -19 | -47 | -67 | -75 | -68 | -49 | -23 | 5 | 29 | 45 | 50 | 45 | 33 | 18 | 5 |
| 5-Jul | Tu | | -1 | 2 | 14 | 29 | 44 | 55 | 57 | 48 | 30 | 4 | -23 | -47 | -62 | -64 | -52 | -32 | -6 | 19 | 39 | 49 | 49 | 39 | 24 | 9 |
| 6-Jul | W | | -3 | -7 | -2 | 10 | 25 | 39 | 48 | 49 | 40 | 22 | 0 | -23 | -41 | -50 | -47 | -33 | -13 | 11 | 32 | 47 | 51 | 45 | 32 | 16 |
| 7-Jul | Th | | 0 | -11 | -13 | -8 | 3 | 17 | 30 | 38 | 38 | 30 | 16 | -1 | -18 | -30 | -33 | -27 | -13 | 6 | 26 | 42 | 51 | 50 | 40 | 25 |
| 8-Jul | F | First Quarter | 8 | -7 | -17 | -20 | -15 | -6 | 6 | 18 | 25 | 27 | 23 | 14 | 2 | -8 | -15 | -15 | -7 | 6 | 22 | 38 | 49 | 52 | 48 | 36 |
| 9-Jul | Sa | | 20 | 2 | -13 | -24 | -28 | -25 | -17 | -7 | 5 | 13 | 18 | 15 | 9 | 4 | 1 | 3 | 10 | 21 | 34 | 45 | 52 | 52 | 46 | |
| 10-Jul | Su | | 33 | 16 | -1 | -18 | -30 | -36 | -36 | -30 | -20 | -8 | 3 | 12 | 18 | 20 | 19 | 17 | 22 | 30 | 40 | 48 | 53 | 52 | | |
| 11-Jul | M | | 45 | 33 | 16 | -4 | -22 | -37 | -46 | -48 | -42 | -31 | -17 | -2 | 12 | 22 | 28 | 29 | 28 | 26 | 25 | 28 | 34 | 42 | 49 | 53 |
| 12-Jul | Tu | | 53 | 47 | 34 | 16 | -6 | -27 | -45 | -56 | -59 | -53 | -39 | -22 | -3 | 15 | 29 | 36 | 38 | 35 | 31 | 28 | 29 | 33 | 41 | 49 |
| 13-Jul | W | | 54 | 55 | 50 | 36 | 16 | -9 | -33 | -53 | -65 | -67 | -59 | -42 | -21 | 2 | 22 | 37 | 43 | 43 | 37 | 30 | 26 | 25 | 30 | 39 |
| 14-Jul | Th | | 49 | 57 | 59 | 53 | 37 | 14 | -13 | -40 | -61 | -72 | -71 | -59 | -39 | -14 | 11 | 32 | 44 | 48 | 44 | 35 | 26 | 20 | 20 | 28 |
| 15-Jul | F | Full Moon | 39 | 51 | 60 | 62 | 54 | 35 | 9 | -20 | -47 | -67 | -75 | -70 | -54 | -30 | -3 | 22 | 40 | 49 | 48 | 40 | 29 | 18 | 13 | 16 |
| 16-Jul | Sa | | 26 | 41 | 54 | 63 | 63 | 52 | 30 | 2 | -28 | -53 | -70 | -73 | -62 | -42 | -16 | 11 | 33 | 47 | 50 | 45 | 33 | 19 | 9 | 6 |
| 17-Jul | Su | | 13 | 27 | 43 | 57 | 64 | 61 | 46 | 22 | -7 | -35 | -57 | -68 | -64 | -49 | -26 | 0 | 25 | 43 | 51 | 48 | 38 | 23 | 9 | 1 |
| 18-Jul | M | | 2 | 12 | 28 | 45 | 57 | 62 | 55 | 37 | 12 | -15 | -40 | -56 | -60 | -51 | -32 | -7 | 17 | 38 | 50 | 51 | 42 | 28 | 13 | 0 |
| 19-Jul | Tu | | -5 | 0 | 13 | 29 | 45 | 55 | 56 | 45 | 26 | 2 | -22 | -40 | -50 | -47 | -33 | -12 | 11 | 33 | 47 | 52 | 47 | 34 | 18 | 2 |
| 20-Jul | W | | -8 | -9 | -1 | 13 | 29 | 42 | 49 | 46 | 34 | 15 | -5 | -24 | -36 | -38 | -30 | -13 | 7 | 28 | 44 | 52 | 50 | 40 | 25 | 8 |
| 21-Jul | Th | | -6 | -13 | -11 | -2 | 12 | 26 | 36 | 40 | 35 | 23 | 8 | -8 | -21 | -27 | -23 | -11 | 5 | 24 | 40 | 50 | 52 | 45 | 32 | 16 |
| 22-Jul | F | | 1 | -11 | -16 | -13 | -4 | 8 | 20 | 28 | 30 | 25 | 15 | 4 | -7 | -13 | -14 | -7 | 6 | 21 | 36 | 47 | 52 | 49 | 39 | 25 |
| 23-Jul | Sa | Last Quarter | 9 | -5 | -15 | -18 | -15 | -8 | 3 | 12 | 19 | 20 | 17 | 12 | 5 | 0 | -2 | 1 | 8 | 19 | 32 | 43 | 49 | 50 | 44 | 33 |
| 24-Jul | Su | | 19 | 5 | -8 | -18 | -22 | -20 | -14 | -5 | 4 | 10 | 14 | 14 | 13 | 10 | 9 | 10 | 13 | 20 | 29 | 38 | 45 | 48 | 46 | 40 |
| 25-Jul | M | | 29 | 16 | 2 | -11 | -22 | -27 | -27 | -22 | -14 | -5 | 4 | 11 | 16 | 18 | 19 | 20 | 21 | 23 | 27 | 33 | 40 | 44 | 46 | 44 |
| 26-Jul | Tu | | 38 | 28 | 15 | 0 | -16 | -28 | -36 | -37 | -32 | -22 | -10 | 2 | 13 | 22 | 27 | 29 | 29 | 28 | 28 | 30 | 34 | 39 | 43 | 46 |
| 27-Jul | W | | 45 | 40 | 29 | 14 | -4 | -22 | -37 | -46 | -47 | -41 | -28 | -12 | 5 | 20 | 30 | 36 | 37 | 35 | 31 | 29 | 29 | 32 | 38 | 44 |
| 28-Jul | Th | | 48 | 49 | 43 | 31 | 13 | -9 | -31 | -48 | -58 | -57 | -47 | -29 | -9 | 12 | 29 | 40 | 44 | 42 | 36 | 30 | 26 | 25 | 30 | 38 |
| 29-Jul | F | | 46 | 53 | 54 | 48 | 32 | 9 | -17 | -41 | -60 | -67 | -63 | -48 | -26 | -1 | 22 | 40 | 48 | 48 | 42 | 33 | 24 | 19 | 20 | 28 |
| 30-Jul | Sa | | 40 | 51 | 60 | 61 | 51 | 31 | 4 | -25 | -51 | -69 | -73 | -64 | -44 | -17 | 10 | 34 | 49 | 53 | 49 | 38 | 25 | 15 | 11 | 16 |
| 31-Jul | Su | New Moon | 27 | 43 | 57 | 66 | 65 | 52 | 28 | -3 | -33 | -59 | -73 | -72 | -58 | -33 | -4 | 24 | 46 | 56 | 54 | 44 | 29 | 14 | 4 | 3 |

* Note that tide levels in the calendar are astronomical tide levels. During an intense low pressure system's approaching, tide levels can be higher by a few to tens centimeters than the values in the calendar.

Hourly Astronomical Tide Level at Kashima-ko, Ibaraki Pref. in 2011 (unit: centimeter) Issued by JMA

| Date | Moon | Time | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|------|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|-----|-----|
| | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
| 1-Aug | M | 12 | 27 | 45 | 61 | 69 | 65 | 49 | 22 | -9 | -39 | -61 | -70 | -64 | -44 | -17 | 13 | 38 | 55 | 58 | 51 | 35 | 17 | 1 | -7 | |
| 2-Aug | Tu | -5 | 8 | 27 | 46 | 62 | 68 | 62 | 43 | 16 | -14 | -40 | -58 | -60 | -48 | -25 | 3 | 30 | 51 | 60 | 57 | 43 | 23 | 3 | -12 | |
| 3-Aug | W | -17 | -11 | 5 | 25 | 45 | 59 | 63 | 54 | 35 | 10 | -16 | -37 | -47 | -43 | -27 | -3 | 23 | 46 | 60 | 61 | 51 | 32 | 10 | -10 | |
| 4-Aug | Th | -23 | -25 | -15 | 1 | 21 | 39 | 51 | 53 | 44 | 27 | 7 | -13 | -27 | -31 | -22 | -4 | 18 | 40 | 57 | 63 | 58 | 42 | 21 | -1 | |
| 5-Aug | F | -20 | -30 | -29 | -19 | -3 | 14 | 30 | 40 | 41 | 34 | 21 | 6 | -7 | -14 | -11 | 0 | 17 | 36 | 53 | 63 | 62 | 52 | 34 | 12 | |
| 6-Aug | Sa | First Quarter | -9 | -25 | -33 | -32 | -23 | -10 | 5 | 19 | 27 | 29 | 25 | 18 | 10 | 4 | 2 | 8 | 19 | 34 | 49 | 60 | 63 | 58 | 45 | 27 |
| 7-Aug | Su | | 7 | -12 | -27 | -34 | -34 | -28 | -18 | -5 | 6 | 15 | 19 | 20 | 19 | 17 | 16 | 18 | 23 | 33 | 44 | 54 | 60 | 60 | 53 | 41 |
| 8-Aug | M | | 24 | 6 | -11 | -25 | -34 | -37 | -34 | -27 | -16 | -5 | 6 | 14 | 21 | 25 | 26 | 27 | 29 | 33 | 39 | 46 | 52 | 56 | 55 | 49 |
| 9-Aug | Tu | | 39 | 26 | 9 | -8 | -24 | -35 | -41 | -41 | -35 | -25 | -12 | 2 | 15 | 26 | 33 | 35 | 36 | 35 | 36 | 38 | 42 | 47 | 50 | 52 |
| 10-Aug | W | | 49 | 42 | 30 | 13 | -5 | -24 | -39 | -47 | -49 | -42 | -30 | -13 | 5 | 22 | 34 | 41 | 42 | 39 | 35 | 32 | 32 | 35 | 40 | 47 |
| 11-Aug | Th | | 51 | 52 | 47 | 35 | 16 | -5 | -27 | -44 | -54 | -54 | -45 | -29 | -9 | 13 | 31 | 43 | 47 | 45 | 37 | 29 | 24 | 23 | 27 | 36 |
| 12-Aug | F | | 46 | 54 | 57 | 51 | 37 | 16 | -9 | -32 | -50 | -58 | -55 | -42 | -22 | 2 | 25 | 42 | 50 | 50 | 42 | 30 | 19 | 13 | 14 | 22 |
| 13-Aug | Sa | | 35 | 49 | 59 | 61 | 54 | 36 | 11 | -15 | -39 | -55 | -59 | -51 | -33 | -9 | 16 | 38 | 51 | 54 | 47 | 34 | 19 | 7 | 3 | 8 |
| 14-Aug | Su | Full Moon | 21 | 37 | 53 | 63 | 63 | 52 | 30 | 4 | -23 | -45 | -56 | -54 | -40 | -18 | 8 | 32 | 49 | 56 | 52 | 39 | 22 | 6 | -5 | -5 |
| 15-Aug | M | | 6 | 23 | 41 | 57 | 65 | 61 | 45 | 22 | -5 | -29 | -47 | -51 | -43 | -24 | 1 | 26 | 46 | 57 | 56 | 45 | 27 | 8 | -7 | -14 |
| 16-Aug | Tu | | -8 | 7 | 26 | 45 | 59 | 63 | 55 | 36 | 12 | -12 | -33 | -43 | -40 | -26 | -4 | 20 | 42 | 56 | 59 | 50 | 34 | 14 | -5 | -18 |
| 17-Aug | W | | -19 | -8 | 9 | 30 | 47 | 58 | 57 | 45 | 26 | 3 | -17 | -31 | -34 | -25 | -6 | 16 | 37 | 54 | 60 | 55 | 40 | 21 | 0 | -17 |
| 18-Aug | Th | | -24 | -20 | -6 | 13 | 32 | 47 | 53 | 48 | 34 | 16 | -3 | -17 | -24 | -20 | -6 | 13 | 33 | 50 | 60 | 59 | 47 | 29 | 8 | -11 |
| 19-Aug | F | | -24 | -27 | -19 | -4 | 14 | 31 | 42 | 44 | 38 | 25 | 9 | -4 | -12 | -12 | -3 | 12 | 30 | 46 | 58 | 60 | 52 | 37 | 17 | -3 |
| 20-Aug | Sa | | -19 | -27 | -26 | -16 | -2 | 14 | 28 | 35 | 35 | 28 | 18 | 7 | -1 | -3 | 2 | 13 | 27 | 42 | 54 | 58 | 55 | 43 | 26 | 8 |
| 21-Aug | Su | | -9 | -22 | -27 | -24 | -15 | -2 | 11 | 21 | 26 | 26 | 21 | 15 | 9 | 7 | 8 | 15 | 26 | 38 | 49 | 55 | 55 | 47 | 35 | 19 |
| 22-Aug | M | Last Quarter | 3 | -12 | -22 | -26 | -24 | -16 | -6 | 5 | 13 | 18 | 20 | 19 | 17 | 16 | 17 | 20 | 27 | 35 | 43 | 50 | 52 | 49 | 41 | 29 |
| 23-Aug | Tu | | 15 | 1 | -12 | -21 | -26 | -26 | -21 | -13 | -3 | 6 | 13 | 18 | 21 | 23 | 25 | 27 | 30 | 34 | 39 | 44 | 47 | 47 | 44 | 38 |
| 24-Aug | W | | 28 | 16 | 3 | -11 | -22 | -30 | -32 | -29 | -21 | -10 | 1 | 12 | 21 | 28 | 32 | 34 | 34 | 35 | 35 | 37 | 40 | 42 | 43 | 43 |
| 25-Aug | Th | | 39 | 32 | 20 | 5 | -11 | -26 | -37 | -41 | -38 | -29 | -15 | 1 | 16 | 29 | 38 | 41 | 41 | 37 | 34 | 31 | 31 | 34 | 38 | 43 |
| 26-Aug | F | | 46 | 45 | 38 | 25 | 7 | -14 | -32 | -46 | -51 | -46 | -33 | -14 | 6 | 25 | 39 | 47 | 47 | 42 | 34 | 27 | 22 | 23 | 28 | 37 |
| 27-Aug | Sa | | 46 | 52 | 53 | 45 | 29 | 6 | -18 | -40 | -54 | -58 | -49 | -31 | -8 | 16 | 37 | 50 | 53 | 48 | 37 | 25 | 15 | 10 | 13 | 24 |
| 28-Aug | Su | | 37 | 51 | 61 | 61 | 51 | 30 | 4 | -24 | -47 | -60 | -59 | -45 | -22 | 4 | 30 | 49 | 58 | 55 | 43 | 27 | 10 | -1 | -3 | 5 |
| 29-Aug | M | New Moon | 21 | 40 | 57 | 68 | 67 | 53 | 29 | 0 | -29 | -50 | -59 | -53 | -34 | -7 | 21 | 45 | 60 | 61 | 50 | 32 | 11 | -7 | -17 | -15 |
| 30-Aug | Tu | | -1 | 20 | 43 | 62 | 72 | 68 | 51 | 25 | -4 | -31 | -48 | -51 | -39 | -16 | 12 | 39 | 58 | 65 | 58 | 40 | 17 | -7 | -25 | -31 |
| 31-Aug | W | | -23 | -4 | 20 | 44 | 63 | 71 | 64 | 46 | 21 | -6 | -28 | -39 | -35 | -18 | 6 | 33 | 55 | 67 | 66 | 50 | 27 | 0 | -24 | -39 |

* Note that tide levels in the calendar are astronomical tide levels. During an intense low pressure system's approaching, tide levels can be higher by a few to tens centimeters than the values in the calendar.

Hourly Astronomical Tide Level at Kashima-ko, Ibaraki Pref. in 2011 (unit: centimeter) Issued by JMA

| Date | Moon | Time | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|------|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|-----|-----|-----|-----|
| | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
| 1-Sep | Th | -40 | -28 | -6 | 19 | 43 | 60 | 64 | 56 | 39 | 17 | -5 | -21 | -24 | -15 | 5 | 28 | 51 | 67 | 70 | 60 | 39 | 13 | -15 | -36 | |
| 2-Sep | F | -47 | -44 | -29 | -7 | 17 | 38 | 51 | 54 | 46 | 31 | 14 | -1 | -9 | -6 | 7 | 26 | 47 | 64 | 72 | 68 | 52 | 28 | 1 | -24 | |
| 3-Sep | Sa | -42 | -49 | -43 | -28 | -8 | 12 | 30 | 40 | 42 | 36 | 26 | 15 | 6 | 5 | 12 | 26 | 43 | 58 | 69 | 70 | 60 | 42 | 18 | -7 | |
| 4-Sep | Su | -28 | -42 | -45 | -40 | -27 | -11 | 6 | 20 | 28 | 30 | 28 | 23 | 18 | 16 | 19 | 27 | 39 | 52 | 62 | 67 | 63 | 52 | 34 | 13 | |
| 5-Sep | M | First Quarter | -8 | -25 | -36 | -39 | -36 | -27 | -15 | -2 | 9 | 18 | 22 | 25 | 25 | 25 | 26 | 30 | 37 | 45 | 53 | 59 | 60 | 55 | 44 | 30 |
| 6-Sep | Tu | | 13 | -3 | -18 | -28 | -34 | -33 | -29 | -20 | -9 | 1 | 11 | 20 | 26 | 30 | 32 | 34 | 36 | 39 | 43 | 47 | 50 | 50 | 47 | 40 |
| 7-Sep | W | | 31 | 18 | 4 | -10 | -22 | -31 | -34 | -32 | -25 | -15 | -2 | 11 | 23 | 32 | 37 | 39 | 38 | 36 | 35 | 35 | 37 | 40 | 42 | 43 |
| 8-Sep | Th | | 41 | 35 | 25 | 11 | -5 | -19 | -31 | -37 | -36 | -28 | -15 | 1 | 17 | 31 | 41 | 44 | 41 | 36 | 29 | 24 | 23 | 26 | 32 | 38 |
| 9-Sep | F | | 44 | 46 | 42 | 32 | 16 | -3 | -21 | -34 | -40 | -37 | -27 | -10 | 9 | 28 | 42 | 48 | 47 | 39 | 28 | 18 | 11 | 11 | 17 | 27 |
| 10-Sep | Sa | | 39 | 48 | 52 | 48 | 35 | 16 | -5 | -25 | -38 | -41 | -35 | -20 | 0 | 22 | 40 | 51 | 52 | 44 | 31 | 16 | 3 | -2 | 1 | 12 |
| 11-Sep | Su | | 28 | 43 | 55 | 58 | 50 | 34 | 12 | -10 | -29 | -40 | -39 | -27 | -7 | 15 | 37 | 51 | 56 | 50 | 36 | 18 | 0 | -11 | -13 | -4 |
| 12-Sep | M | Full Moon | 13 | 32 | 50 | 60 | 60 | 49 | 29 | 6 | -16 | -32 | -37 | -30 | -13 | 9 | 32 | 50 | 59 | 55 | 42 | 23 | 2 | -16 | -24 | -19 |
| 13-Sep | Tu | | -4 | 17 | 38 | 56 | 63 | 59 | 43 | 22 | -1 | -20 | -31 | -29 | -16 | 4 | 27 | 47 | 59 | 60 | 49 | 29 | 6 | -15 | -29 | -31 |
| 14-Sep | W | | -20 | 0 | 23 | 45 | 59 | 62 | 53 | 35 | 14 | -6 | -21 | -25 | -16 | 1 | 23 | 43 | 58 | 63 | 55 | 37 | 14 | -10 | -29 | -38 |
| 15-Sep | Th | | -33 | -17 | 6 | 29 | 49 | 59 | 57 | 45 | 27 | 7 | -9 | -17 | -13 | 0 | 19 | 39 | 56 | 64 | 60 | 45 | 22 | -2 | -25 | -39 |
| 16-Sep | F | | -41 | -30 | -11 | 12 | 34 | 49 | 54 | 49 | 35 | 19 | 3 | -7 | -8 | 1 | 17 | 35 | 52 | 62 | 62 | 51 | 32 | 8 | -16 | -34 |
| 17-Sep | Sa | | -42 | -39 | -24 | -4 | 18 | 36 | 46 | 47 | 39 | 27 | 14 | 3 | -1 | 4 | 16 | 32 | 47 | 59 | 63 | 56 | 40 | 18 | -5 | -25 |
| 18-Sep | Su | | -38 | -41 | -33 | -18 | 1 | 20 | 34 | 40 | 39 | 31 | 21 | 13 | 7 | 9 | 16 | 29 | 43 | 54 | 60 | 57 | 46 | 28 | 7 | -13 |
| 19-Sep | M | | -29 | -37 | -36 | -27 | -13 | 3 | 18 | 29 | 33 | 31 | 26 | 20 | 15 | 15 | 19 | 28 | 39 | 49 | 55 | 56 | 49 | 36 | 19 | 1 |
| 20-Sep | Tu | Last Quarter | -16 | -28 | -33 | -32 | -24 | -12 | 2 | 14 | 22 | 26 | 26 | 25 | 23 | 22 | 24 | 29 | 36 | 43 | 49 | 51 | 49 | 41 | 29 | 15 |
| 21-Sep | W | | 0 | -14 | -24 | -29 | -29 | -24 | -14 | -3 | 8 | 16 | 23 | 26 | 28 | 29 | 30 | 31 | 34 | 38 | 42 | 44 | 45 | 42 | 36 | 27 |
| 22-Sep | Th | | 16 | 4 | -9 | -20 | -27 | -30 | -27 | -20 | -9 | 3 | 14 | 24 | 31 | 35 | 36 | 36 | 35 | 34 | 34 | 35 | 36 | 37 | 37 | 35 |
| 23-Sep | F | | 31 | 23 | 11 | -3 | -17 | -28 | -34 | -33 | -26 | -14 | 1 | 16 | 29 | 38 | 43 | 42 | 38 | 32 | 27 | 24 | 24 | 27 | 32 | 37 |
| 24-Sep | Sa | | 40 | 39 | 32 | 19 | 2 | -16 | -30 | -39 | -38 | -29 | -14 | 5 | 24 | 39 | 47 | 48 | 42 | 33 | 22 | 13 | 9 | 11 | 19 | 30 |
| 25-Sep | Su | | 41 | 49 | 50 | 42 | 25 | 4 | -17 | -34 | -42 | -40 | -27 | -7 | 15 | 36 | 50 | 54 | 49 | 37 | 20 | 5 | -6 | -8 | -1 | 13 |
| 26-Sep | M | | 31 | 47 | 58 | 59 | 49 | 29 | 5 | -18 | -35 | -42 | -35 | -18 | 6 | 30 | 49 | 59 | 57 | 44 | 24 | 3 | -16 | -26 | -24 | -10 |
| 27-Sep | Tu | New Moon | 11 | 34 | 54 | 66 | 66 | 53 | 31 | 5 | -18 | -33 | -35 | -23 | -2 | 23 | 46 | 62 | 64 | 54 | 33 | 7 | -18 | -37 | -43 | -35 |
| 28-Sep | W | | -16 | 10 | 37 | 59 | 70 | 67 | 52 | 29 | 5 | -16 | -26 | -22 | -6 | 17 | 41 | 61 | 70 | 64 | 45 | 18 | -12 | -38 | -54 | -55 |
| 29-Sep | Th | | -42 | -17 | 12 | 40 | 61 | 69 | 64 | 48 | 27 | 5 | -10 | -14 | -5 | 14 | 37 | 58 | 72 | 72 | 58 | 33 | 2 | -29 | -53 | -65 |
| 30-Sep | F | | -60 | -42 | -16 | 13 | 40 | 57 | 63 | 56 | 42 | 24 | 8 | -2 | 1 | 14 | 33 | 53 | 69 | 76 | 68 | 48 | 19 | -12 | -41 | -61 |

* Note that tide levels in the calendar are astronomical tide levels. During an intense low pressure system's approaching, tide levels can be higher by a few to tens centimeters than the values in the calendar.

Hourly Astronomical Tide Level at Kashima-ko, Ibaraki Pref. in 2011 (unit: centimeter) Issued by JMA

| Date | Moon | Time | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|------|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|
| | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
| 1-Oct | Sa | -67 | -58 | -39 | -13 | 14 | 36 | 50 | 53 | 47 | 36 | 23 | 12 | 9 | 16 | 30 | 48 | 64 | 74 | 73 | 60 | 37 | 8 | -21 | -46 | |
| 2-Oct | Su | -60 | -62 | -52 | -33 | -10 | 12 | 30 | 41 | 43 | 39 | 31 | 23 | 18 | 20 | 29 | 42 | 56 | 67 | 71 | 65 | 49 | 27 | 1 | -24 | |
| 3-Oct | M | -43 | -53 | -52 | -43 | -27 | -9 | 9 | 23 | 31 | 34 | 33 | 29 | 25 | 24 | 28 | 37 | 47 | 57 | 63 | 63 | 55 | 39 | 20 | -1 | |
| 4-Oct | Tu | First Quarter | -20 | -34 | -41 | -41 | -34 | -23 | -9 | 5 | 16 | 24 | 29 | 31 | 30 | 29 | 30 | 33 | 39 | 45 | 51 | 53 | 51 | 44 | 32 | 18 |
| 5-Oct | W | | 3 | -12 | -23 | -30 | -31 | -28 | -20 | -10 | 2 | 13 | 22 | 29 | 33 | 34 | 33 | 32 | 33 | 34 | 37 | 39 | 41 | 40 | 36 | 30 |
| 6-Oct | Th | | 21 | 10 | -2 | -13 | -21 | -25 | -24 | -19 | -10 | 1 | 14 | 25 | 33 | 38 | 38 | 35 | 31 | 26 | 24 | 24 | 26 | 29 | 32 | 33 |
| 7-Oct | F | | 32 | 27 | 18 | 7 | -5 | -16 | -22 | -23 | -18 | -8 | 5 | 19 | 32 | 40 | 43 | 40 | 33 | 23 | 15 | 10 | 10 | 14 | 21 | 29 |
| 8-Oct | Sa | | 35 | 38 | 34 | 25 | 12 | -2 | -14 | -22 | -22 | -16 | -3 | 12 | 28 | 41 | 47 | 46 | 38 | 25 | 11 | 0 | -5 | -3 | 6 | 18 |
| 9-Oct | Su | | 31 | 41 | 45 | 41 | 30 | 14 | -2 | -15 | -22 | -20 | -10 | 6 | 24 | 40 | 50 | 52 | 44 | 30 | 12 | -5 | -16 | -19 | -11 | 3 |
| 10-Oct | M | | 20 | 37 | 48 | 51 | 44 | 31 | 13 | -4 | -16 | -20 | -13 | 1 | 19 | 37 | 51 | 56 | 51 | 36 | 16 | -5 | -23 | -31 | -28 | -15 |
| 11-Oct | Tu | | 5 | 27 | 45 | 55 | 55 | 45 | 28 | 10 | -6 | -15 | -14 | -3 | 14 | 33 | 50 | 59 | 57 | 44 | 23 | -1 | -23 | -38 | -41 | -31 |
| 12-Oct | W | Full Moon | -12 | 12 | 35 | 52 | 59 | 54 | 41 | 24 | 6 | -7 | -11 | -5 | 10 | 29 | 47 | 59 | 61 | 51 | 32 | 7 | -19 | -40 | -50 | -46 |
| 13-Oct | Th | | -29 | -6 | 20 | 43 | 57 | 59 | 51 | 36 | 18 | 3 | -6 | -4 | 7 | 24 | 43 | 57 | 63 | 58 | 41 | 16 | -11 | -36 | -52 | -55 |
| 14-Oct | F | | -44 | -23 | 4 | 29 | 49 | 58 | 55 | 44 | 29 | 14 | 2 | 0 | 7 | 21 | 38 | 54 | 63 | 62 | 49 | 27 | 0 | -27 | -48 | -58 |
| 15-Oct | Sa | | -53 | -37 | -13 | 13 | 36 | 51 | 55 | 49 | 37 | 23 | 11 | 5 | 8 | 18 | 34 | 49 | 61 | 64 | 55 | 37 | 12 | -15 | -39 | -54 |
| 16-Oct | Su | | -57 | -47 | -28 | -4 | 20 | 39 | 49 | 49 | 42 | 31 | 19 | 11 | 10 | 17 | 30 | 44 | 56 | 62 | 59 | 45 | 24 | -1 | -26 | -45 |
| 17-Oct | M | | -54 | -52 | -38 | -19 | 4 | 24 | 39 | 44 | 42 | 35 | 26 | 18 | 15 | 18 | 27 | 39 | 50 | 58 | 58 | 50 | 33 | 12 | -11 | -31 |
| 18-Oct | Tu | | -45 | -49 | -44 | -30 | -11 | 8 | 25 | 35 | 39 | 37 | 31 | 25 | 21 | 21 | 25 | 34 | 43 | 51 | 54 | 51 | 40 | 24 | 4 | -15 |
| 19-Oct | W | | -31 | -41 | -43 | -36 | -24 | -8 | 9 | 22 | 31 | 35 | 34 | 31 | 27 | 25 | 26 | 31 | 37 | 43 | 47 | 47 | 42 | 32 | 18 | 2 |
| 20-Oct | Th | Last Quarter | -13 | -26 | -34 | -35 | -31 | -20 | -7 | 7 | 20 | 28 | 33 | 34 | 33 | 31 | 29 | 29 | 31 | 34 | 37 | 39 | 38 | 34 | 27 | 17 |
| 21-Oct | F | | 6 | -7 | -18 | -26 | -30 | -27 | -20 | -8 | 6 | 18 | 28 | 35 | 38 | 37 | 34 | 30 | 26 | 24 | 24 | 25 | 28 | 30 | 30 | 28 |
| 22-Oct | Sa | | 23 | 14 | 3 | -9 | -20 | -26 | -26 | -20 | -8 | 6 | 21 | 33 | 41 | 43 | 40 | 33 | 25 | 17 | 11 | 9 | 11 | 17 | 24 | 30 |
| 23-Oct | Su | | 34 | 32 | 25 | 13 | -1 | -14 | -23 | -25 | -18 | -5 | 11 | 27 | 41 | 48 | 47 | 40 | 27 | 13 | 0 | -9 | -10 | -4 | 8 | 21 |
| 24-Oct | M | | 34 | 43 | 44 | 36 | 22 | 6 | -10 | -20 | -22 | -13 | 2 | 20 | 38 | 50 | 55 | 49 | 34 | 15 | -5 | -22 | -30 | -28 | -16 | 2 |
| 25-Oct | Tu | | 22 | 41 | 52 | 54 | 45 | 29 | 10 | -6 | -16 | -15 | -4 | 14 | 33 | 51 | 60 | 58 | 45 | 23 | -2 | -27 | -44 | -50 | -43 | -25 |
| 26-Oct | W | | 0 | 26 | 48 | 60 | 61 | 50 | 33 | 14 | -2 | -10 | -5 | 9 | 29 | 48 | 63 | 67 | 58 | 37 | 8 | -22 | -48 | -64 | -65 | -52 |
| 27-Oct | Th | New Moon | -28 | 1 | 30 | 53 | 65 | 63 | 52 | 34 | 16 | 2 | -1 | 8 | 24 | 44 | 62 | 72 | 69 | 53 | 25 | -8 | -40 | -65 | -77 | -73 |
| 28-Oct | F | | -55 | -27 | 4 | 34 | 55 | 64 | 61 | 49 | 33 | 17 | 8 | 10 | 21 | 39 | 57 | 71 | 76 | 66 | 44 | 12 | -22 | -53 | -75 | -82 |
| 29-Oct | Sa | | -73 | -51 | -22 | 8 | 35 | 53 | 60 | 55 | 45 | 31 | 19 | 14 | 20 | 34 | 51 | 66 | 76 | 74 | 59 | 33 | 1 | -32 | -60 | -77 |
| 30-Oct | Su | | -78 | -66 | -44 | -16 | 12 | 35 | 49 | 53 | 48 | 39 | 28 | 21 | 20 | 29 | 42 | 57 | 69 | 74 | 67 | 49 | 22 | -8 | -37 | -59 |
| 31-Oct | M | | -71 | -69 | -55 | -34 | -9 | 14 | 33 | 43 | 45 | 42 | 34 | 27 | 23 | 25 | 34 | 46 | 58 | 66 | 66 | 56 | 38 | 13 | -12 | -36 |

* Note that tide levels in the calendar are astronomical tide levels. During an intense low pressure system's approaching, tide levels can be higher by a few to tens centimeters than the values in the calendar.

Hourly Astronomical Tide Level at Kashima-ko, Ibaraki Pref. in 2011 (unit: centimeter) Issued by JMA

| Date | Moon | Time | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|------|---------------|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|
| | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
| 1-Nov | Tu | -53 | -59 | -55 | -42 | -24 | -3 | 16 | 30 | 38 | 40 | 37 | 31 | 26 | 25 | 28 | 36 | 45 | 53 | 57 | 55 | 45 | 28 | 8 | -12 | |
| 2-Nov | W | -30 | -42 | -45 | -41 | -30 | -15 | 2 | 17 | 28 | 34 | 36 | 35 | 30 | 26 | 25 | 27 | 32 | 38 | 43 | 45 | 42 | 34 | 22 | 7 | |
| 3-Nov | Th | First Quarter | -8 | -21 | -29 | -32 | -28 | -20 | -8 | 6 | 18 | 28 | 34 | 36 | 35 | 31 | 26 | 23 | 22 | 24 | 27 | 30 | 32 | 31 | 27 | 19 |
| 4-Nov | F | | 10 | -1 | -10 | -17 | -20 | -18 | -12 | -2 | 10 | 21 | 31 | 37 | 38 | 36 | 30 | 23 | 17 | 13 | 11 | 13 | 17 | 21 | 23 | 24 |
| 5-Nov | Sa | | 21 | 16 | 8 | 0 | -7 | -12 | -11 | -6 | 3 | 15 | 26 | 36 | 41 | 42 | 37 | 28 | 17 | 6 | -1 | -3 | -1 | 5 | 13 | 21 |
| 6-Nov | Su | | 26 | 27 | 24 | 17 | 8 | -1 | -6 | -6 | -1 | 9 | 21 | 33 | 42 | 46 | 44 | 35 | 21 | 5 | -8 | -17 | -18 | -13 | -2 | 11 |
| 7-Nov | M | | 23 | 32 | 35 | 31 | 23 | 13 | 3 | -3 | -2 | 5 | 16 | 29 | 41 | 49 | 50 | 42 | 28 | 9 | -10 | -25 | -32 | -30 | -20 | -4 |
| 8-Nov | Tu | | 14 | 30 | 40 | 42 | 37 | 27 | 15 | 5 | 0 | 2 | 11 | 24 | 38 | 50 | 54 | 50 | 37 | 16 | -6 | -27 | -42 | -45 | -37 | -21 |
| 9-Nov | W | | 0 | 21 | 38 | 47 | 47 | 40 | 28 | 15 | 6 | 3 | 8 | 20 | 34 | 48 | 56 | 56 | 46 | 26 | 1 | -24 | -45 | -55 | -53 | -39 |
| 10-Nov | Th | | -17 | 8 | 31 | 46 | 53 | 49 | 39 | 26 | 14 | 6 | 7 | 16 | 29 | 44 | 56 | 60 | 54 | 36 | 12 | -16 | -41 | -59 | -63 | -54 |
| 11-Nov | F | Full Moon | -35 | -9 | 18 | 39 | 52 | 54 | 48 | 36 | 23 | 12 | 8 | 13 | 25 | 39 | 53 | 61 | 60 | 47 | 24 | -4 | -33 | -56 | -67 | -65 |
| 12-Nov | Sa | | -50 | -26 | 2 | 27 | 46 | 55 | 53 | 44 | 31 | 19 | 12 | 12 | 21 | 34 | 49 | 60 | 63 | 55 | 36 | 9 | -20 | -46 | -65 | -70 |
| 13-Nov | Su | | -62 | -42 | -15 | 12 | 35 | 50 | 53 | 49 | 38 | 26 | 17 | 13 | 18 | 29 | 43 | 55 | 62 | 60 | 46 | 23 | -5 | -33 | -56 | -68 |
| 14-Nov | M | | -67 | -54 | -31 | -4 | 21 | 40 | 50 | 50 | 43 | 33 | 23 | 16 | 17 | 24 | 36 | 49 | 58 | 61 | 53 | 35 | 11 | -17 | -42 | -59 |
| 15-Nov | Tu | | -66 | -60 | -43 | -20 | 5 | 27 | 42 | 48 | 46 | 38 | 29 | 21 | 18 | 21 | 30 | 41 | 52 | 57 | 55 | 43 | 24 | 0 | -24 | -45 |
| 16-Nov | W | | -58 | -60 | -50 | -33 | -11 | 12 | 30 | 41 | 45 | 41 | 34 | 26 | 21 | 20 | 24 | 33 | 42 | 49 | 51 | 46 | 34 | 15 | -6 | -27 |
| 17-Nov | Th | | -43 | -51 | -50 | -40 | -23 | -3 | 17 | 32 | 40 | 42 | 39 | 32 | 25 | 21 | 21 | 25 | 31 | 38 | 43 | 43 | 37 | 26 | 10 | -7 |
| 18-Nov | F | | -24 | -36 | -42 | -40 | -30 | -15 | 3 | 20 | 33 | 40 | 41 | 37 | 31 | 24 | 20 | 18 | 20 | 24 | 28 | 32 | 33 | 29 | 21 | 10 |
| 19-Nov | Sa | Last Quarter | -3 | -16 | -26 | -30 | -29 | -21 | -7 | 8 | 23 | 35 | 41 | 42 | 38 | 30 | 22 | 14 | 10 | 8 | 10 | 15 | 20 | 23 | 24 | 22 |
| 20-Nov | Su | | 15 | 6 | -4 | -13 | -19 | -19 | -12 | -1 | 14 | 28 | 39 | 44 | 44 | 38 | 27 | 15 | 4 | -4 | -8 | -7 | -1 | 8 | 16 | 23 |
| 21-Nov | M | | 26 | 24 | 18 | 9 | -1 | -8 | -9 | -4 | 7 | 20 | 34 | 44 | 49 | 46 | 37 | 22 | 5 | -12 | -23 | -29 | -26 | -16 | -2 | 13 |
| 22-Nov | Tu | | 26 | 34 | 35 | 30 | 20 | 10 | 1 | -1 | 4 | 15 | 29 | 42 | 52 | 54 | 48 | 33 | 13 | -10 | -31 | -45 | -49 | -43 | -28 | -8 |
| 23-Nov | W | | 13 | 32 | 43 | 46 | 40 | 30 | 18 | 9 | 6 | 12 | 24 | 38 | 52 | 60 | 59 | 48 | 27 | 1 | -27 | -50 | -64 | -66 | -55 | -35 |
| 24-Nov | Th | | -9 | 17 | 38 | 51 | 53 | 47 | 35 | 23 | 14 | 13 | 20 | 33 | 48 | 61 | 67 | 62 | 45 | 18 | -13 | -43 | -67 | -80 | -77 | -62 |
| 25-Nov | F | New Moon | -37 | -7 | 22 | 44 | 56 | 57 | 49 | 37 | 25 | 17 | 18 | 28 | 42 | 58 | 69 | 71 | 61 | 39 | 8 | -26 | -57 | -79 | -88 | -81 |
| 26-Nov | Sa | | -61 | -33 | -2 | 27 | 47 | 57 | 56 | 48 | 36 | 24 | 19 | 23 | 35 | 50 | 64 | 73 | 71 | 57 | 31 | -2 | -36 | -66 | -85 | -89 |
| 27-Nov | Su | | -78 | -55 | -26 | 5 | 31 | 49 | 56 | 53 | 44 | 32 | 22 | 20 | 27 | 40 | 55 | 68 | 73 | 67 | 49 | 22 | -11 | -43 | -69 | -83 |
| 28-Nov | M | | -83 | -68 | -44 | -16 | 12 | 35 | 48 | 52 | 47 | 38 | 27 | 20 | 21 | 29 | 43 | 56 | 67 | 69 | 60 | 40 | 12 | -18 | -46 | -67 |
| 29-Nov | Tu | | -76 | -71 | -54 | -31 | -5 | 19 | 37 | 46 | 47 | 41 | 32 | 22 | 18 | 20 | 30 | 42 | 54 | 61 | 60 | 49 | 29 | 4 | -22 | -45 |
| 30-Nov | W | | -60 | -63 | -55 | -38 | -17 | 6 | 25 | 39 | 44 | 42 | 35 | 26 | 18 | 15 | 19 | 28 | 38 | 47 | 52 | 49 | 37 | 19 | -2 | -23 |

* Note that tide levels in the calendar are astronomical tide levels. During an intense low pressure system's approaching, tide levels can be higher by a few to tens centimeters than the values in the calendar.

Hourly Astronomical Tide Level at Kashima-ko, Ibaraki Pref. in 2011 (unit: centimeter) Issued by JMA

| Date | Moon | Time | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|------|---------------|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
| 1-Dec | Th | | -40 | -49 | -48 | -38 | -22 | -3 | 16 | 31 | 40 | 42 | 38 | 31 | 22 | 15 | 12 | 15 | 22 | 31 | 37 | 40 | 36 | 26 | 12 | -4 |
| 2-Dec | F | First Quarter | -19 | -31 | -35 | -32 | -22 | -8 | 8 | 24 | 35 | 41 | 40 | 35 | 27 | 18 | 11 | 8 | 9 | 14 | 20 | 25 | 27 | 25 | 18 | 8 |
| 3-Dec | Sa | | -2 | -12 | -19 | -21 | -17 | -8 | 4 | 18 | 30 | 38 | 41 | 40 | 33 | 24 | 14 | 6 | 1 | 0 | 2 | 7 | 12 | 16 | 17 | 14 |
| 4-Dec | Su | | 10 | 3 | -3 | -7 | -8 | -4 | 3 | 13 | 24 | 34 | 41 | 43 | 40 | 32 | 21 | 9 | -2 | -10 | -13 | -11 | -6 | 1 | 8 | 13 |
| 5-Dec | M | | 16 | 15 | 12 | 8 | 4 | 3 | 5 | 11 | 20 | 29 | 38 | 43 | 44 | 40 | 30 | 16 | 1 | -13 | -23 | -27 | -24 | -16 | -5 | 6 |
| 6-Dec | Tu | | 15 | 21 | 23 | 21 | 17 | 12 | 10 | 11 | 16 | 24 | 34 | 42 | 46 | 46 | 39 | 25 | 8 | -11 | -27 | -38 | -40 | -34 | -22 | -7 |
| 7-Dec | W | | 9 | 22 | 30 | 32 | 29 | 24 | 18 | 14 | 15 | 20 | 28 | 38 | 46 | 50 | 47 | 36 | 18 | -4 | -25 | -43 | -52 | -51 | -41 | -24 |
| 8-Dec | Th | | -4 | 15 | 30 | 38 | 39 | 34 | 27 | 20 | 16 | 17 | 23 | 33 | 43 | 51 | 52 | 46 | 30 | 8 | -17 | -41 | -57 | -63 | -57 | -41 |
| 9-Dec | F | | -20 | 4 | 25 | 39 | 45 | 43 | 36 | 27 | 19 | 16 | 19 | 28 | 39 | 49 | 55 | 54 | 42 | 21 | -5 | -33 | -56 | -69 | -70 | -58 |
| 10-Dec | Sa | Full Moon | -37 | -11 | 14 | 34 | 46 | 48 | 43 | 34 | 24 | 17 | 16 | 22 | 33 | 45 | 55 | 59 | 52 | 35 | 9 | -20 | -47 | -68 | -76 | -71 |
| 11-Dec | Su | | -54 | -29 | -1 | 24 | 42 | 50 | 48 | 41 | 30 | 20 | 15 | 17 | 26 | 39 | 52 | 60 | 59 | 47 | 25 | -3 | -33 | -59 | -76 | -78 |
| 12-Dec | M | | -67 | -45 | -18 | 10 | 33 | 47 | 51 | 46 | 36 | 25 | 16 | 14 | 20 | 31 | 45 | 56 | 61 | 56 | 39 | 14 | -16 | -45 | -67 | -78 |
| 13-Dec | Tu | | -75 | -59 | -34 | -5 | 21 | 40 | 50 | 49 | 41 | 30 | 19 | 13 | 14 | 23 | 36 | 49 | 58 | 59 | 50 | 30 | 3 | -26 | -53 | -70 |
| 14-Dec | W | | -75 | -67 | -47 | -21 | 6 | 30 | 45 | 50 | 46 | 36 | 24 | 15 | 11 | 15 | 25 | 38 | 50 | 56 | 54 | 41 | 20 | -7 | -33 | -55 |
| 15-Dec | Th | | -67 | -67 | -54 | -33 | -8 | 17 | 37 | 47 | 48 | 41 | 30 | 18 | 10 | 9 | 14 | 25 | 37 | 46 | 50 | 45 | 32 | 11 | -13 | -35 |
| 16-Dec | F | | -52 | -59 | -54 | -40 | -18 | 5 | 27 | 42 | 48 | 45 | 36 | 24 | 13 | 6 | 5 | 11 | 20 | 30 | 38 | 40 | 35 | 23 | 6 | -14 |
| 17-Dec | Sa | | -31 | -43 | -45 | -39 | -24 | -4 | 17 | 34 | 45 | 47 | 41 | 30 | 18 | 7 | 0 | -1 | 3 | 11 | 20 | 27 | 29 | 26 | 17 | 4 |
| 18-Dec | Su | Last Quarter | -9 | -22 | -29 | -29 | -22 | -8 | 9 | 26 | 40 | 46 | 45 | 38 | 26 | 12 | 0 | -8 | -11 | -9 | -2 | 6 | 13 | 18 | 19 | 15 |
| 19-Dec | M | | 8 | -1 | -9 | -13 | -13 | -6 | 6 | 20 | 34 | 44 | 48 | 45 | 35 | 22 | 6 | -8 | -19 | -24 | -24 | -19 | -10 | 1 | 9 | 15 |
| 20-Dec | Tu | | 18 | 16 | 11 | 6 | 2 | 2 | 7 | 17 | 29 | 40 | 48 | 50 | 45 | 34 | 18 | 0 | -18 | -32 | -41 | -41 | -35 | -24 | -10 | 4 |
| 21-Dec | W | | 16 | 23 | 26 | 24 | 19 | 15 | 14 | 17 | 25 | 35 | 45 | 51 | 53 | 47 | 34 | 15 | -7 | -29 | -47 | -57 | -58 | -50 | -35 | -16 |
| 22-Dec | Th | | 3 | 20 | 31 | 36 | 34 | 29 | 24 | 21 | 22 | 29 | 39 | 49 | 56 | 57 | 49 | 34 | 11 | -16 | -41 | -61 | -72 | -72 | -61 | -41 |
| 23-Dec | F | | -18 | 6 | 27 | 39 | 44 | 41 | 35 | 27 | 23 | 24 | 31 | 42 | 53 | 60 | 61 | 52 | 32 | 6 | -24 | -53 | -74 | -83 | -80 | -65 |
| 24-Dec | Sa | | -42 | -14 | 13 | 34 | 46 | 49 | 44 | 35 | 26 | 21 | 24 | 32 | 45 | 57 | 65 | 64 | 52 | 29 | -1 | -33 | -62 | -82 | -89 | -82 |
| 25-Dec | Su | New Moon | -63 | -36 | -6 | 21 | 40 | 50 | 49 | 42 | 31 | 21 | 18 | 22 | 33 | 48 | 61 | 68 | 64 | 49 | 23 | -9 | -42 | -69 | -86 | -89 |
| 26-Dec | M | | -77 | -54 | -25 | 4 | 29 | 45 | 50 | 46 | 36 | 24 | 15 | 13 | 21 | 34 | 50 | 62 | 67 | 61 | 43 | 15 | -17 | -48 | -72 | -84 |
| 27-Dec | Tu | | -81 | -65 | -40 | -12 | 16 | 37 | 48 | 48 | 40 | 28 | 15 | 8 | 10 | 20 | 35 | 50 | 61 | 63 | 54 | 33 | 5 | -25 | -52 | -71 |
| 28-Dec | W | | -76 | -68 | -49 | -23 | 4 | 27 | 42 | 47 | 43 | 32 | 19 | 7 | 2 | 7 | 19 | 34 | 48 | 56 | 55 | 43 | 22 | -4 | -30 | -52 |
| 29-Dec | Th | | -64 | -63 | -50 | -30 | -5 | 18 | 36 | 45 | 45 | 36 | 23 | 10 | 0 | -2 | 5 | 17 | 31 | 43 | 48 | 44 | 31 | 11 | -12 | -32 |
| 30-Dec | F | | -47 | -52 | -46 | -31 | -10 | 11 | 30 | 42 | 45 | 40 | 29 | 15 | 2 | -5 | -5 | 2 | 14 | 25 | 34 | 37 | 32 | 19 | 2 | -15 |
| 31-Dec | Sa | | -30 | -38 | -37 | -28 | -12 | 7 | 25 | 39 | 45 | 44 | 35 | 23 | 9 | -3 | -9 | -8 | -2 | 7 | 16 | 23 | 24 | 19 | 9 | -3 |

* Note that tide levels in the calendar are astronomical tide levels. During an intense low pressure system's approaching, tide levels can be higher by a few to tens centimeters than the values in the calendar.