

PORT IRENE, STA. ANA, CAGAYAN

LAT 18° 23'N LONG 122° 06'E

TIMES AND HEIGHTS OF HIGH AND LOW WATERS

| January | | | | February | | | | March | | | | April | | | |
|------------------|--|------------------|--|------------------|--|------------------|---|------------------|--|------------------|---|------------------|---|------------------|--|
| Time | Ht. | Time | Ht. | Time | Ht. | Time | Ht. | Time | Ht. | Time | Ht. | Time | Ht. | Time | Ht. |
| h. min. | m. | h. min. | m. | h. min. | m. | h. min. | m. | h. min. | m. | h. min. | m. | h. min. | m. | h. min. | m. |
| 1 SUN | 01 04 0.56 06 53 0.18 13 31 0.73 20 14 0.05 | 16 MON | 05 24 0.14 11 53 0.68 18 28 0.09 | 1 WED | 04 00 0.46 08 51 0.29 15 18 0.71 22 12 -0.08 | 16 THU | 02 27 0.47 07 03 0.32 13 52 0.78 21 17 -0.07 | 1 WED | 01 08 0.39 04 19 0.37 12 57 0.64 20 42 0.12 | 16 THU | 04 31 0.37 11 28 0.81 19 20 0.11 | 1 SAT | 03 42 0.65 09 06 0.43 15 15 0.84 21 49 0.12 | 16 SUN | 03 00 0.83 08 35 0.35 14 51 1.03 21 23 0.09 |
| 2 MON | 02 35 0.54 08 03 0.21 14 33 0.76 21 19 -0.05 | 17 TUE | 00 46 0.53 06 32 0.19 13 01 0.71 19 57 0.00 | 2 THU | 04 48 0.53 10 00 0.23 16 15 0.79 22 55 -0.17 | 17 FRI | 04 00 0.57 08 53 0.28 15 21 0.90 22 22 -0.21 | 2 THU | 04 03 0.46 08 25 0.40 14 54 0.70 21 51 0.03 | 17 FRI | 02 30 0.55 06 51 0.43 13 42 0.84 21 02 0.02 | 2 SUN | 04 10 0.76 09 51 0.34 16 01 0.94 22 24 0.06 | 17 MON | 03 40 0.97 09 32 0.20 15 48 1.13 22 05 0.05 |
| 3 TUE | 03 48 0.56 09 07 0.20 15 28 0.80 22 12 -0.14 | 18 WED | 02 28 0.53 07 49 0.21 14 15 0.77 21 18 -0.13 | 3 FRI | 05 22 0.60 10 44 0.18 16 58 0.86 23 32 -0.24 | 18 SAT | 04 51 0.69 10 04 0.18 16 23 1.05 23 11 -0.33 | 3 FRI | 04 34 0.56 09 45 0.33 15 55 0.80 22 33 -0.05 | 18 SAT | 03 42 0.67 08 49 0.34 15 10 0.98 22 00 -0.09 | 3 MON | 04 35 0.88 10 24 0.24 16 37 1.02 22 52 0.03 | 18 TUE | 04 15 1.10 10 18 0.05 16 36 1.19 22 42 0.04 |
| 4 WED | 04 41 0.60 10 00 0.17 16 17 0.84 22 57 -0.22 | 19 THU | 03 52 0.58 09 02 0.19 15 24 0.88 22 24 -0.27 | 4 SAT | 05 52 0.67 11 20 0.13 17 34 0.93 | 19 SUN | 05 31 0.81 10 58 0.07 17 15 1.18 23 53 -0.40 | 4 SAT | 04 59 0.66 10 27 0.25 16 37 0.91 23 06 -0.12 | 19 SUN | 04 23 0.82 09 52 0.20 16 09 1.12 22 43 -0.16 | 4 TUE | 04 58 0.98 10 54 0.15 17 08 1.08 23 17 0.01 | 19 WED | 04 49 1.20 11 01 -0.08 17 19 1.21 23 18 0.05 |
| 5 THU | 05 22 0.63 10 44 0.14 17 00 0.87 23 36 -0.28 | 20 FRI | 04 54 0.65 10 06 0.14 16 25 1.00 23 18 -0.39 | 5 SUN | 00 04 -0.28 06 19 0.73 11 51 0.09 18 06 0.98 | 20 MON | 06 08 0.92 11 45 -0.04 18 01 1.26 ● | 5 SUN | 05 24 0.76 11 00 0.18 17 12 0.99 23 36 -0.16 | 20 MON | 04 57 0.96 10 42 0.05 16 57 1.22 23 21 -0.20 | 5 WED | 05 21 1.08 11 23 0.05 17 36 1.12 23 41 0.00 | 20 THU | 05 23 1.27 11 42 -0.17 18 00 1.19 ● 23 51 0.08 |
| 6 FRI | 05 57 0.66 11 21 0.12 17 39 0.90 | 21 SAT | 05 43 0.72 11 01 0.07 17 20 1.11 | 6 MON | 00 33 -0.30 06 45 0.79 12 21 0.06 18 36 1.01 ○ | 21 TUE | 00 31 -0.41 06 43 1.01 12 29 -0.13 18 44 1.26 | 6 MON | 05 47 0.86 11 30 0.11 17 42 1.05 | 21 TUE | 05 31 1.08 11 25 -0.08 17 41 1.27 23 56 -0.20 | 6 THU | 05 43 1.15 11 52 -0.05 18 06 1.14 ○ | 21 FRI | 05 57 1.29 12 21 -0.21 18 39 1.13 |
| 7 SAT | 00 12 -0.31 06 30 0.68 11 55 0.10 18 13 0.92 ○ | 22 SUN | 00 07 -0.48 06 28 0.79 11 53 0.01 18 10 1.19 ● | 7 TUE | 01 00 -0.29 07 11 0.83 12 49 0.03 19 03 1.01 | 22 WED | 01 06 -0.37 07 17 1.06 13 12 -0.18 19 25 1.21 | 7 TUE | 00 02 -0.18 06 09 0.94 11 57 0.05 18 10 1.09 ○ | 22 WED | 06 03 1.17 12 06 -0.18 18 22 1.26 ● | 7 FRI | 00 05 0.00 06 07 1.21 12 23 -0.14 18 36 1.13 | 22 SAT | 00 22 0.13 06 29 1.26 12 59 -0.21 19 15 1.05 |
| 8 SUN | 00 46 -0.32 07 00 0.69 12 27 0.09 18 45 0.93 | 23 MON | 00 52 -0.51 07 10 0.84 12 42 -0.04 18 57 1.20 | 8 WED | 01 26 -0.27 07 35 0.87 13 18 0.01 19 30 1.00 | 23 THU | 01 39 -0.29 07 50 1.08 13 53 -0.19 20 04 1.09 | 8 WED | 00 26 -0.18 06 32 1.01 12 24 -0.01 18 37 1.10 | 23 THU | 00 29 -0.16 06 36 1.22 12 46 -0.23 19 01 1.20 | 8 SAT | 00 30 0.02 06 33 1.24 12 56 -0.20 19 09 1.10 | 23 SUN | 00 51 0.18 07 00 1.20 13 36 -0.16 19 49 0.95 |
| 9 MON | 01 18 -0.30 07 30 0.71 12 57 0.09 19 15 0.92 | 24 TUE | 01 34 -0.48 07 50 0.88 13 28 -0.07 19 42 1.16 | 9 THU | 01 51 -0.23 08 00 0.89 13 48 -0.01 19 57 0.96 | 24 FRI | 02 10 -0.17 08 22 1.05 14 33 -0.16 20 41 0.94 | 9 THU | 00 48 -0.16 06 54 1.06 12 53 -0.07 19 03 1.09 | 24 FRI | 01 00 -0.09 07 07 1.22 13 24 -0.24 19 38 1.09 | 9 SUN | 00 58 0.06 07 02 1.24 13 32 -0.22 19 45 1.02 | 24 MON | 01 18 0.24 07 30 1.13 14 12 -0.08 20 22 0.86 |
| 10 TUE | 01 49 -0.27 08 00 0.72 13 28 0.09 19 45 0.90 | 25 WED | 02 13 -0.39 08 28 0.89 14 14 -0.07 20 26 1.06 | 10 FRI | 02 15 -0.17 08 24 0.89 14 19 -0.03 20 25 0.91 | 25 SAT | 02 39 -0.05 08 53 0.99 15 14 -0.10 21 18 0.78 | 10 FRI | 01 12 -0.13 07 17 1.09 13 23 -0.12 19 32 1.05 | 25 SAT | 01 28 0.00 07 38 1.17 14 02 -0.20 20 12 0.96 | 10 MON | 01 27 0.11 07 33 1.20 14 12 -0.18 20 24 0.92 | 25 TUE | 01 42 0.29 08 00 1.04 14 50 0.03 20 57 0.77 |
| 11 WED | 02 19 -0.22 08 30 0.72 14 01 0.10 20 15 0.87 | 26 THU | 02 49 -0.27 09 06 0.88 15 00 -0.05 21 09 0.92 | 11 SAT | 02 40 -0.11 08 51 0.88 14 54 -0.03 20 58 0.83 | 26 SUN | 03 03 0.07 09 25 0.90 15 59 -0.01 21 57 0.62 | 11 SAT | 01 36 -0.09 07 42 1.09 13 54 -0.15 20 03 0.99 | 26 SUN | 01 54 0.09 08 06 1.09 14 39 -0.12 20 45 0.82 | 11 TUE | 01 58 0.19 08 08 1.14 14 57 -0.10 21 09 0.80 | 26 WED | 02 09 0.35 08 34 0.96 15 35 0.14 21 42 0.69 |
| 12 THU | 02 48 -0.16 09 02 0.72 14 37 0.11 20 46 0.82 | 27 FRI | 03 24 -0.13 09 43 0.84 15 50 -0.01 21 54 0.75 | 12 SUN | 03 07 -0.03 09 19 0.85 15 34 -0.02 21 37 0.73 | 27 MON | 03 27 0.18 10 01 0.80 16 57 0.09 22 49 0.48 ☾ | 12 SUN | 02 01 -0.03 08 08 1.07 14 30 -0.15 20 36 0.90 | 27 MON | 02 17 0.17 08 35 0.99 15 18 -0.01 21 20 0.69 | 12 WED | 02 33 0.28 08 50 1.06 15 53 0.02 22 11 0.69 | 27 THU | 02 41 0.42 09 18 0.88 16 39 0.25 22 55 0.64 |
| 13 FRI | 03 19 -0.09 09 35 0.71 15 18 0.12 21 24 0.75 | 28 SAT | 03 57 0.00 10 24 0.79 16 47 0.05 22 45 0.59 ☾ | 13 MON | 03 38 0.06 09 54 0.80 16 26 0.02 22 30 0.61 | 28 TUE | 03 48 0.27 10 54 0.70 18 37 0.15 | 13 MON | 02 28 0.05 08 37 1.02 15 10 -0.10 21 16 0.78 | 28 TUE | 02 37 0.25 09 06 0.89 16 06 0.11 22 03 0.58 | 13 THU | 03 17 0.39 09 48 0.96 17 13 0.14 ☾ | 28 FRI | 03 32 0.50 10 35 0.80 18 20 0.32 ☾ |
| 14 SAT | 03 53 -0.01 10 12 0.69 16 06 0.13 22 11 0.67 | 29 SUN | 04 34 0.13 11 14 0.73 18 00 0.09 | 14 TUE | 04 16 0.16 10 44 0.76 17 42 0.05 23 58 0.49 ☾ | 29 MON | 04 03 0.25 10 11 0.88 17 17 0.08 23 43 0.52 ☾ | 14 TUE | 02 57 0.14 09 12 0.95 16 01 -0.02 22 08 0.64 | 29 WED | 02 59 0.34 09 48 0.79 17 23 0.21 23 30 0.49 ☾ | 14 FRI | 00 03 0.63 04 39 0.48 11 29 0.89 19 04 0.18 | 29 SAT | 01 04 0.66 05 51 0.56 12 52 0.80 19 52 0.31 |
| 15 SUN | 04 33 0.07 10 57 0.68 17 09 0.12 23 16 0.59 ☾ | 30 MON | 00 01 0.46 05 24 0.23 12 25 0.67 19 39 0.08 | 15 WED | 05 16 0.26 12 03 0.73 19 33 0.04 | 30 THU | 05 03 0.25 11 19 0.71 19 38 0.24 | 15 WED | 03 33 0.25 10 01 0.88 17 17 0.08 23 43 0.52 ☾ | 30 THU | 03 30 0.43 11 19 0.71 19 38 0.24 | 15 SAT | 02 03 0.70 07 06 0.48 13 32 0.92 20 28 0.14 | 30 SUN | 02 23 0.76 08 08 0.50 14 20 0.86 20 49 0.28 |
| | | 31 TUE | 02 14 0.41 06 59 0.30 14 00 0.66 21 11 0.01 | | | | | 31 FRI | 02 51 0.53 07 11 0.50 14 03 0.73 21 02 0.18 | | | | | | |

TIME MERIDIAN 120 DEG. EAST. 0000 IS MIDNIGHT, 1200 IS NOON

HEIGHTS ARE IN METERS AND RECKONED FROM THE DATUM OF SOUNDINGS ON CHARTS OF THE LOCALITY WHICH IS MEAN LOWER LOW WATER