

Station: Kharagpur

Location: Longitude : 87.55 E Latitude : 22.83 N

| Date       | Moonrise | Moonset | Sunrise | Sunset |
|------------|----------|---------|---------|--------|
|            | h. m.    | h. m.   | h. m.   | h. m.  |
| 2017/12/27 | 12-21    | -----   | 6-18    | 17- 3  |
| 2017/12/28 | 13- 2    | 0-56    | 6-19    | 17- 4  |
| 2017/12/29 | 13-46    | 1-55    | 6-19    | 17- 4  |
| 2017/12/30 | 14-35    | 2-57    | 6-19    | 17- 5  |
| 2017/12/31 | 15-29    | 4- 2    | 6-20    | 17- 6  |
| 2018/ 1/ 1 | 16-29    | 5- 8    | 6-20    | 17- 6  |
| 2018/ 1/ 2 | 17-33    | 6-13    | 6-20    | 17- 7  |
| 2018/ 1/ 3 | 18-38    | 7-15    | 6-21    | 17- 8  |
| 2018/ 1/ 4 | 19-44    | 8-11    | 6-21    | 17- 8  |
| 2018/ 1/ 5 | 20-47    | 9- 3    | 6-21    | 17- 9  |
| 2018/ 1/ 6 | 21-47    | 9-49    | 6-21    | 17-10  |
| 2018/ 1/ 7 | 22-44    | 10-31   | 6-22    | 17-10  |
| 2018/ 1/ 8 | 23-39    | 11-11   | 6-22    | 17-11  |
| 2018/ 1/ 9 | -----    | 11-49   | 6-22    | 17-12  |
| 2018/ 1/10 | 0-31     | 12-26   | 6-22    | 17-12  |
| 2018/ 1/11 | 1-23     | 13- 4   | 6-22    | 17-13  |
| 2018/ 1/12 | 2-14     | 13-44   | 6-22    | 17-14  |
| 2018/ 1/13 | 3- 5     | 14-25   | 6-22    | 17-15  |
| 2018/ 1/14 | 3-56     | 15- 9   | 6-22    | 17-15  |
| 2018/ 1/15 | 4-45     | 15-56   | 6-22    | 17-16  |
| 2018/ 1/16 | 5-34     | 16-44   | 6-22    | 17-17  |
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| 2018/ 1/18 | 7- 4     | 18-25   | 6-22    | 17-18  |
| 2018/ 1/19 | 7-46     | 19-17   | 6-22    | 17-19  |
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| 2018/ 1/22 | 9-43     | 21-54   | 6-22    | 17-21  |
| 2018/ 1/23 | 10-20    | 22-48   | 6-22    | 17-22  |
| 2018/ 1/24 | 10-59    | 23-45   | 6-22    | 17-22  |
| 2018/ 1/25 | 11-41    | -----   | 6-21    | 17-23  |
| 2018/ 1/26 | 12-25    | 0-42    | 6-21    | 17-24  |
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| 2018/ 1/28 | 14- 9    | 2-46    | 6-21    | 17-25  |
| 2018/ 1/29 | 15-10    | 3-51    | 6-20    | 17-26  |
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| 2018/ 1/31 | 17-20    | 5-53    | 6-20    | 17-27  |
| 2018/ 2/ 1 | 18-25    | 6-47    | 6-19    | 17-28  |
| 2018/ 2/ 2 | 19-28    | 7-37    | 6-19    | 17-28  |
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| 2018/ 2/11 | 2-40     | 13-52   | 6-14    | 17-34  |
| 2018/ 2/12 | 3-29     | 14-39   | 6-14    | 17-35  |
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| 2018/ 2/18 | 7-43     | 19-51   | 6-10    | 17-38  |
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| 2018/ 2/20 | 9- 0     | 21-40   | 6- 9    | 17-39  |
| 2018/ 2/21 | 9-40     | 22-36   | 6- 8    | 17-40  |
| 2018/ 2/22 | 10-22    | 23-35   | 6- 7    | 17-40  |
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| 2018/ 2/26 | 13-56    | 2-38    | 6- 4    | 17-42  |
| 2018/ 2/27 | 14-59    | 3-37    | 6- 3    | 17-42  |
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| 2018/ 3/ 1 | 17- 7    | 5-24    | 6- 2    | 17-43  |
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| 2018/ 3/ 7 | 22-50    | 9-37    | 5-56    | 17-46  |
| 2018/ 3/ 8 | 23-43    | 10-17   | 5-56    | 17-46  |

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| 2018/ 3/11 | 1-23  | 12-32 | 5-53 | 17-48 |
| 2018/ 3/12 | 2-11  | 13-22 | 5-52 | 17-48 |
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| 2018/ 3/15 | 4-22  | 15-56 | 5-49 | 17-49 |
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| 2018/ 3/17 | 5-42  | 17-44 | 5-47 | 17-50 |
| 2018/ 3/18 | 6-20  | 18-38 | 5-46 | 17-50 |
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| 2018/ 3/27 | 13-50 | 2-24  | 5-38 | 17-53 |
| 2018/ 3/28 | 14-52 | 3-15  | 5-37 | 17-54 |
| 2018/ 3/29 | 15-54 | 4- 3  | 5-36 | 17-54 |
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| 2018/ 4/17 | 6-17  | 19-21 | 5-18 | 18- 1 |
| 2018/ 4/18 | 7- 2  | 20-22 | 5-17 | 18- 1 |
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| 2018/ 5/27 | 16-20 | 3-23  | 4-55 | 18-19 |
| 2018/ 5/28 | 17-14 | 4- 2  | 4-55 | 18-19 |
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| 2018/ 6/12 | 3-29  | 16-50 | 4-54 | 18-25 |
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| 2018/ 6/29 | 19-24 | 5-43  | 4-58 | 18-29 |
| 2018/ 6/30 | 20- 8 | 6-33  | 4-58 | 18-29 |
| 2018/ 7/ 1 | 20-50 | 7-24  | 4-58 | 18-29 |
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| 2018/ 7/ 7 | ----- | 12-34 | 5- 0 | 18-29 |
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| 2018/ 7/14 | 6- 7  | 19-43 | 5- 3 | 18-28 |
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| 2018/ 7/16 | 8-18  | 21-22 | 5- 4 | 18-27 |
| 2018/ 7/17 | 9-21  | 22- 5 | 5- 4 | 18-27 |
| 2018/ 7/18 | 10-19 | 22-45 | 5- 5 | 18-27 |
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| 2018/ 7/21 | 13- 5 | 0- 3  | 5- 6 | 18-26 |
| 2018/ 7/22 | 13-58 | 0-43  | 5- 7 | 18-26 |
| 2018/ 7/23 | 14-51 | 1-24  | 5- 7 | 18-25 |
| 2018/ 7/24 | 15-43 | 2- 7  | 5- 7 | 18-25 |
| 2018/ 7/25 | 16-32 | 2-52  | 5- 8 | 18-24 |
| 2018/ 7/26 | 17-21 | 3-40  | 5- 8 | 18-24 |
| 2018/ 7/27 | 18- 6 | 4-29  | 5- 9 | 18-24 |
| 2018/ 7/28 | 18-49 | 5-20  | 5- 9 | 18-23 |
| 2018/ 7/29 | 19-30 | 6-10  | 5-10 | 18-23 |
| 2018/ 7/30 | 20- 8 | 7- 1  | 5-10 | 18-22 |
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| 2018/ 8/10 | 3-44  | 17-26 | 5-15 | 18-16 |
| 2018/ 8/11 | 4-50  | 18-20 | 5-15 | 18-15 |
| 2018/ 8/12 | 5-57  | 19-11 | 5-15 | 18-14 |
| 2018/ 8/13 | 7- 2  | 19-57 | 5-16 | 18-13 |

|            |       |       |      |       |
|------------|-------|-------|------|-------|
| 2018/ 8/14 | 8- 4  | 20-40 | 5-16 | 18-13 |
| 2018/ 8/15 | 9- 4  | 21-21 | 5-17 | 18-12 |
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| 2018/ 9/15 | 10-36 | 21-59 | 5-27 | 17-44 |
| 2018/ 9/16 | 11-31 | 22-44 | 5-27 | 17-43 |
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| 2018/ 9/24 | 17-22 | 4-34  | 5-29 | 17-35 |
| 2018/ 9/25 | 17-59 | 5-26  | 5-30 | 17-34 |
| 2018/ 9/26 | 18-35 | 6-19  | 5-30 | 17-33 |
| 2018/ 9/27 | 19-14 | 7-13  | 5-30 | 17-32 |
| 2018/ 9/28 | 19-55 | 8- 8  | 5-31 | 17-31 |
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| 2018/ 9/30 | 21-27 | 10- 4 | 5-31 | 17-29 |
| 2018/10/ 1 | 22-19 | 11- 4 | 5-31 | 17-28 |
| 2018/10/ 2 | 23-17 | 12- 4 | 5-32 | 17-27 |
| 2018/10/ 3 | ----- | 13- 2 | 5-32 | 17-26 |
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| 2018/10/14 | 10-13 | 21-23 | 5-36 | 17-16 |
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| 2018/10/24 | 17-11 | 5- 4  | 5-41 | 17- 8 |
| 2018/10/25 | 17-52 | 6- 0  | 5-41 | 17- 7 |
| 2018/10/26 | 18-35 | 6-58  | 5-42 | 17- 6 |
| 2018/10/27 | 19-23 | 7-58  | 5-42 | 17- 5 |
| 2018/10/28 | 20-15 | 8-59  | 5-43 | 17- 5 |
| 2018/10/29 | 21-12 | 9-59  | 5-43 | 17- 4 |
| 2018/10/30 | 22-12 | 10-58 | 5-44 | 17- 3 |
| 2018/10/31 | 23-14 | 11-54 | 5-44 | 17- 3 |

|            |       |       |      |       |
|------------|-------|-------|------|-------|
| 2018/11/ 1 | ----- | 12-45 | 5-45 | 17- 2 |
| 2018/11/ 2 | 0-15  | 13-33 | 5-45 | 17- 2 |
| 2018/11/ 3 | 1-17  | 14-17 | 5-46 | 17- 1 |
| 2018/11/ 4 | 2-17  | 14-59 | 5-46 | 17- 0 |
| 2018/11/ 5 | 3-16  | 15-40 | 5-47 | 17- 0 |
| 2018/11/ 6 | 4-14  | 16-20 | 5-47 | 16-59 |
| 2018/11/ 7 | 5-12  | 17- 1 | 5-48 | 16-59 |
| 2018/11/ 8 | 6-10  | 17-43 | 5-49 | 16-58 |
| 2018/11/ 9 | 7- 6  | 18-27 | 5-49 | 16-58 |
| 2018/11/10 | 8- 2  | 19-14 | 5-50 | 16-58 |
| 2018/11/11 | 8-55  | 20- 2 | 5-50 | 16-57 |
| 2018/11/12 | 9-47  | 20-52 | 5-51 | 16-57 |
| 2018/11/13 | 10-34 | 21-42 | 5-52 | 16-56 |
| 2018/11/14 | 11-19 | 22-33 | 5-52 | 16-56 |
| 2018/11/15 | 12- 0 | 23-24 | 5-53 | 16-56 |
| 2018/11/16 | 12-39 | ----- | 5-53 | 16-55 |
| 2018/11/17 | 13-17 | 0-15  | 5-54 | 16-55 |
| 2018/11/18 | 13-53 | 1- 7  | 5-55 | 16-55 |
| 2018/11/19 | 14-29 | 1-58  | 5-55 | 16-55 |
| 2018/11/20 | 15- 6 | 2-51  | 5-56 | 16-55 |
| 2018/11/21 | 15-45 | 3-46  | 5-57 | 16-54 |
| 2018/11/22 | 16-27 | 4-43  | 5-57 | 16-54 |
| 2018/11/23 | 17-14 | 5-44  | 5-58 | 16-54 |
| 2018/11/24 | 18- 6 | 6-46  | 5-59 | 16-54 |
| 2018/11/25 | 19- 3 | 7-49  | 5-59 | 16-54 |
| 2018/11/26 | 20- 3 | 8-51  | 6- 0 | 16-54 |
| 2018/11/27 | 21- 6 | 9-50  | 6- 1 | 16-54 |
| 2018/11/28 | 22- 9 | 10-44 | 6- 1 | 16-54 |
| 2018/11/29 | 23-12 | 11-33 | 6- 2 | 16-54 |
| 2018/11/30 | ----- | 12-18 | 6- 3 | 16-54 |
| 2018/12/ 1 | 0-12  | 13- 0 | 6- 3 | 16-54 |
| 2018/12/ 2 | 1-10  | 13-40 | 6- 4 | 16-54 |
| 2018/12/ 3 | 2- 7  | 14-19 | 6- 5 | 16-54 |
| 2018/12/ 4 | 3- 4  | 14-58 | 6- 5 | 16-54 |
| 2018/12/ 5 | 4- 0  | 15-39 | 6- 6 | 16-54 |
| 2018/12/ 6 | 4-56  | 16-21 | 6- 7 | 16-55 |
| 2018/12/ 7 | 5-52  | 17- 6 | 6- 7 | 16-55 |
| 2018/12/ 8 | 6-46  | 17-54 | 6- 8 | 16-55 |
| 2018/12/ 9 | 7-39  | 18-43 | 6- 9 | 16-55 |
| 2018/12/10 | 8-28  | 19-34 | 6- 9 | 16-55 |
| 2018/12/11 | 9-14  | 20-25 | 6-10 | 16-56 |
| 2018/12/12 | 9-57  | 21-16 | 6-10 | 16-56 |
| 2018/12/13 | 10-37 | 22- 6 | 6-11 | 16-56 |
| 2018/12/14 | 11-14 | 22-57 | 6-12 | 16-57 |
| 2018/12/15 | 11-50 | 23-48 | 6-12 | 16-57 |
| 2018/12/16 | 12-25 | ----- | 6-13 | 16-58 |
| 2018/12/17 | 13- 1 | 0-39  | 6-13 | 16-58 |
| 2018/12/18 | 13-38 | 1-32  | 6-14 | 16-58 |
| 2018/12/19 | 14-18 | 2-27  | 6-14 | 16-59 |
| 2018/12/20 | 15- 2 | 3-25  | 6-15 | 16-59 |
| 2018/12/21 | 15-51 | 4-26  | 6-15 | 17- 0 |
| 2018/12/22 | 16-46 | 5-30  | 6-16 | 17- 0 |
| 2018/12/23 | 17-47 | 6-33  | 6-16 | 17- 1 |
| 2018/12/24 | 18-51 | 7-36  | 6-17 | 17- 1 |
| 2018/12/25 | 19-57 | 8-34  | 6-17 | 17- 2 |
| 2018/12/26 | 21- 2 | 9-28  | 6-18 | 17- 2 |
| 2018/12/27 | 22- 5 | 10-16 | 6-18 | 17- 3 |
| 2018/12/28 | 23- 5 | 11- 0 | 6-19 | 17- 4 |
| 2018/12/29 | ----- | 11-41 | 6-19 | 17- 4 |
| 2018/12/30 | 0- 3  | 12-20 | 6-19 | 17- 5 |
| 2018/12/31 | 1- 0  | 12-59 | 6-20 | 17- 6 |

all times in local time ( = UT + 5.5h )