



ASTROPHILE EDUCATION SERVICES

Contact Timings for various location in India for ASE 2019 on Dec 26th.

Table 1

S. No.	Location Name	First contact	Second Contact	Maximum Eclipse	Third Contact	Fourth Contact	Obscuration percentage
1	Andaman & Nicobar Island						
a	Port Blair	2h 57m 38s 900ms	-	4h 37m 19s 600ms	-	6h 33m 47s 500ms	70.424
2	Andhra Pradesh						
a	Visakhapatnam	2h 43m 49s 300ms	-	4h 10m 5s 400ms	-	5h 53m 59s	65.785
b	Vijayawada	2h 40m 2s 700ms	-	4h 4m 52s 100ms	-	5h 47m 39s	73.353
c	Nellore	2h 38m 43s 700ms	-	4h 3m 53s 500ms	-	5h 47m 31s 100ms	80.801
3	Arunachal Pradesh						
a	Ita nagar	3h 16m 7s 100ms	-	4h 38m 21s 300ms	-	6h 9m 47s 300ms	29.292
4	Assam						
a	Tezpur	3h 13m 10s 600ms	-	4h 35m 45s 100ms	-	6h 8m 14s 900ms	30.913
b	Guwahati	3h 9m 43s 100ms	-	4h 32m 36s 100ms	-	6h 6m 15s 200ms	32.959
c	Dibrugarh	3h 20m 27s 900ms	-	4h 42m 35s	-	6h 12m 50s 900ms	27.419
5	Bihar						
a	Patna	2h 54m 46s 100ms	-	4h 15m 8s 600ms	-	5h 48m 57s 100ms	41.676
b	Purnia	2h 59m 32s 500ms	-	4h 20m 50s 200ms	-	5h 54m 52s 700ms	38.370
6	Chandigarh						
a	Chandigarh	2h 49m 32s 800ms	-	4h 1m 17s 100ms	-	5h 24m 18s 400ms	40.134
7	Chhattisgarh						
a	Raipur	2h 44m 15s 800ms	-	4h 6m 44s 800ms	-	5h 45m 19s 200ms	57.927
b	Bijapur	2h 41m 22s 400ms	-	4h 4m 59s 400ms	-	5h 45m 44s 200ms	66.230



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Table 1

8	Daman & Diu						
a	Daman	2h 34m 40s 500ms	-	3h 51m 48s 800ms	-	5h 24m 14s 300ms	74.421
b	Diu	2h 33m 36s 100ms	-	3h 49m 23s 200ms	-	5h 19m 55s 500ms	76.577
9	Dadra & Nagar Haveli						
a	Silvassa	2h 34m 43s 700ms	-	3h 52m 2s	-	5h 24m 42s 200ms	74.530
10	Delhi						
a	Delhi	2h 46m 55s 100ms	-	4h 0m 49s 800ms	-	5h 27m 6s 400ms	44.732
11	Goa						
a	Panaji	2h 33m 45s 600ms	-	3h 53m 13s 700ms	-	5h 29m 28s 200ms	87.938
12	Gujarat						
a	Ahmedabad	2h 36m 11s 900ms	-	3h 51m 57s 600ms	-	5h 22m 5s 700ms	66.934
b	Surat	2h 35m 6s 800ms	-	3h 51m 55s 800ms	-	5h 23m 47s 800ms	72.098
c	Vadodara	2h 36m 7s 800ms	-	3h 52m 37s 200ms	-	5h 23m 50s 900ms	68.117
d	Rajkot	2h 34m 26s 700ms	-	3h 49m 31s 800ms	-	5h 18m 52s 700ms	71.952
e	Bhavnagar	2h 34m 59s 700ms	-	3h 51m 7s 100ms	-	5h 21m 57s 600ms	71.411
f	Jamnagar	2h 34m 5s 600ms	-	3h 48m 40s 600ms	-	5h 17m 18s 500ms	72.656
13	Haryana						
a	Kurukshetra	2h 48m 29s	-	4h 0m 59s 100ms	-	5h 25m 9s 100ms	41.830
b	Kaithal	2h 47m 40s 600ms	-	4h 0m 12s	-	5h 24m 28s 700ms	42.825
c	Yamuna Nagar	2h 49m 22s 100ms	-	4h 1m 48s 800ms	-	5h 25m 49s 200ms	40.770
d	Gurgaon	2h 46m 30s 900ms	-	4h 0m 29s 700ms	-	5h 26m 54s 700ms	45.312



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14 Himachal Pradesh							
a	Shimla	2h 50m 43s	-	4h 2m 10s 200ms	-	5h 24m 41s 700ms	38.689
b	Manali	2h 52m 59s 500ms	-	4h 3m 6s 500ms	-	5h 23m 37s 400ms	35.660
c	Dharamshala	2h 51m 26s 500ms	-	4h 1m 32s 500ms	-	5h 22m 9s 900ms	37.192
d	Mandi	2h 51m 23s 600ms	-	4h 2m 9s 900ms	-	5h 23m 42s 100ms	37.597
e	Kaza	2h 53m 53s 700ms	-	4h 4m 20s 500ms	-	5h 23m 13s 400ms	34.994
15 Jammu & Kashmir							
a	Srinagar	2h 52m 47s 500ms	-	4h 0m 39s 300ms	-	5h 18m 8s 900ms	34.828
b	Leh	2h 56m 41s 900ms	-	4h 4m 51s 100ms	-	5h 22m 27s 100ms	31.428
c	Jammu	2h 50m 27s 600ms	-	3h 59m 43s 700ms	-	5h 19m 17s 900ms	37.842
16 Jharkhand							
a	Dhanbad	2h 55m 44s	-	4h 17m 50s	-	5h 55m 6s 700ms	44.461
b	Ranchi	2h 52m 8s 300ms	-	4h 15m 4s	-	5h 52m 40s 300ms	47.088
c	Jamshedpur	2h 53m 2s 700ms	-	4h 17m 4s 200ms	-	5h 55m 53s 200ms	47.317
17 Karnataka							
a	Bangalore	2h 36m 24s	-	3h 59m 47s 200ms	-	5h 41m 27s 100ms	89.410
b	Hubli	2h 34m 37s 400ms	-	3h 55m 11s 800ms	-	5h 32m 56s	86.116
c	Mysore	2h 35m 42s 400ms	-	3h 58m 19s 500ms	-	5h 39m 3s 900ms	92.771
d	Gulbarga	2h 36m 28s 900ms	-	3h 57m 47s 200ms	-	5h 36m 10s 900ms	77.166
e	Belgaum	2h 34m 15s 200ms	-	3h 54m 10s 500ms	-	5h 30m 59s 100ms	85.659
f	Mangalore	2h 34m 25s	3h 54m 15s 500ms	3h 55m 16s 400ms	3h 56m 17s 200ms	5h 33m 38s 200ms	93.038



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18 Kerala							
a	Thiruvananthapuram	2h 37m 1s 900ms	-	4h 0m 15s 400ms	-	5h 41m 55s 400ms	87.576
b	Kasargod	2h 34m 32s	3h 54m 0s 900ms	3h 55m 32s 700ms	3h 57m 4s 600ms	5h 34m 8s 600ms	93.055
c	Kochi	2h 36m 0s 200ms	-	3h 58m 30s	-	5h 39m 11s 900ms	90.765
19 Lakshwadeep							
a	Kavaratti	2h 33m 45s 900ms	-	3h 52m 36s 700ms	-	5h 28m 20s 100ms	86.339
20 Madhya Pradesh							
a	Indore	2h 38m 47s 700ms	-	3h 56m 37s 300ms	-	5h 3m 47s 600ms	62.650
b	Bhopal	2h 40m 55s 200ms	-	3h 59m 16s 700ms	-	5h 32m 34s 800ms	58.605
c	Jabalpur	2h 43m 54s 100ms	-	4h 3m 48s 600ms	-	5h 38m 51s 500ms	54.998
d	Gwalior	2h 45m 0s 700ms	-	4h 1m 27s 200ms	-	5h 31m 28s 900ms	49.457
e	Rewa	2h 47m 13s 900ms	-	4h 6m 42s 500ms	-	5h 40m 37s 200ms	49.385
21 Maharashtra							
a	Mumbai	2h 34m 3s 400ms	-	3h 51m 43s 200ms	-	5h 25m 3s 400ms	78.478
b	Pune	2h 34m 32s 200ms	-	3h 53m 6s 800ms	-	5h 27m 45s 500ms	78.474
c	Nagpur	2h 40m 58s	-	4h 1m 49s 600ms	-	5h 38m 43s	62.120
d	Thane	2h 31m 12s 200ms	-	3h 51m 54s 600ms	-	5h 25m 17s 200ms	77.839
e	Amravati	2h 39m 19s 300ms	-	3h 59m 25s 400ms	-	5h 35m 29s 900ms	64.828
f	Nashik	2h 35m 9s 200ms	-	3h 53m 6s 300ms	-	5h 26m 40s 900ms	74.116
g	Kalyan	2h 34m 18s 800ms	-	3h 52m 6s 300ms	-	5h 25m 35s 400ms	77.505
h	Aurangabad	2h 36m 20s 800ms	-	3h 55m 24s 100ms	-	5h 30m 26s 400ms	71.878
i	Navi Mumbai	2h 34m 9s 200ms	-	3h 51m 57s 500ms	-	5h 25m 29s 500ms	78.340
j	Solapur	2h 35m 48s	-	3h 56m 15s	-	5h 33m 29s 800ms	77.730
k	Nanded Waghala	2h 37m 44s 900ms	-	3h 58m 34s 300ms	-	5h 35m 59s 200ms	70.848



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l	Kolapur	2h 34m 14s 700ms	-	3h 53m 43s 400ms	-	5h 29m 50s 100ms	83.476
m	Malegoan	2h 36m 3s 200ms	-	3h 54m 14s 200ms	-	5h 28m 0s 700ms	71.168
n	Jalgaon	2h 37m 14s 400ms	-	3h 55m 52s 900ms	-	5h 30m 9s 200ms	68.124
22	Manipur						
a	Imphal	3h 13m 5s 300ms	-	4h 39m 11s 700ms	-	6h 15m 26s 100ms	33.833
23	Meghalaya						
a	Shillong	3h 9m 11s	-	4h 32m 58s 700ms	-	6h 7m 46s	34.018
24	Mizoram						
a	Aizwal	3h 8m 18s 500ms	-	4h 35m 21s 900ms	-	6h 13m 55s 200ms	37.464
25	Nagaland						
a	Kohima	3h 14m 58s 200ms	-	4h 39m 49s 300ms	-	6h 14m 15s 800ms	31.842
26	Odisha						
a	Bhubaneswar	2h 49m 50s 200ms	-	4h 16m 7s 600ms	-	5h 58m 35s 200ms	54.465
b	Bramhapur	2h 47m 17s	-	4h 13m 37s 600ms	-	5h 56m 46s 700ms	58.705
27	Puducherry						
a	Puducherry	2h 38m 25s	-	4h 4m 13s 500ms	-	5h 48m 58s 600ms	88.977
28	Punjab						
a	Ludhiana	2h 48m 40s 600ms	-	3h 59m 59s 700ms	-	5h 22m 30s 800ms	40.892
b	Amritsar	2h 48m 39s 300ms	-	3h 59m 1s	-	5h 20m 13s 200ms	40.417
c	Jalandhar	2h 49m 1s 100ms	-	3h 59m 50s 900ms	-	5h 21m 39s 900ms	40.227



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29	Rajasthan						
a	Jaipur	2h 43m 2s 700ms	-	3h 57m 52s 700ms	-	5h 25m 52s 100ms	51.082
b	Jodhpur	2h 39m 31s 200ms	-	3h 53m 36s 600ms	-	5h 20m 54s 100ms	56.999
c	Kota	2h 41m 13s 100ms	-	3h 57m 22s 300ms	-	5h 27m 27s 500ms	55.506
d	Bikaner	2h 41m 52s	-	3h 54m 49s	-	5h 20m 14s	51.667
e	Ajmer	2h 41m 17s 600ms	-	3h 55m 58s 100ms	-	5h 23m 55s 300ms	53.995
f	Udaipur	2h 38m 29s 500ms	-	3h 53m 59s 700ms	-	5h 23m 27s 900ms	60.574
30	Sikkim						
a	Gangtok	3h 4m 26s 200ms	-	4h 24m 8s 100ms	-	5h 55m 16s 600ms	33.547
31	Tamil Nadu						
a	Chennai	2h 38m 53s 300ms	-	4h 4m 50s 500ms	-	5h 49m 37s 200ms	84.592
b	Coimbatore	2h 36m 9s 800ms	3h 57m 44s 800ms	3h 59m 16s 400ms	4h 0m 47s 900ms	5h 40m 44s	93.191
c	Madurai	2h 37m 20s 400ms	4h 1m 41s 400ms	4h 1m 45s 800ms	4h 1m 49s 800ms	5h 44m 57s	93.276
d	Tiruchirappalli	2h 37m 35s 600ms	4h 1m 35s 100ms	4h 2m 31s 200ms	4h 3m 27s 200ms	5h 46m 17s 900ms	93.276
e	Salem	2h 36m 58s 100ms	-	4h 1m 10s 400ms	-	5h 43m 59s 300ms	92.375
f	Tirunelveli	2h 37m 30s 100ms	-	4h 1m 35s 200ms	-	5h 44m 21s 800ms	89.548
32	Telangana						
a	Hyderabad	2h 38m 3s 600ms	-	4;00:38.7	-	5h 40m 36s 600ms	74.252
b	Warangal	2h 39m 29s 800ms	-	4h 2m 39s 900ms	-	5h 43m 10s 100ms	70.660
33	Tripura						
a	Agartala	3:05:00.3	-	4h 30m 59s 900ms	-	6h 9m 16s 800ms	38.671



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34	Uttar Pradesh						
a	Lucknow	<u>2h 49m 37s 600ms</u>	-	4h 6m 41s 400ms	-	5h 36m 57s 700ms	<u>44.009</u>
b	Kanpur	<u>2h 48m 9s 400ms</u>	-	4h 5m 20s	-	5h 35m 57s 800ms	<u>45.857</u>
c	Ghaziabad	<u>2h 47m 17s 500ms</u>	-	4h 1m 13s	-	5h 27m 28s 200ms	<u>44.262</u>
d	Agra	<u>2h 46m 0s 900ms</u>	-	4h 1m 32s 600ms	-	5h 30m 10s 200ms	<u>47.213</u>
e	Meerut	<u>2h 48m 7s 400ms</u>	-	4h 1m 50s 900ms	-	5h 27m 44s 500ms	<u>43.091</u>
f	Varanasi	<u>2h 50m 42s 600ms</u>	-	4h 10m 17s 700ms	-	5h 43m 46s 900ms	<u>45.145</u>
g	Pryagraj	<u>2h 49m 6s 100ms</u>	-	4h 8m 0s 400ms	-	5h 40m 50s 700ms	<u>46.367</u>
h	Bareilly	<u>2h 49m 32s 500ms</u>	-	4h 4m 29s	-	5h 31m 53s 100ms	<u>42.341</u>
l	Moradabad	<u>2h 49m 21s</u>	-	4h 3m 34s 300ms	-	5h 30m 0s 700ms	<u>42.013</u>
j	Aligarh	<u>2h 47m 4s 100ms</u>	-	4h 1m 47s 900ms	-	5h 29m 35s 600ms	<u>45.293</u>
k	Saharanpur	<u>2h 49m 23s 400ms</u>	-	4h 2m 6s 400ms	-	5h 26m 28s 900ms	<u>40.919</u>
l	Gorakhpur	<u>2h 53m 23s 100ms</u>	-	4h 11m 35s 500ms	-	5h 42m 49s 500ms	<u>41.030</u>
m	Noida	<u>2h 47m 3s 700ms</u>	-	4h 1m 6s 600ms	-	5h 27m 33s 700ms	<u>44.649</u>
n	Firozabad	<u>2h 46m 27s 800ms</u>	-	4h 2m 10s 200ms	-	5h 30m 59s 500ms	<u>46.756</u>
o	Jhansi	<u>2h 44m 34s 100ms</u>	-	4h 1m 51s 200ms	-	5h 33m 7s 300ms	<u>50.942</u>
35	Uttarakhand						
a	Dehradun	<u>2h 50m 36s 300ms</u>	-	4h 3m 5s 800ms	-	5h 27m 2s 600ms	<u>39.441</u>
b	Nainital	<u>2h 51m 7s 500ms</u>	-	4h 5m 1s 600ms	-	5h 30m 49s 800ms	<u>39.848</u>



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36	West Bengal						
a	Kolkata	2h 56m 58s 300ms	-	4h 22m 41s 200ms	-	6h 2m 41s 200ms	45.107
b	Digha	2h 54m 11s 200ms	-	4h 20m 21s 500ms	-	6h 1m 36s 200ms	48.624
c	Durgapur	2h 56m 4s 600ms	-	4h 20m 1s 300ms	-	5h 58m 3s 800ms	44.026
d	Malda	2h 59m 47s 200ms	-	4h 22m 23s 500ms	-	5h 57m 58s 700ms	39.381
e	Siliguri	3h 2m 57s 700ms	-	4h 23m 25s 600ms	-	5h 55m 46s 500ms	35.139
f	Darjeeling	3h 3m 9s 700ms	-	4h 23m 8s 800ms	-	5h 54m 52s 700ms	34.609