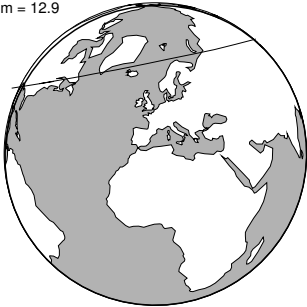
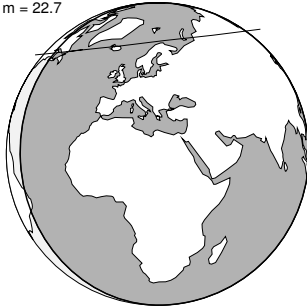
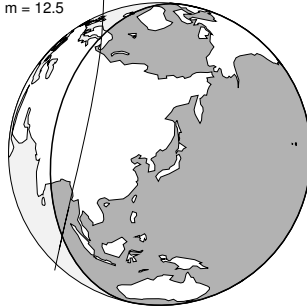
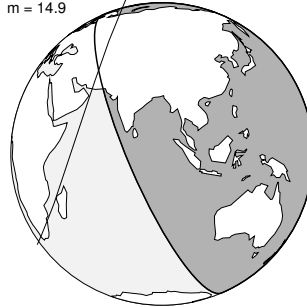
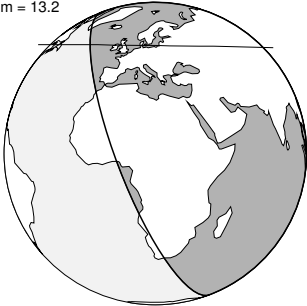
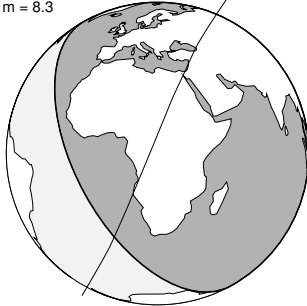
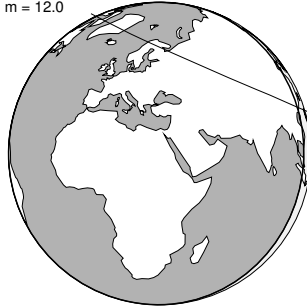
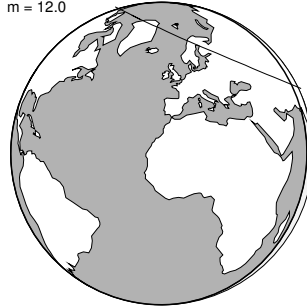
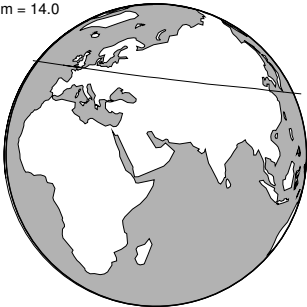
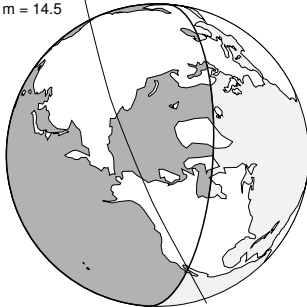

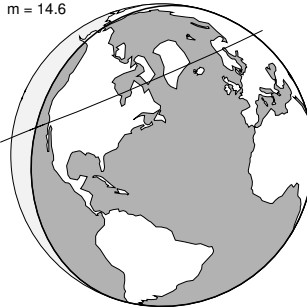
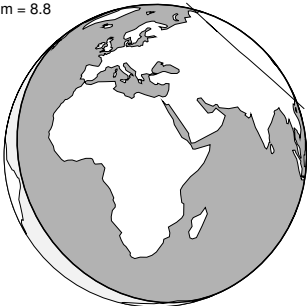
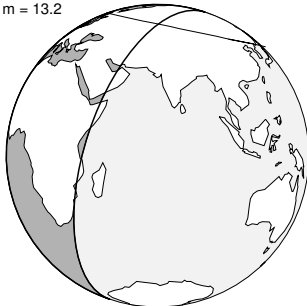
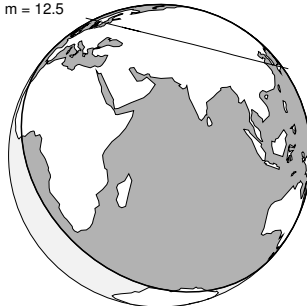
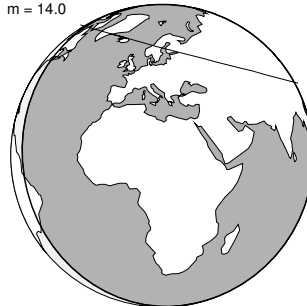


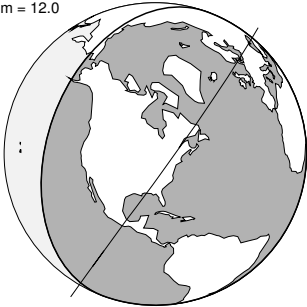
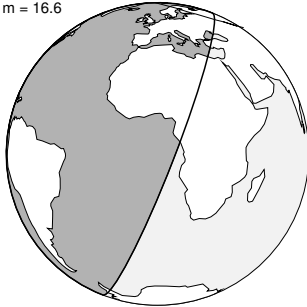
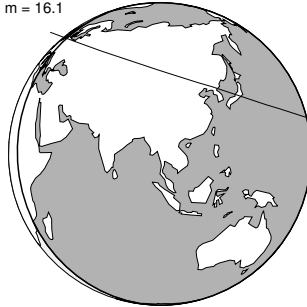
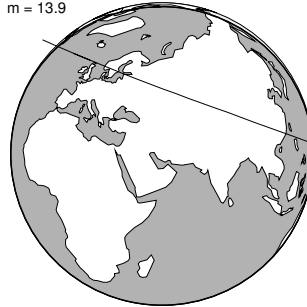
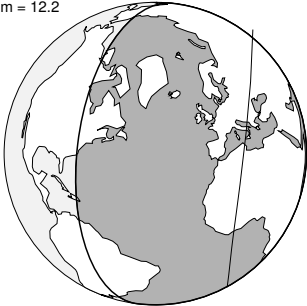
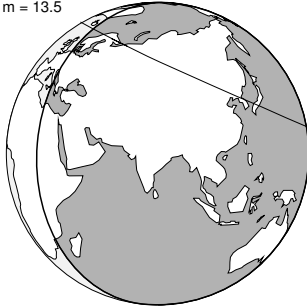
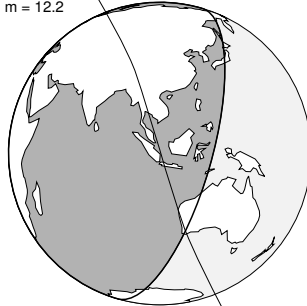
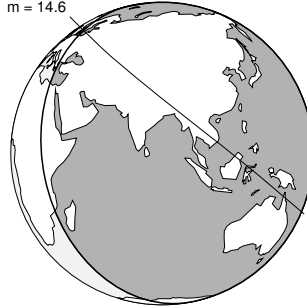
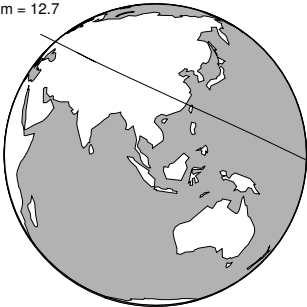
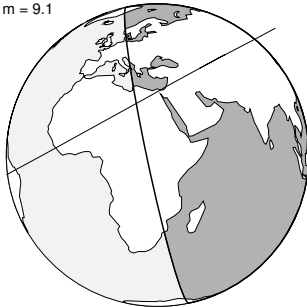

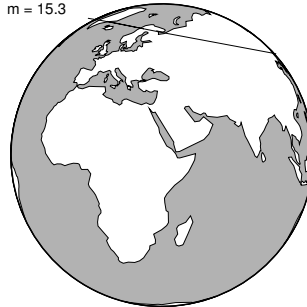
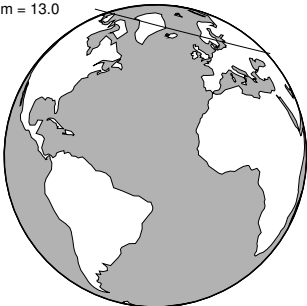
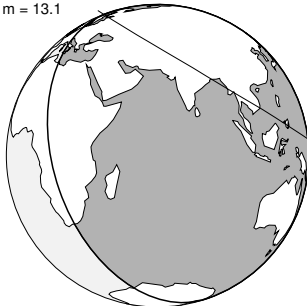
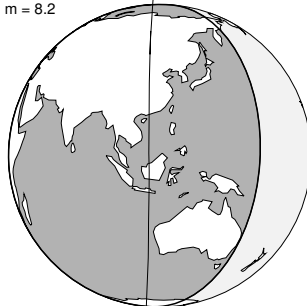
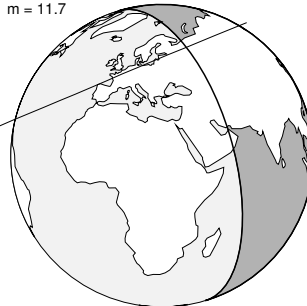
# Occultations by major and minor planets – 2019

# Region 5

<p><b>2019 jan 1 23h27.3m</b> A19_01090 524 Fidelio TYC 2429–00225–1 Diam = 74.0 m = 12.1 m = 12.9</p>  <p>Dur = 7.1s Dmag = 1.2 Sun: 167° Moon: 138°</p>	<p><b>2019 jan 2 20h48.6m</b> B19_01006 149348 2002VS130 UCAC5 569–013618 Diam = 229.1 m = 15.0 m = 22.7</p>  <p>Dur = 10.0s Dmag = 7.7 Sun: 155° Moon: 168°</p>	<p><b>2019 jan 3 12h 3.7m</b> A19_01098 602 Marianna UCAC5 658–017287 Diam = 130.0 m = 11.8 m = 12.5</p>  <p>Dur = 16.8s Dmag = 1.1 Sun: 135° Moon: 153°</p>	<p><b>2019 jan 5 12h57.9m</b> A19_01113 786 Bredichina UCAC5 449–002379 Diam = 93.2 m = 11.8 m = 14.9</p>  <p>Dur = 9.2s Dmag = 3.2 Sun: 103° Moon: 109°</p>
<p><b>2019 jan 5 17h40.1m</b> A19_01109 694 Ekard UCAC5 498–002550 Diam = 92.7 m = 12.1 m = 13.2</p>  <p>Dur = 6.7s Dmag = 1.4 Sun: 104° Moon: 109°</p>	<p><b>2019 jan 5 19h 9.6m</b> A19_01002 3 Juno UCAC5 442–004580 Diam = 257.6 m = 11.5 m = 8.3</p>  <p>Dur = 40.0s Dmag = 0.1 Sun: 123° Moon: 127°</p>	<p><b>2019 jan 5 23h20.0m</b> A19_01080 449 Hamburga UCAC5 561–043916 Diam = 88.6 m = 12.3 m = 12.0</p>  <p>Dur = 12.6s Dmag = 0.6 Sun: 162° Moon: 161°</p>	<p><b>2019 jan 7 1h58.9m</b> A19_01079 449 Hamburga TYC 1390–00007–1 Diam = 88.6 m = 11.3 m = 12.0</p>  <p>Dur = 12.3s Dmag = 1.1 Sun: 163° Moon: 174°</p>
<p><b>2019 jan 7 20h 0.6m</b> A19_01091 526 Jena TYC 1341–00226–1 Diam = 46.7 m = 11.9 m = 14.0</p>  <p>Dur = 4.2s Dmag = 2.2 Sun: 170° Moon: 152°</p>	<p><b>2019 jan 11 14h30.7m</b> B19_01001 944 Hidalgo UCAC5 850–010266 Diam = 29.2 m = 14.8 m = 14.5</p>  <p>Dur = 5.6s Dmag = 0.6 Sun: 111° Moon: 106°</p>	<p><b>2019 jan 14 16h20.1m</b> B19_01003 24835 1995SM55 UCAC5 623–009693 Diam = 501.2 m = 15.0 m = 20.6</p>  <p>Dur = 41.8s Dmag = 5.6 Sun: 118° Moon: 33°</p>	<p><b>2019 jan 15 1h38.4m</b> A19_01123 949 Hel UCAC5 622–023714 Diam = 71.0 m = 12.4 m = 14.6</p>  <p>Dur = 6.0s Dmag = 2.4 Sun: 148° Moon: 53°</p>
<p><b>2019 jan 15 20h28.5m</b> A19_01011 6 Hebe UCAC5 491–018732 Diam = 186.0 m = 11.6 m = 8.8</p>  <p>Dur = 18.3s Dmag = 0.1 Sun: 152° Moon: 48°</p>	<p><b>2019 jan 16 3h12.8m</b> A19_01078 410 Chloris UCAC5 399–057014 Diam = 128.0 m = 11.6 m = 13.2</p>  <p>Dur = 3.6s Dmag = 1.8 Sun: 61° Moon: 172°</p>	<p><b>2019 jan 17 18h22.4m</b> A19_01016 25 Phocaea TYC 4791–00936–1 Diam = 78.0 m = 11.1 m = 12.5</p>  <p>Dur = 5.9s Dmag = 1.6 Sun: 143° Moon: 34°</p>	<p><b>2019 jan 17 21h21.0m</b> A19_01095 538 Friederike PPMX 6031046 Diam = 77.8 m = 12.5 m = 14.0</p>  <p>Dur = 6.9s Dmag = 1.7 Sun: 157° Moon: 24°</p>

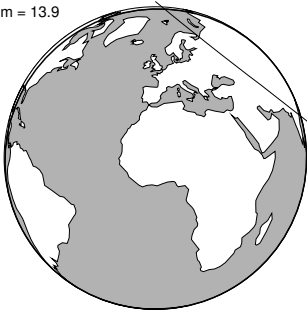
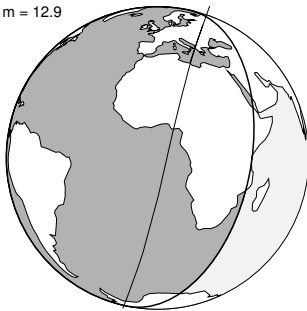
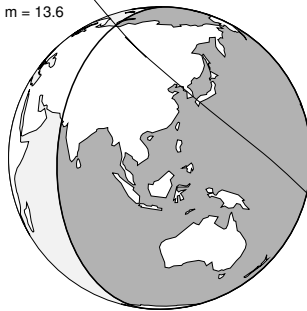
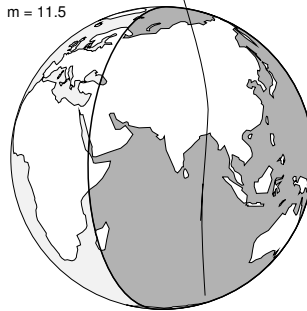
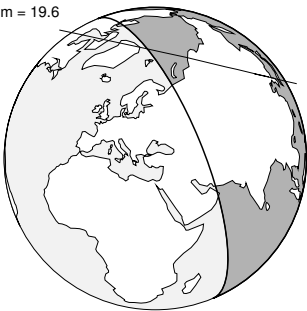
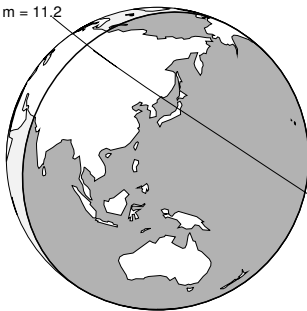
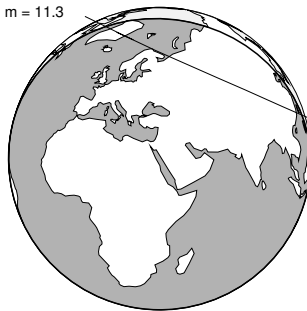
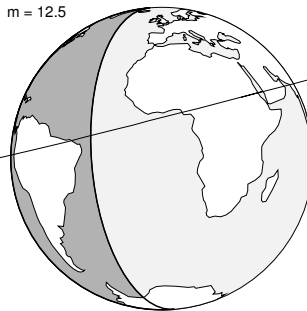
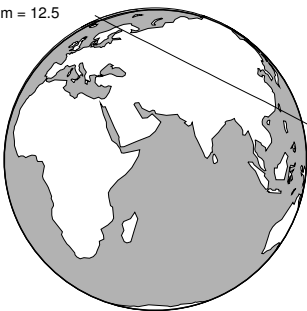
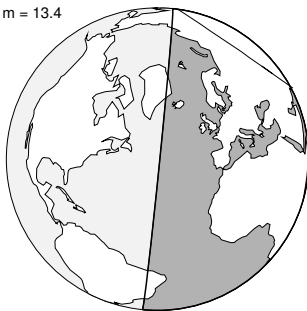
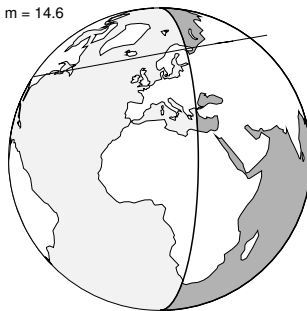
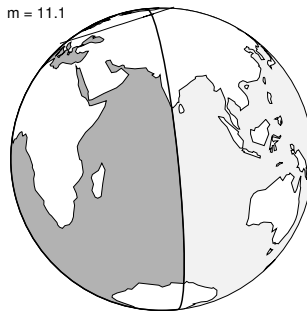
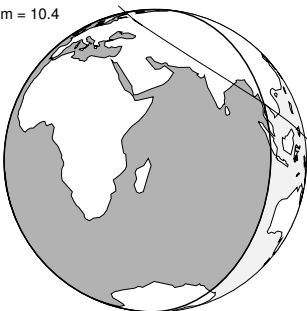
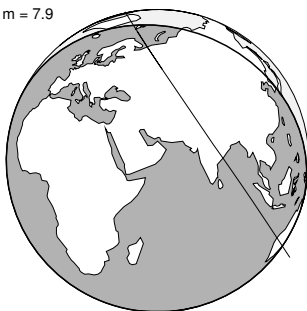
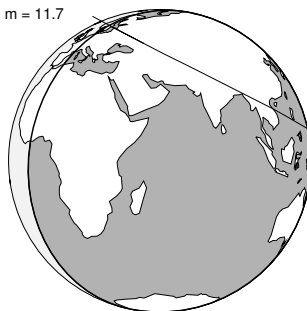
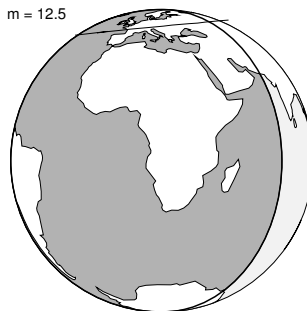
# Occultations by major and minor planets – 2019

# Region 5

<p><b>2019 jan 20 2h50.4m</b> A19_01021 71 Niobe UCAC5 678-033134 Diam = 87.3 m = 11.0</p>  <p>Dur = 6.5s Dmag = 1.4 Sun: 135° Moon: 33°</p>	<p><b>2019 jan 22 5h18.1m</b> A19_01142 2357 Phereclos HIP 66250 Diam = 103.0 m = 8.1</p>  <p>Dur = 10.2s Dmag = 8.5 Sun: 96° Moon: 69°</p>	<p><b>2019 jan 31 16h18.5m</b> A19_01140 2246 Bowell PPMX 6100101 Diam = 52.1 m = 11.8</p>  <p>Dur = 3.9s Dmag = 4.3 Sun: 160° Moon: 153°</p>	<p><b>2019 feb 2 20h45.5m</b> A19_02082 1028 Lydina UCAC5 599-043091 Diam = 76.3 m = 12.5</p>  <p>Dur = 6.0s Dmag = 1.7 Sun: 166° Moon: 157°</p>
<p><b>2019 feb 4 22h31.7m</b> A19_02012 71 Niobe UCAC5 665-031606 Diam = 87.3 m = 12.3</p>  <p>Dur = 7.3s Dmag = 0.7 Sun: 121° Moon: 121°</p>	<p><b>2019 feb 6 16h14.0m</b> A19_02084 1107 Lictoria UCAC5 567-030205 Diam = 81.0 m = 12.0</p>  <p>Dur = 12.8s Dmag = 1.7 Sun: 142° Moon: 124°</p>	<p><b>2019 feb 10 21h45.6m</b> A19_02007 31 Euphrosyne UCAC5 437-054395 Diam = 248.0 m = 10.5</p>  <p>Dur = 61.4s Dmag = 1.9 Sun: 109° Moon: 174°</p>	<p><b>2019 feb 14 15h56.3m</b> A19_02087 1309 Hyperborea UCAC5 487-035880 Diam = 59.8 m = 11.3</p>  <p>Dur = 8.4s Dmag = 3.3 Sun: 142° Moon: 35°</p>
<p><b>2019 feb 14 16h59.7m</b> A19_02035 236 Honoria UCAC5 482-045565 Diam = 90.5 m = 12.7</p>  <p>Dur = 6.0s Dmag = 1.4 Sun: 172° Moon: 68°</p>	<p><b>2019 feb 16 16h21.1m</b> A19_02001 3 Juno HIP 19495 Diam = 257.6 m = 9.1</p>  <p>Dur = 13.1s Dmag = 1.0 Sun: 94° Moon: 46°</p>	<p><b>2019 feb 21 18h34.3m</b> A19_02095 2025 Nortia TYC 1396-00766-1 Diam = 45.0 m = 8.4</p>  <p>Dur = 3.4s Dmag = 7.2 Sun: 157° Moon: 52°</p>	<p><b>2019 feb 21 21h31.9m</b> A19_02094 1977 Shura TYC 0833-00142-1 Diam = 60.8 m = 10.7</p>  <p>Dur = 4.5s Dmag = 4.6 Sun: 177° Moon: 34°</p>
<p><b>2019 feb 27 2h18.3m</b> A19_02048 388 Charybdis PPMX 7218397 Diam = 120.0 m = 13.0</p>  <p>Dur = 8.5s Dmag = 1.1 Sun: 175° Moon: 101°</p>	<p><b>2019 mar 2 16h56.0m</b> A19_03095 895 Helio TYC 5412-02260-1 Diam = 147.0 m = 12.0</p>  <p>Dur = 20.1s Dmag = 1.4 Sun: 133° Moon: 150°</p>	<p><b>2019 mar 3 19h42.7m</b> A19_03001 2 Pallas TYC 0323-01028-1 Diam = 530.9 m = 10.6</p>  <p>Dur = 32.4s Dmag = 0.1 Sun: 131° Moon: 103°</p>	<p><b>2019 mar 6 14h18.1m</b> A19_03011 23 Thalia UCAC5 539-005084 Diam = 111.0 m = 12.4</p>  <p>Dur = 3.5s Dmag = 0.5 Sun: 62° Moon: 63°</p>

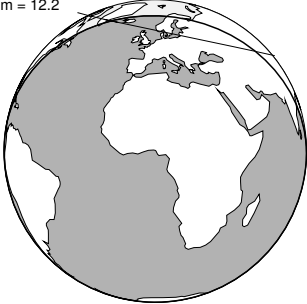
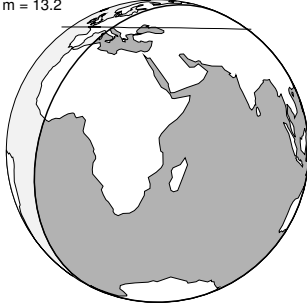
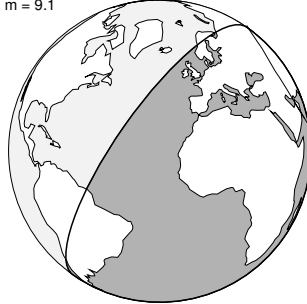
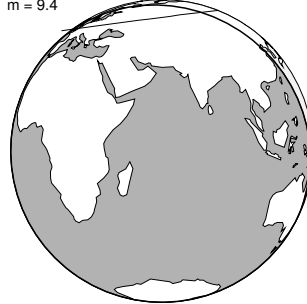
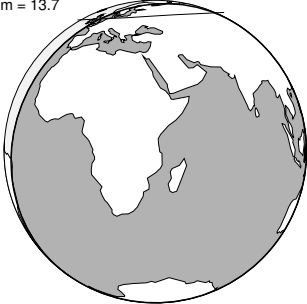
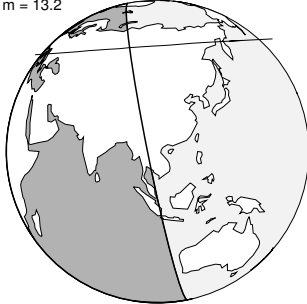
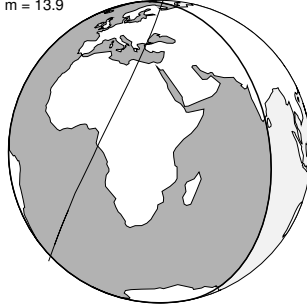
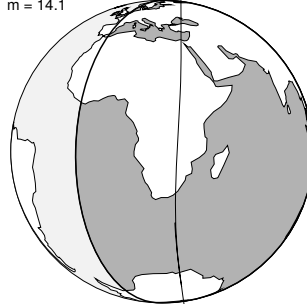
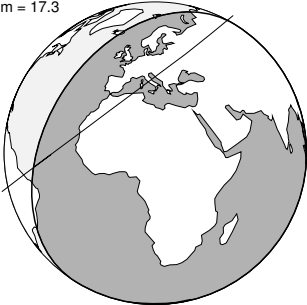
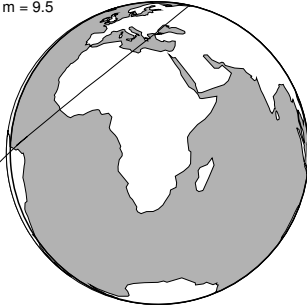
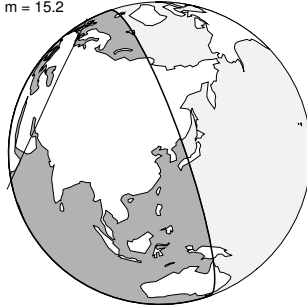
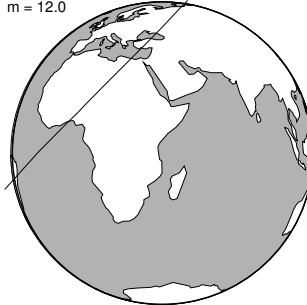
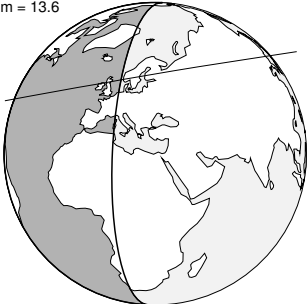
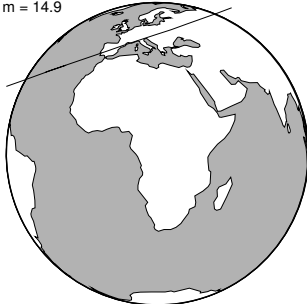
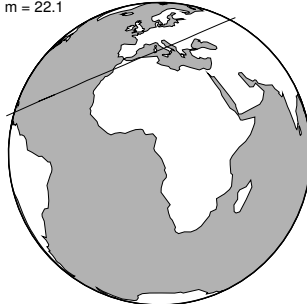
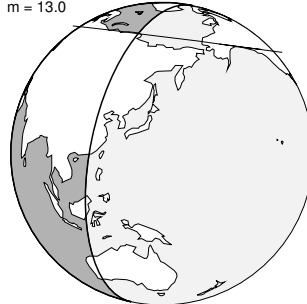
# Occultations by major and minor planets – 2019

# Region 5

<p><b>2019 mar 6 23h56.6m</b> A19_03089 780 Armenia UCAC5 528-050004 Diam = 97.1 m = 10.2 m = 13.9</p>  <p>Dur = 6.2s Dmag = 3.7 Sun: 168° Moon: 167°</p>	<p><b>2019 mar 8 3h31.7m</b> A19_03090 788 Hohensteina UCAC5 417-056707 Diam = 109.0 m = 10.6 m = 12.9</p>  <p>Dur = 15.7s Dmag = 2.4 Sun: 128° Moon: 145°</p>	<p><b>2019 mar 8 13h27.1m</b> A19_03051 336 Lacadiera UCAC5 509-042400 Diam = 72.0 m = 11.7 m = 13.6</p>  <p>Dur = 17.8s Dmag = 2.1 Sun: 132° Moon: 111°</p>	<p><b>2019 mar 8 15h20.3m</b> A19_03083 704 Interamnia TYC 0774-01738-1 Diam = 333.0 m = 12.2 m = 11.5</p>  <p>Dur = 254.6s Dmag = 0.5 Sun: 119° Moon: 97°</p>
<p><b>2019 mar 9 14h 8.3m</b> A19_03123 54598 Bienor UCAC5 648-013792 Diam = 131.8 m = 12.2 m = 19.6</p>  <p>Dur = 6.6s Dmag = 7.4 Sun: 71° Moon: 45°</p>	<p><b>2019 mar 14 13h42.1m</b> A19_03027 129 Antigone UCAC5 546-046708 Diam = 113.0 m = 12.5 m = 11.2</p>  <p>Dur = 11.3s Dmag = 0.3 Sun: 148° Moon: 58°</p>	<p><b>2019 mar 14 21h57.1m</b> A19_03063 451 Patientia UCAC5 575-044927 Diam = 230.0 m = 12.1 m = 11.3</p>  <p>Dur = 17.6s Dmag = 0.4 Sun: 157° Moon: 80°</p>	<p><b>2019 mar 16 8h10.5m</b> A19_03014 51 Nemausa UCAC5 387-122411 Diam = 152.3 m = 12.1 m = 12.5</p>  <p>Dur = 4.8s Dmag = 1.0 Sun: 62° Moon: 171°</p>
<p><b>2019 mar 21 20h 7.3m</b> A19_03023 100 Hekate UCAC5 493-055409 Diam = 92.0 m = 12.2 m = 12.5</p>  <p>Dur = 6.2s Dmag = 0.9 Sun: 170° Moon: 17°</p>	<p><b>2019 apr 1 20h50.2m</b> A19_04043 154 Bertha UCAC5 675-046866 Diam = 192.0 m = 9.0 m = 13.4</p>  <p>Dur = 10.9s Dmag = 4.4 Sun: 89° Moon: 126°</p>	<p><b>2019 apr 3 16h37.3m</b> A19_04108 740 Cantabia UCAC5 561-020896 Diam = 94.5 m = 12.5 m = 14.6</p>  <p>Dur = 4.0s Dmag = 2.2 Sun: 75° Moon: 94°</p>	<p><b>2019 apr 8 0h49.8m</b> A19_04010 18 Melpomene UCAC5 391-094255 Diam = 135.0 m = 12.3 m = 11.1</p>  <p>Dur = 8.8s Dmag = 0.3 Sun: 96° Moon: 127°</p>
<p><b>2019 apr 9 23h16.0m</b> A19_04004 11 Parthenope UCAC5 385-067969 Diam = 162.0 m = 12.4 m = 10.4</p>  <p>Dur = 39.0s Dmag = 0.2 Sun: 139° Moon: 165°</p>	<p><b>2019 apr 10 20h56.8m</b> A19_04001 2 Pallas UCAC5 542-051155 Diam = 530.9 m = 9.9 m = 7.9</p>  <p>Dur = 33.2s Dmag = 0.2 Sun: 151° Moon: 112°</p>	<p><b>2019 apr 15 18h17.4m</b> A19_04039 111 Ate UCAC5 428-052718 Diam = 139.0 m = 11.3 m = 11.7</p>  <p>Dur = 19.8s Dmag = 1.0 Sun: 149° Moon: 23°</p>	<p><b>2019 apr 22 1h20.3m</b> A19_04040 145 Adeona UCAC5 376-074462 Diam = 155.0 m = 12.4 m = 12.5</p>  <p>Dur = 20.3s Dmag = 0.8 Sun: 142° Moon: 5°</p>

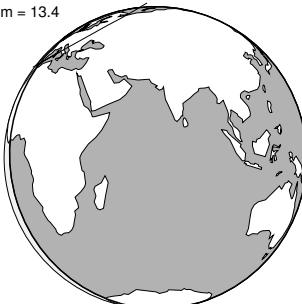
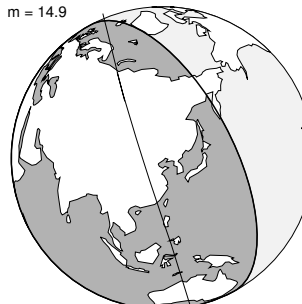
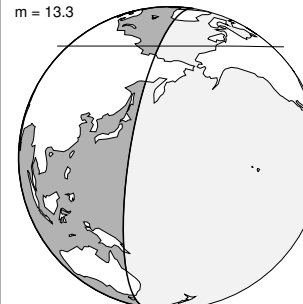
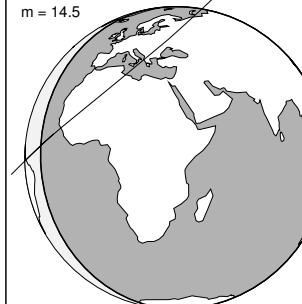
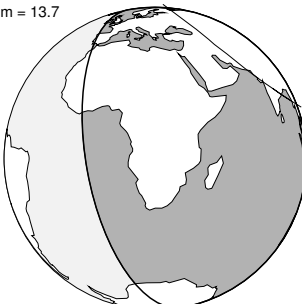
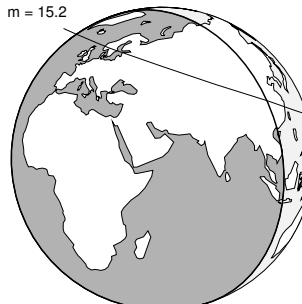
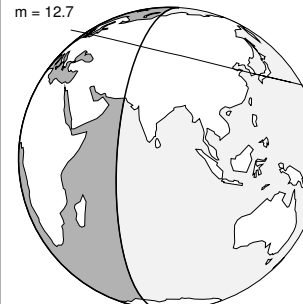
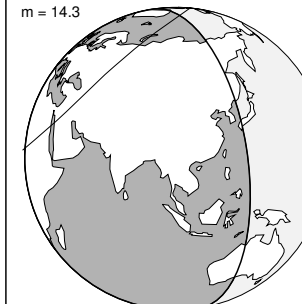
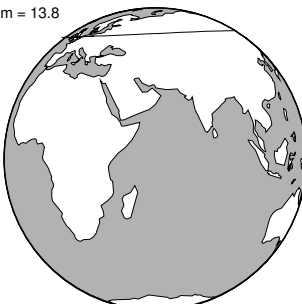

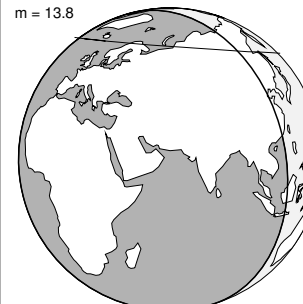
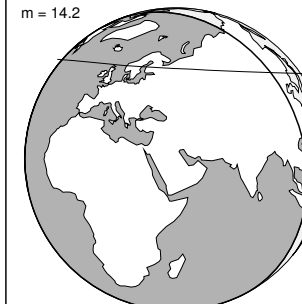
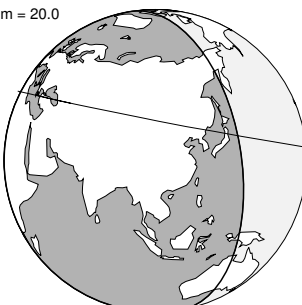
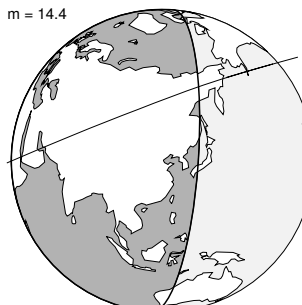
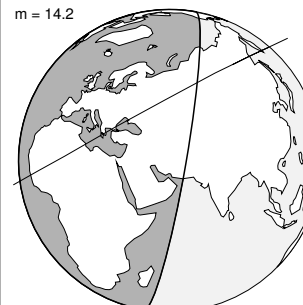
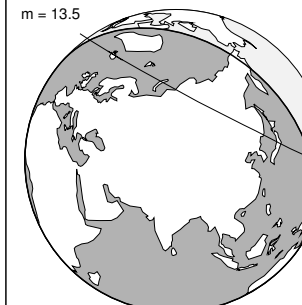
# Occultations by major and minor planets – 2019

# Region 5

<p><b>2019 may 23 23h47.7m</b> A19_05039 234 Barbara PPMX 8469364 Diam = 44.6 m = 12.0</p>  <p>Dur = 4.4s Dmag = 0.9 Sun: 153° Moon: 67°</p>	<p><b>2019 jun 7 18h48.8m</b> A19_06031 121 Hermione UCAC5 401-055242 Diam = 217.0 m = 10.7</p>  <p>Dur = 23.1s Dmag = 2.6 Sun: 140° Moon: 83°</p>	<p><b>2019 jun 12 21h43.5m</b> A19_06003 2 Pallas UCAC5 567-046961 Diam = 530.9 m = 9.1</p>  <p>Dur = 85.5s Dmag = 1.5 Sun: 106° Moon: 29°</p>	<p><b>2019 jun 21 20h42.6m</b> A19_06008 18 Melpomene UCAC5 408-087869 Diam = 135.0 m = 12.3</p>  <p>Dur = 14.7s Dmag = 0.1 Sun: 161° Moon: 42°</p>
<p><b>2019 jul 15 20h18.7m</b> A19_07116 713 Luscinia UCAC5 401-075537 Diam = 109.0 m = 13.7</p>  <p>Dur = 9.6s Dmag = 1.9 Sun: 158° Moon: 14°</p>	<p><b>2019 aug 21 23h 4.6m</b> A19_08027 119 Althaea TYC 1258-00334-1 Diam = 60.7 m = 11.8</p>  <p>Dur = 3.1s Dmag = 1.7 Sun: 86° Moon: 23°</p>	<p><b>2019 aug 26 0h40.4m</b> A19_08133 1015 Christa UCAC5 426-001328 Diam = 101.0 m = 10.1</p>  <p>Dur = 15.7s Dmag = 3.8 Sun: 136° Moon: 77°</p>	<p><b>2019 aug 26 18h43.8m</b> A19_08128 924 Toni PPMX 11674477 Diam = 87.6 m = 14.1</p>  <p>Dur = 19.3s Dmag = 2.0 Sun: 124° Moon: 172°</p>
<p><b>2019 aug 27 20h35.0m</b> A19_08158 38050 1998VR38 TYC 1083-03019-1 Diam = 45.7 m = 17.3</p>  <p>Dur = 3.1s Dmag = 6.1 Sun: 137° Moon: 145°</p>	<p><b>2019 aug 27 21h18.0m</b> A19_08008 39 Laetitia UCAC5 394-118959 Diam = 159.0 m = 9.5</p>  <p>Dur = 15.4s Dmag = 0.2 Sun: 166° Moon: 156°</p>	<p><b>2019 aug 30 20h36.7m</b> A19_08110 733 Mocia UCAC5 641-012746 Diam = 92.0 m = 15.2</p>  <p>Dur = 6.3s Dmag = 2.8 Sun: 99° Moon: 103°</p>	<p><b>2019 sep 2 20h44.3m</b> A19_09071 246 Asporina TYC 5803-00269-1 Diam = 63.8 m = 12.0</p>  <p>Dur = 5.2s Dmag = 1.3 Sun: 171° Moon: 124°</p>
<p><b>2019 sep 7 5h 1.3m</b> A19_09037 93 Minerva UCAC5 606-026432 Diam = 170.8 m = 13.6</p>  <p>Dur = 7.4s Dmag = 1.5 Sun: 73° Moon: 170°</p>	<p><b>2019 sep 7 23h 0.4m</b> A19_09156 1268 Libya UCAC5 430-114577 Diam = 97.5 m = 14.9</p>  <p>Dur = 6.4s Dmag = 2.5 Sun: 174° Moon: 74°</p>	<p><b>2019 sep 13 23h23.0m</b> B19_09001 66652 Borasisi UCAC5 435-113798 Diam = 275.4 m = 22.1</p>  <p>Dur = 11.1s Dmag = 8.3 Sun: 176° Moon: 7°</p>	<p><b>2019 sep 15 22h 8.5m</b> A19_09023 63 Ausonia TYC 1919-00393-1 Diam = 108.0 m = 11.1</p>  <p>Dur = 3.6s Dmag = 2.0 Sun: 61° Moon: 100°</p>

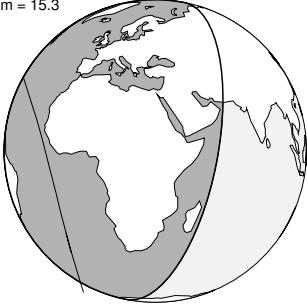
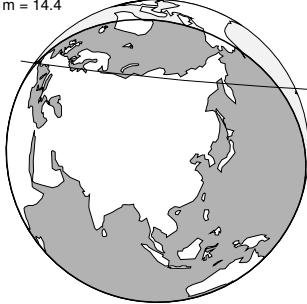
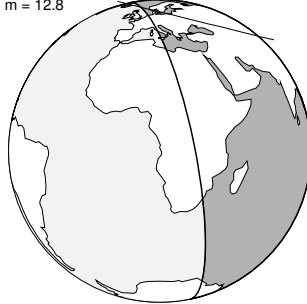
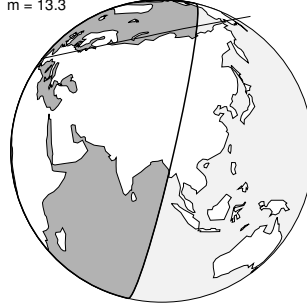
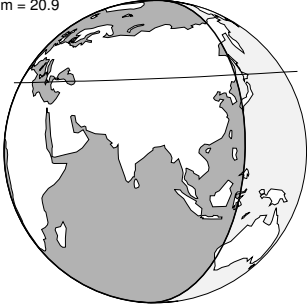
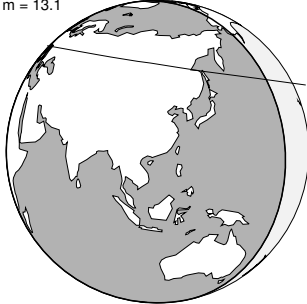
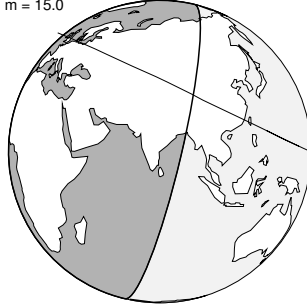
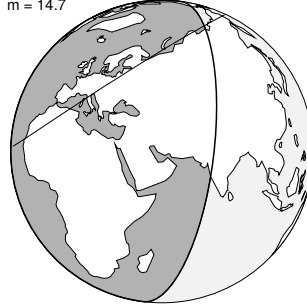
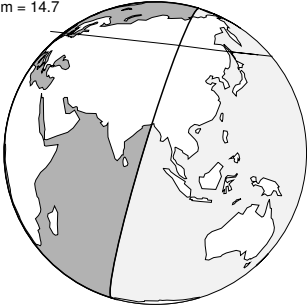
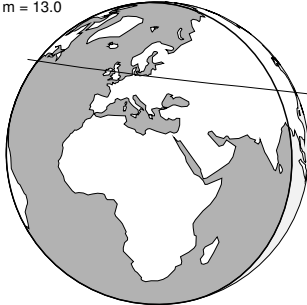
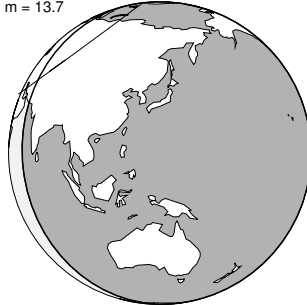
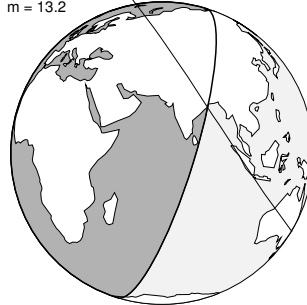
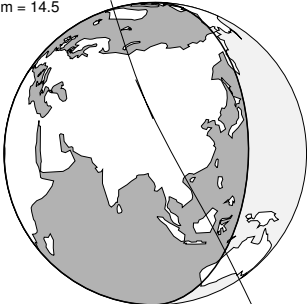
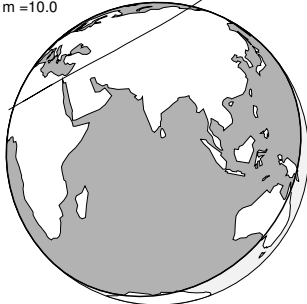
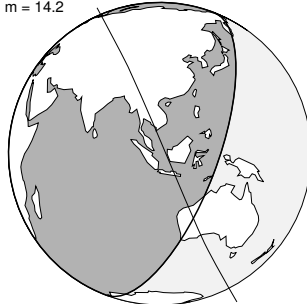
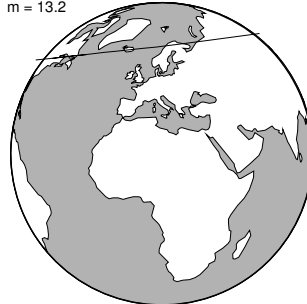
# Occultations by major and minor planets – 2019

# Region 5

<p><b>2019 sep 20 18h14.4m</b> A19_09057 190 Ismene UCAC5 420-139084 Diam = 126.5 m = 12.0 m = 13.4</p>  <p>Dur = 9.0s Dmag = 1.6 Sun: 163° Moon: 90°</p>	<p><b>2019 sep 21 19h19.7m</b> A19_09142 733 Moccia PPMX 2916171 Diam = 92.0 m = 12.5 m = 14.9</p>  <p>Dur = 8.7s Dmag = 2.5 Sun: 117° Moon: 35°</p>	<p><b>2019 sep 22 19h60.0m</b> A19_09031 81 Terpsichore TYC 2438-00351-1 Diam = 124.0 m = 11.8 m = 13.3</p>  <p>Dur = 4.7s Dmag = 1.7 Sun: 74° Moon: 10°</p>	<p><b>2019 sep 27 19h42.8m</b> A19_09154 1203 Nanna TYC 5226-00152-1 Diam = 44.7 m = 11.6 m = 14.5</p>  <p>Dur = 6.2s Dmag = 2.9 Sun: 153° Moon: 163°</p>
<p><b>2019 sep 28 18h15.8m</b> A19_09015 34 Circe UCAC5 376-161913 Diam = 118.0 m = 11.0 m = 13.7</p>  <p>Dur = 30.1s Dmag = 2.8 Sun: 117° Moon: 117°</p>	<p><b>2019 sep 29 22h36.7m</b> A19_09162 3171 Wang Shouguan TYC 1223-01453-1 Diam = 47.3 m = 10.1 m = 15.2</p>  <p>Dur = 7.4s Dmag = 5.0 Sun: 141° Moon: 158°</p>	<p><b>2019 sep 30 1h31.3m</b> A19_09049 148 Gallia UCAC5 460-036038 Diam = 104.0 m = 12.3 m = 12.7</p>  <p>Dur = 3.9s Dmag = 0.9 Sun: 69° Moon: 88°</p>	<p><b>2019 oct 1 21h11.1m</b> A19_10066 332 Siri UCAC5 566-010205 Diam = 45.0 m = 11.5 m = 14.3</p>  <p>Dur = 17.7s Dmag = 2.8 Sun: 118° Moon: 160°</p>
<p><b>2019 oct 2 19h57.9m</b> A19_10128 795 Fini TYC 4672-00259-1 Diam = 78.7 m = 10.7 m = 13.8</p>  <p>Dur = 5.2s Dmag = 3.2 Sun: 174° Moon: 122°</p>	<p><b>2019 oct 8 23h53.0m</b> A19_10148 1583 Antiochus UCAC5 548-139618 Diam = 109.0 m = 12.2 m = 15.7</p>  <p>Dur = 6.6s Dmag = 3.6 Sun: 141° Moon: 38°</p>	<p><b>2019 oct 10 22h16.4m</b> A19_10105 578 Happelia HIP 17043 Diam = 71.6 m = 7.3 m = 13.8</p>  <p>Dur = 9.3s Dmag = 6.5 Sun: 139° Moon: 73°</p>	<p><b>2019 oct 17 22h38.8m</b> A19_10138 1062 Ljuba UCAC5 583-007870 Diam = 44.7 m = 11.9 m = 14.2</p>  <p>Dur = 5.7s Dmag = 2.4 Sun: 146° Moon: 17°</p>
<p><b>2019 oct 22 20h34.0m</b> B19_10002 84922 2003VS2 UCAC5 616-022460 Diam = 602.6 m = 14.0 m = 20.0</p>  <p>Dur = 46.3s Dmag = 6.0 Sun: 124° Moon: 52°</p>	<p><b>2019 oct 23 21h22.4m</b> A19_10118 709 Fringilla PPMX 3127644 Diam = 99.6 m = 11.0 m = 14.4</p>  <p>Dur = 12.0s Dmag = 3.4 Sun: 103° Moon: 46°</p>	<p><b>2019 oct 24 1h57.7m</b> A19_10131 886 Washingtonia UCAC5 611-038678 Diam = 93.3 m = 12.1 m = 14.2</p>  <p>Dur = 6.9s Dmag = 2.3 Sun: 96° Moon: 40°</p>	<p><b>2019 oct 25 19h53.5m</b> A19_10097 501 Urhixidur UCAC5 674-019968 Diam = 80.1 m = 11.6 m = 13.5</p>  <p>Dur = 6.6s Dmag = 2.0 Sun: 141° Moon: 112°</p>

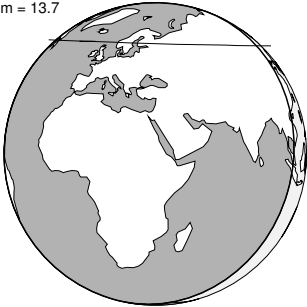
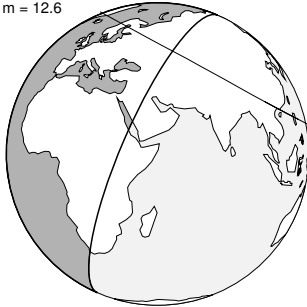
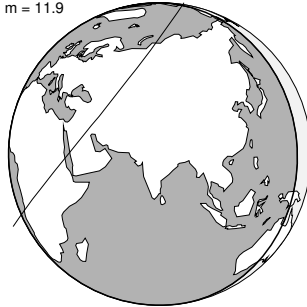
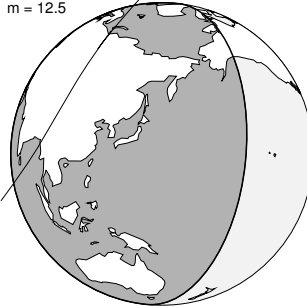
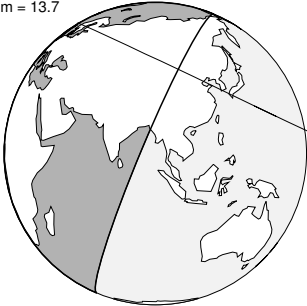
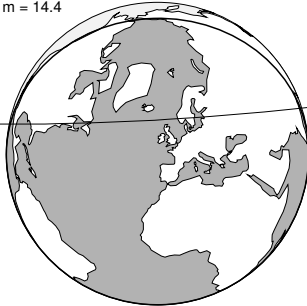
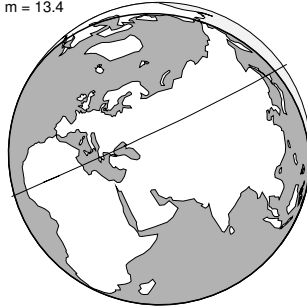
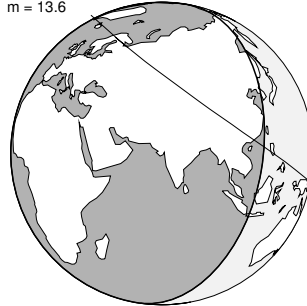
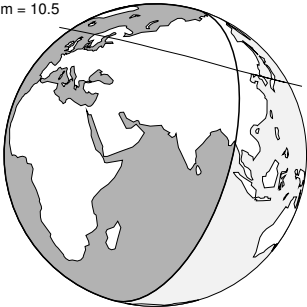
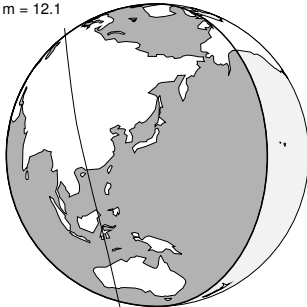
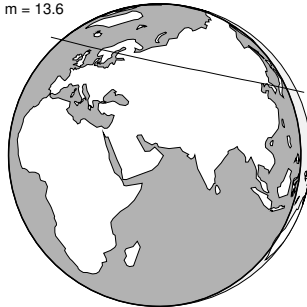
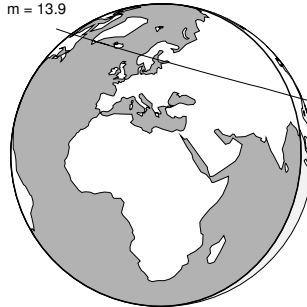
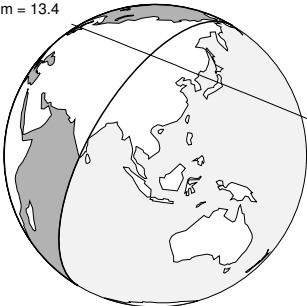
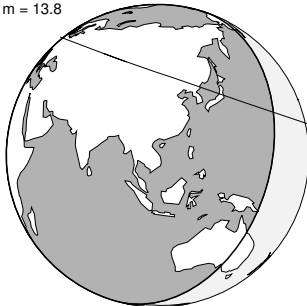
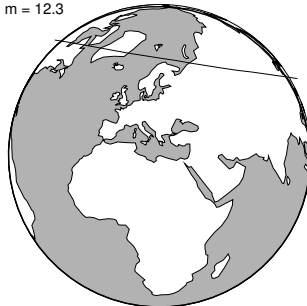
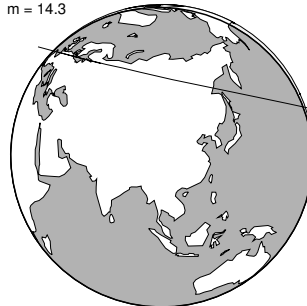
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# Region 5

<p><b>2019 oct 28 2h 2.7m</b> A19_10057 256 Walpurga UCAC5 487-023995 Diam = 66.1 m = 12.5 m = 15.3</p>  <p>Dur = 9.1s Dmag = 2.9 Sun: 114° Moon: 115°</p>	<p><b>2019 oct 28 17h43.6m</b> A19_10121 733 Moccia PPMX 2896584 Diam = 92.0 m = 12.4 m = 14.4</p>  <p>Dur = 6.6s Dmag = 2.2 Sun: 147° Moon: 148°</p>	<p><b>2019 oct 29 16h 5.6m</b> A19_10076 386 Siegena UCAC5 398-112613 Diam = 173.0 m = 11.8 m = 12.8</p>  <p>Dur = 6.8s Dmag = 1.4 Sun: 76° Moon: 56°</p>	<p><b>2019 oct 29 23h43.6m</b> A19_10032 87 Sylvia TYC 1932-00469-1 Diam = 271.0 m = 10.1 m = 13.3</p>  <p>Dur = 21.8s Dmag = 3.3 Sun: 94° Moon: 119°</p>
<p><b>2019 oct 30 21h35.7m</b> B19_10004 119979 2002WC19 UCAC5 551-020455 Diam = 478.6 m = 14.2 m = 20.9</p>  <p>Dur = 36.0s Dmag = 6.7 Sun: 126° Moon: 163°</p>	<p><b>2019 nov 1 18h26.9m</b> A19_11083 416 Vaticana UCAC5 568-011120 Diam = 89.5 m = 11.6 m = 13.1</p>  <p>Dur = 7.3s Dmag = 1.8 Sun: 147° Moon: 153°</p>	<p><b>2019 nov 3 0h 4.0m</b> A19_11112 743 Eugennis UCAC5 528-044908 Diam = 55.7 m = 12.2 m = 15.0</p>  <p>Dur = 4.4s Dmag = 2.9 Sun: 98° Moon: 170°</p>	<p><b>2019 nov 4 1h10.0m</b> A19_11098 567 Eleutheria UCAC5 591-039832 Diam = 97.0 m = 10.9 m = 14.7</p>  <p>Dur = 13.3s Dmag = 3.8 Sun: 109° Moon: 164°</p>
<p><b>2019 nov 5 0h 6.2m</b> A19_11120 928 Hildrun UCAC5 507-046421 Diam = 69.7 m = 12.0 m = 14.7</p>  <p>Dur = 3.6s Dmag = 2.8 Sun: 85° Moon: 172°</p>	<p><b>2019 nov 5 23h55.6m</b> A19_11084 416 Vaticana UCAC5 568-010962 Diam = 89.5 m = 11.4 m = 13.0</p>  <p>Dur = 6.7s Dmag = 1.8 Sun: 152° Moon: 101°</p>	<p><b>2019 nov 10 12h58.0m</b> A19_11052 156 Xanthippe TYC 1197-00261-1 Diam = 126.0 m = 11.9 m = 13.7</p>  <p>Dur = 9.3s Dmag = 1.9 Sun: 155° Moon: 12°</p>	<p><b>2019 nov 11 0h23.1m</b> A19_11061 258 Tyche TYC 0199-01178-1 Diam = 67.7 m = 9.7 m = 13.2</p>  <p>Dur = 6.1s Dmag = 3.6 Sun: 102° Moon: 93°</p>
<p><b>2019 nov 17 21h12.3m</b> A19_11111 734 Benda TYC 2451-01895-1 Diam = 78.6 m = 11.6 m = 14.5</p>  <p>Dur = 27.0s Dmag = 2.9 Sun: 128° Moon: 14°</p>	<p><b>2019 nov 18 19h49.5m</b> A19_11035 97 Klotho UCAC5 450-007492 Diam = 87.1 m = 12.4 m = 10.0</p>  <p>Dur = 14.6s Dmag = 0.1 Sun: 152° Moon: 64°</p>	<p><b>2019 nov 18 21h 4.7m</b> A19_11066 329 Svea UCAC5 451-040423 Diam = 80.5 m = 12.2 m = 14.2</p>  <p>Dur = 10.5s Dmag = 2.1 Sun: 112° Moon: 25°</p>	<p><b>2019 nov 20 23h17.4m</b> A19_11068 332 Siri TYC 1814-00592-1 Diam = 45.0 m = 10.5 m = 13.2</p>  <p>Dur = 3.7s Dmag = 2.8 Sun: 173° Moon: 98°</p>

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<p><b>2019 nov 22 23h 4.1m</b> A19_11096 559 Nanon UCAC5 526-013182 Diam = 80.0 m = 12.4 m = 13.7</p>  <p>Dur = 7.1s Dmag = 1.6 Sun: 155° Moon: 108°</p>	<p><b>2019 nov 24 3h36.6m</b> A19_11025 78 Diana UCAC5 491-053864 Diam = 116.0 m = 11.9 m = 12.6</p>  <p>Dur = 4.4s Dmag = 1.2 Sun: 76° Moon: 43°</p>	<p><b>2019 nov 25 20h13.6m</b> A19_11047 132 Aethra UCAC5 578-018413 Diam = 47.0 m = 10.4 m = 11.9</p>  <p>Dur = 4.2s Dmag = 1.7 Sun: 155° Moon: 145°</p>	<p><b>2019 nov 26 17h48.6m</b> A19_11026 81 Terpsichore UCAC5 605-040880 Diam = 124.0 m = 12.3 m = 12.5</p>  <p>Dur = 41.0s Dmag = 0.9 Sun: 123° Moon: 124°</p>
<p><b>2019 nov 27 0h12.1m</b> A19_11036 101 Helena UCAC5 510-049559 Diam = 68.3 m = 12.3 m = 13.7</p>  <p>Dur = 4.0s Dmag = 1.7 Sun: 84° Moon: 89°</p>	<p><b>2019 nov 27 0h25.9m</b> A19_11087 436 Patricia UCAC5 689-026828 Diam = 63.0 m = 12.3 m = 14.4</p>  <p>Dur = 5.0s Dmag = 2.2 Sun: 153° Moon: 151°</p>	<p><b>2019 nov 27 20h56.5m</b> A19_11090 445 Edna TYC 2905-01262-1 Diam = 89.0 m = 11.2 m = 13.4</p>  <p>Dur = 7.1s Dmag = 2.4 Sun: 155° Moon: 157°</p>	<p><b>2019 nov 27 22h29.7m</b> A19_11094 498 Tokio UCAC5 559-040563 Diam = 84.8 m = 11.9 m = 13.6</p>  <p>Dur = 14.0s Dmag = 1.9 Sun: 131° Moon: 148°</p>
<p><b>2019 nov 27 23h43.9m</b> A19_11004 5 Astraea TYC 0807-01006-1 Diam = 125.0 m = 10.7 m = 10.5</p>  <p>Dur = 23.1s Dmag = 0.7 Sun: 119° Moon: 137°</p>	<p><b>2019 nov 28 17h33.3m</b> A19_11042 118 Peitho TYC 2452-02032-1 Diam = 45.7 m = 12.1 m = 12.1</p>  <p>Dur = 10.4s Dmag = 0.8 Sun: 136° Moon: 161°</p>	<p><b>2019 nov 29 21h27.4m</b> A19_11058 237 Coelestina TYC 1863-02300-1 Diam = 44.0 m = 11.4 m = 13.6</p>  <p>Dur = 3.6s Dmag = 2.3 Sun: 158° Moon: 160°</p>	<p><b>2019 dec 1 23h51.0m</b> A19_12133 786 Bredichina PPMX 6021012 Diam = 93.2 m = 12.5 m = 13.9</p>  <p>Dur = 6.8s Dmag = 1.7 Sun: 156° Moon: 138°</p>
<p><b>2019 dec 3 0h54.5m</b> A19_12047 154 Bertha TYC 0885-00412-1 Diam = 192.0 m = 9.6 m = 13.4</p>  <p>Dur = 6.4s Dmag = 3.8 Sun: 63° Moon: 138°</p>	<p><b>2019 dec 6 19h33.1m</b> A19_12080 381 Myrrha UCAC5 527-041296 Diam = 136.5 m = 12.5 m = 13.8</p>  <p>Dur = 16.3s Dmag = 1.6 Sun: 138° Moon: 103°</p>	<p><b>2019 dec 8 22h53.0m</b> A19_12019 70 Panopaea UCAC5 615-021437 Diam = 127.0 m = 12.1 m = 12.3</p>  <p>Dur = 8.8s Dmag = 0.8 Sun: 168° Moon: 48°</p>	<p><b>2019 dec 9 17h35.5m</b> A19_12140 1048 Feodosia TYC 2411-00728-1 Diam = 72.5 m = 11.4 m = 14.3</p>  <p>Dur = 4.6s Dmag = 2.9 Sun: 167° Moon: 39°</p>

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<p><b>2019 dec 12 1h39.4m</b> A19_12026 87 Sylvia TYC 1947-00290-1 Diam = 271.0 m = 11.0 m = 12.8</p> <p>Dur = 29.0s Dmag = 2.0 Sun: 136° Moon: 45°</p>	<p><b>2019 dec 12 2h 8.3m</b> A19_12148 1320 Impala TYC 2461-00049-1 Diam = 45.6 m = 11.9 m = 16.0</p> <p>Dur = 3.1s Dmag = 4.2 Sun: 147° Moon: 35°</p>	<p><b>2019 dec 12 20h41.9m</b> A19_12013 55 Pandora PPMX 3973441 Diam = 67.5 m = 12.3 m = 11.2</p> <p>Dur = 6.1s Dmag = 0.3 Sun: 169° Moon: 14°</p>	<p><b>2019 dec 13 0h53.4m</b> A19_12044 144 Vibia PPMX 5075219 Diam = 178.0 m = 12.2 m = 11.5</p> <p>Dur = 19.0s Dmag = 0.4 Sun: 153° Moon: 17°</p>
<p><b>2019 dec 14 2h42.0m</b> A19_12102 542 Susanna TYC 0780-01579-1 Diam = 43.5 m = 11.1 m = 14.0</p> <p>Dur = 5.8s Dmag = 3.0 Sun: 139° Moon: 20°</p>	<p><b>2019 dec 14 18h14.6m</b> A19_12018 69 Hesperia TYC 0746-00039-1 Diam = 143.0 m = 11.0 m = 10.6</p> <p>Dur = 16.6s Dmag = 0.6 Sun: 156° Moon: 20°</p>	<p><b>2019 dec 16 16h29.6m</b> A19_12005 28 Bellona TYC 0698-00313-1 Diam = 126.0 m = 11.8 m = 10.4</p> <p>Dur = 12.1s Dmag = 0.3 Sun: 164° Moon: 66°</p>	<p><b>2019 dec 16 21h33.1m</b> A19_12037 127 Johanna UCAC5 623-036233 Diam = 91.2 m = 11.8 m = 12.0</p> <p>Dur = 9.0s Dmag = 0.9 Sun: 158° Moon: 42°</p>
<p><b>2019 dec 17 0h51.2m</b> A19_12079 368 Haidea PPMX 7121372 Diam = 74.0 m = 12.2 m = 15.5</p> <p>Dur = 6.5s Dmag = 3.4 Sun: 143° Moon: 29°</p>	<p><b>2019 dec 17 17h49.1m</b> A19_12020 70 Panopaea PPMX 3977032 Diam = 127.0 m = 12.3 m = 12.3</p> <p>Dur = 8.8s Dmag = 0.7 Sun: 169° Moon: 74°</p>	<p><b>2019 dec 19 18h55.9m</b> A19_12098 507 Laodica UCAC5 595-027581 Diam = 48.5 m = 11.6 m = 13.2</p> <p>Dur = 3.8s Dmag = 1.8 Sun: 172° Moon: 92°</p>	<p><b>2019 dec 20 18h49.2m</b> A19_12027 87 Sylvia TYC 1940-00875-1 Diam = 271.0 m = 11.5 m = 12.6</p> <p>Dur = 22.9s Dmag = 1.5 Sun: 146° Moon: 77°</p>
<p><b>2019 dec 21 2h34.3m</b> A19_12147 1256 Normannia UCAC5 547-032385 Diam = 78.0 m = 11.3 m = 15.5</p> <p>Dur = 5.2s Dmag = 4.2 Sun: 166° Moon: 102°</p>	<p><b>2019 dec 26 19h45.9m</b> A19_12094 480 Hansa TYC 4801-02432-1 Diam = 58.0 m = 12.1 m = 12.1</p> <p>Dur = 4.4s Dmag = 0.7 Sun: 153° Moon: 155°</p>	<p><b>2019 dec 27 15h42.0m</b> A19_12007 35 Leukothea UCAC5 622-020326 Diam = 108.0 m = 12.1 m = 13.3</p> <p>Dur = 7.7s Dmag = 1.5 Sun: 161° Moon: 147°</p>	<p><b>2019 dec 27 17h41.0m</b> A19_12085 408 Fama TYC 1758-00283-1 Diam = 45.0 m = 12.1 m = 14.2</p> <p>Dur = 7.8s Dmag = 2.2 Sun: 121° Moon: 103°</p>



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# Region 5

