

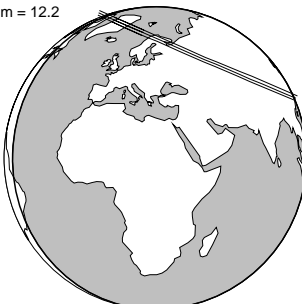
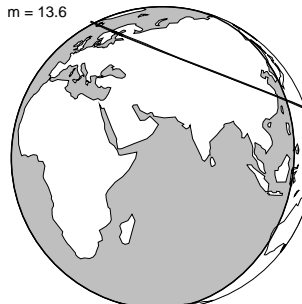
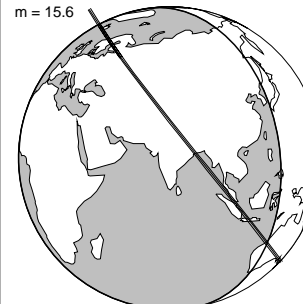
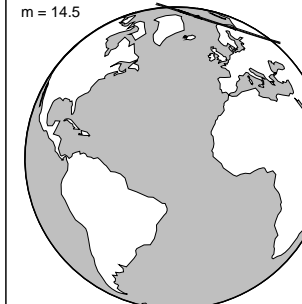
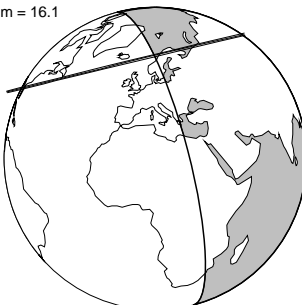
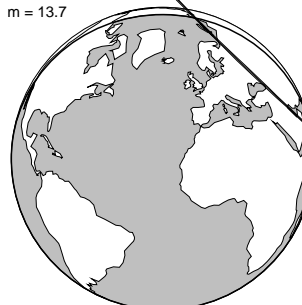
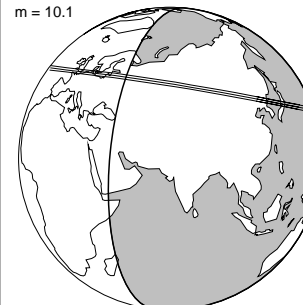
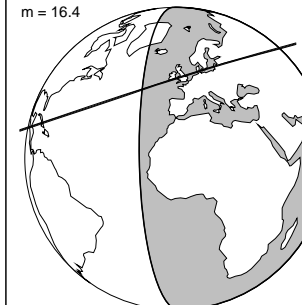
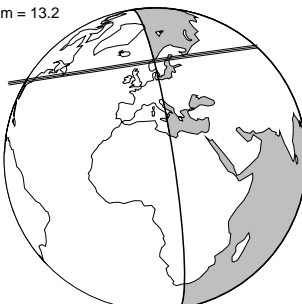
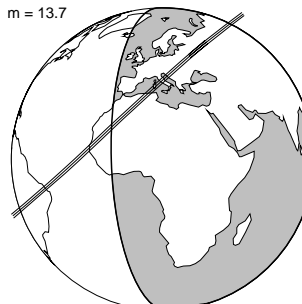
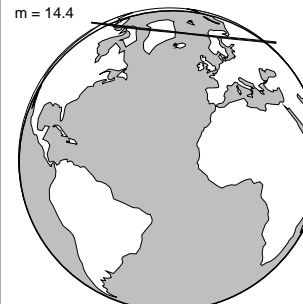
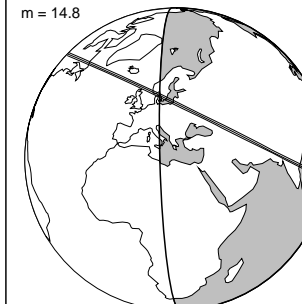
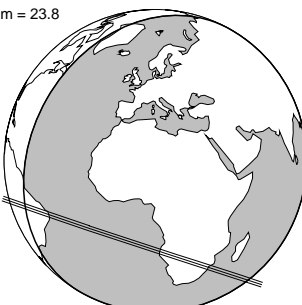
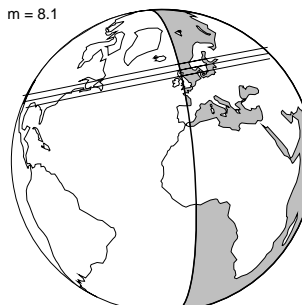
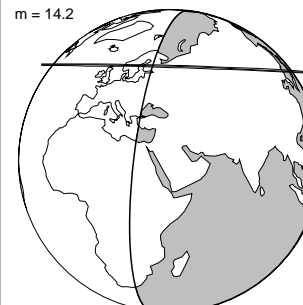
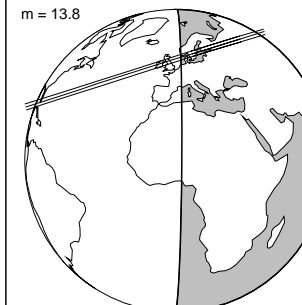
# Occultations by major and minor planets – 2013

# Region 5

<p><b>2013 jan 1 19h18.5m</b> A13_01015 48 Doris PPMX 6984462 Diam = 219.0 m = 12.3 m = 11.8</p> <p>Dur = 18.9s Dmag = 0.5 Sun: 165° Moon: 60°</p>	<p><b>2013 jan 2 2h 1.6m</b> A13_01076 595 Polyxena PPMX 2968642 Diam = 114.0 m = 12.2 m = 14.3</p> <p>Dur = 11.3s Dmag = 2.3 Sun: 142° Moon: 88°</p>	<p><b>2013 jan 5 21h 8.6m</b> A13_01085 895 Helio N08c 265451 Diam = 147.0 m = 12.4 m = 13.2</p> <p>Dur = 9.8s Dmag = 1.2 Sun: 165° Moon: 101°</p>	<p><b>2013 jan 8 16h53.4m</b> A13_01001 9 Metis PPMX 5046699 Diam = 183.7 m = 11.7 m = 8.6</p> <p>Dur = 21.4s Dmag = 0.1 Sun: 169° Moon: 145°</p>
<p><b>2013 jan 10 0h11.6m</b> A13_01082 758 Mancunia PPMX 5084493 Diam = 86.5 m = 12.2 m = 12.6</p> <p>Dur = 7.3s Dmag = 1.0 Sun: 179° Moon: 155°</p>	<p><b>2013 jan 13 0h 7.5m</b> A13_01096 4835 1989BQ PPMX 6234844 Diam = 36.3 m = 12.3 m = 17.1</p> <p>Dur = 3.7s Dmag = 4.8 Sun: 130° Moon: 145°</p>	<p><b>2013 jan 14 2h11.6m</b> A13_01077 595 Polyxena PPMX 2963819 Diam = 114.0 m = 10.3 m = 14.5</p> <p>Dur = 17.5s Dmag = 4.3 Sun: 130° Moon: 100°</p>	<p><b>2013 jan 14 15h36.1m</b> A13_01034 120 Lachesis PPMX 6817736 Diam = 178.0 m = 9.7 m = 14.5</p> <p>Dur = 10.5s Dmag = 4.8 Sun: 86° Moon: 48°</p>
<p><b>2013 jan 18 20h43.2m</b> A13_01091 907 Rhoda PPMX 2136435 Diam = 65.8 m = 11.1 m = 14.1</p> <p>Dur = 9.8s Dmag = 3.1 Sun: 139° Moon: 62°</p>	<p><b>2013 jan 23 3h14.7m</b> A13_01012 26 Proserpina S03c 510682 Diam = 98.7 m = 11.5 m = 13.1</p> <p>Dur = 9.7s Dmag = 1.8 Sun: 105° Moon: 119°</p>	<p><b>2013 jan 26 16h39.1m</b> A13_01007 21 Lutetia PPMX 4983686 Diam = 99.5 m = 12.4 m = 12.3</p> <p>Dur = 19.2s Dmag = 0.7 Sun: 138° Moon: 37°</p>	<p><b>2013 jan 27 19h18.2m</b> A13_01072 536 Merapi PPMX 3129626 Diam = 158.0 m = 12.1 m = 14.3</p> <p>Dur = 12.1s Dmag = 2.3 Sun: 149° Moon: 39°</p>
<p><b>2013 jan 28 21h19.4m</b> A13_01064 410 Chloris PPMX 5035955 Diam = 128.0 m = 10.8 m = 14.2</p> <p>Dur = 10.5s Dmag = 3.4 Sun: 147° Moon: 52°</p>	<p><b>2013 jan 30 15h44.2m</b> B13_01006 2003WU188 PPMX 5058625 Diam = 239.9 m = 14.3 m = 22.1</p> <p>Dur = 10.8s Dmag = 7.8 Sun: 151° Moon: 69°</p>	<p><b>2013 feb 7 0h 8.5m</b> A13_02011 68 Leto PPMX 5180328 Diam = 127.0 m = 11.7 m = 12.3</p> <p>Dur = 8.5s Dmag = 1.1 Sun: 168° Moon: 131°</p>	<p><b>2013 feb 7 3h35.7m</b> B13_02004 2005CG81 PPMX 6211501 Diam = 182.0 m = 13.8 m = 22.7</p> <p>Dur = 7.1s Dmag = 8.8 Sun: 169° Moon: 128°</p>

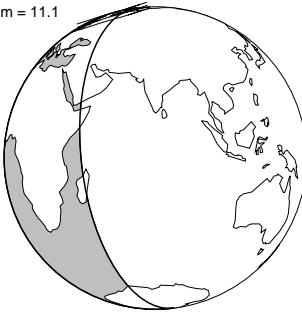
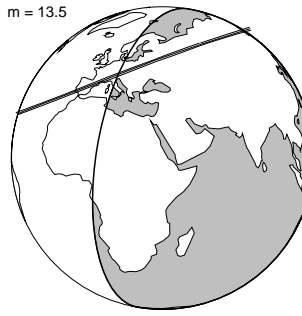
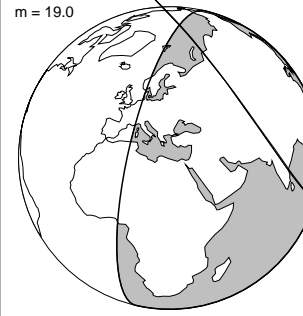
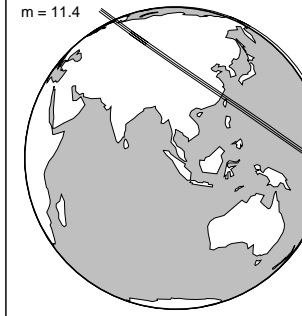
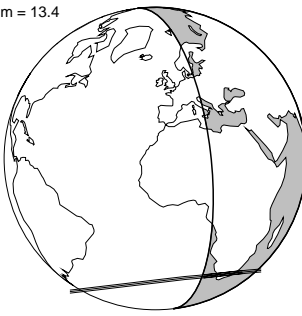
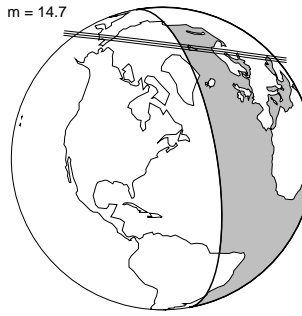
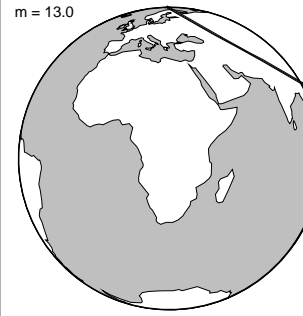
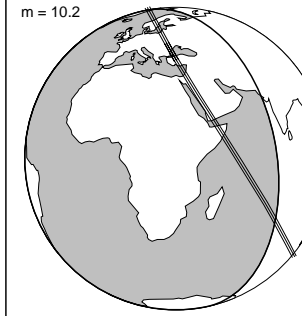
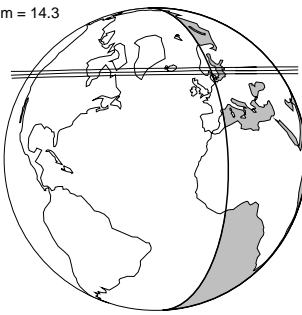
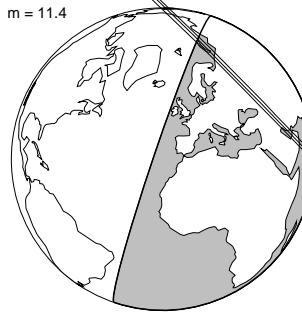
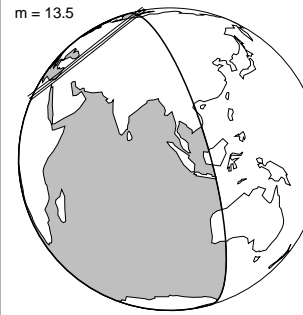
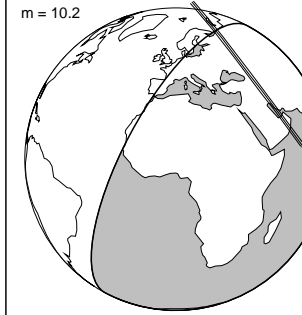
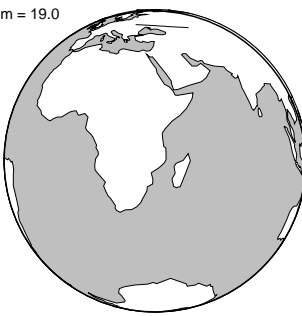
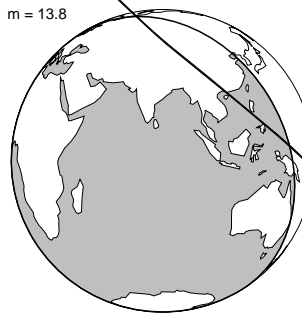
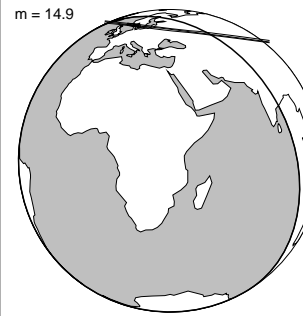
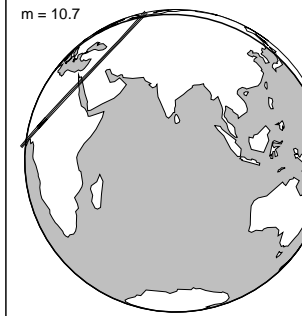
# Occultations by major and minor planets – 2013

# Region 5

<p><b>2013 feb 7 21h14.3m</b> A13_02008 45 Eugenia PPMX 6139358 Diam = 214.0 m = 12.1 m = 12.2</p>  <p>Dur = 18.4s Dmag = 0.8 Sun: 160° Moon: 166°</p>	<p><b>2013 feb 14 22h10.3m</b> A13_02038 362 Havnia PPMX 7250262 Diam = 52.5 m = 12.3 m = 13.6</p>  <p>Dur = 6.1s Dmag = 1.7 Sun: 150° Moon: 149°</p>	<p><b>2013 feb 25 21h56.5m</b> A13_02059 814 Taurus PPMX 6280675 Diam = 116.0 m = 12.3 m = 15.6</p>  <p>Dur = 8.3s Dmag = 3.3 Sun: 136° Moon: 46°</p>	<p><b>2013 feb 27 2h 7.7m</b> A13_02013 75 Eurydike PPMX 7218923 Diam = 58.3 m = 11.3 m = 14.5</p>  <p>Dur = 3.5s Dmag = 3.2 Sun: 175° Moon: 20°</p>
<p><b>2013 feb 28 16h18.4m</b> A13_02056 721 Tabora PPMX 4881489 Diam = 82.6 m = 11.7 m = 16.1</p>  <p>Dur = 3.6s Dmag = 4.4 Sun: 77° Moon: 138°</p>	<p><b>2013 mar 3 1h48.2m</b> A13_03091 729 Watsonia HIP 53417 Diam = 53.3 m = 4.3 m = 13.7</p>  <p>Dur = 4.3s Dmag = 9.4 Sun: 162° Moon: 74°</p>	<p><b>2013 mar 3 15h 0.6m</b> A13_03005 9 Metis UCAC2 42040041 Diam = 183.7 m = 12.2 m = 10.1</p>  <p>Dur = 24.7s Dmag = 0.1 Sun: 113° Moon: 139°</p>	<p><b>2013 mar 5 19h25.7m</b> A13_03057 301 Bavaria PPMX 6009088 Diam = 55.5 m = 11.7 m = 16.4</p>  <p>Dur = 6.5s Dmag = 4.7 Sun: 104° Moon: 178°</p>
<p><b>2013 mar 6 16h51.8m</b> A13_03010 24 Themis PPMX 5924462 Diam = 127.1 m = 12.4 m = 13.2</p>  <p>Dur = 6.4s Dmag = 1.3 Sun: 83° Moon: 149°</p>	<p><b>2013 mar 6 18h35.8m</b> A13_03077 444 Gyptis N11a 206674 Diam = 170.0 m = 11.5 m = 13.7</p>  <p>Dur = 22.0s Dmag = 2.3 Sun: 109° Moon: 171°</p>	<p><b>2013 mar 7 1h43.0m</b> A13_03051 255 Oppavia PPMX 6229058 Diam = 58.0 m = 11.4 m = 14.4</p>  <p>Dur = 5.3s Dmag = 3.0 Sun: 167° Moon: 126°</p>	<p><b>2013 mar 8 16h56.5m</b> A13_03081 469 Argentina PPMX 3990130 Diam = 129.0 m = 11.0 m = 14.8</p>  <p>Dur = 9.6s Dmag = 3.8 Sun: 96° Moon: 134°</p>
<p><b>2013 mar 14 21h30.6m</b> A13_03107 1999CL119 PPMX 6203007 Diam = 208.9 m = 12.1 m = 23.8</p>  <p>Dur = 9.9s Dmag = 11.6 Sun: 145° Moon: 109°</p>	<p><b>2013 mar 20 18h22.0m</b> A13_03003 4 Vesta PPMX 4960290 Diam = 501.0 m = 11.6 m = 8.1</p>  <p>Dur = 22.8s Dmag = 0.0 Sun: 78° Moon: 24°</p>	<p><b>2013 mar 21 16h18.0m</b> A13_03093 758 Mancunia PPMX 5067123 Diam = 86.5 m = 11.8 m = 14.2</p>  <p>Dur = 8.5s Dmag = 2.5 Sun: 103° Moon: 10°</p>	<p><b>2013 mar 22 17h49.1m</b> A13_03034 107 Camilla N14a 168454 Diam = 237.0 m = 12.0 m = 13.8</p>  <p>Dur = 13.4s Dmag = 2.0 Sun: 87° Moon: 36°</p>

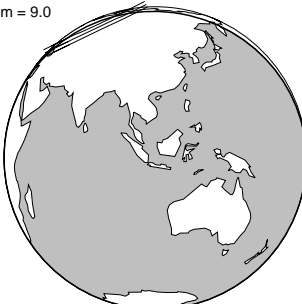
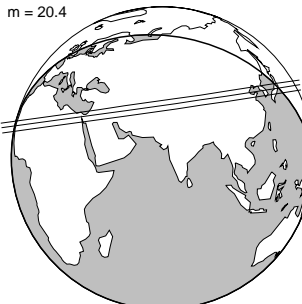
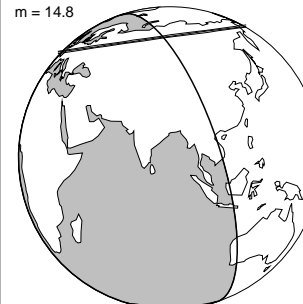
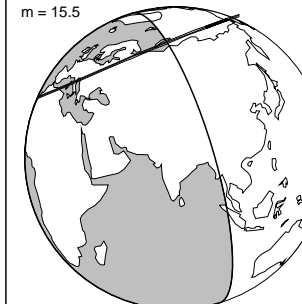
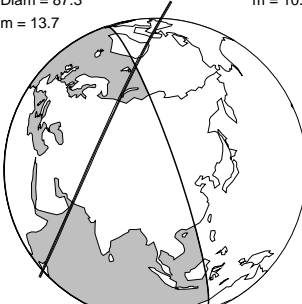
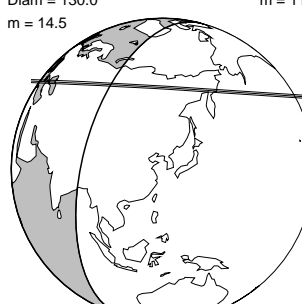
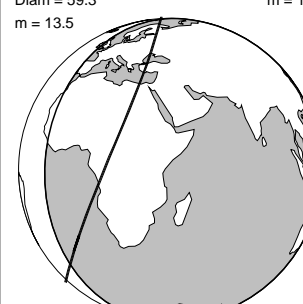
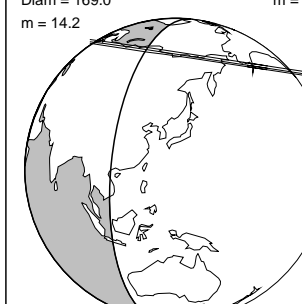
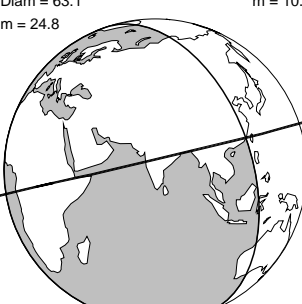
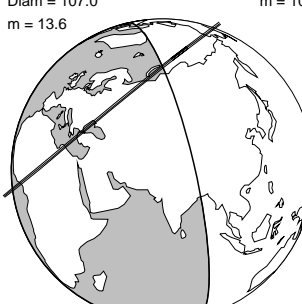
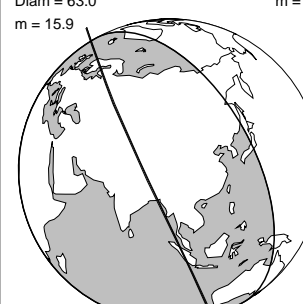
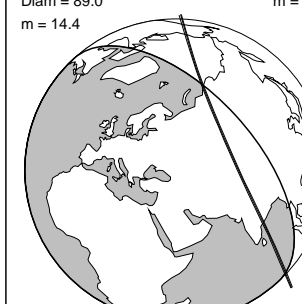
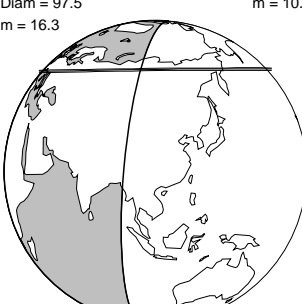
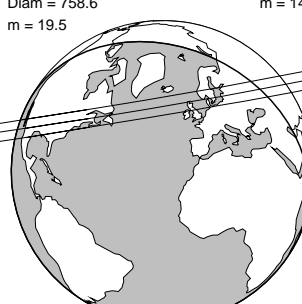
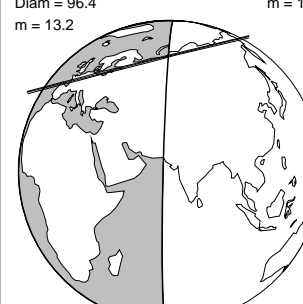
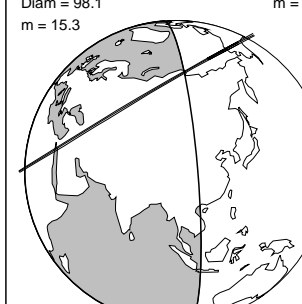
# Occultations by major and minor planets – 2013

# Region 5

<p><b>2013 mar 24 2h57.0m</b> A13_03002 3 Juno S09b 1288017 Diam = 267.0 m = 12.0 m = 11.1</p>  <p>Dur = 8.6s Dmag = 0.4 Sun: 60° Moon: 160°</p>	<p><b>2013 mar 24 17h24.8m</b> A13_03012 34 Circe PPMX 6138226 Diam = 118.0 m = 11.3 m = 13.5</p>  <p>Dur = 20.2s Dmag = 2.3 Sun: 115° Moon: 30°</p>	<p><b>2013 mar 25 17h44.8m</b> A13_03106 19725 1999WT4 N32a 373439 Diam = 25.1 m = 11.4 m = 19.0</p>  <p>Dur = 3.9s Dmag = 7.7 Sun: 106° Moon: 55°</p>	<p><b>2013 mar 25 18h 7.6m</b> A13_03014 39 Laetitia PPMX 8377563 Diam = 159.0 m = 9.9 m = 11.4</p>  <p>Dur = 11.3s Dmag = 1.7 Sun: 168° Moon: 32°</p>
<p><b>2013 mar 26 17h18.6m</b> A13_03011 24 Themis PPMX 4944520 Diam = 127.1 m = 11.6 m = 13.4</p>  <p>Dur = 4.6s Dmag = 2.0 Sun: 68° Moon: 103°</p>	<p><b>2013 apr 5 21h 6.0m</b> A13_04036 154 Bertha PPMX 3039402 Diam = 192.0 m = 11.4 m = 14.7</p>  <p>Dur = 7.4s Dmag = 3.3 Sun: 69° Moon: 120°</p>	<p><b>2013 apr 5 22h44.7m</b> A13_04032 119 Althaea PPMX 10468792 Diam = 60.7 m = 11.8 m = 13.0</p>  <p>Dur = 4.8s Dmag = 1.5 Sun: 174° Moon: 120°</p>	<p><b>2013 apr 15 1h 7.9m</b> A13_04008 6 Hebe PPMX 9590506 Diam = 186.0 m = 10.3 m = 10.2</p>  <p>Dur = 25.8s Dmag = 0.7 Sun: 131° Moon: 161°</p>
<p><b>2013 apr 18 18h24.5m</b> A13_04025 87 Sylvia PPMX 5007140 Diam = 271.0 m = 12.2 m = 14.3</p>  <p>Dur = 9.5s Dmag = 2.2 Sun: 61° Moon: 33°</p>	<p><b>2013 apr 24 19h56.8m</b> A13_04012 13 Egeria PPMX 4137294 Diam = 215.0 m = 12.1 m = 11.4</p>  <p>Dur = 11.9s Dmag = 0.4 Sun: 93° Moon: 74°</p>	<p><b>2013 may 2 22h29.1m</b> A13_05014 130 Elektra UCAC2 31403275 Diam = 189.0 m = 11.8 m = 13.5</p>  <p>Dur = 21.9s Dmag = 1.9 Sun: 105° Moon: 26°</p>	<p><b>2013 may 26 19h29.5m</b> A13_05002 14 Irene PPMX 7253337 Diam = 152.4 m = 11.5 m = 10.2</p>  <p>Dur = 14.4s Dmag = 0.3 Sun: 110° Moon: 92°</p>
<p><b>2013 jun 8 22h 2.2m</b> B13_06006 50000 Quaoar S15b 837100 Diam = 1250.0 m = 12.7 m = 19.0</p>  <p>Dur = 50.8s Dmag = 6.2 Sun: 169° Moon: 174°</p>	<p><b>2013 jun 9 20h34.0m</b> A13_06062 397 Vienna PPMX 9709679 Diam = 46.0 m = 11.9 m = 13.8</p>  <p>Dur = 5.6s Dmag = 2.1 Sun: 145° Moon: 158°</p>	<p><b>2013 jun 13 0h 1.2m</b> A13_06082 589 Croatia UCAC2 29546954 Diam = 92.5 m = 12.1 m = 14.9</p>  <p>Dur = 11.2s Dmag = 2.9 Sun: 143° Moon: 164°</p>	<p><b>2013 jul 2 19h15.8m</b> A13_07075 387 Aquitania PPMX 10702320 Diam = 106.0 m = 11.9 m = 10.7</p>  <p>Dur = 11.6s Dmag = 0.3 Sun: 163° Moon: 110°</p>

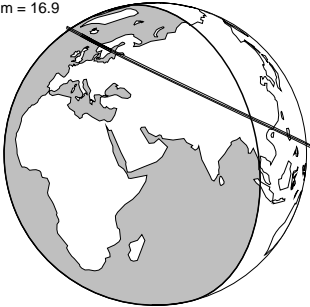
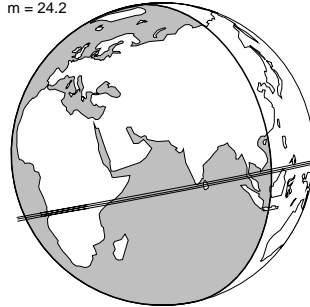

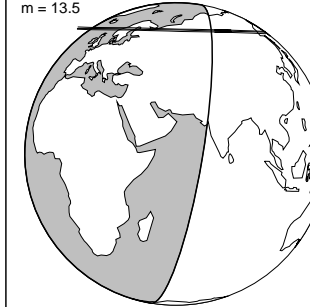
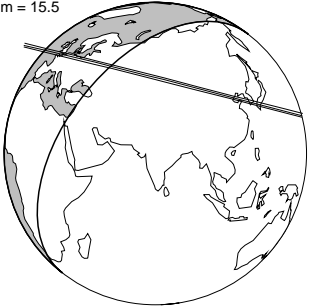
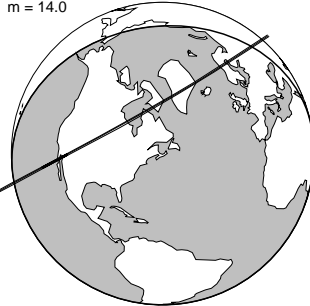
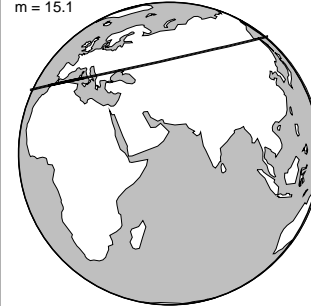
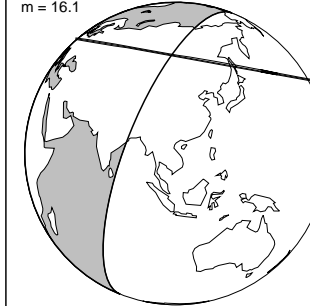
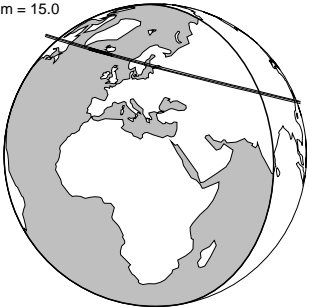
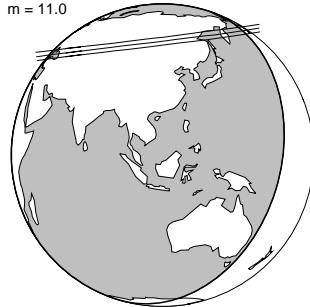
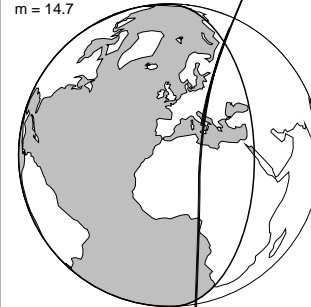
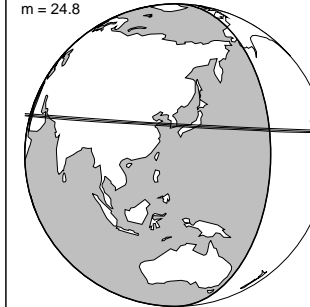
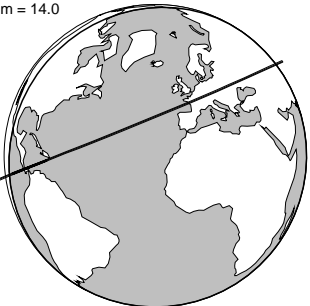
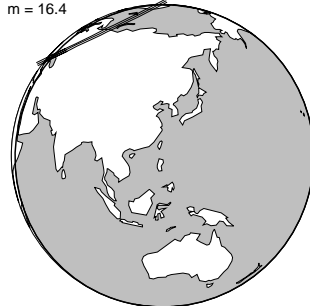
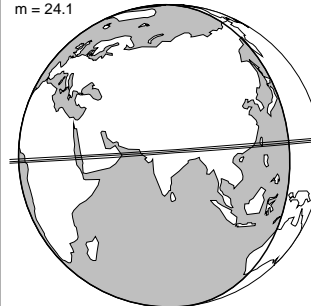
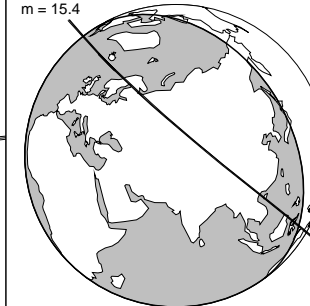
# Occultations by major and minor planets – 2013

# Region 5

<p><b>2013 jul 29 17h 3.4m</b> A13_07002 3 Juno PPMX 9823370 Diam = 267.0 m = 11.3 m = 9.0</p>  <p>Dur = 22.0s Dmag = 0.1 Sun: 165° Moon: 83°</p>	<p><b>2013 jul 31 19h53.4m</b> B13_07010 2004NT33 PPMX 6671114 Diam = 436.5 m = 14.3 m = 20.4</p>  <p>Dur = 18.6s Dmag = 6.1 Sun: 143° Moon: 95°</p>	<p><b>2013 aug 18 22h40.6m</b> A13_08044 358 Apollonia PPMX 6844616 Diam = 91.8 m = 11.0 m = 14.8</p>  <p>Dur = 10.3s Dmag = 3.8 Sun: 109° Moon: 100°</p>	<p><b>2013 aug 30 23h25.2m</b> A13_08079 583 Klotilde PPMX 4867650 Diam = 86.0 m = 11.5 m = 15.5</p>  <p>Dur = 10.8s Dmag = 4.0 Sun: 104° Moon: 44°</p>
<p><b>2013 sep 3 22h10.2m</b> A13_09016 71 Niobe PPMX 2038700 Diam = 87.3 m = 10.2 m = 13.7</p>  <p>Dur = 6.1s Dmag = 3.5 Sun: 97° Moon: 84°</p>	<p><b>2013 sep 3 23h59.5m</b> A13_09067 602 Marianna PPMX 4056568 Diam = 130.0 m = 11.2 m = 14.5</p>  <p>Dur = 4.0s Dmag = 3.4 Sun: 57° Moon: 43°</p>	<p><b>2013 sep 8 18h53.1m</b> A13_09057 510 Mabella PPMX 9828277 Diam = 59.3 m = 10.9 m = 13.5</p>  <p>Dur = 10.2s Dmag = 2.7 Sun: 145° Moon: 108°</p>	<p><b>2013 sep 9 22h43.6m</b> A13_09038 241 Germania UCAC2 40003213 Diam = 169.0 m = 11.8 m = 14.2</p>  <p>Dur = 6.0s Dmag = 2.5 Sun: 64° Moon: 119°</p>
<p><b>2013 sep 10 21h56.8m</b> A13_09089 143751 2003US292 PPMX 5856509 Diam = 63.1 m = 10.8 m = 24.8</p>  <p>Dur = 4.7s Dmag = 14.0 Sun: 129° Moon: 164°</p>	<p><b>2013 sep 11 23h55.1m</b> A13_09026 134 Sophrosyne PPMX 3918726 Diam = 107.0 m = 10.1 m = 13.6</p>  <p>Dur = 7.7s Dmag = 3.6 Sun: 102° Moon: 165°</p>	<p><b>2013 sep 18 20h36.0m</b> A13_09052 436 Patricia PPMX 3850868 Diam = 63.0 m = 9.6 m = 15.9</p>  <p>Dur = 6.6s Dmag = 6.2 Sun: 124° Moon: 62°</p>	<p><b>2013 sep 19 23h29.5m</b> A13_09053 445 Edna PPMX 1983470 Diam = 89.0 m = 11.7 m = 14.4</p>  <p>Dur = 12.7s Dmag = 2.8 Sun: 122° Moon: 51°</p>
<p><b>2013 sep 19 23h40.7m</b> A13_09083 1268 Libya PPMX 5044506 Diam = 97.5 m = 10.8 m = 16.3</p>  <p>Dur = 4.5s Dmag = 5.4 Sun: 77° Moon: 95°</p>	<p><b>2013 sep 23 2h25.1m</b> B13_09002 55636 2002TX300 UCAC2 42870489 Diam = 758.6 m = 14.7 m = 19.5</p>  <p>Dur = 32.9s Dmag = 4.9 Sun: 145° Moon: 30°</p>	<p><b>2013 sep 24 1h26.7m</b> A13_09077 776 Berbericia PPMX 6024887 Diam = 96.4 m = 11.6 m = 13.2</p>  <p>Dur = 5.4s Dmag = 1.8 Sun: 87° Moon: 37°</p>	<p><b>2013 sep 24 22h42.0m</b> A13_09048 366 Vincentina PPMX 3985851 Diam = 98.1 m = 10.6 m = 15.3</p>  <p>Dur = 8.3s Dmag = 4.7 Sun: 98° Moon: 21°</p>

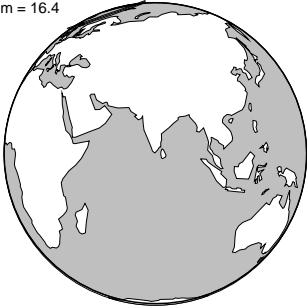
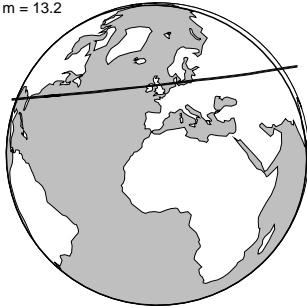
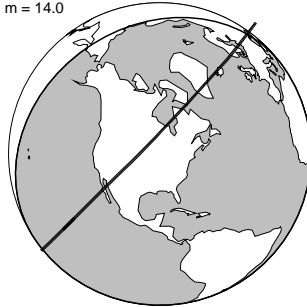
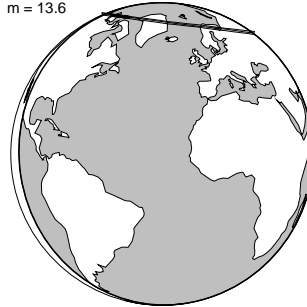
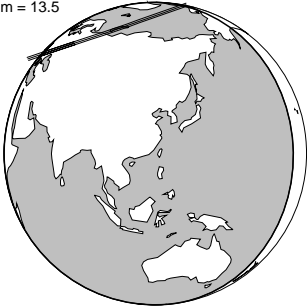
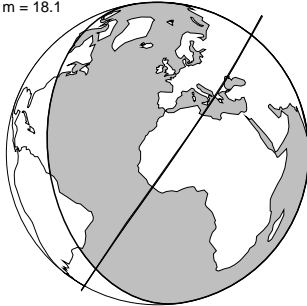
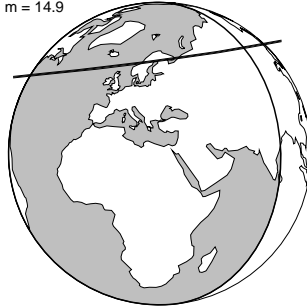
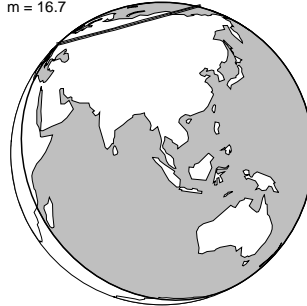
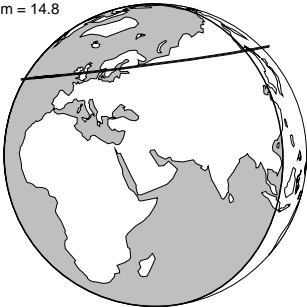
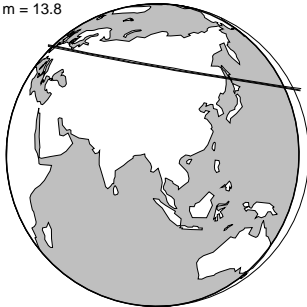
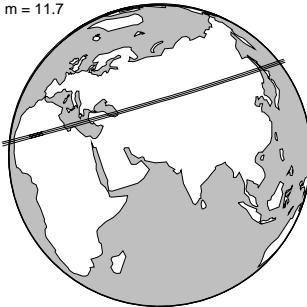
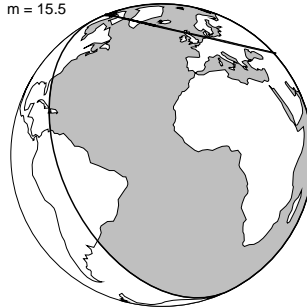
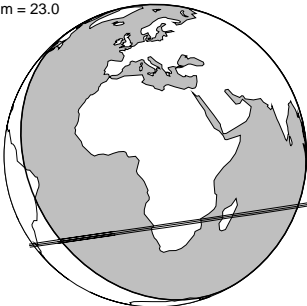
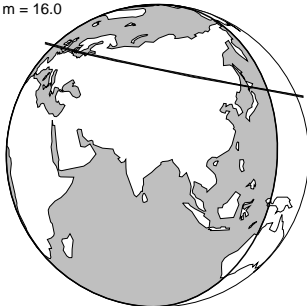
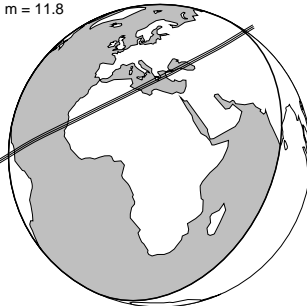
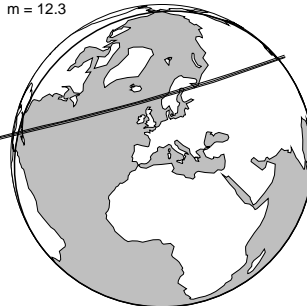
# Occultations by major and minor planets – 2013

# Region 5

<p><b>2013 oct 2 23h16.1m</b> A13_10089 1208 Troilus PPMX 5896696 Diam = 111.0 m = 12.5 m = 16.9</p>  <p>Dur = 9.2s Dmag = 4.5 Sun: 132° Moon: 107°</p>	<p><b>2013 oct 7 22h28.6m</b> A13_10093 2004UD10 PPMX 5901966 Diam = 158.5 m = 10.6 m = 24.2</p>  <p>Dur = 9.4s Dmag = 13.6 Sun: 134° Moon: 172°</p>	<p><b>2013 oct 18 16h16.1m</b> A13_10091 4709 Ennomos PPMX 3894540 Diam = 55.0 m = 12.2 m = 17.2</p>  <p>Dur = 4.3s Dmag = 5.0 Sun: 142° Moon: 41°</p>	<p><b>2013 oct 22 1h13.9m</b> A13_10084 1021 Flammario HIP 34828 Diam = 103.0 m = 8.1 m = 13.5</p>  <p>Dur = 8.5s Dmag = 5.5 Sun: 100° Moon: 44°</p>
<p><b>2013 oct 26 3h58.7m</b> A13_10068 536 Merapi HIP 55562 Diam = 158.0 m = 10.0 m = 15.5</p>  <p>Dur = 4.7s Dmag = 5.6 Sun: 52° Moon: 53°</p>	<p><b>2013 oct 29 3h34.4m</b> A13_10055 445 Edna PPMX 1961074 Diam = 89.0 m = 12.1 m = 14.0</p>  <p>Dur = 8.7s Dmag = 2.0 Sun: 147° Moon: 106°</p>	<p><b>2013 oct 29 20h17.5m</b> A13_10054 425 Cornelia PPMX 6855350 Diam = 66.8 m = 11.9 m = 15.1</p>  <p>Dur = 5.1s Dmag = 3.3 Sun: 171° Moon: 114°</p>	<p><b>2013 oct 30 0h20.0m</b> A13_10057 464 Megaira PPMX 6209131 Diam = 76.5 m = 11.4 m = 16.1</p>  <p>Dur = 3.2s Dmag = 4.7 Sun: 70° Moon: 17°</p>
<p><b>2013 oct 31 0h40.5m</b> A13_10070 567 Eleutheria PPMX 4951097 Diam = 97.0 m = 12.5 m = 15.0</p>  <p>Dur = 11.5s Dmag = 2.7 Sun: 141° Moon: 97°</p>	<p><b>2013 nov 1 18h48.0m</b> A13_11062 511 Davida PPMX 7979446 Diam = 337.0 m = 9.8 m = 11.0</p>  <p>Dur = 59.2s Dmag = 1.5 Sun: 141° Moon: 120°</p>	<p><b>2013 nov 3 3h49.4m</b> A13_11059 497 Iva PPMX 5035341 Diam = 45.3 m = 12.1 m = 14.7</p>  <p>Dur = 18.5s Dmag = 2.6 Sun: 123° Moon: 119°</p>	<p><b>2013 nov 3 18h43.7m</b> A13_11101 1998WY31 PPMX 5020951 Diam = 114.8 m = 10.5 m = 24.8</p>  <p>Dur = 7.9s Dmag = 14.3 Sun: 128° Moon: 132°</p>
<p><b>2013 nov 4 0h 5.9m</b> A13_11024 174 Phaedra PPMX 4802536 Diam = 71.7 m = 11.8 m = 14.0</p>  <p>Dur = 5.2s Dmag = 2.3 Sun: 161° Moon: 157°</p>	<p><b>2013 nov 4 14h42.2m</b> A13_11091 1173 Anchises UCAC2 38732787 Diam = 135.0 m = 12.4 m = 16.4</p>  <p>Dur = 8.6s Dmag = 4.0 Sun: 166° Moon: 153°</p>	<p><b>2013 nov 4 21h 2.2m</b> A13_11100 183595 2003TG58 PPMX 4967594 Diam = 151.4 m = 12.5 m = 24.1</p>  <p>Dur = 7.8s Dmag = 11.6 Sun: 142° Moon: 160°</p>	<p><b>2013 nov 4 21h15.7m</b> A13_11057 493 Griseldis PPMX 3008647 Diam = 52.0 m = 11.4 m = 15.4</p>  <p>Dur = 6.1s Dmag = 4.1 Sun: 139° Moon: 152°</p>

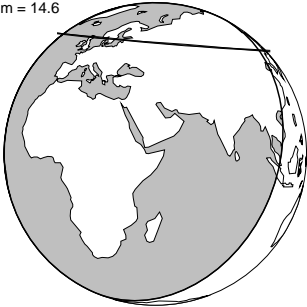
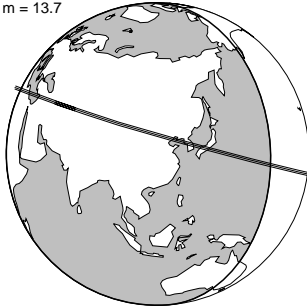
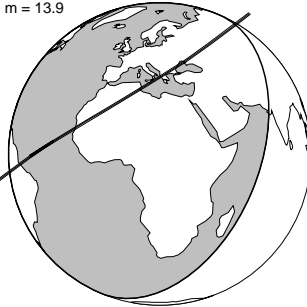
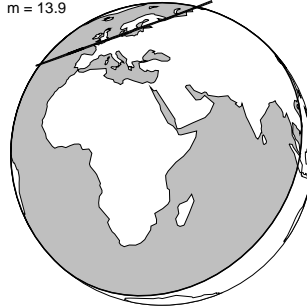
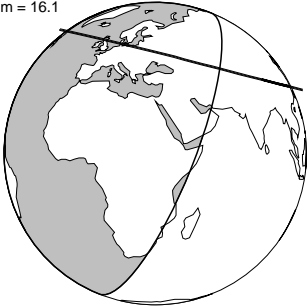
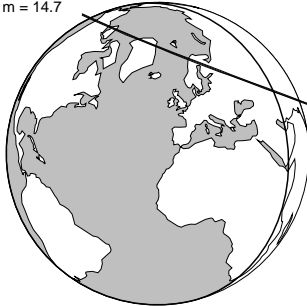
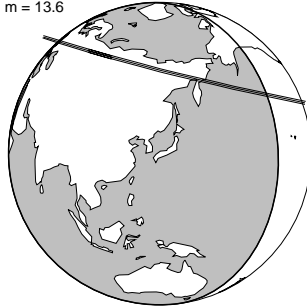
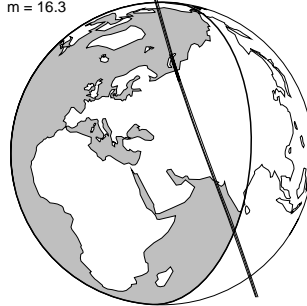
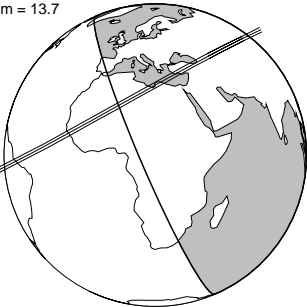
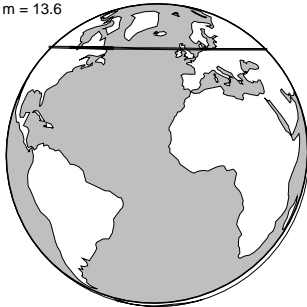
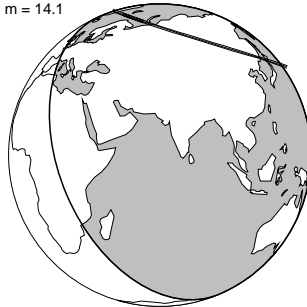
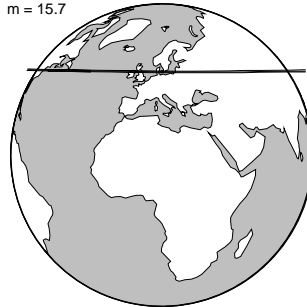
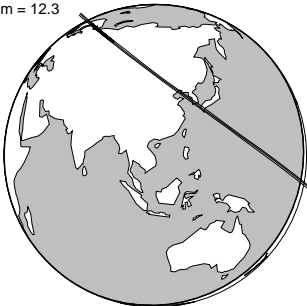
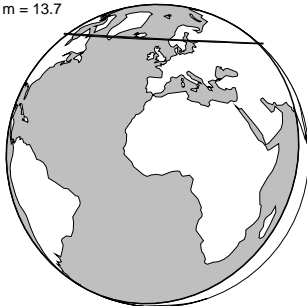
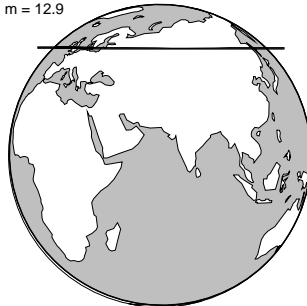
# Occultations by major and minor planets – 2013

# Region 5

<p><b>2013 nov 5 18h26.8m</b> A13_11094 2207 Antenor PPMX 6851414 Diam = 92.6 m = 9.0 m = 16.4</p>  <p>Dur = 5.5s Dmag = 7.4 Sun: 171° Moon: 146°</p>	<p><b>2013 nov 9 0h35.8m</b> A13_11028 224 Oceana PPMX 4882677 Diam = 63.4 m = 12.5 m = 13.2</p>  <p>Dur = 5.3s Dmag = 1.2 Sun: 165° Moon: 117°</p>	<p><b>2013 nov 9 4h26.3m</b> A13_11048 445 Edna UCAC2 47012477 Diam = 89.0 m = 12.2 m = 14.0</p>  <p>Dur = 8.1s Dmag = 2.0 Sun: 148° Moon: 95°</p>	<p><b>2013 nov 12 0h16.5m</b> A13_11036 326 Tamara PPMX 5839956 Diam = 100.0 m = 11.9 m = 13.6</p>  <p>Dur = 7.3s Dmag = 1.9 Sun: 160° Moon: 49°</p>
<p><b>2013 nov 20 17h32.6m</b> A13_11045 405 Thia UCAC2 39979012 Diam = 129.0 m = 12.4 m = 13.5</p>  <p>Dur = 10.8s Dmag = 1.4 Sun: 155° Moon: 11°</p>	<p><b>2013 nov 21 21h16.6m</b> A13_11099 4805 Asteropeia PPMX 5807253 Diam = 31.6 m = 10.6 m = 18.1</p>  <p>Dur = 3.3s Dmag = 7.5 Sun: 136° Moon: 90°</p>	<p><b>2013 nov 22 0h36.0m</b> A13_11076 607 Jenny PPMX 5034712 Diam = 65.5 m = 12.0 m = 14.9</p>  <p>Dur = 8.1s Dmag = 3.0 Sun: 142° Moon: 15°</p>	<p><b>2013 nov 24 15h38.3m</b> A13_11095 2207 Antenor PPMX 7890775 Diam = 92.6 m = 12.2 m = 16.7</p>  <p>Dur = 6.6s Dmag = 4.5 Sun: 153° Moon: 102°</p>
<p><b>2013 nov 25 22h45.7m</b> A13_11075 607 Jenny PPMX 5032207 Diam = 65.5 m = 11.9 m = 14.8</p>  <p>Dur = 7.0s Dmag = 3.0 Sun: 147° Moon: 60°</p>	<p><b>2013 nov 27 18h49.1m</b> A13_11065 535 Montague PPMX 5993981 Diam = 77.0 m = 12.5 m = 13.8</p>  <p>Dur = 7.6s Dmag = 1.6 Sun: 159° Moon: 92°</p>	<p><b>2013 nov 27 19h16.0m</b> A13_11017 111 Ate PPMX 4903429 Diam = 139.0 m = 11.4 m = 11.7</p>  <p>Dur = 13.4s Dmag = 0.9 Sun: 172° Moon: 115°</p>	<p><b>2013 nov 29 22h12.0m</b> A13_11031 278 Paulina PPMX 7864723 Diam = 38.0 m = 10.9 m = 15.5</p>  <p>Dur = 6.3s Dmag = 4.6 Sun: 131° Moon: 171°</p>
<p><b>2013 nov 30 20h46.2m</b> A13_11104 2007RT15 PPMX 7891313 Diam = 138.0 m = 10.9 m = 23.0</p>  <p>Dur = 6.9s Dmag = 12.1 Sun: 146° Moon: 170°</p>	<p><b>2013 nov 30 20h50.4m</b> A13_11055 492 Gismonda PPMX 5072339 Diam = 54.0 m = 11.0 m = 16.0</p>  <p>Dur = 6.0s Dmag = 4.9 Sun: 142° Moon: 113°</p>	<p><b>2013 dec 2 0h53.6m</b> A13_12006 51 Nemausa PPMX 8151727 Diam = 152.3 m = 11.9 m = 11.8</p>  <p>Dur = 26.7s Dmag = 0.7 Sun: 138° Moon: 127°</p>	<p><b>2013 dec 2 22h33.3m</b> A13_12029 134 Sophrosyne UCAC2 45778335 Diam = 107.0 m = 12.3 m = 12.3</p>  <p>Dur = 11.8s Dmag = 0.8 Sun: 158° Moon: 156°</p>

# Occultations by major and minor planets – 2013

# Region 5

<p><b>2013 dec 6 23h 2.8m</b> A13_12044 282 Clorinde PPMX 7083571 Diam = 40.0 m = 12.1 m = 14.6</p>  <p>Dur = 8.0s Dmag = 2.6 Sun: 143° Moon: 159°</p>	<p><b>2013 dec 12 19h30.0m</b> A13_12088 602 Marianna PPMX 4117741 Diam = 130.0 m = 10.8 m = 13.7</p>  <p>Dur = 16.8s Dmag = 3.0 Sun: 138° Moon: 91°</p>	<p><b>2013 dec 13 1h51.6m</b> A13_12057 377 Campania PPMX 7156366 Diam = 94.0 m = 11.6 m = 13.9</p>  <p>Dur = 23.5s Dmag = 2.5 Sun: 131° Moon: 97°</p>	<p><b>2013 dec 13 23h 1.9m</b> A13_12070 509 Iolanda PPMX 8136603 Diam = 59.0 m = 11.4 m = 13.9</p>  <p>Dur = 4.9s Dmag = 2.6 Sun: 148° Moon: 65°</p>
<p><b>2013 dec 14 2h55.4m</b> A13_12098 738 Alagasta PPMX 7221731 Diam = 64.8 m = 11.1 m = 16.1</p>  <p>Dur = 7.0s Dmag = 5.0 Sun: 104° Moon: 112°</p>	<p><b>2013 dec 15 3h13.6m</b> A13_12047 312 Pierretta PPMX 4086894 Diam = 51.0 m = 11.4 m = 14.7</p>  <p>Dur = 4.4s Dmag = 3.3 Sun: 149° Moon: 55°</p>	<p><b>2013 dec 15 17h54.4m</b> A13_12090 602 Marianna PPMX 4116810 Diam = 130.0 m = 12.3 m = 13.6</p>  <p>Dur = 15.0s Dmag = 1.6 Sun: 141° Moon: 56°</p>	<p><b>2013 dec 16 0h57.6m</b> A13_12096 680 Geneveva PPMX 4151257 Diam = 86.7 m = 11.6 m = 16.3</p>  <p>Dur = 8.6s Dmag = 4.7 Sun: 125° Moon: 69°</p>
<p><b>2013 dec 18 16h55.0m</b> A13_12022 94 Aurora UCAC2 32981711 Diam = 212.0 m = 12.4 m = 13.7</p>  <p>Dur = 15.7s Dmag = 1.5 Sun: 95° Moon: 99°</p>	<p><b>2013 dec 23 1h57.0m</b> A13_12013 56 Melete PPMX 7031696 Diam = 72.1 m = 11.7 m = 13.6</p>  <p>Dur = 4.7s Dmag = 2.1 Sun: 165° Moon: 54°</p>	<p><b>2013 dec 23 16h12.4m</b> A13_12049 335 Roberta PPMX 6856981 Diam = 93.6 m = 9.7 m = 14.1</p>  <p>Dur = 23.2s Dmag = 4.4 Sun: 131° Moon: 115°</p>	<p><b>2013 dec 25 23h38.7m</b> A13_12113 1109 Tata N22a 296192 Diam = 69.5 m = 11.9 m = 15.7</p>  <p>Dur = 4.6s Dmag = 3.8 Sun: 173° Moon: 89°</p>
<p><b>2013 dec 26 17h34.5m</b> A13_12110 1021 Flammario PPMX 6082923 Diam = 103.0 m = 12.2 m = 12.3</p>  <p>Dur = 9.5s Dmag = 0.8 Sun: 165° Moon: 91°</p>	<p><b>2013 dec 27 1h47.5m</b> A13_12037 189 Phthia PPMX 7116405 Diam = 38.5 m = 12.2 m = 13.7</p>  <p>Dur = 4.1s Dmag = 1.8 Sun: 155° Moon: 85°</p>	<p><b>2013 dec 28 19h11.6m</b> A13_12015 67 Asia PPMX 6989437 Diam = 60.0 m = 8.8 m = 12.9</p>  <p>Dur = 4.4s Dmag = 4.2 Sun: 169° Moon: 135°</p>	