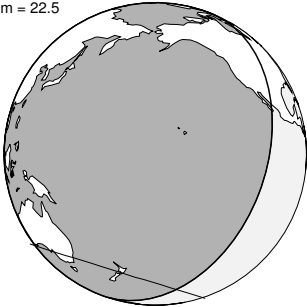
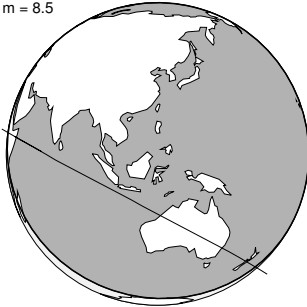
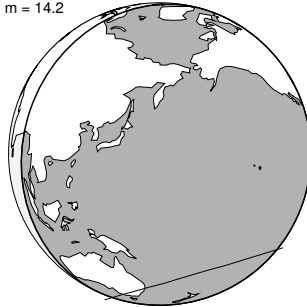
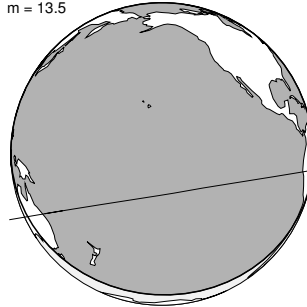
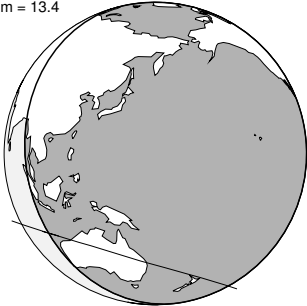
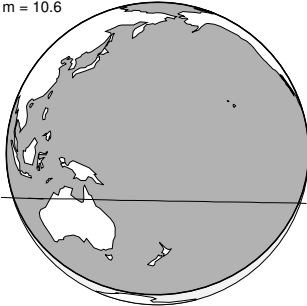
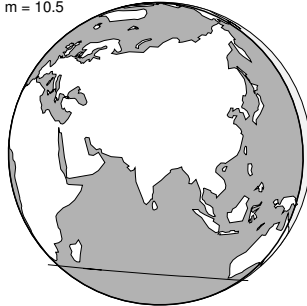
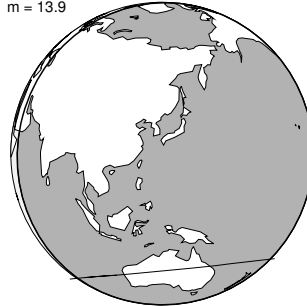
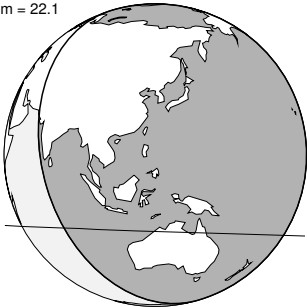
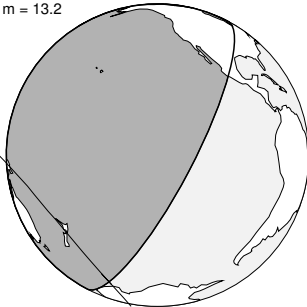
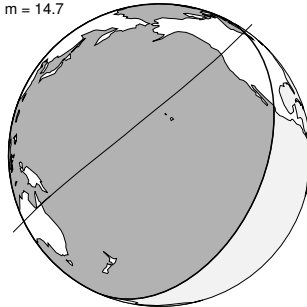
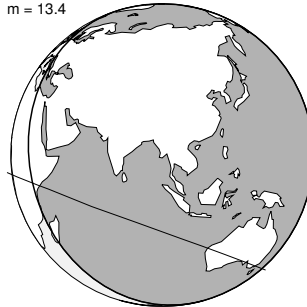
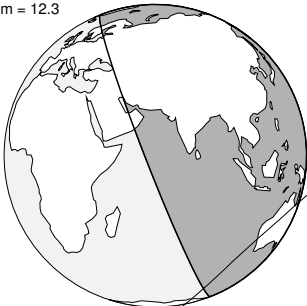
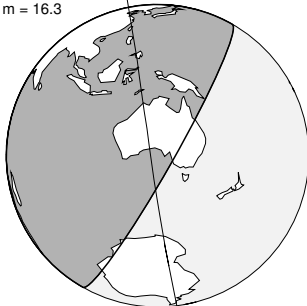
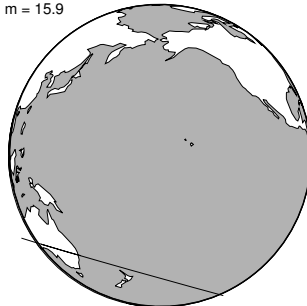
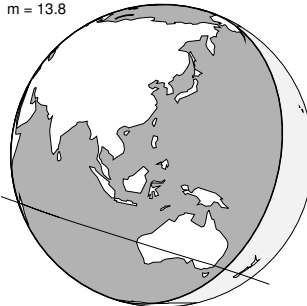


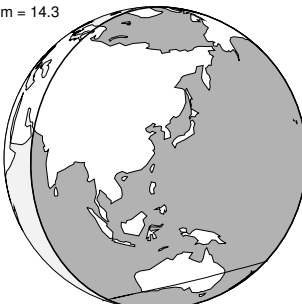
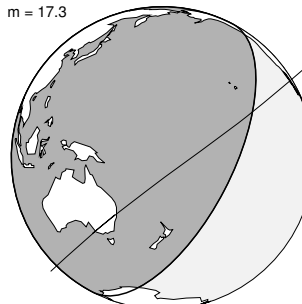
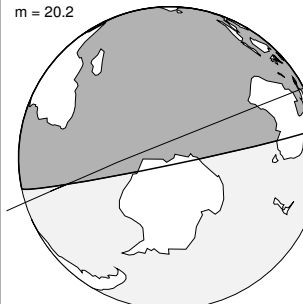
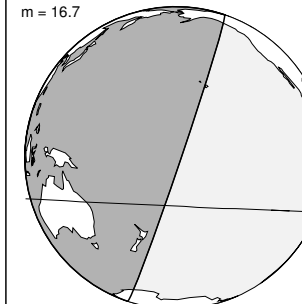
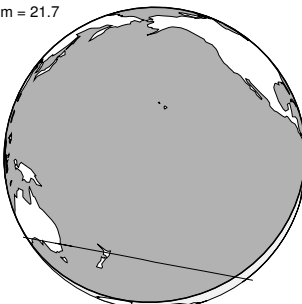
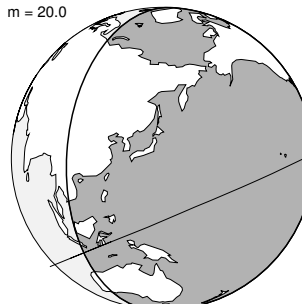
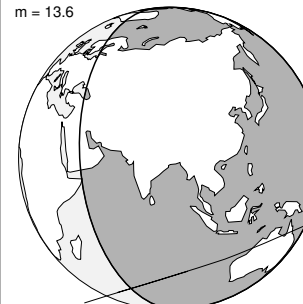
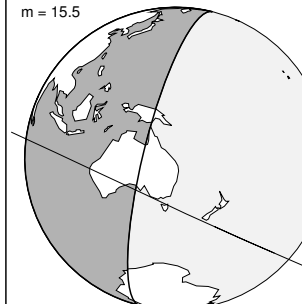
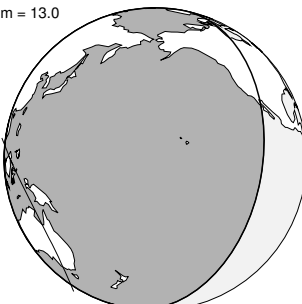
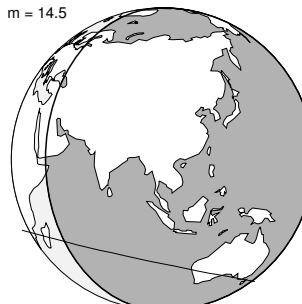
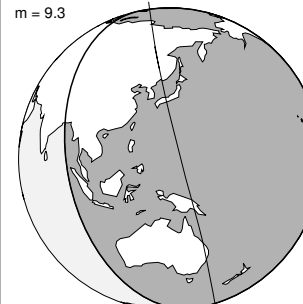
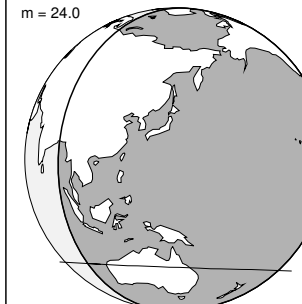
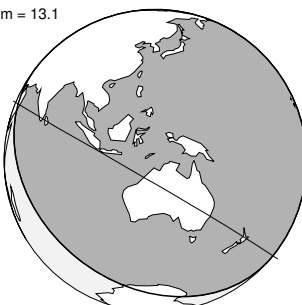
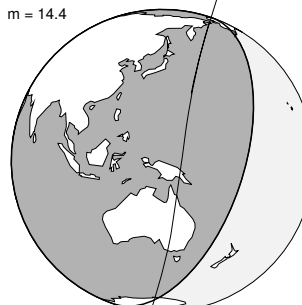
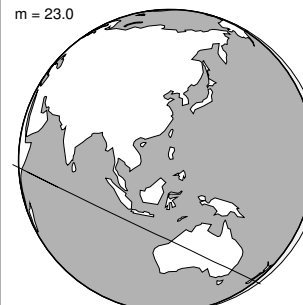
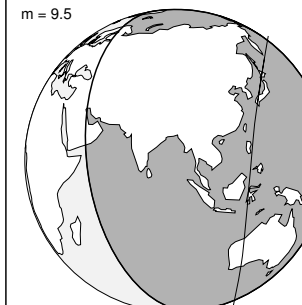
Occultations by major and minor planets – 2019

Region 8

<p>2019 jan 1 14h 7.7m B19_01009 2013AQ183 UCAC5 510-048074 Diam = 208.9 m = 14.8 m = 22.5</p>  <p>Dur = 12.2s Dmag = 7.8 Sun: 137° Moon: 86°</p>	<p>2019 jan 1 15h31.7m A19_01004 6 Hebe UCAC5 480-017722 Diam = 186.0 m = 11.4 m = 8.5</p>  <p>Dur = 16.7s Dmag = 0.1 Sun: 161° Moon: 135°</p>	<p>2019 jan 4 11h42.4m A19_01048 227 Philophosia TYC 2394-01557-1 Diam = 90.1 m = 10.9 m = 14.2</p>  <p>Dur = 6.4s Dmag = 3.3 Sun: 154° Moon: 166°</p>	<p>2019 jan 6 9h57.5m A19_01102 663 Gerlinde TYC 0149-03182-1 Diam = 104.0 m = 8.5 m = 13.5</p>  <p>Dur = 7.8s Dmag = 5.0 Sun: 158° Moon: 159°</p>
<p>2019 jan 6 11h26.0m A19_01076 404 Arsinoë PPMX 5945613 Diam = 101.0 m = 12.1 m = 13.4</p>  <p>Dur = 8.7s Dmag = 1.6 Sun: 149° Moon: 145°</p>	<p>2019 jan 6 12h44.7m A19_01044 216 Kleopatra TYC 0163-00136-1 Diam = 112.6 m = 11.3 m = 10.6</p>  <p>Dur = 10.5s Dmag = 0.5 Sun: 158° Moon: 160°</p>	<p>2019 jan 7 19h56.4m A19_01063 324 Bamberga TYC 1948-02115-1 Diam = 227.6 m = 12.1 m = 10.5</p>  <p>Dur = 18.1s Dmag = 0.2 Sun: 160° Moon: 172°</p>	<p>2019 jan 8 14h12.4m A19_01057 271 Penthesilea PPMX 5013256 Diam = 61.2 m = 12.4 m = 13.9</p>  <p>Dur = 5.6s Dmag = 1.8 Sun: 162° Moon: 136°</p>
<p>2019 jan 10 12h54.1m B19_01012 2014RQ63 UCAC5 523-008344 Diam = 173.8 m = 13.8 m = 22.1</p>  <p>Dur = 9.9s Dmag = 8.3 Sun: 138° Moon: 90°</p>	<p>2019 jan 10 13h29.4m A19_01083 478 Tergeste UCAC5 374-060336 Diam = 82.0 m = 12.2 m = 13.2</p>  <p>Dur = 8.1s Dmag = 1.4 Sun: 103° Moon: 148°</p>	<p>2019 jan 10 13h48.6m A19_01100 623 Chimaera HIP 51023 Diam = 46.0 m = 8.5 m = 14.7</p>  <p>Dur = 7.0s Dmag = 6.2 Sun: 133° Moon: 172°</p>	<p>2019 jan 11 15h46.0m A19_01111 740 Cantabia UCAC5 534-014094 Diam = 94.5 m = 11.4 m = 13.4</p>  <p>Dur = 8.9s Dmag = 2.2 Sun: 151° Moon: 91°</p>
<p>2019 jan 12 13h55.6m A19_01108 674 Rachele TYC 0621-00814-1 Diam = 101.0 m = 10.4 m = 12.3</p>  <p>Dur = 6.4s Dmag = 2.0 Sun: 93° Moon: 23°</p>	<p>2019 jan 19 19h50.2m A19_01135 1867 Deiphobus TYC 7242-00643-1 Diam = 131.0 m = 12.3 m = 16.3</p>  <p>Dur = 8.0s Dmag = 4.1 Sun: 95° Moon: 101°</p>	<p>2019 jan 20 10h56.7m A19_01139 2246 Bowell UCAC5 529-040694 Diam = 52.1 m = 10.9 m = 15.9</p>  <p>Dur = 3.6s Dmag = 5.0 Sun: 171° Moon: 7°</p>	<p>2019 jan 21 18h35.1m A19_01075 388 Charybdis UCAC5 506-049869 Diam = 120.0 m = 10.8 m = 13.8</p>  <p>Dur = 15.8s Dmag = 3.0 Sun: 140° Moon: 32°</p>

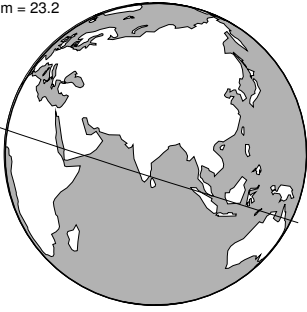
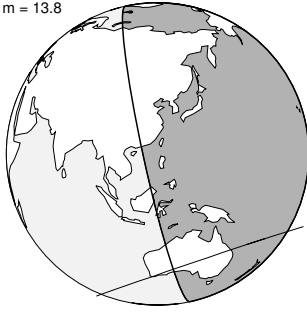
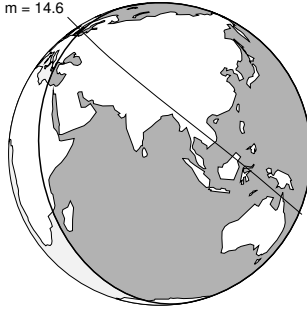
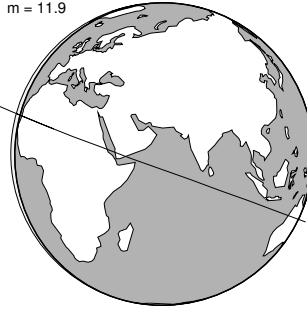
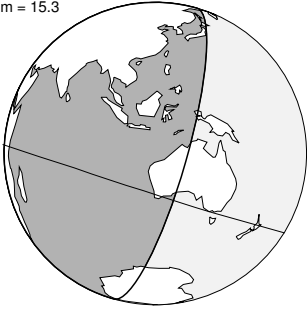
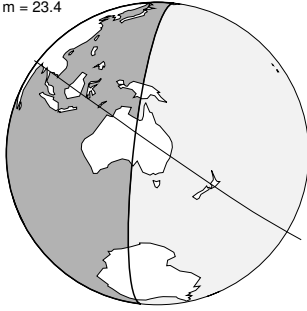
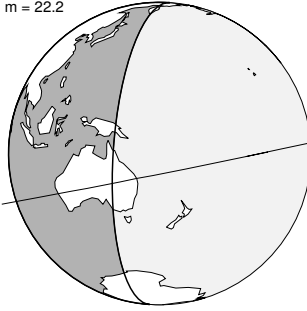
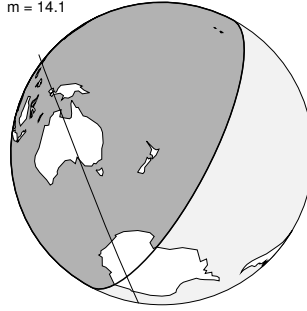
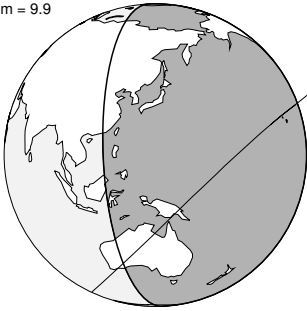
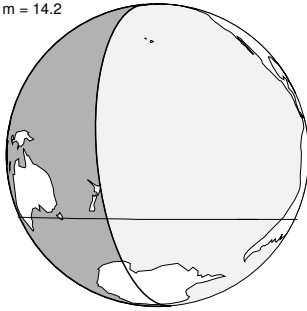
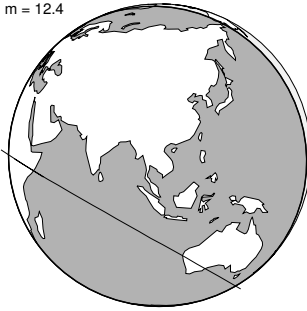
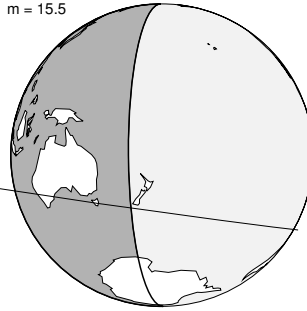
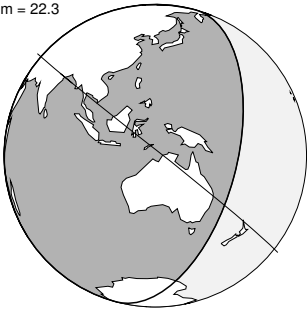
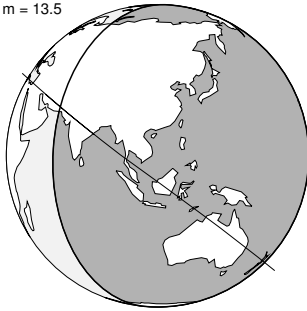
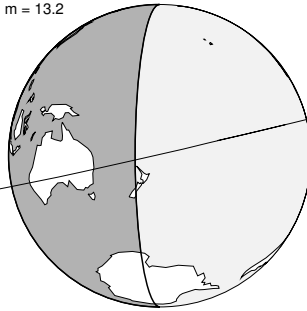
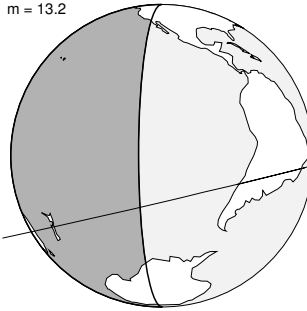
Occultations by major and minor planets – 2019

Region 8

<p>2019 jan 23 13h35.0m A19_01058 271 Penthesilea UCAC5 589-021188 Diam = 61.2 m = 9.0 m = 14.3</p>  <p>Dur = 8.4s Dmag = 5.3 Sun: 145° Moon: 67°</p>	<p>2019 jan 24 16h23.1m A19_01144 4708 Polydoros UCAC5 403-052872 Diam = 52.5 m = 12.0 m = 17.3</p>  <p>Dur = 13.0s Dmag = 5.3 Sun: 117° Moon: 18°</p>	<p>2019 jan 25 19h53.5m B19_01008 2012DR30 UCAC5 111-020320 Diam = 158.5 m = 14.4 m = 20.2</p>  <p>Dur = 4.7s Dmag = 5.8 Sun: 92° Moon: 77°</p>	<p>2019 jan 28 17h 4.4m A19_01137 2207 Antenor UCAC5 406-057161 Diam = 92.6 m = 12.4 m = 16.7</p>  <p>Dur = 7.4s Dmag = 4.2 Sun: 91° Moon: 12°</p>
<p>2019 jan 29 11h21.1m B19_01013 2014WH510 UCAC5 450-045594 Diam = 218.8 m = 14.1 m = 21.7</p>  <p>Dur = 9.3s Dmag = 7.6 Sun: 160° Moon: 98°</p>	<p>2019 jan 30 10h57.5m A19_01145 84922 2003VS2 TYC 2393-00920-1 Diam = 602.6 m = 11.1 m = 20.0</p>  <p>Dur = 38.9s Dmag = 8.8 Sun: 129° Moon: 163°</p>	<p>2019 jan 30 14h34.1m A19_01041 184 Dejopeja UCAC5 571-013229 Diam = 68.2 m = 12.3 m = 13.6</p>  <p>Dur = 29.2s Dmag = 1.6 Sun: 126° Moon: 173°</p>	<p>2019 jan 30 20h30.0m A19_01099 613 Ginevra TYC 6762-00187-1 Diam = 82.0 m = 9.6 m = 15.5</p>  <p>Dur = 3.6s Dmag = 5.9 Sun: 77° Moon: 24°</p>
<p>2019 feb 2 14h33.5m A19_02058 505 Cava TYC 0872-00357-1 Diam = 79.1 m = 12.3 m = 13.0</p>  <p>Dur = 11.5s Dmag = 1.1 Sun: 135° Moon: 111°</p>	<p>2019 feb 2 14h42.6m A19_02060 526 Jena TYC 1327-01748-1 Diam = 46.7 m = 10.7 m = 14.5</p>  <p>Dur = 8.7s Dmag = 3.8 Sun: 140° Moon: 165°</p>	<p>2019 feb 4 11h53.9m A19_02002 6 Hebe TYC 0724-00258-1 Diam = 186.0 m = 12.3 m = 9.3</p>  <p>Dur = 23.7s Dmag = 0.1 Sun: 132° Moon: 136°</p>	<p>2019 feb 4 11h55.9m B19_02004 2002WL21 UCAC5 573-027767 Diam = 120.2 m = 14.9 m = 24.0</p>  <p>Dur = 6.3s Dmag = 9.1 Sun: 141° Moon: 145°</p>
<p>2019 feb 6 14h18.1m A19_02038 276 Adelheid TYC 5415-01987-1 Diam = 127.0 m = 11.8 m = 13.1</p>  <p>Dur = 10.6s Dmag = 1.6 Sun: 145° Moon: 133°</p>	<p>2019 feb 8 18h39.9m A19_02023 191 Kolga TYC 4958-00287-1 Diam = 105.0 m = 11.8 m = 14.4</p>  <p>Dur = 20.6s Dmag = 2.6 Sun: 122° Moon: 165°</p>	<p>2019 feb 9 17h23.4m B19_02003 1999CX131 PPMX 7224281 Diam = 158.5 m = 15.0 m = 23.0</p>  <p>Dur = 6.6s Dmag = 8.0 Sun: 162° Moon: 144°</p>	<p>2019 feb 11 14h27.6m A19_02003 6 Hebe UCAC5 514-015964 Diam = 186.0 m = 11.6 m = 9.5</p>  <p>Dur = 23.7s Dmag = 0.1 Sun: 126° Moon: 52°</p>

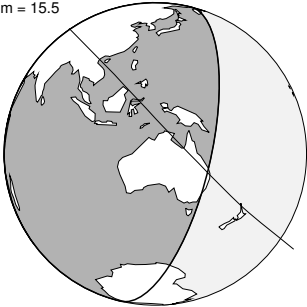
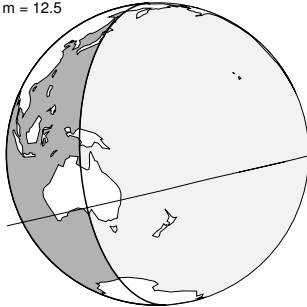
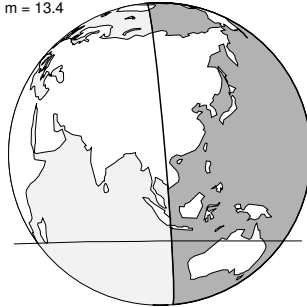
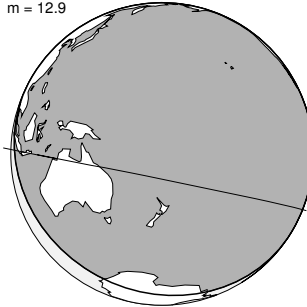
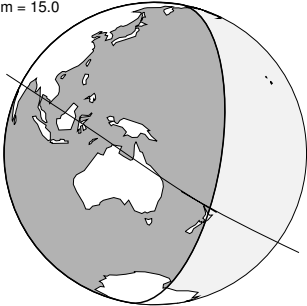
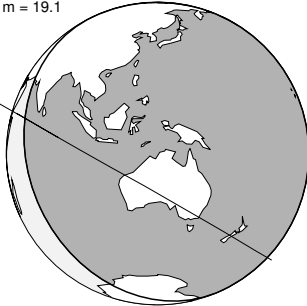
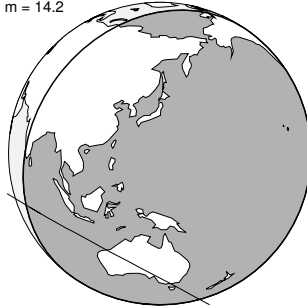
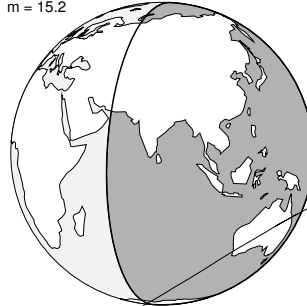
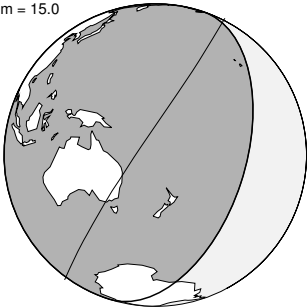
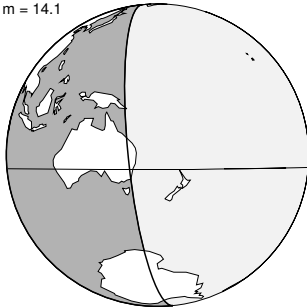
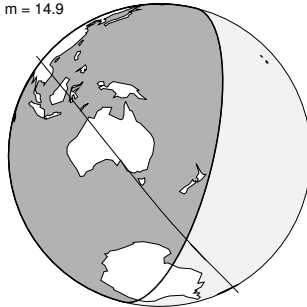
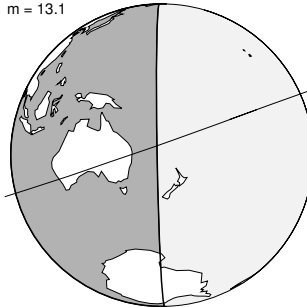
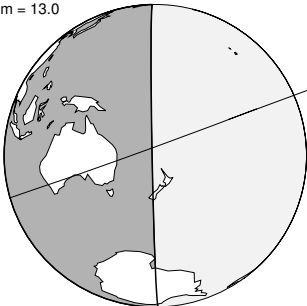
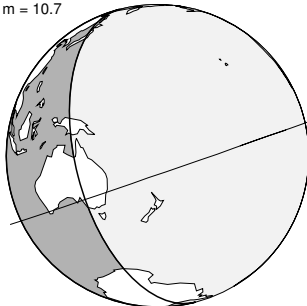
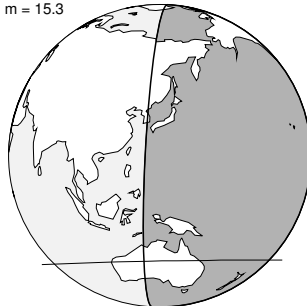
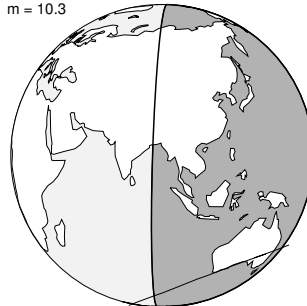
Occultations by major and minor planets – 2019

Region 8

<p>2019 feb 12 18h20.4m A19_02098 131695 2001XS254 TYC 1405-00289-1 Diam = 120.2 m = 10.9 m = 23.2</p>  <p>Dur = 4.8s Dmag = 12.3 Sun: 171° Moon: 85°</p>	<p>2019 feb 13 10h21.2m A19_02037 261 Pymno HIP 17961 Diam = 52.6 m = 8.6 m = 13.8</p>  <p>Dur = 3.7s Dmag = 5.2 Sun: 95° Moon: 4°</p>	<p>2019 feb 14 15h56.3m A19_02087 1309 Hyperborea UCAC5 487-035880 Diam = 59.8 m = 11.3 m = 14.6</p>  <p>Dur = 8.4s Dmag = 3.3 Sun: 142° Moon: 35°</p>	<p>2019 feb 15 19h13.7m A19_02011 65 Cybele UCAC5 527-046264 Diam = 230.0 m = 9.7 m = 11.9</p>  <p>Dur = 16.0s Dmag = 2.4 Sun: 166° Moon: 41°</p>
<p>2019 feb 19 21h22.0m A19_02062 551 Ortrud TYC 6173-00445-1 Diam = 81.2 m = 10.9 m = 15.3</p>  <p>Dur = 9.2s Dmag = 4.5 Sun: 102° Moon: 75°</p>	<p>2019 feb 22 20h44.7m B19_02001 160148 2001KV76 UCAC5 298-094931 Diam = 114.8 m = 14.7 m = 23.4</p>  <p>Dur = 9.1s Dmag = 8.8 Sun: 80° Moon: 56°</p>	<p>2019 feb 26 20h26.2m B19_02007 2014KD102 UCAC5 367-096143 Diam = 158.5 m = 14.3 m = 22.2</p>  <p>Dur = 9.9s Dmag = 7.9 Sun: 72° Moon: 14°</p>	<p>2019 feb 27 16h 5.2m A19_02080 1000 Piazzia UCAC5 254-064325 Diam = 54.0 m = 12.2 m = 14.1</p>  <p>Dur = 3.5s Dmag = 2.0 Sun: 108° Moon: 42°</p>
<p>2019 mar 1 10h19.1m A19_03005 6 Hebe UCAC5 527-019701 Diam = 186.0 m = 10.4 m = 9.9</p>  <p>Dur = 17.0s Dmag = 0.5 Sun: 110° Moon: 165°</p>	<p>2019 mar 2 17h57.5m A19_03034 200 Dynamene PPMX 12716226 Diam = 132.0 m = 11.9 m = 14.2</p>  <p>Dur = 4.7s Dmag = 2.4 Sun: 66° Moon: 24°</p>	<p>2019 mar 3 18h11.9m A19_03069 505 Cava UCAC5 538-049689 Diam = 79.1 m = 12.2 m = 12.4</p>  <p>Dur = 6.6s Dmag = 0.9 Sun: 162° Moon: 138°</p>	<p>2019 mar 6 18h46.7m A19_03045 331 Etheridgea UCAC5 311-123323 Diam = 78.5 m = 12.1 m = 15.5</p>  <p>Dur = 3.3s Dmag = 3.5 Sun: 77° Moon: 78°</p>
<p>2019 mar 6 19h19.0m B19_03011 2014DT143 UCAC5 387-060687 Diam = 199.5 m = 14.3 m = 22.3</p>  <p>Dur = 18.4s Dmag = 8.0 Sun: 122° Moon: 124°</p>	<p>2019 mar 7 13h40.7m A19_03050 336 Lacadiera TYC 0789-01252-1 Diam = 72.0 m = 11.5 m = 13.5</p>  <p>Dur = 16.5s Dmag = 2.2 Sun: 133° Moon: 123°</p>	<p>2019 mar 8 18h29.3m A19_03101 914 Palisana PPMX 13674870 Diam = 79.0 m = 12.0 m = 13.2</p>  <p>Dur = 3.2s Dmag = 1.6 Sun: 80° Moon: 103°</p>	<p>2019 mar 9 14h10.0m A19_03102 914 Palisana UCAC5 296-122416 Diam = 79.0 m = 12.3 m = 13.2</p>  <p>Dur = 3.3s Dmag = 1.3 Sun: 81° Moon: 112°</p>

Occultations by major and minor planets – 2019

Region 8

<p>2019 mar 9 19h54.3m A19_03116 2193 Jackson TYC 6193-00751-1 Diam = 51.5 m = 8.9 m = 15.5</p>  <p>Dur = 6.9s Dmag = 6.6 Sun: 111° Moon: 146°</p>	<p>2019 mar 10 20h56.4m A19_03013 51 Nemausa TYC 5734-01533-1 Diam = 152.3 m = 11.7 m = 12.5</p>  <p>Dur = 4.5s Dmag = 1.2 Sun: 59° Moon: 106°</p>	<p>2019 mar 11 11h 8.1m A19_03041 241 Germania PPMX 5960287 Diam = 169.0 m = 12.4 m = 13.4</p>  <p>Dur = 10.0s Dmag = 1.3 Sun: 87° Moon: 34°</p>	<p>2019 mar 12 11h40.4m A19_03065 466 Tisiphone TYC 6066-00471-1 Diam = 121.0 m = 11.4 m = 12.9</p>  <p>Dur = 9.5s Dmag = 1.7 Sun: 155° Moon: 107°</p>
<p>2019 mar 16 18h19.5m A19_03086 742 Edisona TYC 6187-00147-1 Diam = 46.7 m = 11.4 m = 15.0</p>  <p>Dur = 14.9s Dmag = 3.6 Sun: 115° Moon: 124°</p>	<p>2019 mar 17 13h37.2m B19_03008 459865 2013XZ8 UCAC5 386-05320 Diam = 52.5 m = 14.3 m = 19.1</p>  <p>Dur = 3.1s Dmag = 4.8 Sun: 148° Moon: 37°</p>	<p>2019 mar 19 13h 4.6m A19_03067 484 Pittsburghia UCAC5 557-045999 Diam = 44.5 m = 12.4 m = 14.2</p>  <p>Dur = 4.7s Dmag = 2.0 Sun: 147° Moon: 11°</p>	<p>2019 mar 19 14h 5.9m A19_03114 1309 Hyperborea TYC 0767-00203-1 Diam = 59.8 m = 11.1 m = 15.2</p>  <p>Dur = 7.0s Dmag = 4.1 Sun: 111° Moon: 50°</p>
<p>2019 mar 19 16h16.0m A19_03119 2951 Perepadin UCAC5 340-069714 Diam = 52.1 m = 12.2 m = 15.0</p>  <p>Dur = 8.8s Dmag = 2.9 Sun: 126° Moon: 73°</p>	<p>2019 mar 19 20h 7.8m A19_03035 200 Dynamene UCAC5 305-236010 Diam = 132.0 m = 11.9 m = 14.1</p>  <p>Dur = 6.0s Dmag = 2.3 Sun: 78° Moon: 119°</p>	<p>2019 mar 20 18h 6.0m A19_03077 661 Cloelia TYC 7347-01855-1 Diam = 52.0 m = 10.9 m = 14.9</p>  <p>Dur = 6.6s Dmag = 4.0 Sun: 110° Moon: 75°</p>	<p>2019 mar 20 19h10.5m A19_03103 914 Palisana PPMX 12685400 Diam = 79.0 m = 12.1 m = 13.1</p>  <p>Dur = 3.8s Dmag = 1.3 Sun: 88° Moon: 96°</p>
<p>2019 mar 21 18h53.2m A19_03104 914 Palisana UCAC5 302-176902 Diam = 79.0 m = 11.9 m = 13.0</p>  <p>Dur = 3.8s Dmag = 1.4 Sun: 88° Moon: 82°</p>	<p>2019 mar 21 20h47.3m A19_03009 15 Eunomia TYC 6341-01227-1 Diam = 272.0 m = 11.1 m = 10.7</p>  <p>Dur = 7.9s Dmag = 0.6 Sun: 57° Moon: 112°</p>	<p>2019 mar 22 9h36.0m A19_03072 526 Jena PPMX 6039553 Diam = 46.7 m = 12.5 m = 15.3</p>  <p>Dur = 3.3s Dmag = 2.9 Sun: 95° Moon: 103°</p>	<p>2019 mar 22 12h14.4m A19_03006 6 Hebe UCAC5 539-023530 Diam = 186.0 m = 11.3 m = 10.3</p>  <p>Dur = 10.7s Dmag = 0.3 Sun: 93° Moon: 107°</p>

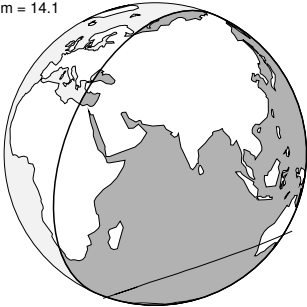
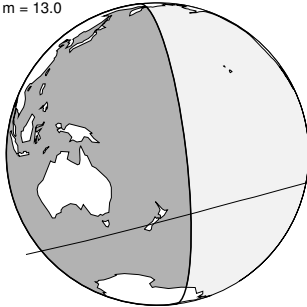
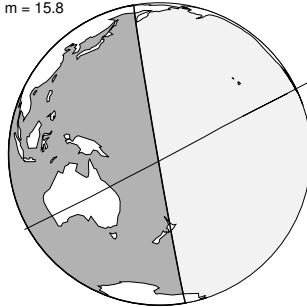
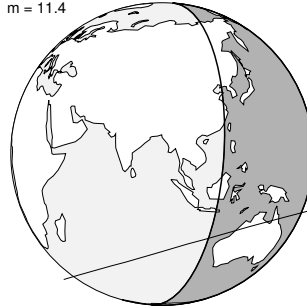
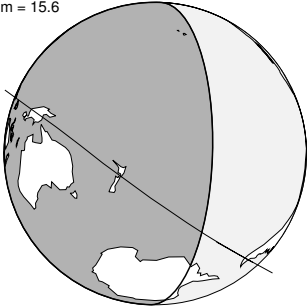
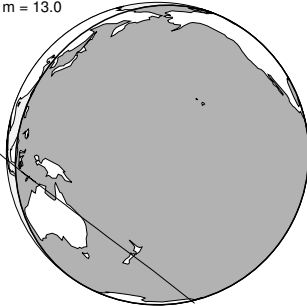
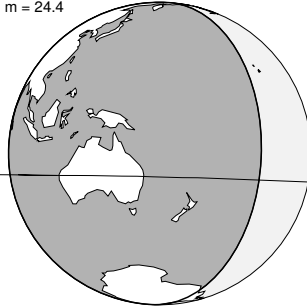
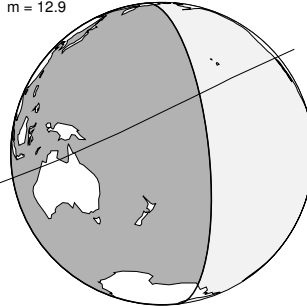
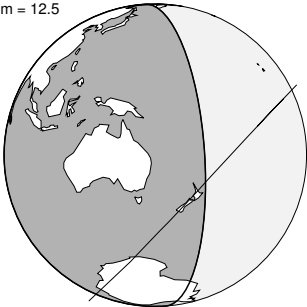
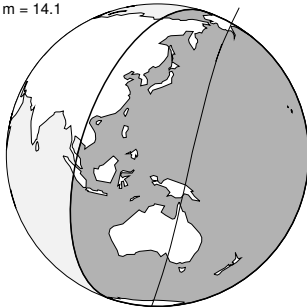
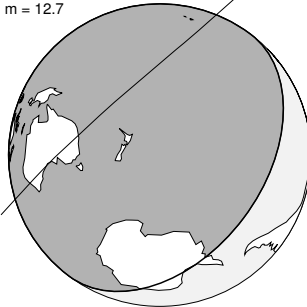
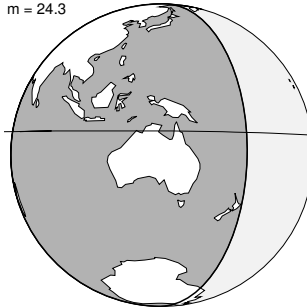
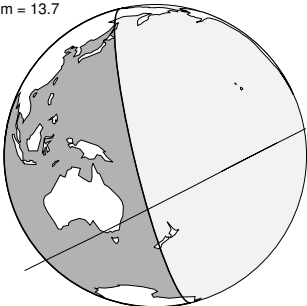
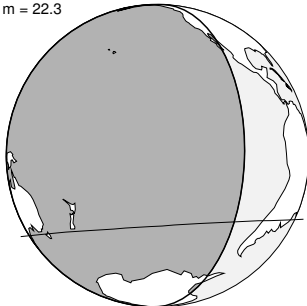
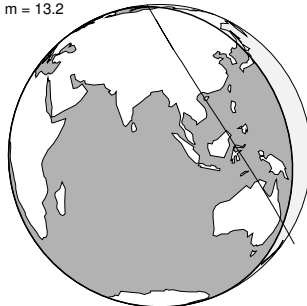
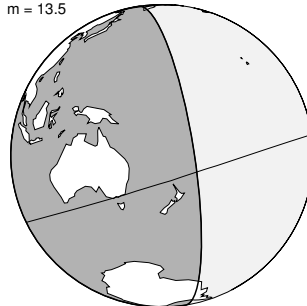
Occultations by major and minor planets – 2019

Region 8

<p>2019 mar 24 11h32.4m A19_03096 895 Helio UCAC5 412-037203 Diam = 147.0 m = 12.4 m = 13.4</p> <p>Dur = 26.3s Dmag = 1.4 Sun: 115° Moon: 107°</p>	<p>2019 mar 24 17h 3.5m A19_03105 914 Palisana UCAC5 304-181086 Diam = 79.0 m = 11.5 m = 13.0</p> <p>Dur = 4.0s Dmag = 1.7 Sun: 90° Moon: 42°</p>	<p>2019 mar 25 16h48.3m A19_03082 693 Zerbinita PPMX 14683446 Diam = 69.1 m = 12.1 m = 14.7</p> <p>Dur = 4.3s Dmag = 2.7 Sun: 95° Moon: 30°</p>	<p>2019 mar 26 13h49.2m A19_03113 1297 Quadea UCAC5 335-065723 Diam = 66.0 m = 12.2 m = 15.7</p> <p>Dur = 5.8s Dmag = 3.5 Sun: 152° Moon: 50°</p>
<p>2019 mar 29 7h18.6m A19_03121 19521 Chaos UCAC5 601-019890 Diam = 457.1 m = 12.0 m = 21.2</p> <p>Dur = 37.2s Dmag = 9.1 Sun: 75° Moon: 152°</p>	<p>2019 mar 29 17h58.5m A19_03054 375 Ursula PPMX 14627363 Diam = 216.0 m = 11.7 m = 12.7</p> <p>Dur = 21.4s Dmag = 1.4 Sun: 111° Moon: 43°</p>	<p>2019 apr 4 12h29.2m A19_04127 1771 Makover PPMX 9524036 Diam = 58.7 m = 12.1 m = 15.6</p> <p>Dur = 4.4s Dmag = 3.5 Sun: 154° Moon: 147°</p>	<p>2019 apr 6 15h53.7m A19_04091 551 Ortrud TYC 6172-00855-1 Diam = 81.2 m = 10.3 m = 14.6</p> <p>Dur = 8.3s Dmag = 4.3 Sun: 148° Moon: 163°</p>
<p>2019 apr 7 19h56.9m A19_04118 925 Alphonsina UCAC5 260-171236 Diam = 57.0 m = 11.6 m = 13.6</p> <p>Dur = 4.6s Dmag = 2.2 Sun: 95° Moon: 121°</p>	<p>2019 apr 8 17h10.3m A19_04119 926 Imhilde UCAC5 301-149373 Diam = 50.5 m = 11.8 m = 14.8</p> <p>Dur = 4.3s Dmag = 3.1 Sun: 108° Moon: 146°</p>	<p>2019 apr 10 13h26.2m A19_04104 697 Galilea TYC 7334-01655-1 Diam = 82.5 m = 11.6 m = 14.6</p> <p>Dur = 9.9s Dmag = 3.1 Sun: 132° Moon: 158°</p>	<p>2019 apr 10 15h40.9m A19_04038 109 Felicitas UCAC5 312-226215 Diam = 91.0 m = 12.3 m = 14.8</p> <p>Dur = 4.4s Dmag = 2.6 Sun: 80° Moon: 142°</p>
<p>2019 apr 10 17h24.9m A19_04122 1114 Lorraine UCAC5 398-115122 Diam = 63.0 m = 10.5 m = 15.8</p> <p>Dur = 3.3s Dmag = 5.3 Sun: 85° Moon: 149°</p>	<p>2019 apr 11 10h24.5m A19_04100 663 Gerlinde PPMX 8123675 Diam = 104.0 m = 12.4 m = 14.6</p> <p>Dur = 5.2s Dmag = 2.3 Sun: 83° Moon: 19°</p>	<p>2019 apr 11 11h26.3m A19_04101 667 Denise TYC 0751-00626-1 Diam = 83.5 m = 10.6 m = 14.1</p> <p>Dur = 3.3s Dmag = 3.6 Sun: 82° Moon: 14°</p>	<p>2019 apr 12 15h24.6m B19_04003 2000FT53 UCAC5 320-079060 Diam = 91.2 m = 12.9 m = 24.3</p> <p>Dur = 5.2s Dmag = 11.4 Sun: 139° Moon: 132°</p>

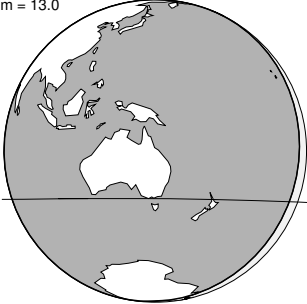
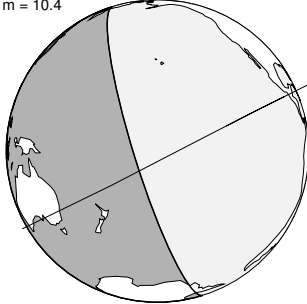
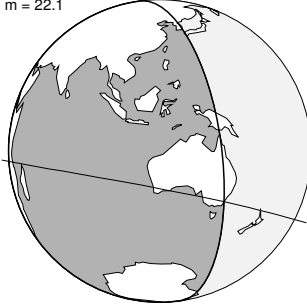
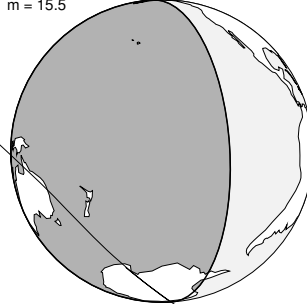
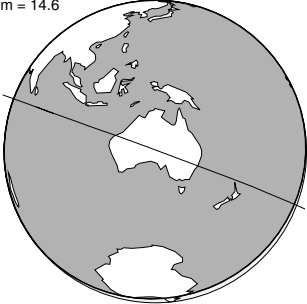
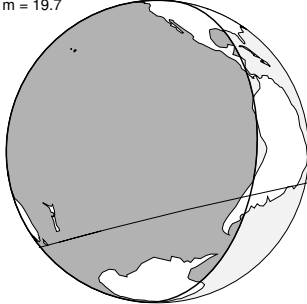
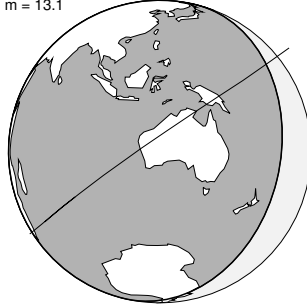
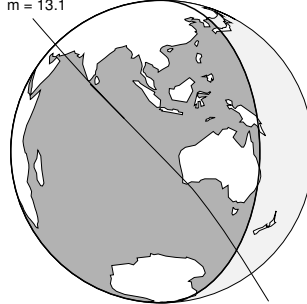
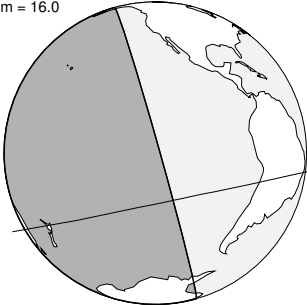
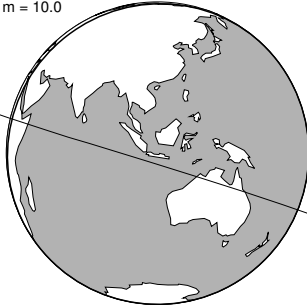
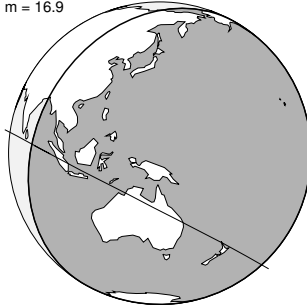
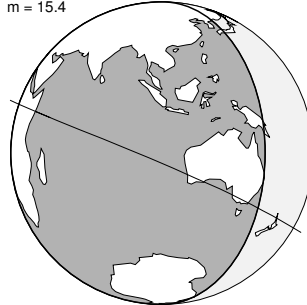
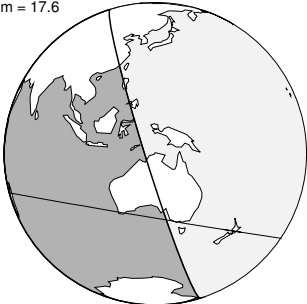
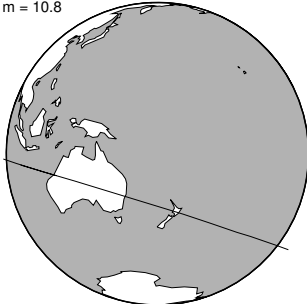
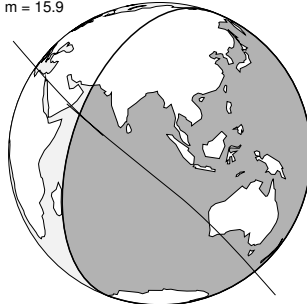
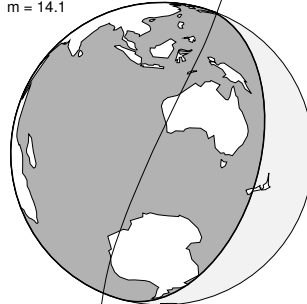
Occultations by major and minor planets – 2019

Region 8

<p>2019 apr 13 16h34.5m A19_04068 359 Georgia TYC 0836–01384–1 Diam = 47.0 m = 10.9 m = 14.1</p>  <p>Dur = 11.0s Dmag = 3.3 Sun: 126° Moon: 25°</p>	<p>2019 apr 14 17h50.7m A19_04051 201 Penelope PPMX 11698944 Diam = 70.5 m = 12.1 m = 13.0</p>  <p>Dur = 5.1s Dmag = 1.3 Sun: 100° Moon: 142°</p>	<p>2019 apr 14 18h48.3m A19_04123 1114 Lorraine UCAC5 400–116410 Diam = 63.0 m = 12.4 m = 15.8</p>  <p>Dur = 3.6s Dmag = 3.4 Sun: 89° Moon: 152°</p>	<p>2019 apr 15 10h22.5m A19_04067 354 Eleonora TYC 1313–00513–1 Diam = 162.0 m = 11.1 m = 11.4</p>  <p>Dur = 5.3s Dmag = 0.9 Sun: 65° Moon: 60°</p>
<p>2019 apr 17 15h49.8m A19_04112 829 Academia UCAC5 283–170608 Diam = 44.0 m = 11.9 m = 15.6</p>  <p>Dur = 6.2s Dmag = 3.8 Sun: 112° Moon: 93°</p>	<p>2019 apr 18 10h14.7m A19_04107 737 Arequipa UCAC5 453–051050 Diam = 46.3 m = 11.9 m = 13.0</p>  <p>Dur = 3.7s Dmag = 1.5 Sun: 156° Moon: 9°</p>	<p>2019 apr 19 16h33.9m A19_04134 500884 2013JK65 TYC 6227–02143–1 Diam = 50.1 m = 11.0 m = 24.4</p>  <p>Dur = 3.6s Dmag = 13.5 Sun: 132° Moon: 45°</p>	<p>2019 apr 19 16h51.0m A19_04030 79 Eurynome UCAC5 358–158616 Diam = 68.0 m = 11.7 m = 12.9</p>  <p>Dur = 8.8s Dmag = 1.5 Sun: 108° Moon: 68°</p>
<p>2019 apr 19 18h35.1m A19_04117 914 Palisana UCAC5 326–161886 Diam = 79.0 m = 11.9 m = 12.5</p>  <p>Dur = 6.0s Dmag = 1.1 Sun: 109° Moon: 67°</p>	<p>2019 apr 20 11h16.6m A19_04088 491 Carina TYC 0250–00273–1 Diam = 101.0 m = 11.4 m = 14.1</p>  <p>Dur = 15.2s Dmag = 2.7 Sun: 120° Moon: 73°</p>	<p>2019 apr 21 13h36.2m A19_04025 61 Danaë TYC 8312–01798–1 Diam = 83.6 m = 12.3 m = 12.7</p>  <p>Dur = 9.1s Dmag = 0.9 Sun: 133° Moon: 31°</p>	<p>2019 apr 21 18h41.5m B19_04001 52747 1998HM151 UCAC5 332–110756 Diam = 109.6 m = 13.2 m = 24.3</p>  <p>Dur = 9.4s Dmag = 11.1 Sun: 124° Moon: 26°</p>
<p>2019 apr 21 19h30.3m A19_04065 345 Tercidina UCAC5 407–124301 Diam = 100.0 m = 12.4 m = 13.7</p>  <p>Dur = 4.5s Dmag = 1.6 Sun: 81° Moon: 67°</p>	<p>2019 apr 23 12h57.0m B19_04002 119069 2001KN77 UCAC5 326–108475 Diam = 166.0 m = 14.9 m = 22.3</p>  <p>Dur = 14.9s Dmag = 7.4 Sun: 125° Moon: 5°</p>	<p>2019 apr 23 19h53.3m A19_04055 225 Henrietta UCAC5 435–059966 Diam = 124.0 m = 12.1 m = 13.2</p>  <p>Dur = 10.1s Dmag = 1.4 Sun: 149° Moon: 33°</p>	<p>2019 apr 24 18h15.9m A19_04070 371 Bohemia PPMX 12785424 Diam = 56.7 m = 11.9 m = 13.5</p>  <p>Dur = 4.8s Dmag = 1.8 Sun: 102° Moon: 12°</p>

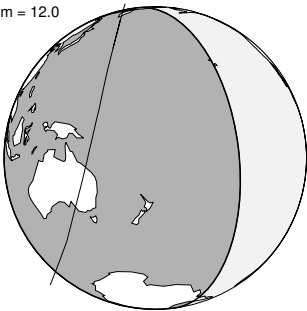
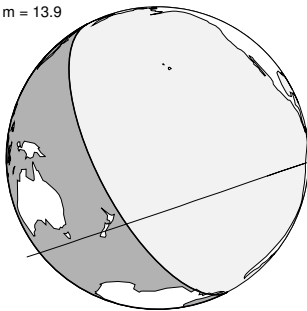
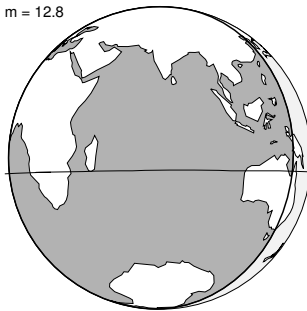

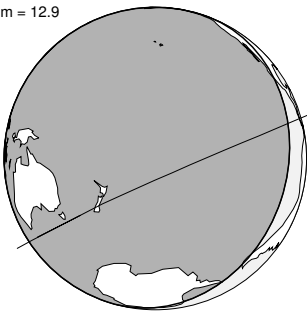
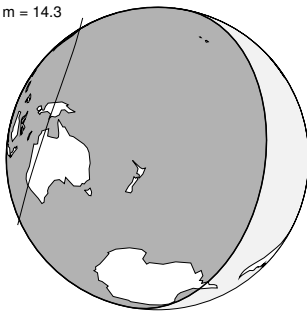
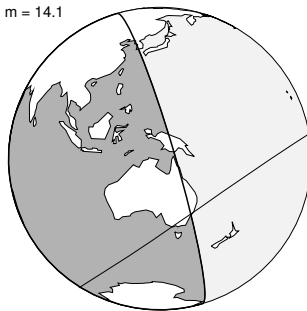
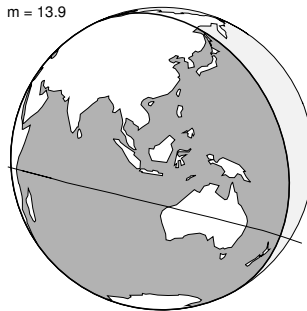
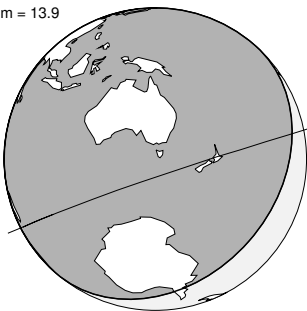
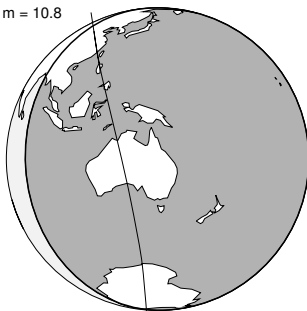
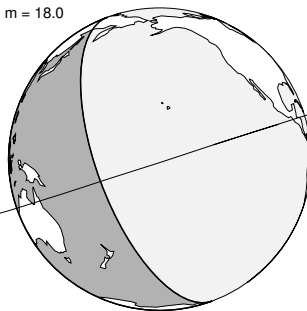
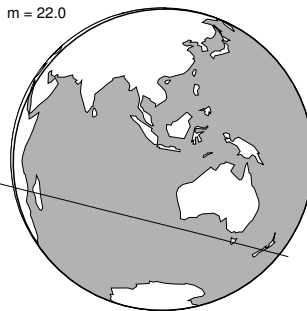
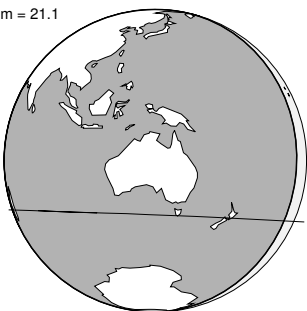
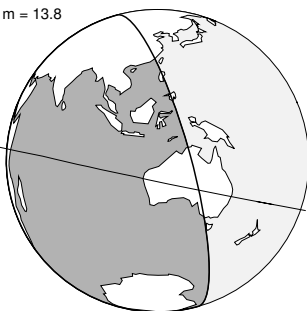
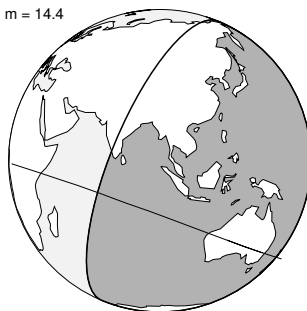
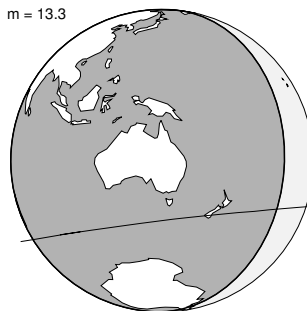
Occultations by major and minor planets – 2019

Region 8

<p>2019 apr 25 15h23.5m A19_04089 494 Virtus UCAC5 349-070596 Diam = 89.1 m = 12.2 m = 13.0</p>  <p>Dur = 8.8s Dmag = 1.2 Sun: 161° Moon: 57°</p>	<p>2019 apr 27 17h21.8m A19_04007 15 Eunomia UCAC5 371-172875 Diam = 272.0 m = 10.4</p>  <p>Dur = 11.8s Dmag = 0.2 Sun: 81° Moon: 2°</p>	<p>2019 apr 28 20h38.4m A19_04132 10370 Hylonome TYC 6286-01152-1 Diam = 104.7 m = 22.1</p>  <p>Dur = 17.3s Dmag = 12.5 Sun: 114° Moon: 46°</p>	<p>2019 apr 29 14h 9.9m A19_04120 1071 Brita UCAC5 318-200342 Diam = 52.7 m = 11.9 m = 15.5</p>  <p>Dur = 14.7s Dmag = 3.6 Sun: 116° Moon: 55°</p>
<p>2019 apr 29 15h29.4m A19_04124 1189 Terentia UCAC5 311-073494 Diam = 58.3 m = 11.6 m = 14.6</p>  <p>Dur = 4.4s Dmag = 3.1 Sun: 165° Moon: 109°</p>	<p>2019 apr 30 11h21.6m A19_04133 28978 Ixion UCAC5 304-136978 Diam = 794.3 m = 11.6 m = 19.7</p>  <p>Dur = 52.3s Dmag = 8.1 Sun: 130° Moon: 79°</p>	<p>2019 apr 30 18h16.7m A19_04079 446 Aeternitas UCAC5 308-098756 Diam = 43.0 m = 8.0 m = 13.1</p>  <p>Dur = 6.2s Dmag = 5.1 Sun: 142° Moon: 95°</p>	<p>2019 apr 30 20h19.8m A19_04048 179 Klytaemnestra TYC 6841-01050-1 Diam = 81.0 m = 12.1 m = 13.1</p>  <p>Dur = 25.4s Dmag = 1.4 Sun: 130° Moon: 83°</p>
<p>2019 may 2 14h 8.3m A19_05058 383 Janina UCAC5 357-184137 Diam = 49.7 m = 12.3 m = 16.0</p>  <p>Dur = 3.3s Dmag = 3.8 Sun: 91° Moon: 64°</p>	<p>2019 may 2 16h 8.1m A19_05010 44 Nysa TYC 4981-00894-1 Diam = 73.3 m = 9.7 m = 10.0</p>  <p>Dur = 7.1s Dmag = 0.9 Sun: 168° Moon: 163°</p>	<p>2019 may 3 12h20.6m A19_05116 5511 Cloanthus UCAC5 458-049628 Diam = 50.1 m = 12.1 m = 16.9</p>  <p>Dur = 4.1s Dmag = 4.8 Sun: 145° Moon: 162°</p>	<p>2019 may 3 20h17.9m A19_05106 1001 Gaussia UCAC5 332-117275 Diam = 78.3 m = 12.2 m = 15.4</p>  <p>Dur = 14.0s Dmag = 3.3 Sun: 132° Moon: 120°</p>
<p>2019 may 4 21h35.0m A19_05111 2146 Stentor UCAC5 391-123406 Diam = 47.9 m = 11.2 m = 17.6</p>  <p>Dur = 3.4s Dmag = 6.4 Sun: 86° Moon: 86°</p>	<p>2019 may 6 13h 5.3m A19_05005 19 Fortuna UCAC5 366-065186 Diam = 149.0 m = 11.5 m = 10.8</p>  <p>Dur = 11.4s Dmag = 0.5 Sun: 176° Moon: 164°</p>	<p>2019 may 6 14h14.4m A19_05109 1285 Julietta UCAC5 442-050958 Diam = 45.5 m = 12.5 m = 15.9</p>  <p>Dur = 22.0s Dmag = 3.4 Sun: 125° Moon: 106°</p>	<p>2019 may 6 19h41.9m A19_05079 693 Zerbietta UCAC5 236-146341 Diam = 69.1 m = 12.3 m = 14.1</p>  <p>Dur = 10.5s Dmag = 2.0 Sun: 130° Moon: 147°</p>

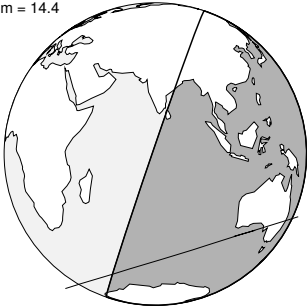
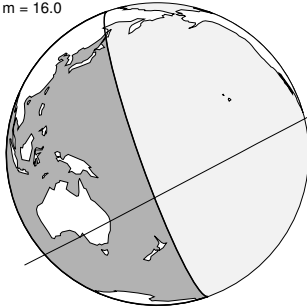
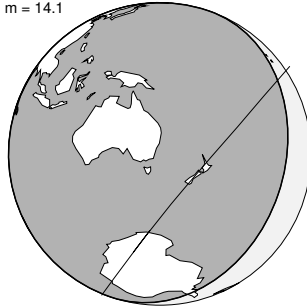
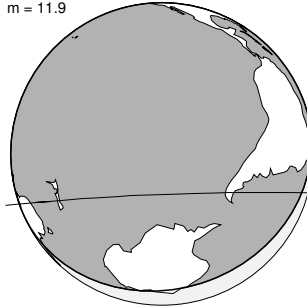
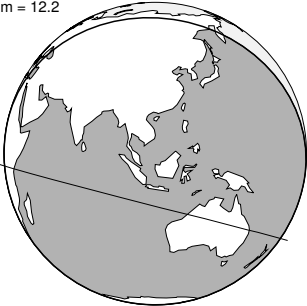
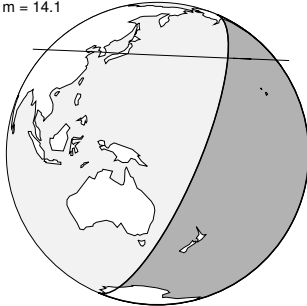
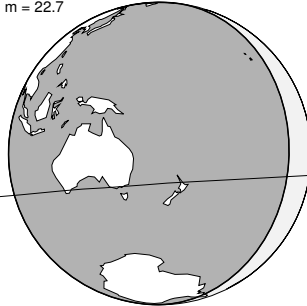
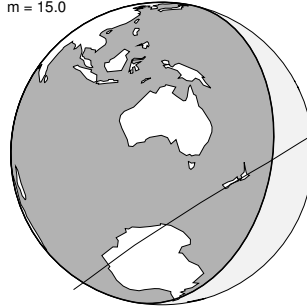
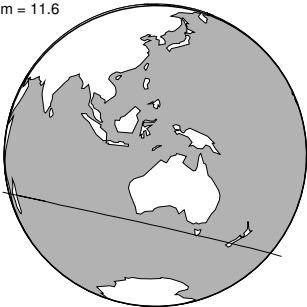
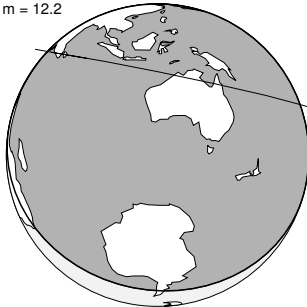
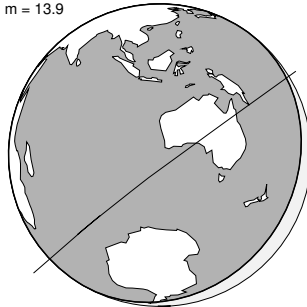
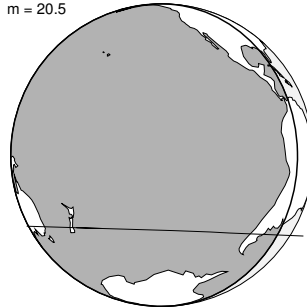
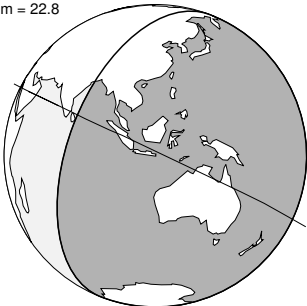
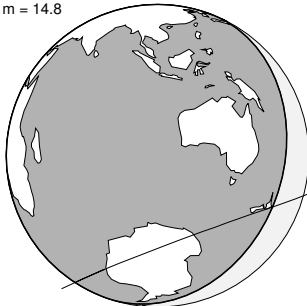
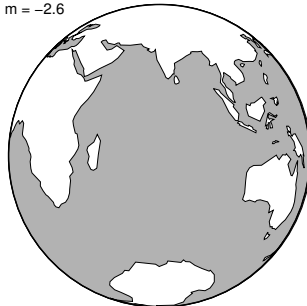
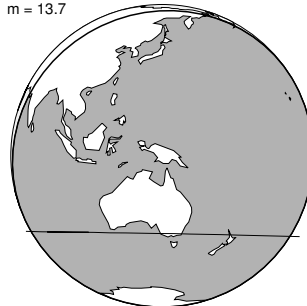
Occultations by major and minor planets – 2019

Region 8

<p>2019 may 7 15h57.8m A19_05097 914 Palisana UCAC5 347-151914 Diam = 79.0 m = 12.5 m = 12.0</p>  <p>Dur = 7.3s Dmag = 0.5 Sun: 123° Moon: 157°</p>	<p>2019 may 7 18h46.5m A19_05040 250 Bettina HIP 114010 Diam = 85.5 m = 13.9</p>  <p>Dur = 3.1s Dmag = 6.9 Sun: 66° Moon: 100°</p>	<p>2019 may 7 20h52.3m A19_05026 106 Dione UCAC5 335-082573 Diam = 146.9 m = 11.7 m = 12.8</p>  <p>Dur = 13.1s Dmag = 1.5 Sun: 151° Moon: 172°</p>	<p>2019 may 7 21h25.7m A19_05095 907 Rhoda UCAC5 273-099479 Diam = 65.8 m = 11.5 m = 14.4</p>  <p>Dur = 5.4s Dmag = 3.0 Sun: 144° Moon: 165°</p>
<p>2019 may 8 12h22.7m A19_05067 446 Aeternitas TYC 6822-02106-1 Diam = 43.0 m = 11.1 m = 12.9</p>  <p>Dur = 5.0s Dmag = 2.0 Sun: 151° Moon: 162°</p>	<p>2019 may 8 14h45.3m A19_05101 926 Imhilde UCAC5 279-149879 Diam = 50.5 m = 12.1 m = 14.3</p>  <p>Dur = 6.1s Dmag = 2.3 Sun: 135° Moon: 168°</p>	<p>2019 may 8 20h37.2m A19_05066 441 Bathilde TYC 5765-00165-1 Diam = 73.2 m = 11.4 m = 14.1</p>  <p>Dur = 5.4s Dmag = 2.8 Sun: 95° Moon: 144°</p>	<p>2019 may 9 18h37.8m A19_05090 856 Backlunda UCAC5 440-064871 Diam = 52.0 m = 12.2 m = 13.9</p>  <p>Dur = 9.3s Dmag = 1.9 Sun: 142° Moon: 145°</p>
<p>2019 may 10 16h 5.3m A19_05049 328 Gudrun PPMX 14632525 Diam = 120.0 m = 12.1 m = 13.9</p>  <p>Dur = 10.0s Dmag = 2.0 Sun: 145° Moon: 133°</p>	<p>2019 may 12 12h13.9m A19_05061 405 Thia UCAC5 337-063251 Diam = 129.0 m = 10.8</p>  <p>Dur = 18.9s Dmag = 0.2 Sun: 150° Moon: 60°</p>	<p>2019 may 12 18h17.3m A19_05113 2759 Idomeneus UCAC5 449-129191 Diam = 73.3 m = 12.2 m = 18.0</p>  <p>Dur = 3.0s Dmag = 5.8 Sun: 65° Moon: 162°</p>	<p>2019 may 13 16h 2.4m A19_05118 471152 2010FE49 HIP 71375 Diam = 208.9 m = 10.2 m = 22.0</p>  <p>Dur = 9.0s Dmag = 11.8 Sun: 167° Moon: 56°</p>
<p>2019 may 13 16h24.1m B19_05008 470593 2008LP17 UCAC5 338-081198 Diam = 239.9 m = 14.9 m = 21.1</p>  <p>Dur = 11.6s Dmag = 6.2 Sun: 159° Moon: 89°</p>	<p>2019 may 13 21h27.2m A19_05076 618 Elfriede UCAC5 361-184927 Diam = 124.0 m = 12.3 m = 13.8</p>  <p>Dur = 11.0s Dmag = 1.7 Sun: 102° Moon: 143°</p>	<p>2019 may 14 13h 7.6m A19_05031 167 Urda UCAC5 489-050431 Diam = 42.2 m = 12.3 m = 14.4</p>  <p>Dur = 6.6s Dmag = 2.3 Sun: 108° Moon: 15°</p>	<p>2019 may 14 16h57.8m A19_05025 91 Aegina UCAC5 319-120058 Diam = 114.0 m = 11.2 m = 13.3</p>  <p>Dur = 15.3s Dmag = 2.3 Sun: 144° Moon: 91°</p>

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<p>2019 may 15 12h47.7m A19_05086 790 Pretoria UCAC5 414-046661 Diam = 176.0 m = 12.1 m = 14.4</p>  <p>Dur = 11.3s Dmag = 2.5 Sun: 91° Moon: 51°</p>	<p>2019 may 16 18h51.3m A19_05092 874 Rotraut TYC 5224-00490-1 Diam = 58.3 m = 11.5 m = 16.0</p>  <p>Dur = 3.1s Dmag = 4.5 Sun: 83° Moon: 122°</p>	<p>2019 may 19 16h 3.1m A19_05103 926 Imhilde UCAC5 270-131229 Diam = 50.5 m = 11.5 m = 14.1</p>  <p>Dur = 5.3s Dmag = 2.7 Sun: 145° Moon: 27°</p>	<p>2019 may 21 8h29.0m A19_05057 375 Ursula TYC 8312-00912-1 Diam = 216.0 m = 11.9</p>  <p>Dur = 19.3s Dmag = 0.8 Sun: 153° Moon: 30°</p>
<p>2019 may 21 17h 0.3m A19_05038 234 Barbara UCAC5 480-056460 Diam = 44.6 m = 11.7 m = 12.2</p>  <p>Dur = 4.4s Dmag = 1.0 Sun: 153° Moon: 42°</p>	<p>2019 may 22 6h20.0m A19_05094 895 Helio UCAC5 422-044912 Diam = 147.0 m = 11.3 m = 14.1</p>  <p>Dur = 5.7s Dmag = 2.9 Sun: 73° Moon: 142°</p>	<p>2019 may 22 15h12.2m B19_05005 119070 2001KP77 UCAC5 318-138003 Diam = 166.0 m = 14.9 m = 22.7</p>  <p>Dur = 8.4s Dmag = 7.8 Sun: 148° Moon: 14°</p>	<p>2019 may 22 18h14.4m A19_05033 193 Ambrosia UCAC5 258-175323 Diam = 48.3 m = 12.3 m = 15.0</p>  <p>Dur = 5.3s Dmag = 2.8 Sun: 136° Moon: 17°</p>
<p>2019 may 23 15h27.7m A19_05027 114 Cassandra UCAC5 390-063050 Diam = 103.0 m = 12.3 m = 11.6</p>  <p>Dur = 9.7s Dmag = 0.5 Sun: 171° Moon: 61°</p>	<p>2019 may 26 15h35.1m A19_05015 61 Danaë UCAC5 213-115940 Diam = 83.6 m = 12.3 m = 12.2</p>  <p>Dur = 6.7s Dmag = 0.7 Sun: 152° Moon: 88°</p>	<p>2019 may 29 17h52.5m A19_05104 926 Imhilde UCAC5 263-130454 Diam = 50.5 m = 12.4 m = 13.9</p>  <p>Dur = 4.8s Dmag = 1.7 Sun: 155° Moon: 101°</p>	<p>2019 jun 1 10h45.7m B19_06008 2010GX34 UCAC5 330-143765 Diam = 95.5 m = 13.5 m = 20.5</p>  <p>Dur = 5.4s Dmag = 7.0 Sun: 153° Moon: 129°</p>
<p>2019 jun 1 12h40.8m B19_06003 79969 1999CP133 UCAC5 409-052985 Diam = 138.0 m = 14.3 m = 22.8</p>  <p>Dur = 11.5s Dmag = 8.5 Sun: 125° Moon: 148°</p>	<p>2019 jun 1 19h14.6m A19_06044 193 Ambrosia UCAC5 255-166978 Diam = 48.3 m = 12.4 m = 14.8</p>  <p>Dur = 4.1s Dmag = 2.6 Sun: 146° Moon: 126°</p>	<p>2019 jun 3 19h33.0m P19_06001 Jupiter HIP 84543 Diam = 133542.0 m = 9.4 m = -2.6</p>  <p>Dur = 8762.3s Dmag = 0.0 Sun: 172° Moon: 177°</p>	<p>2019 jun 5 13h58.6m A19_06068 360 Carlova TYC 5045-00110-1 Diam = 121.0 m = 11.0 m = 13.7</p>  <p>Dur = 8.2s Dmag = 2.8 Sun: 161° Moon: 138°</p>

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<p>2019 jun 5 16h29.9m A19_06124 914 Palisana UCAC5 392-091893 Diam = 79.0 m = 9.5 m = 11.2</p> <p>Dur = 6.4s Dmag = 1.9 Sun: 150° Moon: 169°</p>	<p>2019 jun 6 12h28.7m A19_06028 108 Hecuba PPMX 7219297 Diam = 67.0 m = 12.2 m = 13.9</p> <p>Dur = 3.2s Dmag = 1.9 Sun: 80° Moon: 40°</p>	<p>2019 jun 6 12h57.4m A19_06136 957 Camelia TYC 6153-00772-1 Diam = 76.6 m = 11.4 m = 14.5</p> <p>Dur = 7.8s Dmag = 3.1 Sun: 146° Moon: 106°</p>	<p>2019 jun 6 18h35.7m A19_06123 914 Palisana UCAC5 394-088399 Diam = 79.0 m = 12.4 m = 11.1</p> <p>Dur = 6.3s Dmag = 0.3 Sun: 151° Moon: 159°</p>
<p>2019 jun 7 7h19.8m A19_06032 129 Antigone TYC 1423-01036-1 Diam = 113.0 m = 11.4 m = 12.1</p> <p>Dur = 4.8s Dmag = 1.2 Sun: 74° Moon: 24°</p>	<p>2019 jun 8 12h33.4m A19_06139 1197 Rhodasia UCAC5 334-076154 Diam = 49.0 m = 10.8 m = 13.5</p> <p>Dur = 4.5s Dmag = 2.7 Sun: 167° Moon: 101°</p>	<p>2019 jun 8 15h44.7m A19_06029 114 Kassandra UCAC5 393-060424 Diam = 103.0 m = 11.3 m = 12.0</p> <p>Dur = 12.1s Dmag = 1.2 Sun: 156° Moon: 88°</p>	<p>2019 jun 8 18h30.2m A19_06150 2014JV80 UCAC5 361-110706 Diam = 138.0 m = 10.5 m = 22.0</p> <p>Dur = 6.2s Dmag = 11.5 Sun: 168° Moon: 119°</p>
<p>2019 jun 9 7h10.9m A19_06107 661 Cloelia UCAC5 284-076984 Diam = 52.0 m = 12.4 m = 14.1</p> <p>Dur = 4.8s Dmag = 1.9 Sun: 157° Moon: 85°</p>	<p>2019 jun 9 13h 4.1m A19_06023 79 Eurynome UCAC5 367-126653 Diam = 68.0 m = 11.9 m = 11.9</p> <p>Dur = 6.4s Dmag = 0.7 Sun: 158° Moon: 119°</p>	<p>2019 jun 10 8h27.7m A19_06137 978 Aidamina UCAC5 410-056536 Diam = 82.5 m = 12.4 m = 15.2</p> <p>Dur = 8.6s Dmag = 2.9 Sun: 137° Moon: 46°</p>	<p>2019 jun 11 15h42.7m A19_06121 856 Backlunda UCAC5 436-063437 Diam = 52.0 m = 12.0 m = 13.6</p> <p>Dur = 5.3s Dmag = 1.8 Sun: 159° Moon: 64°</p>
<p>2019 jun 12 12h20.9m A19_06118 791 Ani TYC 5744-00930-1 Diam = 107.0 m = 11.8 m = 13.5</p> <p>Dur = 27.2s Dmag = 1.9 Sun: 136° Moon: 102°</p>	<p>2019 jun 12 12h28.7m B19_06007 2002GV32 UCAC5 332-098813 Diam = 138.0 m = 13.0 m = 22.4</p> <p>Dur = 5.9s Dmag = 9.4 Sun: 177° Moon: 63°</p>	<p>2019 jun 12 12h29.2m A19_06094 564 Dudu UCAC5 402-055532 Diam = 50.7 m = 10.7 m = 13.5</p> <p>Dur = 5.8s Dmag = 2.8 Sun: 140° Moon: 21°</p>	<p>2019 jun 12 13h49.1m A19_06004 11 Parthenope TYC 5584-00967-1 Diam = 162.0 m = 11.9 m = 10.1</p> <p>Dur = 25.7s Dmag = 0.2 Sun: 145° Moon: 25°</p>

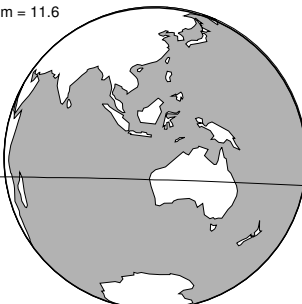
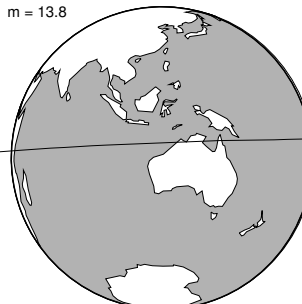
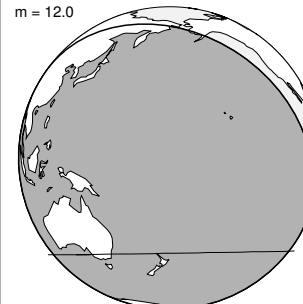
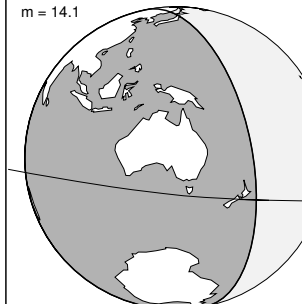
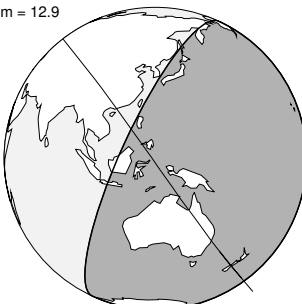
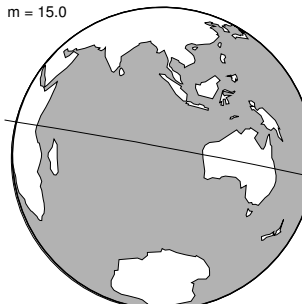
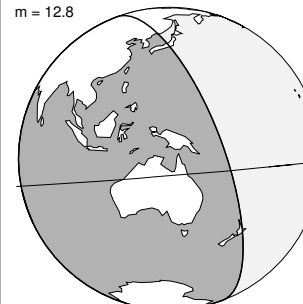
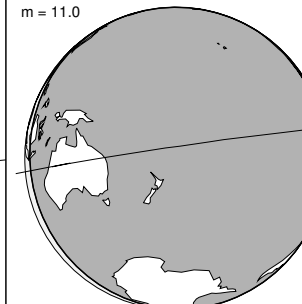
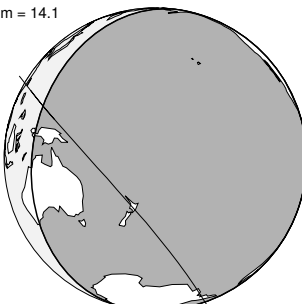
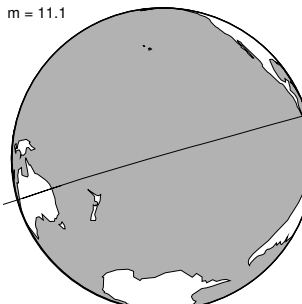
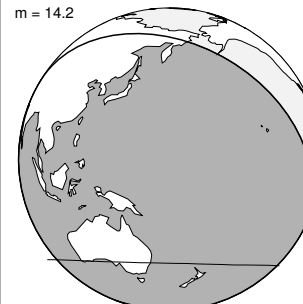
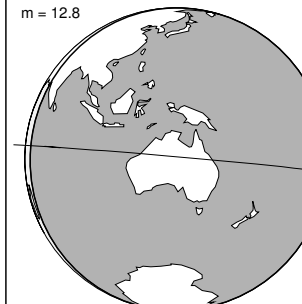
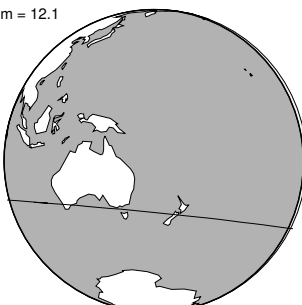

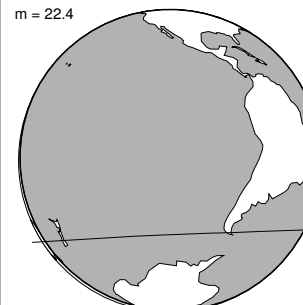
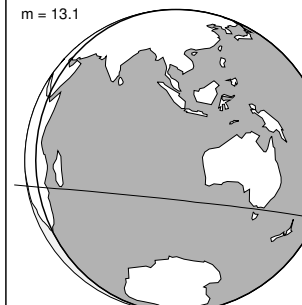
Occultations by major and minor planets – 2019

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<p>2019 jun 12 16h57.6m A19_06066 331 Etheridgea PPMX 13697079 Diam = 78.5 m = 12.5 m = 13.9</p> <p>Dur = 6.8s Dmag = 1.7 Sun: 166° Moon: 70°</p>	<p>2019 jun 13 7h 9.4m A19_06037 161 Athor TYC 4943-00398-1 Diam = 45.7 m = 8.9 m = 13.7</p> <p>Dur = 4.6s Dmag = 4.8 Sun: 101° Moon: 29°</p>	<p>2019 jun 14 15h33.0m A19_06077 406 Erna UCAC5 310-184328 Diam = 53.8 m = 11.8 m = 14.2</p> <p>Dur = 5.2s Dmag = 2.5 Sun: 167° Moon: 45°</p>	<p>2019 jun 14 17h38.4m B19_06002 28978 Ixion UCAC5 304-133829 Diam = 794.3 m = 12.8 m = 19.5</p> <p>Dur = 31.9s Dmag = 6.8 Sun: 172° Moon: 38°</p>
<p>2019 jun 15 11h52.0m A19_06114 747 Winchester UCAC5 413-074834 Diam = 178.0 m = 12.1 m = 12.9</p> <p>Dur = 11.6s Dmag = 1.2 Sun: 160° Moon: 35°</p>	<p>2019 jun 15 13h27.2m A19_06047 201 Penelope UCAC5 380-133635 Diam = 70.5 m = 12.4 m = 11.6</p> <p>Dur = 10.2s Dmag = 0.4 Sun: 156° Moon: 43°</p>	<p>2019 jun 16 17h55.6m A19_06129 914 Palisana UCAC5 411-074745 Diam = 79.0 m = 12.5 m = 10.9</p> <p>Dur = 6.1s Dmag = 0.2 Sun: 158° Moon: 25°</p>	<p>2019 jun 17 16h41.7m A19_06040 179 Klytaemnestra TYC 6247-00046-1 Diam = 81.0 m = 10.8 m = 12.1</p> <p>Dur = 6.6s Dmag = 1.6 Sun: 175° Moon: 7°</p>
<p>2019 jun 18 9h26.3m A19_06067 349 Dembowska HIP 53014 Diam = 143.0 m = 8.2 m = 11.7</p> <p>Dur = 5.9s Dmag = 3.6 Sun: 72° Moon: 119°</p>	<p>2019 jun 19 8h29.5m A19_06080 410 Chloris UCAC5 357-090783 Diam = 128.0 m = 10.4 m = 10.3</p> <p>Dur = 16.3s Dmag = 0.7 Sun: 172° Moon: 29°</p>	<p>2019 jun 19 16h53.0m A19_06060 287 Nephthys UCAC5 423-132711 Diam = 70.1 m = 11.9 m = 12.5</p> <p>Dur = 6.3s Dmag = 1.1 Sun: 103° Moon: 49°</p>	<p>2019 jun 20 12h57.8m A19_06122 856 Backlunda UCAC5 432-062332 Diam = 52.0 m = 12.5 m = 13.7</p> <p>Dur = 5.5s Dmag = 1.6 Sun: 154° Moon: 57°</p>
<p>2019 jun 20 13h 0.6m B19_06009 2014JT80 UCAC5 401-067287 Diam = 158.5 m = 14.2 m = 22.2</p> <p>Dur = 6.7s Dmag = 7.9 Sun: 165° Moon: 45°</p>	<p>2019 jun 20 18h 7.2m A19_06064 328 Gudrun UCAC5 232-097803 Diam = 120.0 m = 11.0 m = 13.8</p> <p>Dur = 9.5s Dmag = 2.9 Sun: 150° Moon: 60°</p>	<p>2019 jun 21 18h46.4m A19_06108 679 Pax UCAC5 415-069765 Diam = 65.5 m = 10.9 m = 12.7</p> <p>Dur = 4.5s Dmag = 2.0 Sun: 163° Moon: 55°</p>	<p>2019 jun 22 10h40.0m A19_06041 179 Klytaemnestra UCAC5 348-098784 Diam = 81.0 m = 10.9 m = 12.2</p> <p>Dur = 6.7s Dmag = 1.6 Sun: 170° Moon: 67°</p>

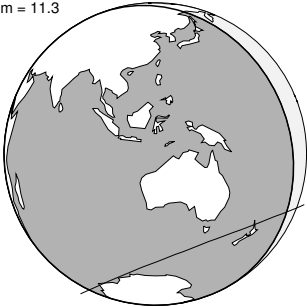
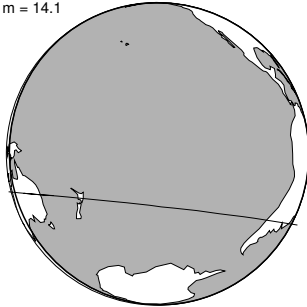
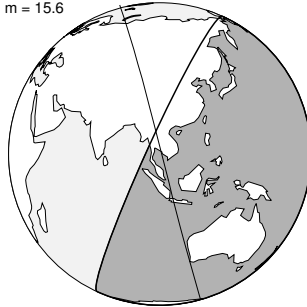
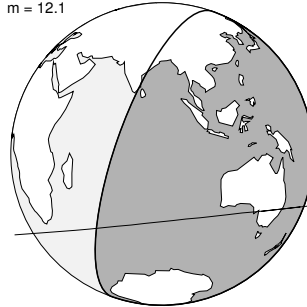
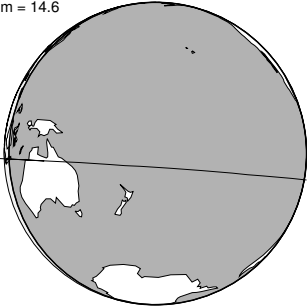
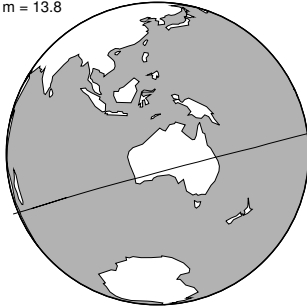
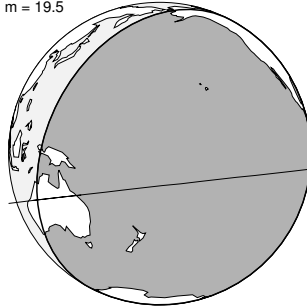
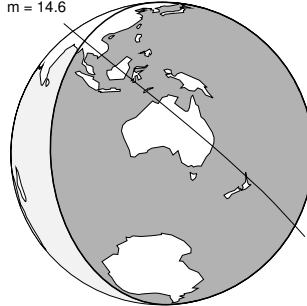
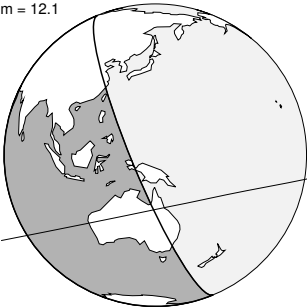
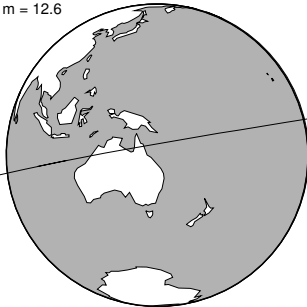
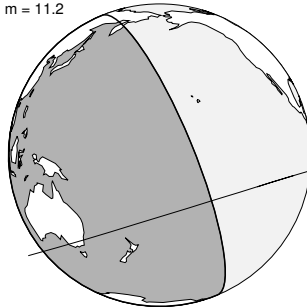
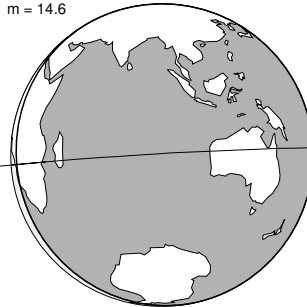
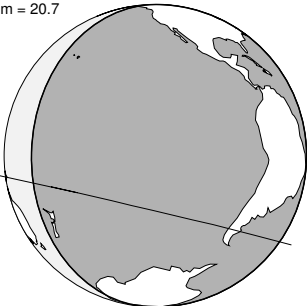
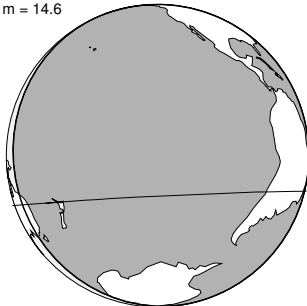
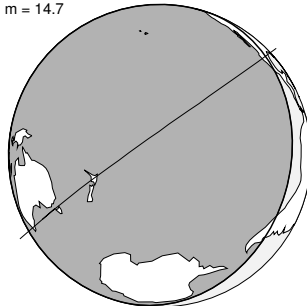
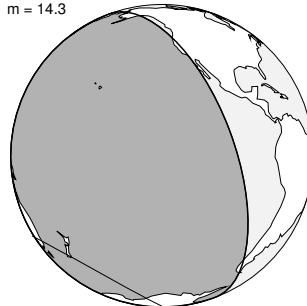
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<p>2019 jun 22 16h38.0m A19_06026 79 Eurynome UCAC5 368-122228 Diam = 68.0 m = 12.1 m = 11.6</p>  <p>Dur = 5.5s Dmag = 0.5 Sun: 171° Moon: 56°</p>	<p>2019 jun 22 16h41.0m A19_06098 586 Thekla UCAC5 344-150885 Diam = 85.0 m = 12.1 m = 13.8</p>  <p>Dur = 6.6s Dmag = 1.8 Sun: 171° Moon: 52°</p>	<p>2019 jun 23 13h27.5m A19_06075 386 Siegena UCAC5 473-093454 Diam = 173.0 m = 12.3 m = 12.0</p>  <p>Dur = 17.2s Dmag = 0.6 Sun: 145° Moon: 54°</p>	<p>2019 jun 24 19h12.9m A19_06113 746 Marlu UCAC5 300-245439 Diam = 75.5 m = 10.6 m = 14.1</p>  <p>Dur = 18.0s Dmag = 3.5 Sun: 120° Moon: 29°</p>
<p>2019 jun 25 10h35.1m A19_06057 259 Aletheia UCAC5 462-047261 Diam = 185.0 m = 12.0 m = 12.9</p>  <p>Dur = 15.8s Dmag = 1.3 Sun: 103° Moon: 166°</p>	<p>2019 jun 25 17h 5.7m A19_06106 648 Pippa TYC 6840-00512-1 Diam = 70.5 m = 11.3 m = 15.0</p>  <p>Dur = 4.5s Dmag = 3.8 Sun: 171° Moon: 100°</p>	<p>2019 jun 25 19h35.4m A19_06054 245 Vera UCAC5 387-136914 Diam = 84.8 m = 9.5 m = 12.8</p>  <p>Dur = 10.2s Dmag = 3.4 Sun: 111° Moon: 26°</p>	<p>2019 jun 27 10h40.6m A19_06011 22 Kalliope TYC 6837-00605-1 Diam = 187.0 m = 8.0 m = 11.0</p>  <p>Dur = 14.1s Dmag = 3.1 Sun: 164° Moon: 126°</p>
<p>2019 jun 29 9h 2.4m A19_06140 1197 Rhodesia TYC 6199-01691-1 Diam = 49.0 m = 11.5 m = 14.1</p>  <p>Dur = 7.2s Dmag = 2.6 Sun: 144° Moon: 170°</p>	<p>2019 jun 29 9h43.1m A19_06088 471 Papagena TYC 6851-01809-1 Diam = 127.0 m = 12.1 m = 11.1</p>  <p>Dur = 8.6s Dmag = 0.4 Sun: 173° Moon: 141°</p>	<p>2019 jun 29 14h43.2m A19_06115 754 Malabar TYC 1079-03191-1 Diam = 89.1 m = 11.5 m = 14.2</p>  <p>Dur = 8.3s Dmag = 2.8 Sun: 139° Moon: 111°</p>	<p>2019 jun 30 13h58.0m A19_06036 147 Protogeneia TYC 6247-00389-1 Diam = 137.0 m = 11.5 m = 12.8</p>  <p>Dur = 11.9s Dmag = 1.6 Sun: 164° Moon: 166°</p>
<p>2019 jun 30 14h 6.0m A19_06070 371 Bohemia UCAC5 343-177059 Diam = 56.7 m = 10.7 m = 12.1</p>  <p>Dur = 5.6s Dmag = 1.7 Sun: 167° Moon: 139°</p>	<p>2019 jul 1 18h 5.6m A19_07090 471 Papagena PPMX 12685440 Diam = 127.0 m = 12.1 m = 11.1</p>  <p>Dur = 8.7s Dmag = 0.4 Sun: 171° Moon: 171°</p>	<p>2019 jul 3 6h53.8m B19_07007 119068 2001KC77 UCAC5 295-163604 Diam = 190.5 m = 12.8 m = 22.4</p>  <p>Dur = 8.1s Dmag = 9.6 Sun: 168° Moon: 164°</p>	<p>2019 jul 3 15h38.5m A19_07025 91 Aegina UCAC5 320-101867 Diam = 114.0 m = 12.0 m = 13.1</p>  <p>Dur = 10.6s Dmag = 1.4 Sun: 157° Moon: 147°</p>

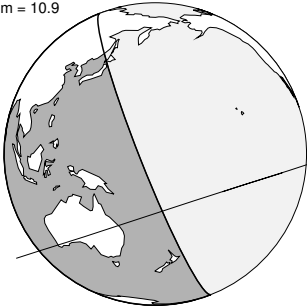
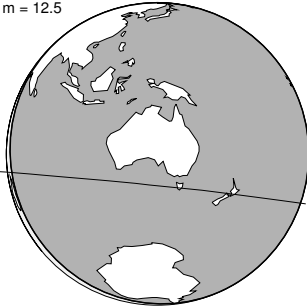
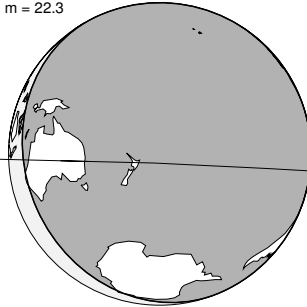
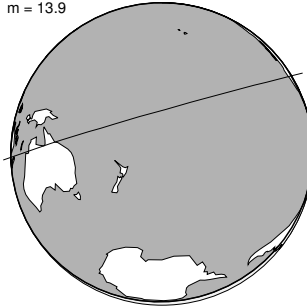
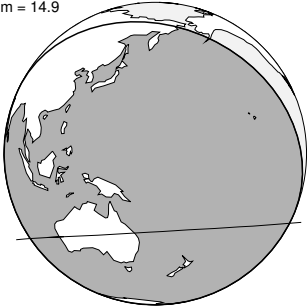
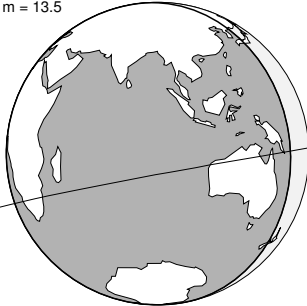
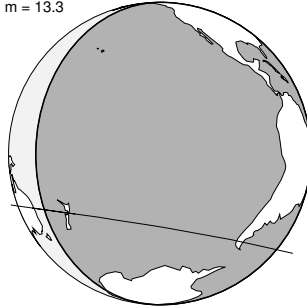
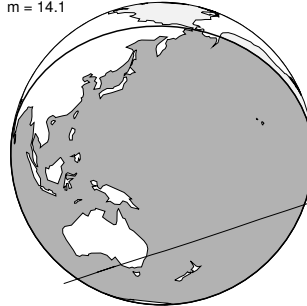
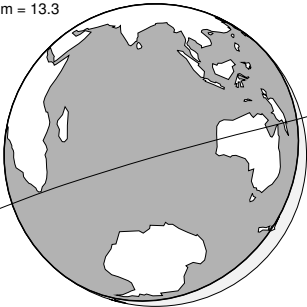
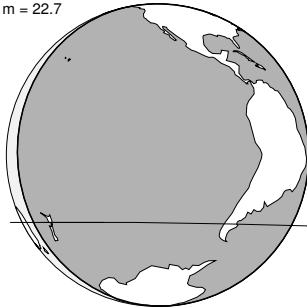
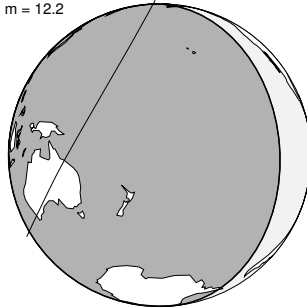
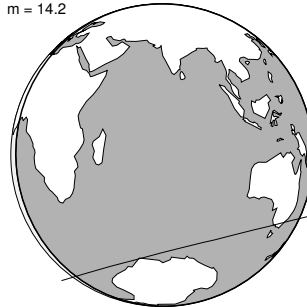
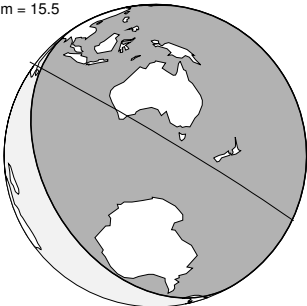
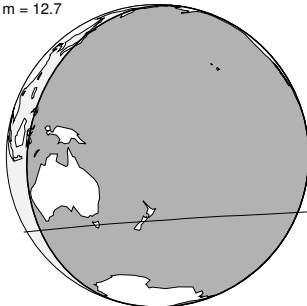
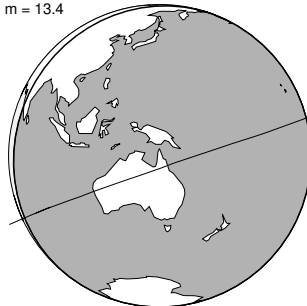
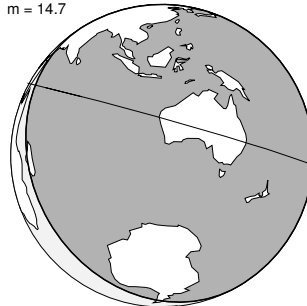
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<p>2019 jul 3 17h49.4m A19_07016 45 Eugenia UCAC5 384-143957 Diam = 214.0 m = 11.9</p>  <p>Dur = 26.3s Dmag = 0.5 Sun: 153° Moon: 165°</p>	<p>2019 jul 4 8h46.6m A19_07074 406 Erna UCAC5 312-126129 Diam = 53.8 m = 14.1</p>  <p>Dur = 5.0s Dmag = 1.9 Sun: 167° Moon: 147°</p>	<p>2019 jul 4 11h57.6m A19_07123 814 Taurus UCAC5 507-052059 Diam = 116.0 m = 11.8 m = 15.6</p>  <p>Dur = 8.1s Dmag = 3.8 Sun: 94° Moon: 73°</p>	<p>2019 jul 4 13h 5.0m A19_07073 405 Thia UCAC5 371-063441 Diam = 129.0 m = 11.1 m = 12.1</p>  <p>Dur = 9.6s Dmag = 1.3 Sun: 108° Moon: 85°</p>
<p>2019 jul 5 10h24.6m A19_07099 517 Edith UCAC5 333-121905 Diam = 95.0 m = 12.1 m = 14.6</p>  <p>Dur = 6.8s Dmag = 2.6 Sun: 165° Moon: 130°</p>	<p>2019 jul 5 15h36.9m A19_07079 424 Gratia UCAC5 332-167316 Diam = 90.5 m = 11.6 m = 13.8</p>  <p>Dur = 6.8s Dmag = 2.3 Sun: 178° Moon: 140°</p>	<p>2019 jul 8 9h 7.7m B19_07002 38628 Huya UCAC5 420-063419 Diam = 457.1 m = 12.5 m = 19.5</p>  <p>Dur = 26.5s Dmag = 7.0 Sun: 138° Moon: 65°</p>	<p>2019 jul 8 12h15.2m A19_07105 573 Recha UCAC5 279-081524 Diam = 50.5 m = 12.2 m = 14.6</p>  <p>Dur = 6.8s Dmag = 2.5 Sun: 137° Moon: 64°</p>
<p>2019 jul 8 21h11.0m A19_07003 14 Irene UCAC5 458-002216 Diam = 152.4 m = 11.6 m = 12.1</p>  <p>Dur = 7.7s Dmag = 1.0 Sun: 80° Moon: 163°</p>	<p>2019 jul 9 14h28.2m A19_07070 379 Huenna UCAC5 355-177668 Diam = 96.1 m = 12.0 m = 12.6</p>  <p>Dur = 9.2s Dmag = 1.1 Sun: 173° Moon: 94°</p>	<p>2019 jul 10 16h37.3m A19_07009 21 Lutetia TYC 4665-01189-1 Diam = 99.5 m = 10.8 m = 11.2</p>  <p>Dur = 7.6s Dmag = 0.9 Sun: 102° Moon: 151°</p>	<p>2019 jul 10 16h46.5m A19_07133 1071 Brita UCAC5 306-185372 Diam = 52.7 m = 11.3 m = 14.6</p>  <p>Dur = 4.3s Dmag = 3.4 Sun: 163° Moon: 59°</p>
<p>2019 jul 11 5h43.6m A19_07161 278361 2007JJ43 UCAC5 319-086962 Diam = 524.8 m = 11.8 m = 20.7</p>  <p>Dur = 27.3s Dmag = 8.9 Sun: 145° Moon: 34°</p>	<p>2019 jul 12 7h28.5m A19_07135 1071 Brita PPMX 12689524 Diam = 52.7 m = 11.6 m = 14.6</p>  <p>Dur = 4.4s Dmag = 3.1 Sun: 161° Moon: 38°</p>	<p>2019 jul 12 12h10.8m A19_07124 859 Bouzaréah UCAC5 277-197269 Diam = 77.5 m = 12.4 m = 14.7</p>  <p>Dur = 6.9s Dmag = 2.4 Sun: 149° Moon: 78°</p>	<p>2019 jul 12 12h54.4m A19_07087 458 Hercynia TYC 5829-00423-1 Diam = 40.0 m = 10.6 m = 14.3</p>  <p>Dur = 5.5s Dmag = 3.8 Sun: 118° Moon: 113°</p>

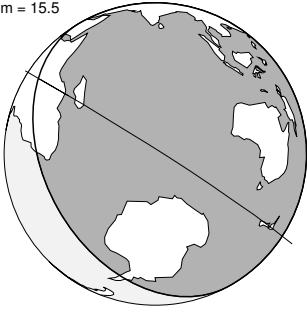
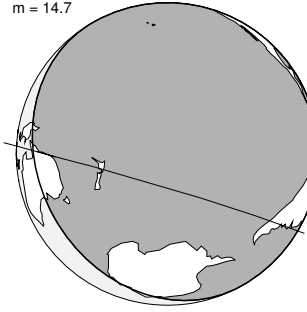
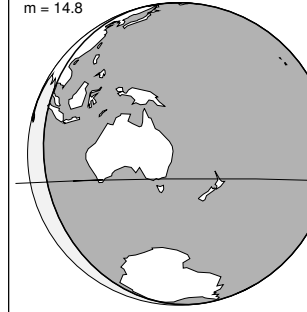
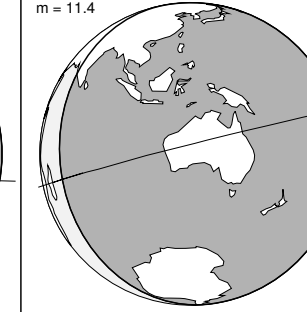
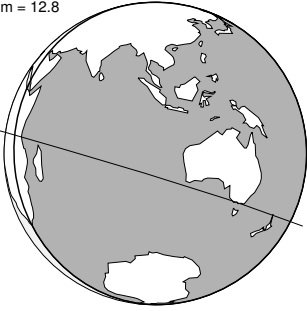
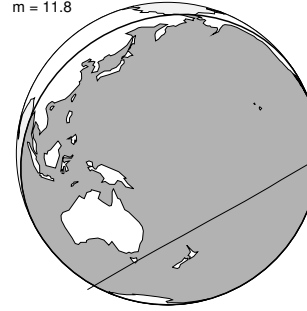
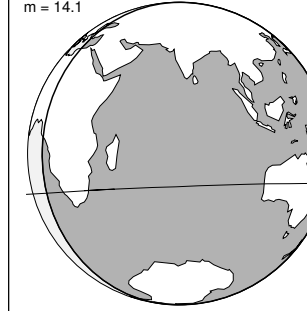
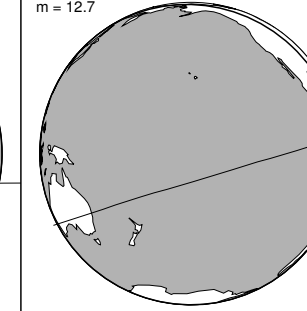
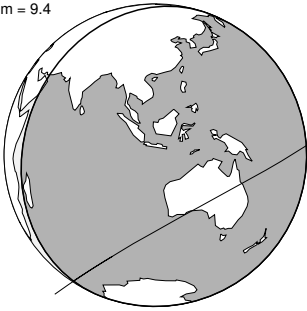
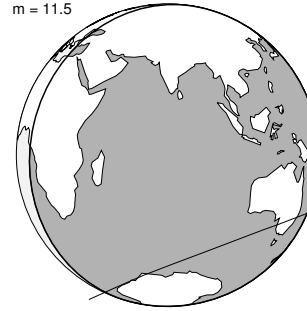
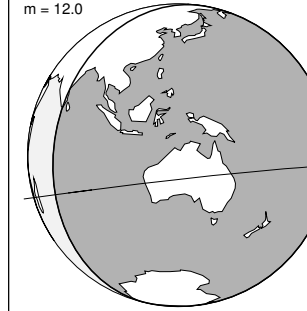
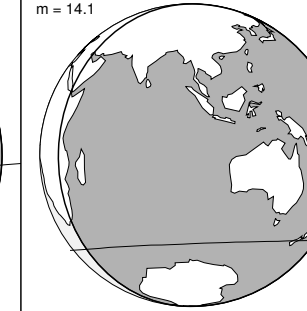
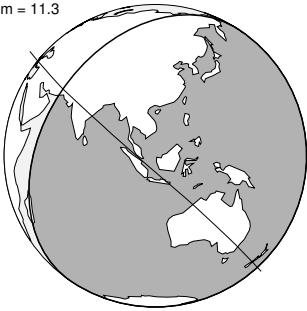
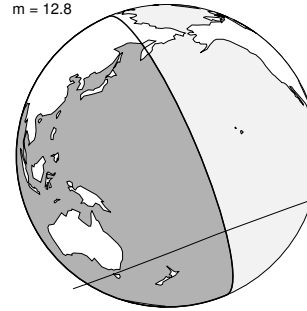
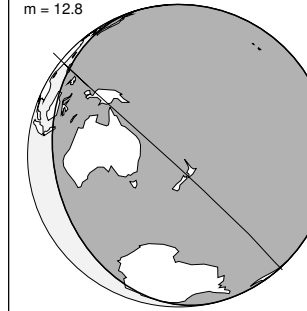
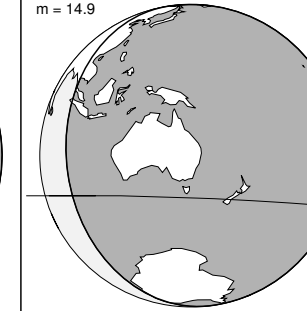
Occultations by major and minor planets – 2019

Region 8

<p>2019 jul 12 19h16.3m A19_07002 9 Metis UCAC5 475-002273 Diam = 231.2 m = 12.0 m = 10.9</p>  <p>Dur = 10.5s Dmag = 0.3 Sun: 84° Moon: 144°</p>	<p>2019 jul 13 14h 9.7m A19_07038 200 Dynamene UCAC5 299-196864 Diam = 132.0 m = 11.9 m = 12.5</p>  <p>Dur = 10.8s Dmag = 1.0 Sun: 165° Moon: 27°</p>	<p>2019 jul 14 9h46.8m B19_07011 2005JK186 UCAC5 271-105942 Diam = 199.5 m = 14.8 m = 22.3</p>  <p>Dur = 9.2s Dmag = 7.4 Sun: 152° Moon: 15°</p>	<p>2019 jul 14 11h22.1m A19_07150 1424 Sundmania TYC 7447-00068-1 Diam = 74.0 m = 11.3 m = 13.9</p>  <p>Dur = 6.1s Dmag = 2.6 Sun: 167° Moon: 33°</p>
<p>2019 jul 14 14h22.4m A19_07085 439 Ohio UCAC5 490-124447 Diam = 79.3 m = 12.3 m = 14.9</p>  <p>Dur = 6.7s Dmag = 2.8 Sun: 147° Moon: 51°</p>	<p>2019 jul 14 20h 1.7m A19_07120 760 Massinga UCAC5 350-180022 Diam = 74.8 m = 11.4 m = 13.5</p>  <p>Dur = 5.9s Dmag = 2.2 Sun: 151° Moon: 52°</p>	<p>2019 jul 15 6h21.5m A19_07026 91 Aegina UCAC5 321-094842 Diam = 114.0 m = 12.3 m = 13.3</p>  <p>Dur = 14.7s Dmag = 1.4 Sun: 145° Moon: 17°</p>	<p>2019 jul 15 13h35.8m A19_07118 754 Malabar UCAC5 506-112185 Diam = 89.1 m = 12.4 m = 14.1</p>  <p>Dur = 6.8s Dmag = 1.8 Sun: 147° Moon: 38°</p>
<p>2019 jul 15 19h39.6m A19_07068 373 Melusina TYC 7964-00671-1 Diam = 99.6 m = 10.8 m = 13.3</p>  <p>Dur = 9.8s Dmag = 2.7 Sun: 155° Moon: 33°</p>	<p>2019 jul 16 6h19.3m A19_07160 119070 2001KP77 UCAC5 317-121540 Diam = 166.0 m = 12.3 m = 22.7</p>  <p>Dur = 7.6s Dmag = 10.4 Sun: 157° Moon: 15°</p>	<p>2019 jul 16 14h 6.0m A19_07107 579 Sidonia TYC 6962-00674-1 Diam = 89.6 m = 12.0 m = 12.2</p>  <p>Dur = 11.6s Dmag = 0.9 Sun: 142° Moon: 41°</p>	<p>2019 jul 17 18h10.7m A19_07082 424 Gratia UCAC5 329-153530 Diam = 90.5 m = 11.8 m = 14.2</p>  <p>Dur = 7.3s Dmag = 2.5 Sun: 164° Moon: 25°</p>
<p>2019 jul 18 12h44.9m A19_07147 1317 Silvette UCAC5 200-142829 Diam = 43.5 m = 12.5 m = 15.5</p>  <p>Dur = 3.6s Dmag = 3.1 Sun: 138° Moon: 55°</p>	<p>2019 jul 19 9h58.5m A19_07022 74 Galatea UCAC5 364-098752 Diam = 123.0 m = 9.5 m = 12.7</p>  <p>Dur = 14.6s Dmag = 3.2 Sun: 149° Moon: 59°</p>	<p>2019 jul 19 13h32.6m A19_07126 924 Toni UCAC5 383-120103 Diam = 87.6 m = 11.8 m = 13.4</p>  <p>Dur = 7.8s Dmag = 1.9 Sun: 163° Moon: 45°</p>	<p>2019 jul 19 14h37.1m A19_07035 193 Ambrosia TYC 7903-00135-1 Diam = 48.3 m = 11.6 m = 14.7</p>  <p>Dur = 3.7s Dmag = 3.1 Sun: 149° Moon: 56°</p>

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<p>2019 jul 19 16h16.8m A19_07146 1317 Silvette UCAC5 200-142260 Diam = 43.5 m = 12.0 m = 15.5</p>  <p>Dur = 3.7s Dmag = 3.5 Sun: 137° Moon: 66°</p>	<p>2019 jul 20 8h11.3m A19_07034 193 Ambrosia TYC 7899-04940-1 Diam = 48.3 m = 11.3 m = 14.7</p>  <p>Dur = 3.7s Dmag = 3.4 Sun: 149° Moon: 65°</p>	<p>2019 jul 20 11h49.0m A19_07136 1071 Brita UCAC5 305-165972 Diam = 52.7 m = 11.5 m = 14.8</p>  <p>Dur = 5.1s Dmag = 3.3 Sun: 152° Moon: 66°</p>	<p>2019 jul 20 13h38.4m A19_07091 471 Papagena UCAC5 308-129221 Diam = 127.0 m = 12.4 m = 11.4</p>  <p>Dur = 11.2s Dmag = 0.3 Sun: 150° Moon: 70°</p>
<p>2019 jul 20 15h49.7m A19_07098 500 Selinur UCAC5 327-139946 Diam = 45.1 m = 11.9 m = 12.8</p>  <p>Dur = 4.7s Dmag = 1.3 Sun: 159° Moon: 62°</p>	<p>2019 jul 22 12h11.6m A19_07072 386 Siegena PPMX 8659054 Diam = 173.0 m = 11.8 m = 11.8</p>  <p>Dur = 13.5s Dmag = 0.7 Sun: 152° Moon: 77°</p>	<p>2019 jul 22 17h19.7m A19_07110 586 Thekla UCAC5 343-127612 Diam = 85.0 m = 11.5 m = 14.1</p>  <p>Dur = 8.2s Dmag = 2.7 Sun: 154° Moon: 90°</p>	<p>2019 jul 23 11h14.4m A19_07014 34 Circe PPMX 10806151 Diam = 118.0 m = 12.1 m = 12.7</p>  <p>Dur = 9.6s Dmag = 1.1 Sun: 166° Moon: 62°</p>
<p>2019 jul 24 14h49.0m A19_07008 18 Melpomene UCAC5 396-075840 Diam = 135.0 m = 12.4 m = 9.4</p>  <p>Dur = 15.7s Dmag = 0.1 Sun: 150° Moon: 113°</p>	<p>2019 jul 24 17h19.7m A19_07040 201 Penelope TYC 6266-01098-1 Diam = 70.5 m = 11.0 m = 11.5</p>  <p>Dur = 9.6s Dmag = 1.1 Sun: 155° Moon: 110°</p>	<p>2019 jul 25 13h 8.6m A19_07024 79 Eurynome PPMX 11633609 Diam = 68.0 m = 12.3 m = 12.0</p>  <p>Dur = 8.3s Dmag = 0.6 Sun: 145° Moon: 130°</p>	<p>2019 jul 25 15h34.9m A19_07109 586 Thekla UCAC5 343-125982 Diam = 85.0 m = 12.2 m = 14.1</p>  <p>Dur = 8.8s Dmag = 2.1 Sun: 151° Moon: 125°</p>
<p>2019 jul 26 14h29.5m A19_07125 914 Palisana TYC 0421-02611-1 Diam = 79.0 m = 8.6 m = 11.3</p>  <p>Dur = 12.8s Dmag = 2.8 Sun: 138° Moon: 137°</p>	<p>2019 jul 26 17h25.9m A19_07019 72 Feronia UCAC5 511-001719 Diam = 89.3 m = 11.8 m = 12.8</p>  <p>Dur = 7.4s Dmag = 1.4 Sun: 101° Moon: 32°</p>	<p>2019 jul 27 10h24.2m A19_07129 925 Alphonsina UCAC5 285-136534 Diam = 57.0 m = 12.0 m = 12.8</p>  <p>Dur = 4.9s Dmag = 1.2 Sun: 145° Moon: 148°</p>	<p>2019 jul 27 11h44.5m A19_07139 1071 Brita UCAC5 305-150050 Diam = 52.7 m = 12.2 m = 14.9</p>  <p>Dur = 6.2s Dmag = 2.8 Sun: 145° Moon: 151°</p>

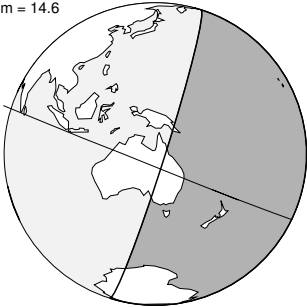
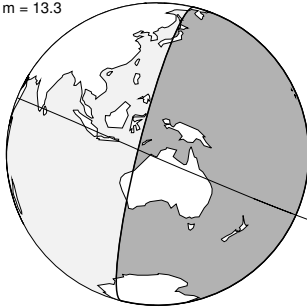
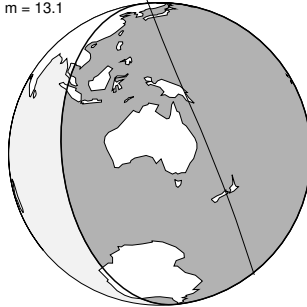
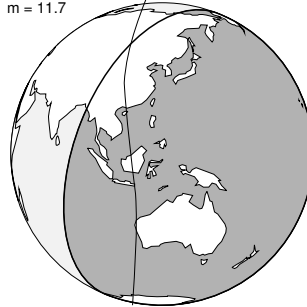
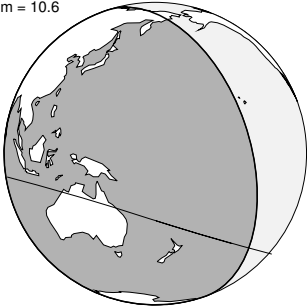
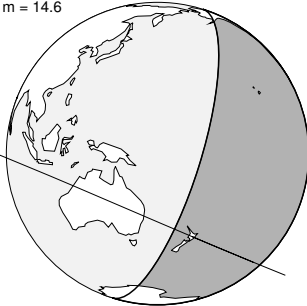
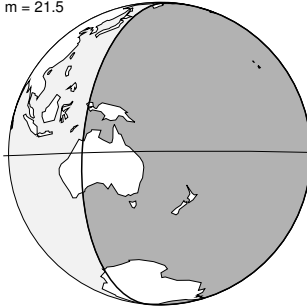
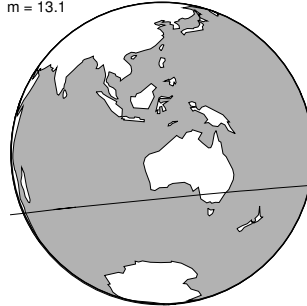
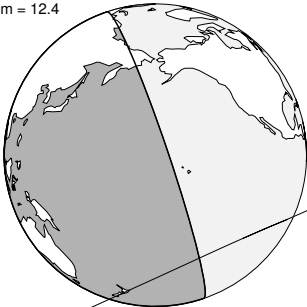
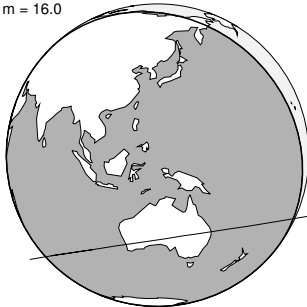
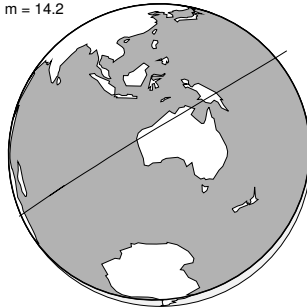
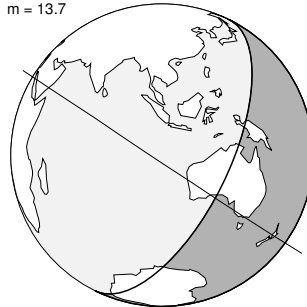
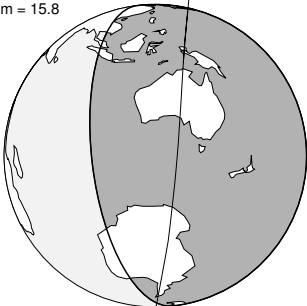
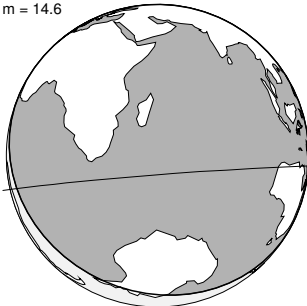
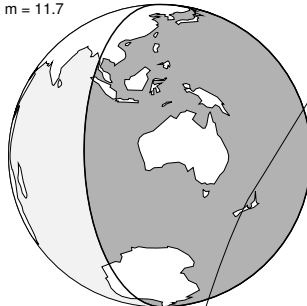
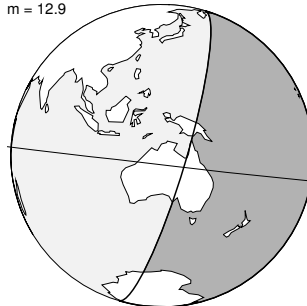
Occultations by major and minor planets – 2019

Region 8

<p>2019 jul 28 12h45.8m A19_07158 15436 1998VU30 UCAC5 478-127099 Diam = 63.1 m = 12.5 m = 16.4</p> <p>Dur = 4.2s Dmag = 3.9 Sun: 150° Moon: 108°</p>	<p>2019 jul 29 9h30.7m A19_07138 1071 Brita UCAC5 305-147284 Diam = 52.7 m = 10.4 m = 15.0</p> <p>Dur = 6.6s Dmag = 4.5 Sun: 143° Moon: 173°</p>	<p>2019 jul 29 13h36.9m A19_07112 605 Juvisia TYC 8362-00106-1 Diam = 72.0 m = 10.8 m = 14.4</p> <p>Dur = 6.5s Dmag = 3.7 Sun: 140° Moon: 154°</p>	<p>2019 jul 30 12h38.0m B19_07009 135571 2002GG32 UCAC5 286-097780 Diam = 151.4 m = 14.3 m = 22.9</p> <p>Dur = 11.4s Dmag = 8.6 Sun: 128° Moon: 150°</p>
<p>2019 jul 30 15h44.2m A19_07041 201 Penelope UCAC5 370-125451 Diam = 70.5 m = 12.2 m = 11.6</p> <p>Dur = 11.4s Dmag = 0.5 Sun: 148° Moon: 168°</p>	<p>2019 jul 30 17h57.1m A19_07013 33 Polyhymnia TYC 0026-00443-1 Diam = 81.3 m = 8.6 m = 11.7</p> <p>Dur = 6.6s Dmag = 3.1 Sun: 107° Moon: 88°</p>	<p>2019 jul 31 13h16.6m B19_07014 2014JV80 UCAC5 361-105482 Diam = 138.0 m = 14.8 m = 22.1</p> <p>Dur = 9.0s Dmag = 7.4 Sun: 137° Moon: 146°</p>	<p>2019 jul 31 14h15.5m B19_07006 95626 2002GZ32 UCAC5 367-081746 Diam = 173.8 m = 14.5 m = 19.6</p> <p>Dur = 13.3s Dmag = 5.2 Sun: 132° Moon: 140°</p>
<p>2019 aug 3 14h26.0m A19_08134 1042 Amazone HIP 113997 Diam = 76.7 m = 9.0 m = 14.5</p> <p>Dur = 7.3s Dmag = 5.4 Sun: 144° Moon: 151°</p>	<p>2019 aug 3 19h 7.8m A19_08155 5254 Ulysses TYC 7972-01134-1 Diam = 60.3 m = 12.3 m = 16.5</p> <p>Dur = 3.5s Dmag = 4.2 Sun: 156° Moon: 134°</p>	<p>2019 aug 5 15h52.9m A19_08136 1071 Brita UCAC5 306-137994 Diam = 52.7 m = 11.7 m = 15.1</p> <p>Dur = 9.5s Dmag = 3.4 Sun: 135° Moon: 74°</p>	<p>2019 aug 6 16h20.0m A19_08142 1317 Silivretta UCAC5 208-136556 Diam = 43.5 m = 12.0 m = 15.7</p> <p>Dur = 4.8s Dmag = 3.8 Sun: 122° Moon: 58°</p>
<p>2019 aug 7 13h44.0m A19_08096 657 Gunlöd UCAC5 344-172758 Diam = 43.6 m = 12.2 m = 14.9</p> <p>Dur = 4.5s Dmag = 2.8 Sun: 156° Moon: 68°</p>	<p>2019 aug 8 7h 0.3m A19_08087 500 Selinur UCAC5 333-137489 Diam = 45.1 m = 10.8 m = 13.2</p> <p>Dur = 8.4s Dmag = 2.5 Sun: 138° Moon: 42°</p>	<p>2019 aug 8 15h39.5m A19_08031 135 Hertha UCAC5 423-133125 Diam = 82.0 m = 12.1 m = 10.5</p> <p>Dur = 31.2s Dmag = 0.2 Sun: 147° Moon: 111°</p>	<p>2019 aug 10 11h19.5m A19_08059 285 Regina UCAC5 294-190706 Diam = 48.3 m = 9.0 m = 14.4</p> <p>Dur = 5.4s Dmag = 5.4 Sun: 141° Moon: 22°</p>

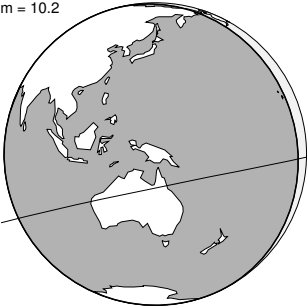
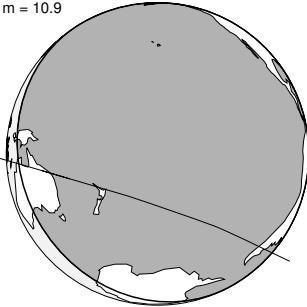
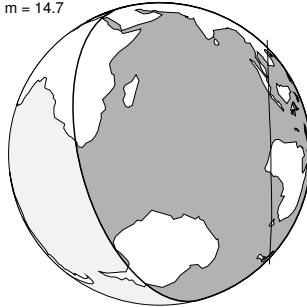
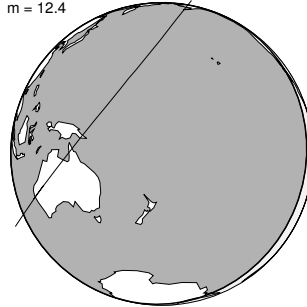
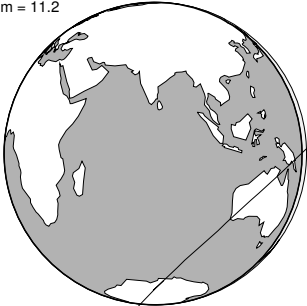
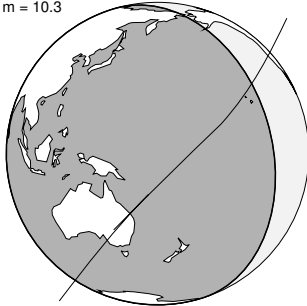

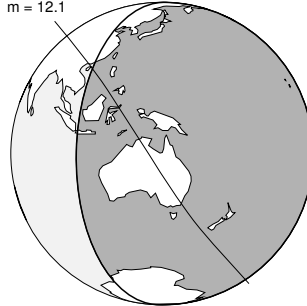
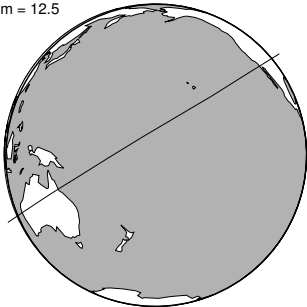
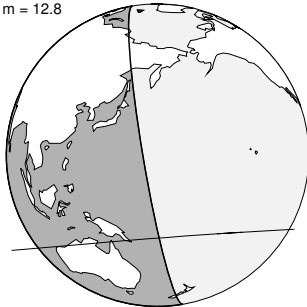
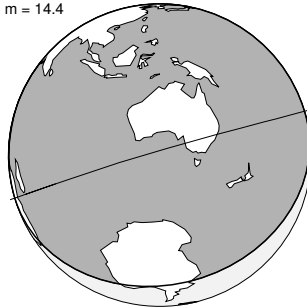
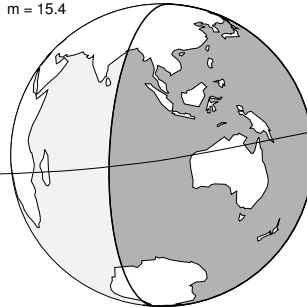
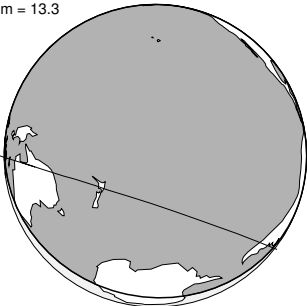
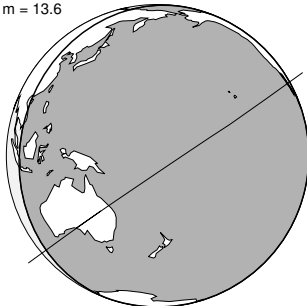
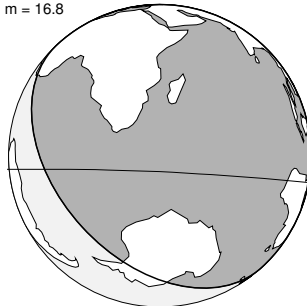
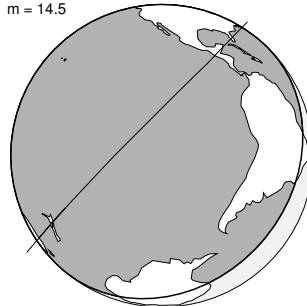
Occultations by major and minor planets – 2019

Region 8

<p>2019 aug 11 8h 3.6m A19_08081 438 Zeuxo UCAC5 356-068404 Diam = 63.6 m = 12.5 m = 14.6</p>  <p>Dur = 3.2s Dmag = 2.3 Sun: 86° Moon: 47°</p>	<p>2019 aug 11 9h44.6m A19_08026 114 Kassandra UCAC5 382-067331 Diam = 103.0 m = 11.2 m = 13.3</p>  <p>Dur = 7.3s Dmag = 2.3 Sun: 97° Moon: 37°</p>	<p>2019 aug 11 11h29.3m A19_08129 925 Alphonsina UCAC5 295-134916 Diam = 57.0 m = 12.4 m = 13.1</p>  <p>Dur = 6.4s Dmag = 1.1 Sun: 130° Moon: 10°</p>	<p>2019 aug 11 12h18.0m A19_08125 914 Palisana UCAC5 469-063227 Diam = 79.0 m = 10.7 m = 11.7</p>  <p>Dur = 45.3s Dmag = 1.3 Sun: 125° Moon: 26°</p>
<p>2019 aug 12 16h22.4m A19_08004 21 Lutetia UCAC5 449-000914 Diam = 99.5 m = 11.1 m = 10.6</p>  <p>Dur = 48.1s Dmag = 0.5 Sun: 128° Moon: 83°</p>	<p>2019 aug 13 6h13.0m A19_08086 490 Veritas UCAC5 421-057742 Diam = 121.0 m = 12.3 m = 14.6</p>  <p>Dur = 5.2s Dmag = 2.4 Sun: 73° Moon: 82°</p>	<p>2019 aug 13 9h14.5m B19_08005 2013KY18 UCAC5 336-092747 Diam = 199.5 m = 12.6 m = 21.5</p>  <p>Dur = 21.1s Dmag = 8.9 Sun: 120° Moon: 36°</p>	<p>2019 aug 13 15h43.0m A19_08115 760 Massinga UCAC5 346-180664 Diam = 74.8 m = 12.1 m = 13.1</p>  <p>Dur = 4.7s Dmag = 1.4 Sun: 172° Moon: 15°</p>
<p>2019 aug 14 16h29.1m A19_08099 675 Ludmilla TYC 1776-01388-1 Diam = 109.1 m = 8.6 m = 12.4</p>  <p>Dur = 6.4s Dmag = 3.8 Sun: 94° Moon: 94°</p>	<p>2019 aug 14 16h33.5m A19_08149 3063 Makhaon TYC 0571-00863-1 Diam = 125.0 m = 11.4 m = 16.0</p>  <p>Dur = 8.1s Dmag = 4.5 Sun: 154° Moon: 35°</p>	<p>2019 aug 15 16h21.9m A19_08131 971 Alsatia TYC 7489-00244-1 Diam = 66.7 m = 11.7 m = 14.2</p>  <p>Dur = 5.2s Dmag = 2.5 Sun: 161° Moon: 15°</p>	<p>2019 aug 16 8h55.2m A19_08064 326 Tamara UCAC5 360-064148 Diam = 100.0 m = 12.0 m = 13.7</p>  <p>Dur = 3.2s Dmag = 1.9 Sun: 63° Moon: 125°</p>
<p>2019 aug 16 11h22.5m A19_08143 1317 Silvette UCAC5 213-140489 Diam = 43.5 m = 11.7 m = 15.8</p>  <p>Dur = 4.8s Dmag = 4.1 Sun: 114° Moon: 73°</p>	<p>2019 aug 17 19h50.0m A19_08122 859 Bouzaréah TYC 7483-00347-1 Diam = 77.5 m = 9.8 m = 14.6</p>  <p>Dur = 6.3s Dmag = 4.8 Sun: 154° Moon: 44°</p>	<p>2019 aug 18 11h42.6m A19_08084 471 Papagena PPMX 12661114 Diam = 127.0 m = 11.2 m = 11.7</p>  <p>Dur = 65.2s Dmag = 1.0 Sun: 120° Moon: 92°</p>	<p>2019 aug 19 8h24.2m A19_08075 405 Thia TYC 6172-01297-1 Diam = 129.0 m = 12.1 m = 12.9</p>  <p>Dur = 4.9s Dmag = 1.2 Sun: 80° Moon: 141°</p>

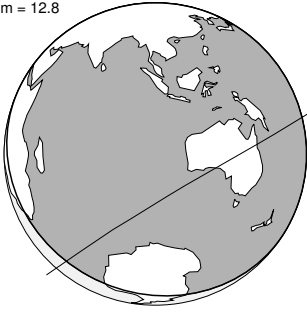
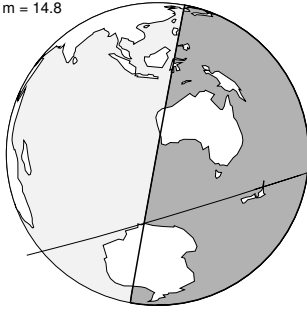
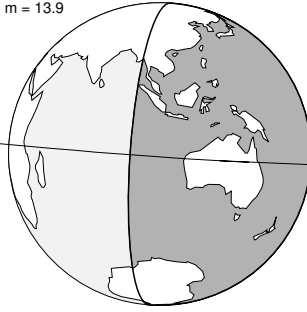
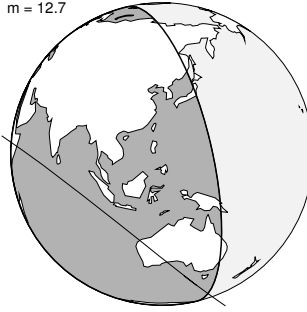
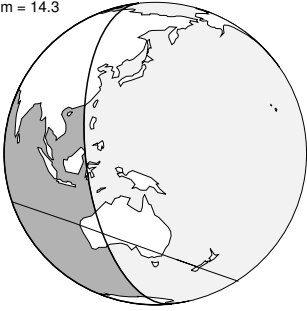
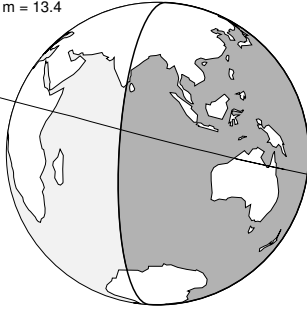
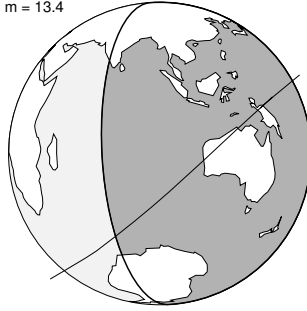
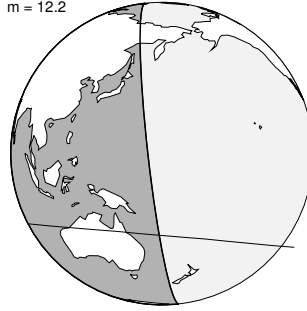
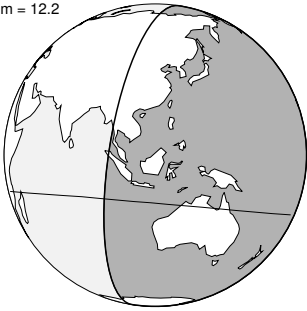
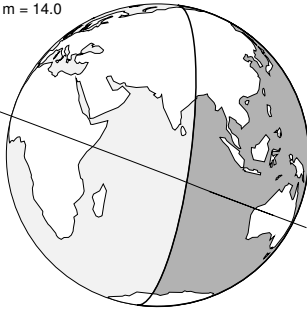
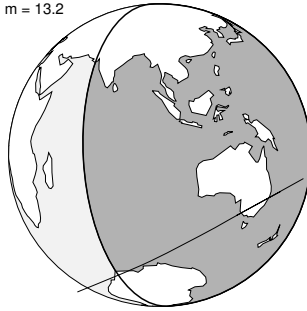
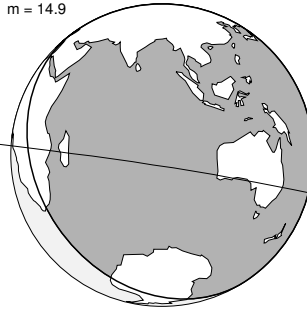
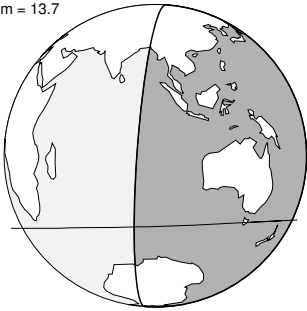
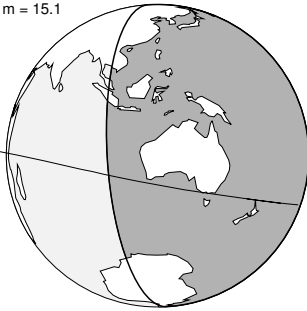
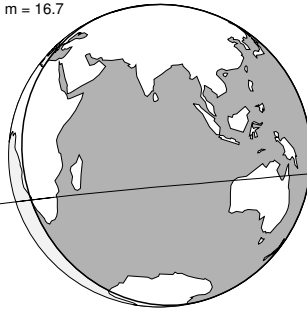
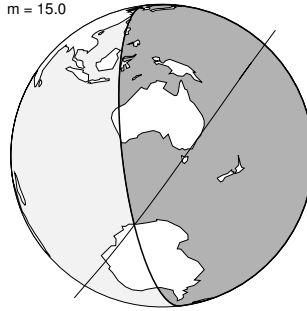
Occultations by major and minor planets – 2019

Region 8

<p>2019 aug 19 15h56.6m A19_08032 135 Hertha UCAC5 421-135020 Diam = 82.0 m = 10.7</p>  <p>Dur = 17.0s Dmag = 0.6 Sun: 159° Moon: 25°</p>	<p>2019 aug 20 8h57.9m A19_08018 75 Eurydike TYC 6915-00271-1 Diam = 58.3 m = 10.1</p>  <p>Dur = 14.3s Dmag = 1.2 Sun: 154° Moon: 77°</p>	<p>2019 aug 20 16h21.4m A19_08093 605 Juvisia UCAC5 228-163364 Diam = 72.0 m = 12.3</p>  <p>Dur = 7.0s Dmag = 2.5 Sun: 122° Moon: 108°</p>	<p>2019 aug 22 13h 7.2m A19_08085 472 Roma TYC 6398-01195-1 Diam = 47.6 m = 9.8</p>  <p>Dur = 4.0s Dmag = 2.6 Sun: 161° Moon: 64°</p>
<p>2019 aug 22 19h43.5m A19_08060 287 Nephthys UCAC5 396-127865 Diam = 70.1 m = 11.3</p>  <p>Dur = 6.8s Dmag = 0.7 Sun: 166° Moon: 67°</p>	<p>2019 aug 23 15h48.6m A19_08005 21 Lutetia UCAC5 447-000892 Diam = 99.5 m = 12.0</p>  <p>Dur = 47.5s Dmag = 0.2 Sun: 139° Moon: 50°</p>	<p>2019 aug 23 20h33.3m B19_08003 416400 2003UZ117 TYC 0086-00640-1 Diam = 398.1 m = 12.7</p>  <p>Dur = 28.9s Dmag = 8.5 Sun: 83° Moon: 16°</p>	<p>2019 aug 24 10h51.1m A19_08044 201 Penelope TYC 6269-00141-1 Diam = 70.5 m = 10.3</p>  <p>Dur = 18.2s Dmag = 2.0 Sun: 124° Moon: 155°</p>
<p>2019 aug 24 10h51.9m A19_08061 289 Nenetta UCAC5 414-132478 Diam = 41.5 m = 12.4</p>  <p>Dur = 4.5s Dmag = 0.8 Sun: 170° Moon: 107°</p>	<p>2019 aug 24 19h23.9m A19_08076 409 Aspasia UCAC5 575-010244 Diam = 168.0 m = 12.2</p>  <p>Dur = 9.2s Dmag = 1.1 Sun: 84° Moon: 11°</p>	<p>2019 aug 25 16h 5.5m A19_08135 1042 Amazone UCAC5 246-180308 Diam = 76.7 m = 11.8</p>  <p>Dur = 6.7s Dmag = 2.7 Sun: 149° Moon: 115°</p>	<p>2019 aug 27 12h26.4m A19_08088 517 Edith TYC 6826-00186-1 Diam = 95.0 m = 10.8</p>  <p>Dur = 24.8s Dmag = 4.6 Sun: 110° Moon: 151°</p>
<p>2019 aug 28 10h 7.7m A19_08111 746 Marlu PPMX 13874151 Diam = 75.5 m = 12.3</p>  <p>Dur = 7.2s Dmag = 1.3 Sun: 159° Moon: 158°</p>	<p>2019 aug 29 10h59.0m A19_08051 252 Clementina UCAC5 430-108468 Diam = 72.1 m = 12.0</p>  <p>Dur = 6.8s Dmag = 1.8 Sun: 155° Moon: 163°</p>	<p>2019 aug 29 19h10.1m A19_08154 4834 Thoas UCAC5 222-171278 Diam = 60.3 m = 12.3</p>  <p>Dur = 5.1s Dmag = 4.5 Sun: 134° Moon: 143°</p>	<p>2019 aug 31 8h57.8m A19_08090 581 Tauntonia UCAC5 301-000061 Diam = 67.1 m = 12.1</p>  <p>Dur = 4.8s Dmag = 2.5 Sun: 150° Moon: 157°</p>

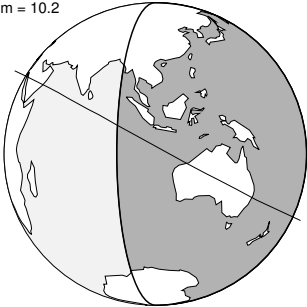
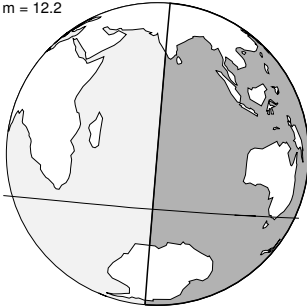
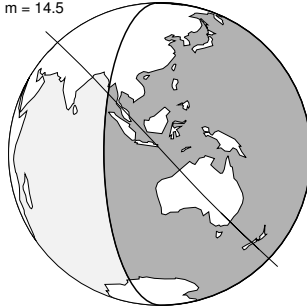

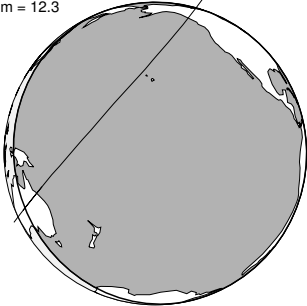
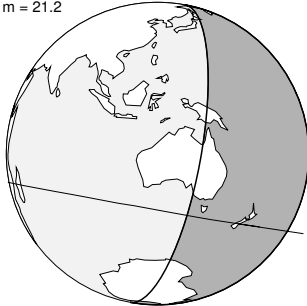
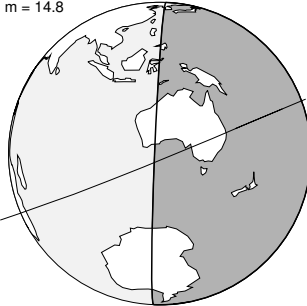
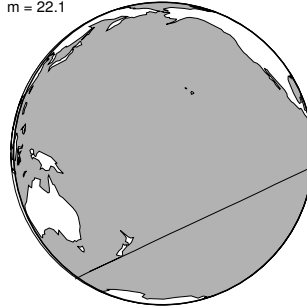
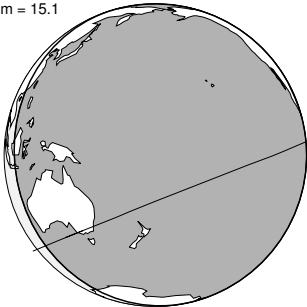
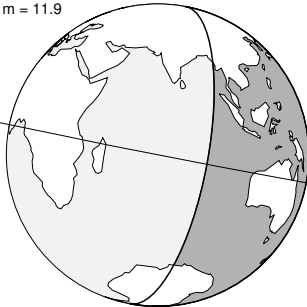
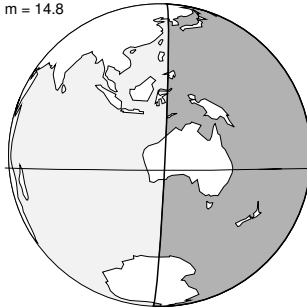
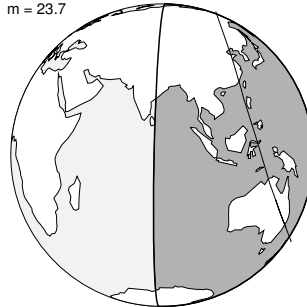
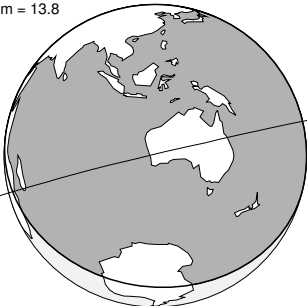
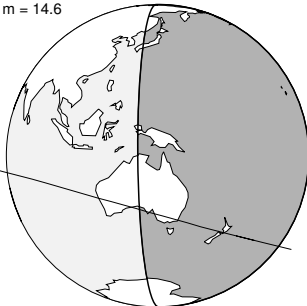
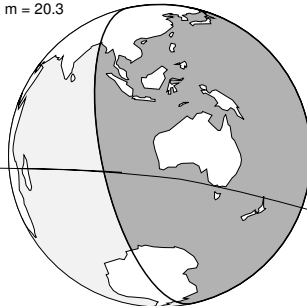

Occultations by major and minor planets – 2019

Region 8

<p>2019 aug 31 16h32.6m A19_08079 411 Xanthe UCAC5 303-253637 Diam = 79.0 m = 12.4</p>  <p>Dur = 8.2s Dmag = 0.9 Sun: 156° Moon: 144°</p>	<p>2019 sep 1 9h58.5m A19_09086 328 Gudrun UCAC5 259-087943 Diam = 120.0 m = 11.9</p>  <p>Dur = 7.2s Dmag = 3.0 Sun: 90° Moon: 65°</p>	<p>2019 sep 2 11h41.9m A19_09046 147 Protogeneia UCAC5 341-090879 Diam = 137.0 m = 12.2</p>  <p>Dur = 12.9s Dmag = 1.9 Sun: 101° Moon: 58°</p>	<p>2019 sep 2 20h14.4m A19_09053 176 Iduna UCAC5 518-005292 Diam = 125.0 m = 12.4</p>  <p>Dur = 10.7s Dmag = 0.9 Sun: 109° Moon: 157°</p>
<p>2019 sep 2 22h 1.7m A19_09040 105 Artemis TYC 0154-01085-1 Diam = 123.0 m = 11.1</p>  <p>Dur = 4.0s Dmag = 3.3 Sun: 62° Moon: 110°</p>	<p>2019 sep 3 12h49.6m A19_09027 74 Galatea UCAC5 358-105410 Diam = 123.0 m = 11.0</p>  <p>Dur = 13.9s Dmag = 2.5 Sun: 104° Moon: 47°</p>	<p>2019 sep 3 13h 4.2m A19_09059 200 Dynamene UCAC5 311-164719 Diam = 132.0 m = 12.4</p>  <p>Dur = 23.5s Dmag = 1.3 Sun: 112° Moon: 56°</p>	<p>2019 sep 3 19h31.3m A19_09011 28 Bellona TYC 0693-01512-1 Diam = 126.0 m = 10.5</p>  <p>Dur = 6.0s Dmag = 2.0 Sun: 84° Moon: 145°</p>
<p>2019 sep 4 11h34.1m A19_09151 914 Palisana UCAC5 471-067061 Diam = 79.0 m = 11.8</p>  <p>Dur = 9.4s Dmag = 1.0 Sun: 107° Moon: 45°</p>	<p>2019 sep 4 12h24.2m A19_09068 225 Henrietta TYC 5019-00614-1 Diam = 124.0 m = 10.6</p>  <p>Dur = 5.1s Dmag = 3.4 Sun: 77° Moon: 16°</p>	<p>2019 sep 4 13h26.1m A19_09091 371 Bohemia UCAC5 352-145316 Diam = 56.7 m = 10.3</p>  <p>Dur = 15.8s Dmag = 2.9 Sun: 120° Moon: 50°</p>	<p>2019 sep 4 16h11.5m A19_09074 255 Oppavia UCAC5 309-239726 Diam = 58.0 m = 12.1</p>  <p>Dur = 6.2s Dmag = 2.9 Sun: 146° Moon: 78°</p>
<p>2019 sep 6 12h 3.7m A19_09019 49 Pales UCAC5 333-097140 Diam = 154.0 m = 13.7</p>  <p>Dur = 14.6s Dmag = 2.5 Sun: 97° Moon: 4°</p>	<p>2019 sep 9 11h 9.9m A19_09111 424 Gratia TYC 6861-02603-1 Diam = 90.5 m = 11.9</p>  <p>Dur = 15.6s Dmag = 3.3 Sun: 109° Moon: 19°</p>	<p>2019 sep 9 16h50.7m A19_09159 2456 Palamedes UCAC5 375-171224 Diam = 103.0 m = 11.9</p>  <p>Dur = 7.2s Dmag = 4.8 Sun: 154° Moon: 23°</p>	<p>2019 sep 10 10h 0.5m A19_09129 605 Juvisia UCAC5 244-150514 Diam = 72.0 m = 12.3</p>  <p>Dur = 5.2s Dmag = 2.7 Sun: 105° Moon: 36°</p>

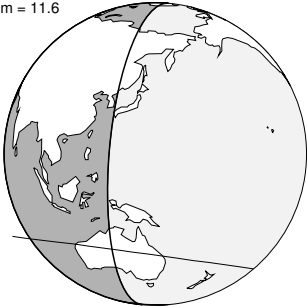
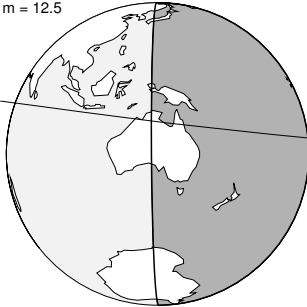
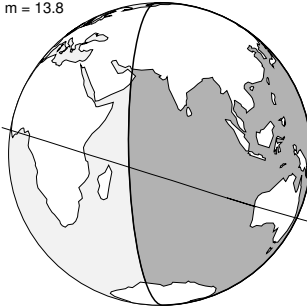
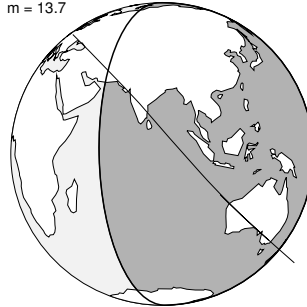
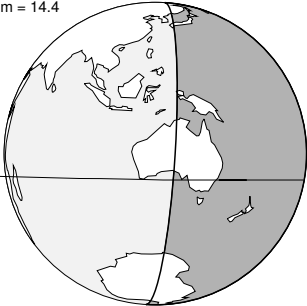
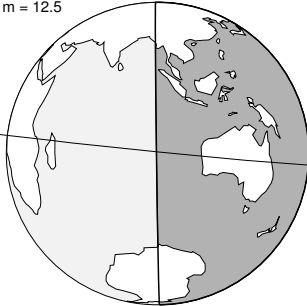
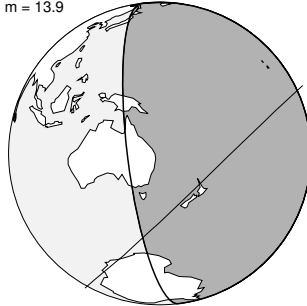
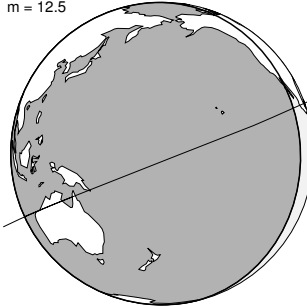

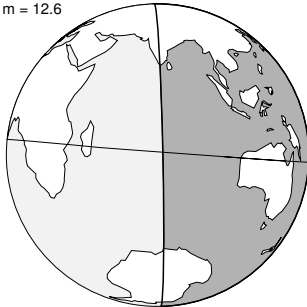
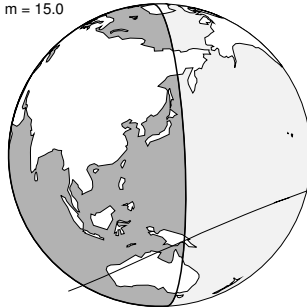
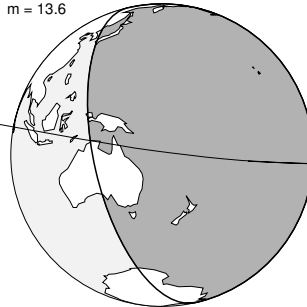
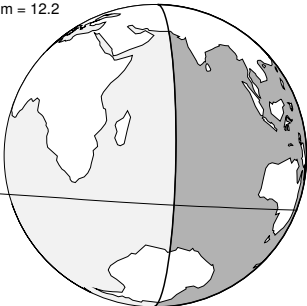
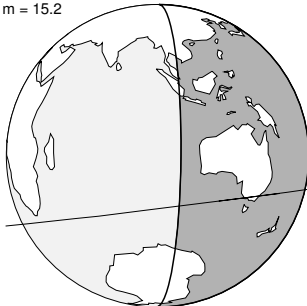
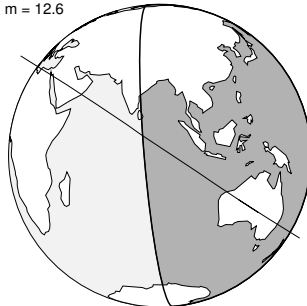
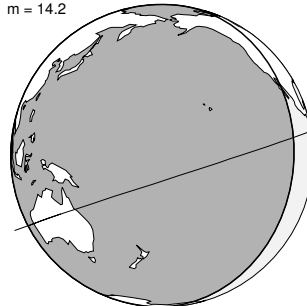
Occultations by major and minor planets – 2019

Region 8

<p>2019 sep 12 11h47.6m A19_09005 18 Melpomene UCAC5 366–116834 Diam = 135.0 m = 12.0</p>  <p>Dur = 12.5s Dmag = 0.2 Sun: 104° Moon: 57°</p>	<p>2019 sep 12 12h57.1m A19_09010 22 Kalliope UCAC5 296–111145 Diam = 187.0 m = 11.2</p>  <p>Dur = 12.6s Dmag = 1.3 Sun: 90° Moon: 72°</p>	<p>2019 sep 13 11h41.1m A19_09085 314 Rosalia TYC 5701–00590–1 Diam = 61.6 m = 11.5</p>  <p>Dur = 6.8s Dmag = 3.1 Sun: 111° Moon: 62°</p>	<p>2019 sep 13 17h31.4m A19_09138 702 Alauda UCAC5 584–125100 Diam = 202.0 m = 11.7</p>  <p>Dur = 15.5s Dmag = 1.0 Sun: 149° Moon: 37°</p>
<p>2019 sep 14 8h51.7m A19_09072 246 Asporina UCAC5 402–122300 Diam = 63.8 m = 12.5</p>  <p>Dur = 5.9s Dmag = 0.7 Sun: 158° Moon: 24°</p>	<p>2019 sep 15 8h28.7m B19_09005 471172 2010JC80 PPMX 11568364 Diam = 275.4 m = 13.5</p>  <p>Dur = 18.2s Dmag = 7.7 Sun: 73° Moon: 119°</p>	<p>2019 sep 15 9h40.8m A19_09137 693 Zerbinetta UCAC5 263–114388 Diam = 69.1 m = 6.9</p>  <p>Dur = 3.9s Dmag = 7.9 Sun: 91° Moon: 100°</p>	<p>2019 sep 15 10h22.1m A19_09173 2014MX69 TYC 5237–00587–1 Diam = 144.5 m = 11.6</p>  <p>Dur = 6.1s Dmag = 10.5 Sun: 168° Moon: 25°</p>
<p>2019 sep 15 10h27.8m A19_09119 499 Venusia HIP 109142 Diam = 86.0 m = 10.7</p>  <p>Dur = 6.7s Dmag = 4.5 Sun: 158° Moon: 36°</p>	<p>2019 sep 16 11h43.3m A19_09009 20 Massalia UCAC5 349–074769 Diam = 151.0 m = 11.8</p>  <p>Dur = 5.7s Dmag = 0.8 Sun: 70° Moon: 134°</p>	<p>2019 sep 19 9h39.7m A19_09055 177 Irma UCAC5 328–103239 Diam = 75.3 m = 14.8</p>  <p>Dur = 4.6s Dmag = 4.2 Sun: 87° Moon: 150°</p>	<p>2019 sep 19 12h27.8m B19_09006 2000KL4 UCAC5 424–071537 Diam = 125.9 m = 14.6</p>  <p>Dur = 11.8s Dmag = 9.1 Sun: 93° Moon: 144°</p>
<p>2019 sep 19 15h42.8m A19_09127 593 Titania UCAC5 295–224149 Diam = 78.2 m = 13.8</p>  <p>Dur = 6.3s Dmag = 2.5 Sun: 150° Moon: 77°</p>	<p>2019 sep 20 9h 2.6m A19_09139 713 Luscinia UCAC5 389–083106 Diam = 109.0 m = 7.0</p>  <p>Dur = 8.4s Dmag = 7.6 Sun: 97° Moon: 151°</p>	<p>2019 sep 20 11h51.1m B19_09004 145627 2006RY102 UCAC5 302–241347 Diam = 25.1 m = 20.3</p>  <p>Dur = 10.5s Dmag = 6.5 Sun: 112° Moon: 137°</p>	<p>2019 sep 20 13h47.9m A19_09170 2000ON67 HIP 159 Diam = 208.9 m = 7.0</p>  <p>Dur = 8.3s Dmag = 16.0 Sun: 176° Moon: 69°</p>

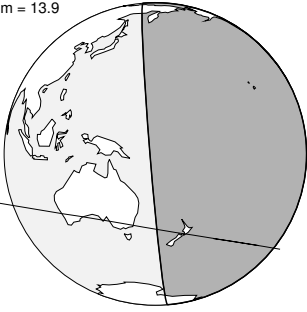
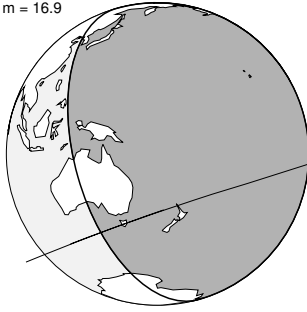
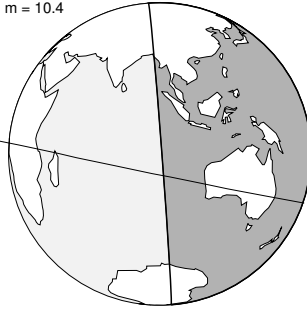
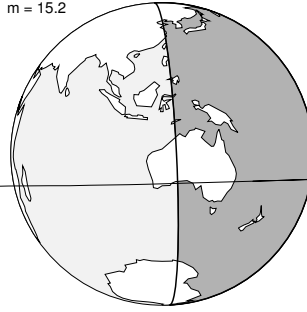
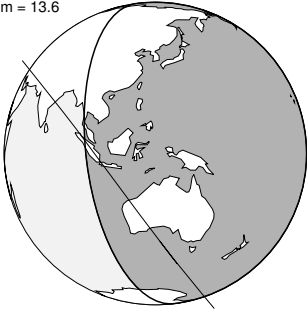
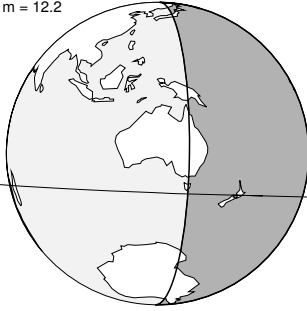
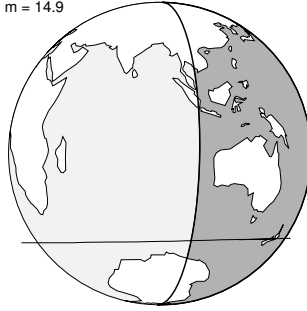
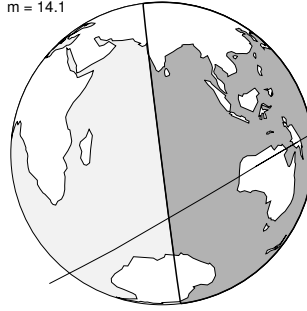
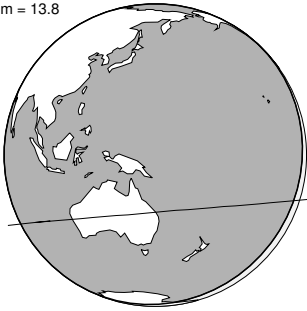
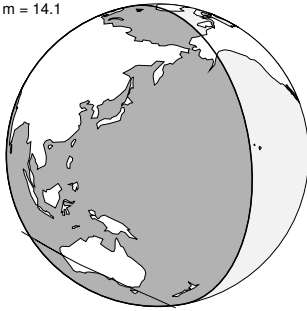
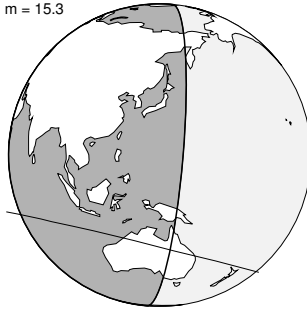
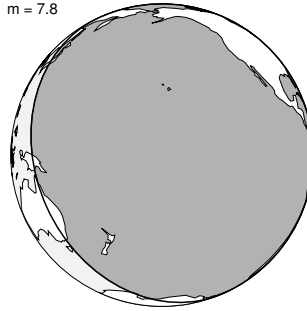
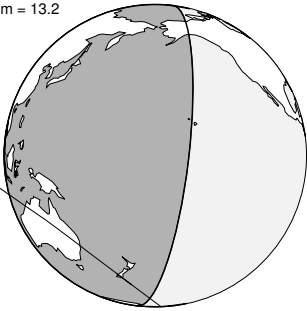
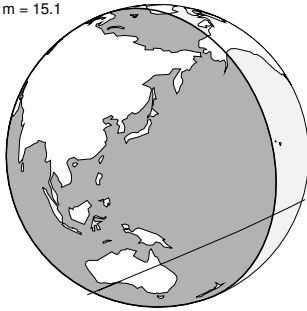
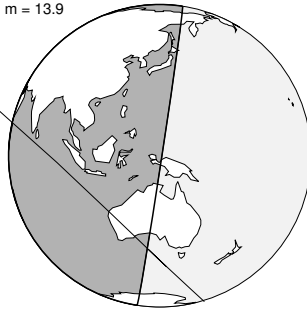
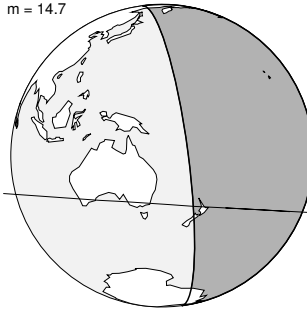
Occultations by major and minor planets – 2019

Region 8

<p>2019 sep 20 21h10.7m A19_09001 5 Astraea TYC 1348-01135-1 Diam = 125.0 m = 11.9 m = 11.6</p>  <p>Dur = 4.4s Dmag = 0.6 Sun: 72° Moon: 33°</p>	<p>2019 sep 21 9h 1.8m A19_09102 410 Chloris TYC 6854-00088-1 Diam = 128.0 m = 10.7 m = 12.5</p>  <p>Dur = 6.5s Dmag = 2.0 Sun: 92° Moon: 167°</p>	<p>2019 sep 21 14h 2.7m A19_09077 266 Aline UCAC5 407-077741 Diam = 113.0 m = 12.3 m = 13.8</p>  <p>Dur = 10.7s Dmag = 1.8 Sun: 101° Moon: 158°</p>	<p>2019 sep 22 13h48.5m A19_09134 683 Lanzia UCAC5 433-096960 Diam = 116.0 m = 11.2 m = 13.7</p>  <p>Dur = 25.2s Dmag = 2.6 Sun: 114° Moon: 154°</p>
<p>2019 sep 23 9h 5.7m A19_09035 91 Aegina TYC 6829-00110-1 Diam = 114.0 m = 11.2 m = 14.4</p>  <p>Dur = 5.7s Dmag = 3.2 Sun: 82° Moon: 157°</p>	<p>2019 sep 24 11h35.0m A19_09105 410 Chloris UCAC5 309-152524 Diam = 128.0 m = 11.7 m = 12.5</p>  <p>Dur = 6.1s Dmag = 1.2 Sun: 90° Moon: 150°</p>	<p>2019 sep 25 8h27.9m A19_09113 426 Hippo TYC 6877-00389-1 Diam = 134.0 m = 11.6 m = 13.9</p>  <p>Dur = 11.5s Dmag = 2.5 Sun: 102° Moon: 151°</p>	<p>2019 sep 26 13h28.9m A19_09125 566 Stereokopia PPMX 7873896 Diam = 175.0 m = 12.0 m = 12.5</p>  <p>Dur = 18.5s Dmag = 1.0 Sun: 156° Moon: 126°</p>
<p>2019 sep 27 13h58.9m A19_09169 145627 2006RY102 HIP 95941 Diam = 25.1 m = 9.4 m = 20.3</p>  <p>Dur = 17.7s Dmag = 10.9 Sun: 105° Moon: 123°</p>	<p>2019 sep 28 12h40.9m A19_09106 410 Chloris TYC 6855-02646-1 Diam = 128.0 m = 11.5 m = 12.6</p>  <p>Dur = 5.8s Dmag = 1.4 Sun: 87° Moon: 92°</p>	<p>2019 sep 28 20h 6.5m A19_09140 721 Tabora UCAC5 590-019335 Diam = 82.6 m = 11.1 m = 15.0</p>  <p>Dur = 7.2s Dmag = 4.0 Sun: 99° Moon: 100°</p>	<p>2019 sep 29 9h 2.0m A19_09065 206 Hersilia HIP 100107 Diam = 76.6 m = 9.0 m = 13.6</p>  <p>Dur = 20.5s Dmag = 4.6 Sun: 116° Moon: 108°</p>
<p>2019 oct 1 13h20.4m A19_10090 471 Papagena UCAC5 300-149601 Diam = 127.0 m = 10.3 m = 12.2</p>  <p>Dur = 6.9s Dmag = 2.0 Sun: 82° Moon: 45°</p>	<p>2019 oct 3 10h54.2m A19_10065 331 Etheridgea UCAC5 303-163727 Diam = 78.5 m = 12.4 m = 15.2</p>  <p>Dur = 3.6s Dmag = 2.8 Sun: 81° Moon: 20°</p>	<p>2019 oct 3 12h22.2m A19_10074 386 Siegena UCAC5 411-099747 Diam = 173.0 m = 12.5 m = 12.6</p>  <p>Dur = 10.3s Dmag = 0.8 Sun: 95° Moon: 34°</p>	<p>2019 oct 3 13h27.6m A19_10127 785 Zwetana UCAC5 459-003191 Diam = 52.1 m = 8.3 m = 14.2</p>  <p>Dur = 4.3s Dmag = 5.9 Sun: 150° Moon: 141°</p>

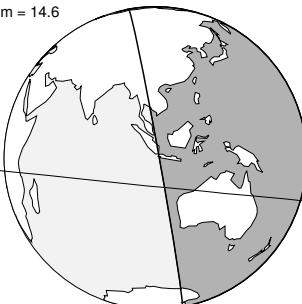
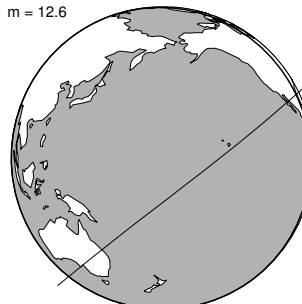
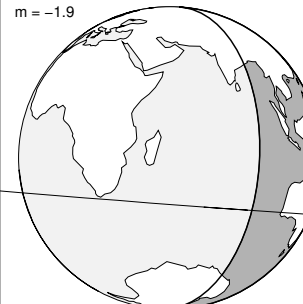
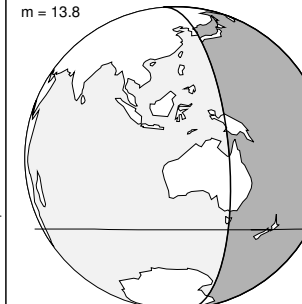
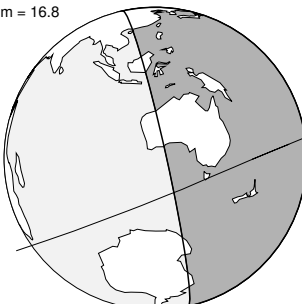
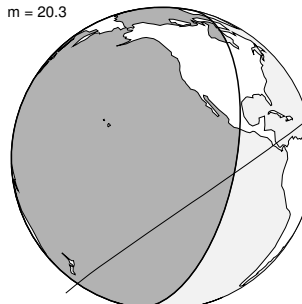
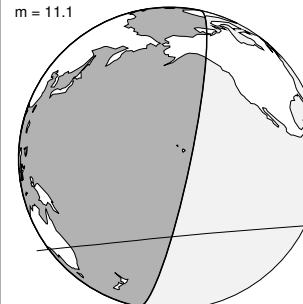
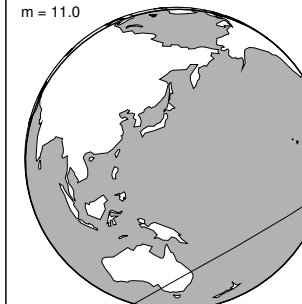
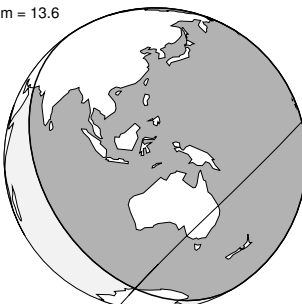
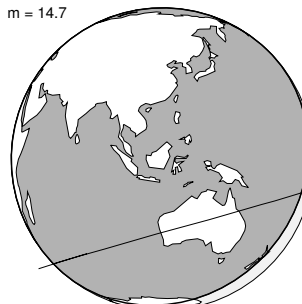
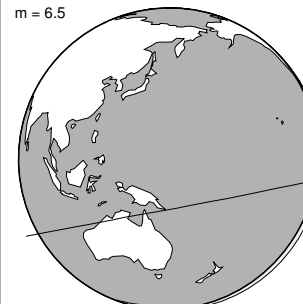
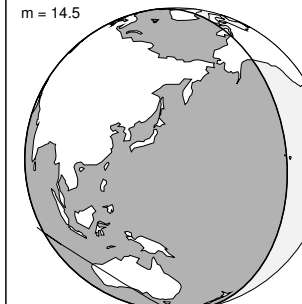
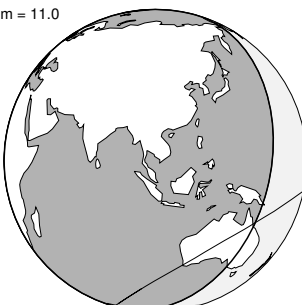
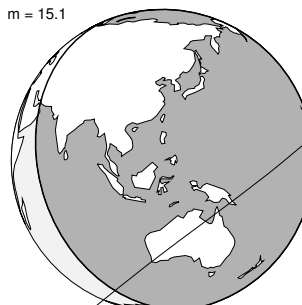
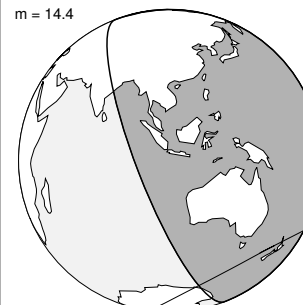
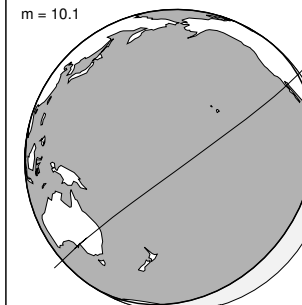
Occultations by major and minor planets – 2019

Region 8

<p>2019 oct 4 7h17.8m A19_10058 266 Aline UCAC5 405-086483 Diam = 113.0 m = 12.4 m = 13.9</p>  <p>Dur = 7.2s Dmag = 1.8 Sun: 92° Moon: 22°</p>	<p>2019 oct 4 9h17.4m A19_10150 1911 Schubart UCAC5 373-174051 Diam = 83.0 m = 11.3 m = 16.9</p>  <p>Dur = 25.2s Dmag = 5.6 Sun: 123° Moon: 49°</p>	<p>2019 oct 4 11h33.2m A19_10007 18 Melpomene UCAC5 356-150089 Diam = 135.0 m = 9.6 m = 10.4</p>  <p>Dur = 7.4s Dmag = 1.2 Sun: 89° Moon: 14°</p>	<p>2019 oct 5 9h32.5m A19_10106 586 Thekla UCAC5 342-129395 Diam = 85.0 m = 11.8 m = 15.2</p>  <p>Dur = 4.6s Dmag = 3.4 Sun: 84° Moon: 2°</p>
<p>2019 oct 6 11h 8.9m A19_10103 547 Praxedis TYC 5180-02092-1 Diam = 73.0 m = 10.7 m = 13.6</p>  <p>Dur = 7.2s Dmag = 3.0 Sun: 117° Moon: 25°</p>	<p>2019 oct 7 8h18.3m A19_10091 471 Papagena UCAC5 299-151349 Diam = 127.0 m = 12.1 m = 12.2</p>  <p>Dur = 6.1s Dmag = 0.8 Sun: 77° Moon: 31°</p>	<p>2019 oct 7 10h49.2m A19_10049 177 Irma TYC 6845-00955-1 Diam = 75.3 m = 10.3 m = 14.9</p>  <p>Dur = 3.2s Dmag = 4.6 Sun: 74° Moon: 35°</p>	<p>2019 oct 9 12h45.8m A19_10084 426 Hippo UCAC5 327-166051 Diam = 134.0 m = 12.0 m = 14.1</p>  <p>Dur = 8.0s Dmag = 2.3 Sun: 90° Moon: 42°</p>
<p>2019 oct 11 14h33.0m A19_10136 1041 Asta UCAC5 440-002351 Diam = 60.6 m = 10.6 m = 13.8</p>  <p>Dur = 5.6s Dmag = 3.3 Sun: 163° Moon: 35°</p>	<p>2019 oct 11 16h40.0m A19_10067 332 Siri UCAC5 567-010411 Diam = 45.0 m = 12.2 m = 14.1</p>  <p>Dur = 20.5s Dmag = 2.1 Sun: 127° Moon: 77°</p>	<p>2019 oct 11 20h 6.4m A19_10139 1085 Amaryllis UCAC5 535-029334 Diam = 72.3 m = 12.5 m = 15.3</p>  <p>Dur = 7.1s Dmag = 2.9 Sun: 98° Moon: 103°</p>	<p>2019 oct 13 8h18.6m P19_10002 Neptune UCAC5 418-145773 Diam = 47300.0 m = 12.3 m = 7.8</p>  <p>Dur = 2530.7s Dmag = 0.0 Sun: 146° Moon: 28°</p>
<p>2019 oct 14 16h25.7m A19_10077 387 Aquitania UCAC5 489-024037 Diam = 106.0 m = 11.9 m = 13.2</p>  <p>Dur = 16.2s Dmag = 1.6 Sun: 102° Moon: 67°</p>	<p>2019 oct 14 16h41.4m A19_10134 983 Gunila UCAC5 586-009474 Diam = 77.3 m = 12.2 m = 15.1</p>  <p>Dur = 9.0s Dmag = 3.0 Sun: 138° Moon: 34°</p>	<p>2019 oct 15 20h39.8m A19_10036 105 Artemis PPMX 9243605 Diam = 123.0 m = 12.1 m = 13.9</p>  <p>Dur = 6.8s Dmag = 2.0 Sun: 90° Moon: 67°</p>	<p>2019 oct 20 6h53.9m A19_10132 924 Toni TYC 6291-01323-1 Diam = 87.6 m = 11.4 m = 14.7</p>  <p>Dur = 3.9s Dmag = 3.3 Sun: 80° Moon: 174°</p>

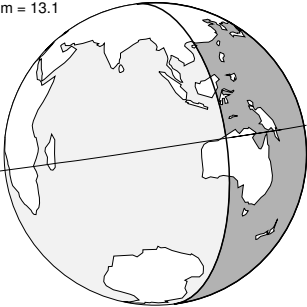
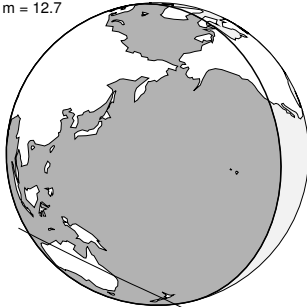
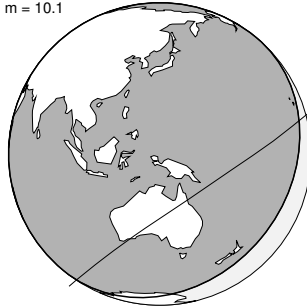
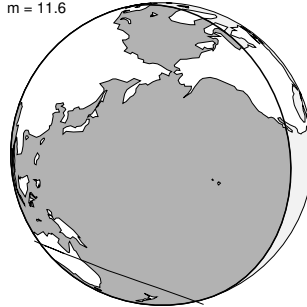
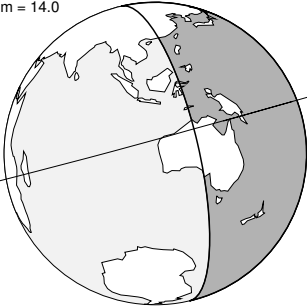
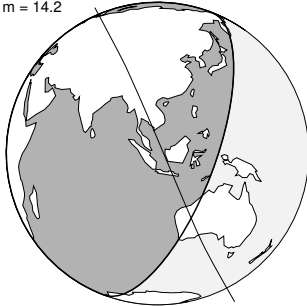
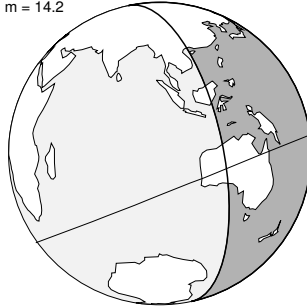
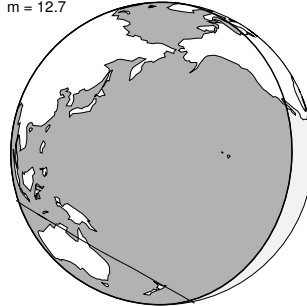
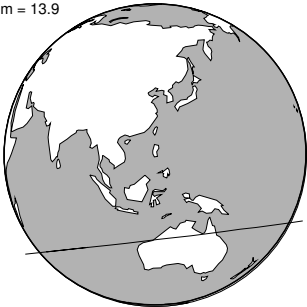
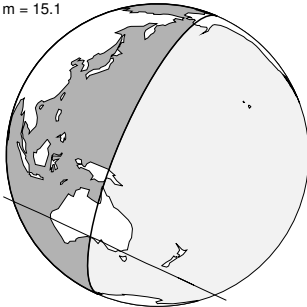
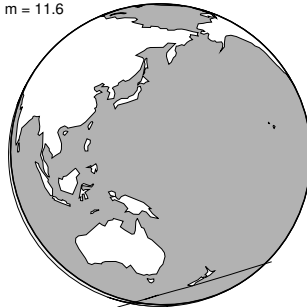
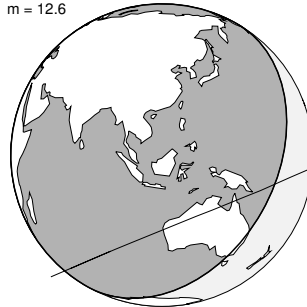
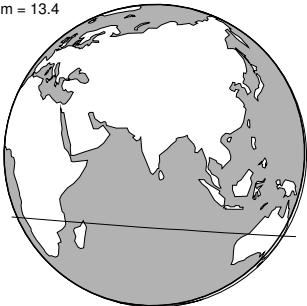
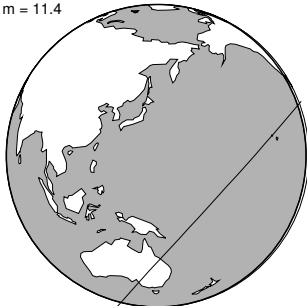
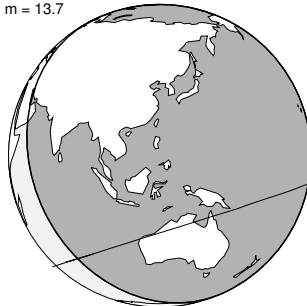
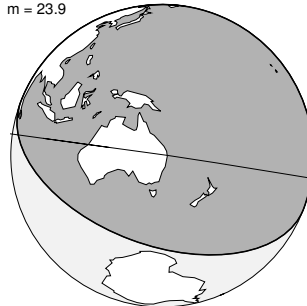
Occultations by major and minor planets – 2019

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<p>2019 oct 20 10h46.2m A19_10111 640 Brambilla UCAC5 413-121013 Diam = 84.8 m = 11.2 m = 14.6</p>  <p>Dur = 4.5s Dmag = 3.4 Sun: 88° Moon: 162°</p>	<p>2019 oct 20 12h42.1m A19_10085 429 Lotis TYC 1215-00639-1 Diam = 70.3 m = 9.5 m = 12.6</p>  <p>Dur = 7.4s Dmag = 3.2 Sun: 167° Moon: 65°</p>	<p>2019 oct 21 11h49.1m P19_10001 Jupiter HIP 84936 Diam = 133542.0 m = 8.8 m = -1.9</p>  <p>Dur = 4638.7s Dmag = 0.0 Sun: 53° Moon: 144°</p>	<p>2019 oct 22 8h35.6m A19_10023 74 Galatea UCAC5 353-132859 Diam = 123.0 m = 12.4 m = 13.8</p>  <p>Dur = 4.4s Dmag = 1.6 Sun: 69° Moon: 148°</p>
<p>2019 oct 26 10h 3.3m A19_10154 4833 Meges UCAC5 259-177134 Diam = 63.1 m = 12.4 m = 16.8</p>  <p>Dur = 4.6s Dmag = 4.4 Sun: 85° Moon: 110°</p>	<p>2019 oct 29 12h44.9m B19_10001 55638 2002VE95 UCAC5 487-020462 Diam = 363.1 m = 13.4 m = 20.3</p>  <p>Dur = 29.8s Dmag = 6.9 Sun: 118° Moon: 138°</p>	<p>2019 oct 29 16h10.3m A19_10101 511 Davida TYC 1363-00477-1 Diam = 337.0 m = 11.7 m = 11.1</p>  <p>Dur = 24.8s Dmag = 0.5 Sun: 97° Moon: 119°</p>	<p>2019 oct 31 13h36.4m A19_10115 678 Frødegundis HIP 9153 Diam = 44.0 m = 4.9 m = 11.0</p>  <p>Dur = 6.3s Dmag = 6.2 Sun: 169° Moon: 132°</p>
<p>2019 nov 3 13h 5.3m A19_11093 483 Seppina UCAC5 415-000288 Diam = 73.5 m = 12.1 m = 13.6</p>  <p>Dur = 9.8s Dmag = 1.7 Sun: 139° Moon: 60°</p>	<p>2019 nov 3 17h 6.5m A19_11126 1262 Sniadeckia HIP 16926 Diam = 58.7 m = 7.3 m = 14.7</p>  <p>Dur = 4.7s Dmag = 7.4 Sun: 158° Moon: 108°</p>	<p>2019 nov 4 14h23.8m A19_11002 4 Vesta TYC 0650-00327-1 Diam = 523.2 m = 11.6 m = 6.5</p>  <p>Dur = 43.9s Dmag = 0.0 Sun: 166° Moon: 97°</p>	<p>2019 nov 6 16h38.0m A19_11109 721 Tabora TYC 1874-00862-1 Diam = 82.6 m = 9.6 m = 14.5</p>  <p>Dur = 11.8s Dmag = 4.8 Sun: 136° Moon: 108°</p>
<p>2019 nov 8 19h33.7m A19_11009 28 Bellona TYC 0705-00094-1 Diam = 126.0 m = 9.8 m = 11.0</p>  <p>Dur = 24.7s Dmag = 1.5 Sun: 139° Moon: 80°</p>	<p>2019 nov 9 13h22.0m A19_11125 1167 Dubiago TYC 0016-00077-1 Diam = 69.0 m = 11.4 m = 15.1</p>  <p>Dur = 8.0s Dmag = 3.8 Sun: 145° Moon: 8°</p>	<p>2019 nov 13 11h45.7m A19_11070 333 Badenia HIP 110296 Diam = 81.5 m = 10.1 m = 14.4</p>  <p>Dur = 7.0s Dmag = 4.3 Sun: 102° Moon: 88°</p>	<p>2019 nov 14 12h54.0m A19_11034 97 Klotho TYC 0085-01068-1 Diam = 87.1 m = 12.0 m = 10.1</p>  <p>Dur = 15.4s Dmag = 0.2 Sun: 149° Moon: 20°</p>

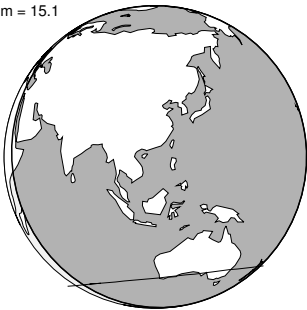
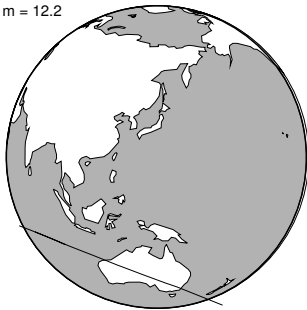
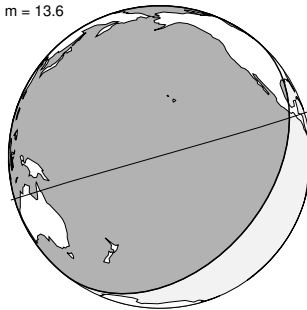
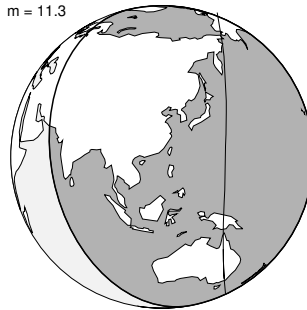
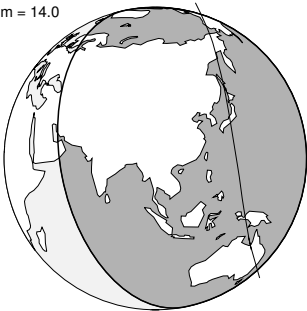
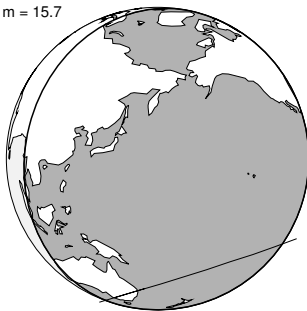
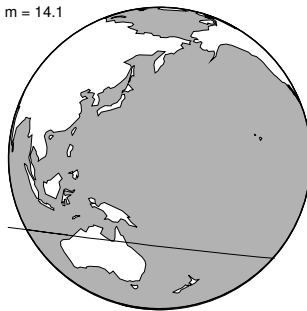
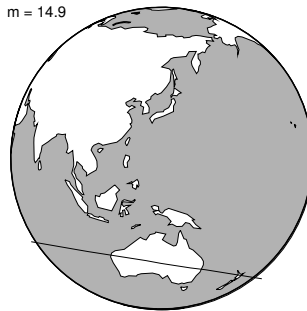
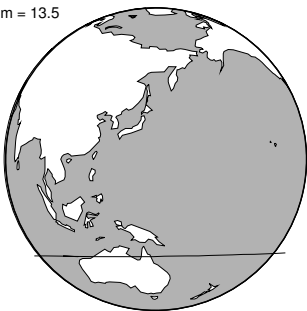
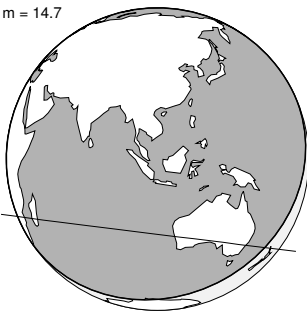
Occultations by major and minor planets – 2019

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<p>2019 nov 15 9h55.9m A19_11082 410 Chloris TYC 6898–00250–1 Diam = 128.0 m = 11.2 m = 13.1</p>  <p>Dur = 3.6s Dmag = 2.1 Sun: 61° Moon: 152°</p>	<p>2019 nov 15 14h51.9m A19_11022 70 Panopaea TYC 2405–00601–1 Diam = 127.0 m = 10.2 m = 12.7</p>  <p>Dur = 12.1s Dmag = 2.6 Sun: 143° Moon: 9°</p>	<p>2019 nov 15 16h19.6m A19_11033 97 Klotho UCAC5 452–007610 Diam = 87.1 m = 12.3 m = 10.1</p>  <p>Dur = 15.1s Dmag = 0.1 Sun: 150° Moon: 27°</p>	<p>2019 nov 16 13h55.1m A19_11017 55 Pandora UCAC5 617–025028 Diam = 67.5 m = 11.0 m = 11.6</p>  <p>Dur = 8.7s Dmag = 1.1 Sun: 146° Moon: 19°</p>
<p>2019 nov 17 9h37.9m A19_11101 618 Elfriede TYC 6930–00763–1 Diam = 124.0 m = 10.0 m = 14.0</p>  <p>Dur = 4.9s Dmag = 4.1 Sun: 73° Moon: 163°</p>	<p>2019 nov 18 21h 4.7m 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>2019 nov 21 10h 3.2m A19_11039 109 Felicitas UCAC5 332–188196 Diam = 91.0 m = 11.9 m = 14.2</p>  <p>Dur = 3.2s Dmag = 2.4 Sun: 65° Moon: 135°</p>	<p>2019 nov 28 14h14.5m A19_11074 347 Pariana TYC 1879–00902–1 Diam = 96.4 m = 11.7 m = 12.7</p>  <p>Dur = 11.6s Dmag = 1.3 Sun: 149° Moon: 174°</p>
<p>2019 dec 1 16h 6.5m A19_12063 269 Justitia UCAC5 523–009238 Diam = 54.7 m = 12.0 m = 13.9</p>  <p>Dur = 3.6s Dmag = 2.1 Sun: 171° Moon: 122°</p>	<p>2019 dec 2 20h 0.5m A19_12111 569 Misa TYC 0272–00616–1 Diam = 75.6 m = 9.7 m = 15.1</p>  <p>Dur = 3.1s Dmag = 5.4 Sun: 74° Moon: 148°</p>	<p>2019 dec 4 13h 5.2m A19_12032 119 Althaea UCAC5 521–006847 Diam = 60.7 m = 12.0 m = 11.6</p>  <p>Dur = 6.0s Dmag = 0.6 Sun: 167° Moon: 76°</p>	<p>2019 dec 4 18h48.6m A19_12054 238 Hypatia TYC 0171–00529–1 Diam = 156.0 m = 11.2 m = 12.6</p>  <p>Dur = 20.0s Dmag = 1.7 Sun: 139° Moon: 118°</p>
<p>2019 dec 4 19h15.7m A19_12103 559 Nanon UCAC5 526–011915 Diam = 80.0 m = 12.3 m = 13.4</p>  <p>Dur = 6.1s Dmag = 1.4 Sun: 168° Moon: 92°</p>	<p>2019 dec 6 14h48.2m A19_12039 132 Aethra UCAC5 562–017635 Diam = 47.0 m = 12.0 m = 11.4</p>  <p>Dur = 3.6s Dmag = 0.5 Sun: 169° Moon: 76°</p>	<p>2019 dec 11 13h38.8m A19_12051 204 Kallisto UCAC5 506–004458 Diam = 50.8 m = 11.9 m = 13.7</p>  <p>Dur = 4.9s Dmag = 2.0 Sun: 148° Moon: 24°</p>	<p>2019 dec 12 12h37.4m A19_12165 2014SZ348 UCAC5 311–004001 Diam = 104.7 m = 12.3 m = 23.9</p>  <p>Dur = 4.5s Dmag = 11.5 Sun: 126° Moon: 54°</p>

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<p>2019 dec 15 14h59.3m A19_12155 2394 Nadeev UCAC5 545-008448 Diam = 56.0 m = 12.0 m = 15.1</p>  <p>Dur = 7.0s Dmag = 3.1 Sun: 160° Moon: 62°</p>	<p>2019 dec 15 15h22.9m A19_12074 347 Pariana PPMX 5022476 Diam = 96.4 m = 12.3 m = 12.2</p>  <p>Dur = 8.3s Dmag = 0.7 Sun: 169° Moon: 33°</p>	<p>2019 dec 17 12h57.4m A19_12070 329 Svea UCAC5 439-039446 Diam = 80.5 m = 11.8 m = 13.6</p>  <p>Dur = 11.0s Dmag = 2.0 Sun: 137° Moon: 41°</p>	<p>2019 dec 17 12h59.1m A19_12121 675 Ludmilla TYC 1222-00630-1 Diam = 109.1 m = 8.8 m = 11.3</p>  <p>Dur = 21.2s Dmag = 2.6 Sun: 137° Moon: 110°</p>
<p>2019 dec 19 13h34.2m A19_12084 408 Fama UCAC5 572-004127 Diam = 45.0 m = 11.6 m = 14.0</p>  <p>Dur = 9.2s Dmag = 2.5 Sun: 128° Moon: 141°</p>	<p>2019 dec 24 11h 8.8m A19_12159 3248 Farinella UCAC5 623-014123 Diam = 50.1 m = 10.7 m = 15.7</p>  <p>Dur = 4.5s Dmag = 5.0 Sun: 151° Moon: 164°</p>	<p>2019 dec 25 13h24.0m A19_12143 1085 Amaryllis UCAC5 533-023027 Diam = 72.3 m = 11.6 m = 14.1</p>  <p>Dur = 5.0s Dmag = 2.6 Sun: 173° Moon: 170°</p>	<p>2019 dec 25 15h20.0m A19_12157 2634 James Bradley PPMX 6046058 Diam = 46.5 m = 12.0 m = 14.9</p>  <p>Dur = 3.4s Dmag = 2.9 Sun: 172° Moon: 167°</p>
<p>2019 dec 27 13h37.8m A19_12141 1074 Beljawskya UCAC5 573-019174 Diam = 53.8 m = 12.1 m = 13.5</p>  <p>Dur = 5.3s Dmag = 1.6 Sun: 171° Moon: 156°</p>	<p>2019 dec 27 17h43.5m A19_12115 601 Nerthus UCAC5 460-029982 Diam = 76.0 m = 11.1 m = 14.7</p>  <p>Dur = 5.4s Dmag = 3.6 Sun: 155° Moon: 158°</p>		