Thursday 15 October 2009

Time	Object (Link)	Event
	Observer Site	**Lostock NSW Australia, Australia WGS84: Lon: +151d25m30.3s Lat: -32d18m53.4s Alt: 204m All times in UTC+11**
18h00m	Moons of Jupiter	G E |J| IC
18h00m	Moons of Saturn	R e | md*S*| |
19h06.1m		**Set Azimuth=259.3°, W**
19.3h	**Jupiter**	**Magnitude=-2.6mag Best seen from 19.3h - 3.3h (in constellation Capricornus) RA=21h19m16s Dec=-16°44.4' (J2000) Distance=4.519AU Elongation=115° Diameter=43.6"**
19h31m		End civil twilight
19h46m		Sun 9° below horizon
20h01m		**Dusk**
20h16m		Sun 15° below horizon
20.3h	Uranus	Magnitude= 5.7mag Best seen from 20.3h - 3.9h (in constellation Aquarius) RA=23h37m08s Dec= -3°20.1' (J2000) Distance=19.217AU Elongation=151° Diameter=3.6"
20.3h	**Deep-Sky Observing**	**Best time interval for observing dim objects: 20h16m- 5h04m Prior to midnight**
20h31m		End astronomical twilight
20h37.9m	**Jupiter**	**Transit Altitude=+74.4° (in constellation Capricornus) Elongation=115.0° East, Magnitude=-2.6mag**
22h55.4m	Uranus	Transit Altitude=+61.0° (in constellation Aquarius) Elongation=151.3° East, Magnitude=5.7mag

Friday 16 October 2009

Time	Object (Link)	Event
1h28.5m	Jupiter-Moon Io	Occultation Disappearance (5.4 mag)
2h18.9m	Mars	Rise Azimuth= 64.9°, ENE (in constellation Cancer)
2.4h	**Mars**	**Magnitude= 0.6mag Best seen from 2.4h - 5.8h (in constellation Cancer) RA= 8h07m00s Dec=+21°21.2' (J2000) Distance=1.308AU Elongation= 83° Phase k=88% Diameter=7.2" planetographic latitude of the Earth=14.7°**
3h23.4m	**Jupiter**	**Set Azimuth=249.7°, WSW (in constellation Capricornus)**
4h35.1m		**Rise Azimuth= 89.7°, E (in constellation Leo)**
4h48m		Begin astronomical twilight
5h04m		Sun 15° below horizon
5h17.6m	Saturn	Rise Azimuth= 87.4°, E (in constellation Virgo)
5h19m		**Dawn**
5h	Meteor	**Orionids (ORI)** Best seen from 24.0h - 5.3h ZHR=3.7 Local hour rate=1 Velocity=67.1km/s (very rapid) Radiant: RA=6.1h/91° Dec=14.9° (J2000) (**in constellation Orion/Ori**)
5.3h	**Saturn**	**Magnitude= 1.1mag Best seen from 5.3h - 5.8h (in constellation Virgo) RA=11h56m54s Dec= +2°31.6' (J2000) Distance=10.353AU Elongation= 24° Diameter=16.0" planetocentric latitude of the Earth=2.3°**
5h22.6m	**Venus**	**Rise Azimuth= 89.2°, E (in constellation Virgo)**
5.4h	**Venus**	**Magnitude=-3.9mag Best seen from 5.4h - 6.2h (in constellation Virgo) RA=12h05m39s Dec= +1°02.4' (J2000) Distance=1.545AU Elongation= 22° Phase k=93% Diameter=10.8"**
5h34m		Sun 9° below horizon
5h44.7m	Mercury	Rise Azimuth= 92.3°, E (in constellation Virgo)

5.8h	☿ **Mercury**	**Magnitude=-1.0mag Best seen from 5.8h - 6.1h (in constellation Virgo) RA=12h34m24s Dec= -1°33.9' (J2000) Distance=1.210AU Elongation= 14° Phase k=85% Diameter=5.6"**
5h48m		Begin civil twilight
5.8h		**Earthshine**
6.0h		**Lunar Crescent visible, 58.3 hours before new moon 7.5% illuminated**
6h13.5m		**Rise Azimuth=100.9°, E**
10h45.9m		**Transit Altitude=+58.6° (in constellation Leo) Phase k=6.4%**
11h22.9m	♀ Venus	Transit Altitude=+56.8° (in constellation Virgo) Elongation=21.5° West, Magnitude=-3.9mag
12h39.9m		**Transit Altitude=+66.6° (in constellation Virgo)**
17h05.1m		**Set Azimuth=266.5°, W (in constellation Virgo)**
18h00m	♃ Moons of Jupiter	I |J|G E C
18h00m	♄ Moons of Saturn	T | |mSt| R| d
19h06.8m		**Set Azimuth=258.8°, W**
19.3h	♃ **Jupiter**	**Magnitude=-2.6mag Best seen from 19.3h - 3.3h (in constellation Capricornus) RA=21h19m18s Dec=-16°44.1' (J2000) Distance=4.533AU Elongation=114° Diameter=43.4"**
19h32m		End civil twilight
19h47m		Sun 9° below horizon
20h02m		**Dusk**
20h17m		Sun 15° below horizon
20.3h	♅ Uranus	Magnitude= 5.7mag Best seen from 20.3h - 3.8h (in constellation Aquarius) RA=23h37m01s Dec= -3°20.9' (J2000) Distance=19.225AU Elongation=150° Diameter=3.6"
20.3h	**Deep-Sky Observing**	**Best time interval for observing dim objects: 20h17m- 5h02m Prior to midnight**
20h32m		End astronomical twilight
20h34.0m	♃ **Jupiter**	**Transit Altitude=+74.4° (in constellation Capricornus) Elongation=114.0° East, Magnitude=-2.6mag**
21h31.0m	♃ Jupiter-Moon Ganymed	Shadow End (5.0 mag)
22h46.0m	♃ Jupiter-Moon Io	Transit Begin (5.4 mag)
22h51.3m	♅ Uranus	Transit Altitude=+61.0° (in constellation Aquarius) Elongation=150.3° East, Magnitude=5.7mag
23h18.7m	♃ Jupiter	Transit of Great Red Spot
23h55.0m	♃ Jupiter-Moon Io	Inferior Conjunction (5.4 mag)

Saturday 17 October 2009

Time	Object (Link)	Event
0h00.5m	♃ Jupiter-Moon Io	Shadow Begin (5.4 mag)
1h04.0m	♃ Jupiter-Moon Io	Transit End (5.4 mag)
2h16.9m	♂ Mars	Rise Azimuth= 65.0°, ENE (in constellation Cancer)
2h18.6m	♃ Jupiter-Moon Io	Shadow End (5.4 mag)
2.3h	**♂ Mars**	**Magnitude= 0.6mag Best seen from 2.3h - 5.8h (in constellation Cancer) RA= 8h09m08s Dec=+21°16.3' (J2000) Distance=1.301AU Elongation= 83° Phase k=88% Diameter=7.2" planetographic latitude of the Earth=14.8°**
3h19.5m	**♃ Jupiter**	**Set Azimuth=249.8°, WSW (in constellation Capricornus)**
4h47m	☉	Begin astronomical twilight
5h02m	☉	Sun 15° below horizon
5h07.0m	●	**Rise Azimuth= 97.1°, E (in constellation Virgo)**
5h14.0m	♄ Saturn	Rise Azimuth= 87.5°, E (in constellation Virgo)
5.3h	**♄ Saturn**	**Magnitude= 1.1mag Best seen from 5.3h - 5.8h (in constellation Virgo) RA=11h57m20s Dec= +2°28.9' (J2000) Distance=10.346AU Elongation= 25° Diameter=16.0" planetocentric latitude of the Earth=2.4°**
5h18m	☉	**Dawn**
5h	Meteor	**Orionids (ORI)** Best seen from 24.0h - 5.3h ZHR=4.9 Local hour rate=2 Velocity=67.1km/s (very rapid) Radiant: RA=6.1h/92° Dec=15.0° (J2000) (**in constellation Orion/Ori**)
5h22.0m	**♀ Venus**	**Rise Azimuth= 89.8°, E (in constellation Virgo)**
5.4h	**♀ Venus**	**Magnitude=-3.9mag Best seen from 5.4h - 6.2h (in constellation Virgo) RA=12h10m13s Dec= +0°33.3' (J2000) Distance=1.549AU Elongation= 21° Phase k=93% Diameter=10.8"**
5h32m	☉	Sun 9° below horizon
5h45.1m	☿ Mercury	Rise Azimuth= 93.1°, E (in constellation Virgo)
5h47m	☉	Begin civil twilight
5.8h	**● Moon**	**Close to Venus, -3.9mag Separation=6.0°, PA=353.2°, h=4.8°**
5.8h	**☿ Mercury**	**Magnitude=-1.0mag Best seen from 5.8h - 6.0h (in constellation Virgo) RA=12h40m26s Dec= -2°14.3' (J2000) Distance=1.230AU Elongation= 13° Phase k=87% Diameter=5.5"**
5.8h	● Moon	Close to Saturn, 1.1mag Separation=8.7°, PA=333.9°, h=6.7°
6.0h	●	**Lunar Crescent visible, 34.3 hours before new moon 2.7% illuminated, Moon lower limb relative to sunrise point at sunrise: dalt=12.5° daz=-12.5°**
6h12.4m	☉	**Rise Azimuth=101.4°, ESE**
11h23.5m	♀ Venus	Transit Altitude=+57.3° (in constellation Virgo) Elongation=21.3° West, Magnitude=-3.9mag
11h34.4m	●	**Transit Altitude=+64.9° (in constellation Virgo) Phase k=2.0%**
12h39.7m	☉	**Transit Altitude=+66.9° (in constellation Virgo)**
18h00m	♃ Moons of Jupiter	|J| I E G C
18h00m	♄ Moons of Saturn	T d | |*S*m | e R
18h10.3m	●	**Set Azimuth=259.1°, W (in constellation Virgo)**
19h07.6m	☉	**Set Azimuth=258.4°, WSW**
19.3h	**♃ Jupiter**	**Magnitude=-2.6mag Best seen from 19.3h - 3.2h (in constellation Capricornus) RA=21h19m21s Dec=-16°43.8' (J2000) Distance=4.548AU Elongation=113° Diameter=43.3"**
19h33m	☉	End civil twilight

19h48m		Sun 9° below horizon
19h56.4m	Jupiter-Moon Io	Occultation Disappearance (5.4 mag)
20h02m		**Dusk**
20h18m		Sun 15° below horizon
20.3h	Uranus	Magnitude= 5.7mag Best seen from 20.3h - 3.7h (in constellation Aquarius) RA=23h36m54s Dec= -3°21.7' (J2000) Distance=19.234AU Elongation=149° Diameter=3.6"
20.3h	**Deep-Sky Observing**	**Best time interval for observing dim objects: 20h18m- 5h01m Prior to midnight**
20h30.1m	**Jupiter**	**Transit Altitude=+74.4° (in constellation Capricornus) Elongation=113.0° East, Magnitude=-2.6mag**
20h33m		End astronomical twilight
22h47.3m	Uranus	Transit Altitude=+61.0° (in constellation Aquarius) Elongation=149.2° East, Magnitude=5.7mag
23h28.0m	Jupiter-Moon Io	Eclipse End (5.4 mag)
23h56.1m	Jupiter-Moon Europa	Occultation Disappearance (6.0 mag)

Sunday 18 October 2009

Time	Object (Link)	Event
2h14.8m	Mars	Rise Azimuth= 65.1°, ENE (in constellation Cancer)
2.3h	**Mars**	**Magnitude= 0.6mag Best seen from 2.3h - 5.8h (in constellation Cancer) RA= 8h11m15s Dec=+21°11.3' (J2000) Distance=1.293AU Elongation= 84° Phase k=88% Diameter=7.2" planetographic latitude of the Earth=15.0°**
3h15.6m	**Jupiter**	**Set Azimuth=249.8°, WSW (in constellation Capricornus)**
4h46m		Begin astronomical twilight
5h01m		Sun 15° below horizon
5h10.4m	Saturn	Rise Azimuth= 87.5°, E (in constellation Virgo)
5.2h	**Saturn**	**Magnitude= 1.1mag Best seen from 5.2h - 5.8h (in constellation Virgo) RA=11h57m46s Dec= +2°26.2' (J2000) Distance=10.339AU Elongation= 26° Diameter=16.0" planetocentric latitude of the Earth=2.4°**
5h16m		**Dawn**
5h	Meteor	**Orionids (ORI)** Best seen from 24.0h - 5.3h ZHR=6.7 Local hour rate=2 Velocity=67.1km/s (very rapid) Radiant: RA=6.2h/92° Dec=15.1° (J2000) (**in constellation Orion/Ori**)
5h21.4m	**Venus**	**Rise Azimuth= 90.3°, E (in constellation Virgo)**
5.4h	**Venus**	**Magnitude=-3.9mag Best seen from 5.4h - 6.2h (in constellation Virgo) RA=12h14m46s Dec= +0°04.1' (J2000) Distance=1.553AU Elongation= 21° Phase k=93% Diameter=10.7"**
5h31m		Sun 9° below horizon
5h40.1m		**Rise Azimuth=104.1°, ESE (in constellation Virgo)**
5h45.5m	Mercury	Rise Azimuth= 93.9°, E (in constellation Virgo)
5h46m		Begin civil twilight
5.8h	**Mercury**	**Magnitude=-1.0mag Best seen from 5.8h - 6.0h (in constellation Virgo) RA=12h46m32s Dec= -2°55.5' (J2000) Distance=1.249AU Elongation= 13° Phase k=89% Diameter=5.4"**
6h11.2m		**Rise Azimuth=101.8°, ESE**

11h24.2m	♀ Venus	Transit Altitude=+57.8° (in constellation Virgo) Elongation=21.0° West, Magnitude=-3.9mag
12h23.6m	●	**Transit Altitude=+70.8° (in constellation Virgo) Phase k=0.2%**
12h39.5m	☀	**Transit Altitude=+67.3° (in constellation Virgo)**
16h33.1m	●	**New Moon**
17h52.9m	●	Libration North

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