

# SOME CLOSE WAXING CRESCENT MOON AND VENUS APPARITIONS

2018 MAY TO OCTOBER

**Approximate Times, Altitudes and Separations for Gainesville, Florida Area**

(Look no later than 20 min. after sunset — Venus altitudes in Column 3)

SEE NEXT PAGE FOR DIAGRAMS

Date	Sunset (DST)	Venus Altitude 20 min. After Sunset	Separation Between Moon & Venus	Moon Phase	Venus Mag.	Venus Phase	Other Objects	Mag.	Separation from Moon	Notes
17-May	8:17 p	24.8°	5.1°	9.1%	-4.0	84.2%				
15-Jun	8:31 p	27.9°	8.0°	7.3%	-4.0	75.3%				
16-Jun	8:32 p	27.7°	5.7°	14.7%	-4.0	75.0%	Beehive Cluster	+3.1	2.9°	1
15-Jul	8:31 p	26.2°	2.7°	12.4%	-4.1	64.0%	<i>Regulus</i> (α Leo)	+1.4	4.2°	2
13-Aug	8:12 p	22.1°	11.0°	9.9%	-4.3	50.6%	<i>Zavijava</i> (β Vir)	+3.6	2.7°	
14-Aug	8:11 p	21.9°	6.3°	17.8%	-4.3	50.1%	<i>Porrina</i> (γ Vir)	+3.4	1.6°	3
12-Sep	7:39 p	15.5°	9.1°	14.0%	-4.5	32.1%	Jupiter	-1.9	16.1°	4
13-Sep	7:37 p	15.3°	16.0°	21.9%	-4.5	31.4%	Jupiter	-1.9	4.5°	5, 6
10-Oct	7:01 p	4.0°	11.7°	4.3%	-4.4	8.4%	Jupiter and Mercury	-1.8	14.0°	7, 8, 9
								-0.4	10.1°	10

**NOTES:**

1. Beehive Cluster (M44 or *Praesepe*) in Cancer between Moon and Venus.
2. Mercury (mag. +0.7) between Moon and Horizon. *Regulus* (mag. +1.4) below and to right of Moon.
3. Venus reaches greatest elongation East on August 17 (46 degrees).
4. Venus now only about 16 degrees high 20 min. after sunset.
5. Close pairing of Moon and Jupiter makes this Moon-Venus-Jupiter triangle special.
6. Venus reaches greatest illumination (mag. -4.6) on Sept. 21.
7. Moon, Venus, Jupiter and Mercury form a *quadrilateral*.
8. Also look for *Antares* (α Sco, approx. mag. +1.1), 17 degrees to upper left of Jupiter.
9. Clear, unobstructed horizon needed. Venus now only about 4 degrees high 20 min. after sunset.
10. Venus becomes stationary Oct. 5 and retrogrades rapidly toward Sun. Conjunction with Sun Oct. 26.

# Close Waxing Crescent Moon and Venus Apparitions

Diagrams illustrate approximate scenes from May to October 2018 for North Florida locations (abt. Lat. 30° N, Long. 82° W) about 20 minutes after sunset.

