MOONBOW PREDICTIONS FOR 2017 UPPER YOSEMITE FALL

TIMES CALCULATED FOR COOK'S MEADOW OBSERVING LOCATION: PARKING LOT JUST NORTH OF SENTINEL BRIDGE

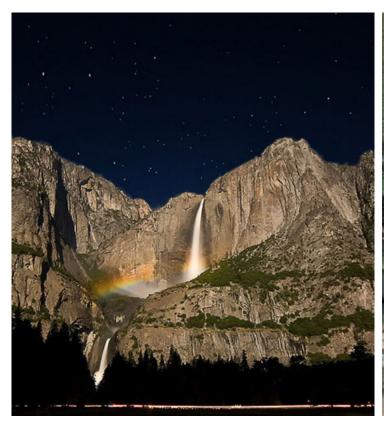




Photo by Brent Gilstrap

Google Earth

DATE	TIMES	LUNAR	REMARKS
IN	(PACIFIC	PHASE	
2017	DAYLIGHT		
	TIME)		
May 11	9:40pm	98%	
(Thurs)	(Thurs)	waning	
	to		
	11:00pm		
	(Thurs)		
night of	10:35pm	95%	
May 12-13	(Fri)	waning	
(Fri-Sat)	to		
	12:35am		
	(Sat)		

June 8	9:15pm	100%	moonbow in progress when sky becomes dark
(Thurs)	(Thurs)		enough at 9:15 p.m.
	to		
	10:30pm		
	(Thurs)		
June 9	10:40pm	99%	if the snowmelt runoff is still very strong in June,
(Fri)	(Fri)	waning	this moonbow may begin before the tabulated time
	to		
	11:25pm		
	(Fri)		
night of	11:30pm	97%	if the snowmelt runoff is still very strong in June,
June 10-11	(Sat)	waning	this moonbow may begin before the tabulated time
(Sat-Sun)	to		
	12:20am		
	(Sun)		
July 7	9:25pm	99%	(brightness and duration depend on snow season
(Fri)	(Fri)	waxing	and snowmelt runoff)
	to		
	10:20pm		
	(Fri)	1000/	
July 8	10:15pm	100%	(brightness and duration depend on snow season
(Sat)	(Sat)		and snowmelt runoff)
	to		
	11:05pm		
T 1 0	(Sat)	000/	
July 9	10:10pm	99%	(brightness and duration depend on snow season
(Sun)	(Sun)	waning	and snowmelt runoff)
	to		
	11:40pm		
July 10	(Sun)	96%	(brightness and duration depend on anory seesan
•	10:20pm		(brightness and duration depend on snow season
(Mon)	(Mon) to	waning	and snowmelt runoff)
	11:20pm		
	(Mon)		
	(IVIOII)		

CONDITIONS REQUIRED TO OBSERVE A MOONBOW IN UPPER YOSEMITE FALL

- 1. bright moonlight (nearly-full Moon)
- 2. Moon risen above the south rim of the valley (so moonlight can strike Upper Yosemite Fall)
- 3. sufficient mist and spray (during snowmelt runoff season: April, May, June, sometimes July)
- 4. clear skies
- 5. dark skies (Sun more than 9 degrees below the horizon)6. geometry (the angle between the "anti-lunar direction" [observer's shadow cast by the

moonlight] and the direction toward the base of Upper Yosemite Fall must be near the "rainbow angle" of 42 degrees)

NOTE

If the snowmelt runoff is unusually strong, then moonbows could appear earlier and last longer than the predicted times.

If the snowmelt runoff is unusually weak, then moonbows would be visible for shorter intervals than the predicted times.