

# MOONBOW PREDICTIONS FOR 2017

## LOWER YOSEMITE FALL

OBSERVING LOCATION:

VIEWING AREA, TERRACE AT THE WEST END OF THE BRIDGE  
NEAR THE BASE OF LOWER YOSEMITE FALL

DATE IN 2017	TIMES (PACIFIC DAYLIGHT TIME)	LUNAR PHASE	REMARKS
April 10 (Mon)	8:15pm (Mon) to 10:25pm (Mon)	100%	moonbow is already in progress when sky gets dark enough at about 8:15pm
April 11 (Tues)	9:10pm (Tues) to 11:50pm (Tues)	99% waning	moonbow appears just as Moon rises into sky between Half Dome and Mount Starr King
night of April 12-13 (Wed-Thurs)	10:05pm (Wed) to 1:05am (Thurs)	96% waning	moonbow appears just as Moon rises into sky between Half Dome and Mount Starr King
May 8 (Mon)	8:45pm (Mon) to 9:40pm (Mon)	97% waxing	moonbow is already in progress when sky gets dark enough at about 8:45pm
May 9 (Tues)	8:50pm (Tues) to 10:50pm (Tues)	99% waxing	moonbow is already in progress when sky gets dark enough at about 8:50pm
May 10 (Wed)	8:50pm (Wed) to 11:55pm (Wed)	100%	moonbow is already in progress when sky gets dark enough at about 8:50pm

night of May 11-12 (Thurs-Fri)	9:45pm (Thurs) to 1:00am (Fri)	98% waning	
night of May 12-13 (Fri-Sat)	12:10am (Sat) to 1:55am (Sat)	95% waning	
June 6 (Tues)	9:15pm (Tues) to 9:50pm (Tues)	95% waxing	moonbow is already in progress when sky gets dark enough at about 9:15pm
June 7 (Wed)	9:15pm (Wed) to 10:55pm (Wed)	98% waxing	moonbow is already in progress when sky gets dark enough at about 9:15pm
June 8 (Thurs)	10:00pm (Thurs) to 11:50pm (Thurs)	100%	
night of June 9-10 (Fri-Sat)	11:00pm (Fri) to 12:40am (Sat)	99% waning	
night of June 10-11 (Sat-Sun)	11:50pm (Sat) to 1:30am (Sun)	97% waning	
July 6 (Thurs)	9:20pm (Thurs) to 10:40pm (Thurs)	96% waxing	(brightness and duration depend on snow season and snowmelt runoff)
July 7 (Fri)	9:50pm (Fri) to 11:30pm (Fri)	99% waxing	(brightness and duration depend on snow season and snowmelt runoff)

night of July 8-9 (Sat-Sun)	10:35pm (Sat) to 12:20am (Sun)	100%	(brightness and duration depend on snow season and snowmelt runoff)
night of July 9-10 (Sun-Mon)	11:10pm (Sun) to 1:05am (Mon)	99% waning	(brightness and duration depend on snow season and snowmelt runoff)
night of July 10-11 (Mon-Tues)	11:35pm (Mon) to 1:40am (Tues)	96% waning	(brightness and duration depend on snow season and snowmelt runoff)

**CONDITIONS REQUIRED TO OBSERVE A MOONBOW IN LOWER YOSEMITE FALL**  
for observers at the viewing area, the terrace just west of the bridge near the base of Lower Yosemite Fall

1. bright moonlight (nearly-full Moon)
2. Moon risen above the south rim of the valley (so moonlight can strike Lower 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 Lower 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.