

Star Gazers
SG 1831 - 5M

JULY 30-August 5, 2018

Summer Meteor Shower (Repeat of 1530)

DEAN:

HEY THERE STAR GAZERS. I'M DEAN REGAS, ASTRONOMER FOR THE CINCINNATI OBSERVATORY.

JAMES:

AND I'M JAMES ALBURY, DIRECTOR OF THE KIKI SILVA PLA PLANETARIUM IN GAINESVILLE, FLORIDA.

WE'VE GOT GOOD NEWS AND SOME EVEN BETTER NEWS.

THE GOOD NEWS IS THAT THE PERSEID METEOR SHOWER, TRADITIONALLY THE BEST METEOR SHOWER OF THE YEAR,

WILL PEAK WEDNESDAY NIGHT AUG 12TH THROUGH THURSDAY MORNING THE 13TH.

DEAN:

BUT THE EVEN BETTER NEWS IS THAT THE MOON WILL BE OUT OF THE PICTURE DURING THE PEAK.

MEANING WE'LL HAVE EXTRA-DARK SKIES FOR WATCHING THE PERSEIDS THIS YEAR.

JAMES:

GET PREPARED BECAUSE WE'RE GOING TO SHARE OUR TIPS AND TRICKS TO OBSERVING A METEOR SHOWER.

(STOP DROP)

DEAN:

THE BEST TIME TO LOOK FOR THE PERSEID METEOR SHOWER IS LATE AT NIGHT ON THE 12TH OF AUGUST, AND INTO THE EARLY MORNING OF THE 13TH.

JAMES:

HERE'S RULE # 1 :
HOPE IT'S CLEAR. BECAUSE IF IT'S CLOUDY OR RAINING

YOU WON'T SEE ANY METEORS AT ALL.

DEAN:

RULE # 2 :

"GET AS FAR AWAY FROM CITY LIGHTS AS POSSIBLE". BECAUSE EVEN THOUGH YOU MAY SEE A HANDFUL OF THE BRIGHTEST METEORS FROM CITY LOCATIONS, THE CITY LIGHTS FLOOD THE SKY WITH SO MUCH SKY-GLOW THAT NOWADAYS MANY OF THE METEORS IN A METEOR SHOWER ARE HIDDEN FROM VIEW.

JAMES:

RULE # 3

"OBSERVE WHILE LYING ON THE GROUND ON A BLANKET OR IN A LAWNCHAIR".
IN OTHER WORDS,
KEEP LOOKING UP!
NO TELESCOPES,
NO BINOCULARS NEEDED!

DEAN:

RULE # 4:

"STAY OUTSIDE FOR AT LEAST A COUPLE OF HOURS,
PREFERABLY AFTER MIDNIGHT AND HAVE PLENTY OF PATIENCE."

JAMES:

IF YOU FOLLOW THESE RULES,
YOU CAN EXPECT TO SEE SEVERAL METEORS PER HOUR AND MAYBE MANY MORE.
SIMPLY LIE BACK AND CONSTANTLY SCAN THE SKY AND USUALLY WHEN YOU LEAST EXPECT IT,
A METEOR OR EVEN TWO WILL ZIP ACROSS THE SKY.

DEAN:

NOW ALTHOUGH SOME ASTRONOMY WEBSITES WILL TELL YOU THAT YOU MAY SEE 60 METEORS PER HOUR,
WHICH WOULD BOIL DOWN TO ABOUT ONE A MINUTE, METEORS REALLY DON'T OPERATE ON A TIME SCHEDULE.
YOU MAY SEE TEN OF THEM IN TWO MINUTES AND THEN HAVE TO WAIT FOR 20 MINUTES TO SEE ANOTHER ONE.
BUT THAT'S THE FUN OF IT, BECAUSE EACH METEOR IS A TOTAL SURPRISE.

STOP (A SLIGHT CHANGE HERE - NEW BACKGROUND GRAPHIC NEEDED)

JAMES:

O.K., WE'VE GOT OUR SKIES SET UP FOR THE USUAL PEAK TIME
TO VIEW: AUGUST 13TH
AFTER MIDNIGHT.
ABOUT HALF WAY UP FROM THE HORIZON YOU WILL SEE THE "W" SHAPE OF
CASSIOPEIA.
LOOK A LITTLE BELOW CASSIOPEIA AND THAT'S WHERE THE METEORS WILL
APPEAR TO ORIGINATE:
THE CONSTELLATION PERSEUS.

DEAN:
I KNOW THAT IS REALLY EARLY, BUT THE METEOR SHOWER WILL BE AT IT'S
BEST BEFORE DAWN ON THE 13TH.

JAMES:
WONDER WHY THEY'RE CALLED THE PERSEIDS? WELL METEOR SHOWERS
ARE NAMED FOR THE CONSTELLATION FROM WHERE THE METEORS APPEAR
TO ORIGINATE. BUT WHAT EXACTLY IS
A METEOR?
LET'S TAKE YOU OUT INTO SPACE AND EXPLAIN.

(STOP FLY)

DEAN:
METEORS ARE THE FLASHES OF LIGHT WE
SEE WHEN TINY SPECKS OF SPACE DEBRIS SLAM INTO OUR EARTH'S
ATMOSPHERE AND
LIGHT UP.
YOU SEE,
EVERY TIME A COMET VISITS OUR SUN IT
SHEDS TONS OF DEBRIS.
AND EVENTUALLY THIS STUFF GETS SPREAD OUT ALONG THE COMET'S PATH.

JAMES:
IF OUR EARTH PLOWS INTO THIS PATH,
THESE TINY PIECES OF COMET LITTER WILL SLAM INTO OUR EARTH'S
ATMOSPHERE TRAVELING MANY MILES PER SECOND. THE PARTICLES
THEMSELVES ARE FAR TOO SMALL TO BE SEEN BUT THE FRICTION OF THESE
PARTICLES HITTING THE AIR CAUSES THE AIR SURROUNDING THEM
TO HEAT UP AND
YOU SEE STREAKS
OF LIGHT.

DEAN:
AND WE CALL THESE STREAKS OF LIGHT METEORS OR INCORRECTLY
"FALLING STARS".
THE METEORS WE SEE DURING THE PERSEID METEOR SHOWER EACH

AUGUST ARE DEBRIS FROM A COMET NAMED SWIFT-TUTTLE.

JAMES:

AND OUR EARTH PLOWS THROUGH ITS DEBRIS FIELD ABOUT THE SAME TIME EVERY AUGUST.

THE PERSEID METOR SHOWER IS ONE OF THE OLDEST RECORDED METEOR SHOWERS IN HISTORY AND HAS BEEN SEEN EVERY AUGUST FOR OVER 2000 YEARS!

(STOP DROP) CLOSE UP ENDING

JAMES:

NOW LET ME REMIND YOU OF THE SINGLE MOST IMPORTANT RULE FOR OBSERVING A

METEOR SHOWER,

WHICH IS YOU MUST CONSTANTLY SCAN THE SKY AND HAVE PATIENCE. YOU MAY SEE NO METEORS FOR 20 MINUTES OR SO AND THEN ALL

OF A SUDDEN 2 OR 3 MAY FLASH BY ALL AT ONCE.

DEAN:

BUT EACH TIME YOU SEE

A PERSEID STREAK ACROSS THE SKY REMIND YOURSELF THAT WHAT YOU'RE ACTUALLY SEEING IS A TINY COMET PIECE IGNITING YOUR NIGHT.

BOTH: KEEP
LOOKING UP!
