

STAR GAZERS
SG 1939 - 5M
SEPTEMBER 30-OCTOBER 6, 2019

PERSEUS AND THE SEVEN SISTERS

DEAN:

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

JAMES:

AND I'M JAMES ALBURY, DIRECTOR OF THE KIKA SILVA PLA PLANETARIUM IN GAINESVILLE FLORIDA. AUTUMN IS FINALLY HERE AND THERE'S A VERY SPECIAL CONSTELLATION THATS GOING TO BE MAKING ITS REAPPEARANCE IN THE EVENING SKY.

DEAN:

THAT'S RIGHT, JAMES! PERSEUS THE HERO IS BACK,
AND NOT ONLY IS HE ASSOCIATED WITH A GREAT STORY IN THE SKY, BUT HE ALSO HAS SOME INTERESTING CELESTIAL COMPANY.

JAMES:

WHAT ARE WE TALKING ABOUT?
LET'S SHOW YOU!

---(STOP)

DEAN:

OK, WE'VE GOT OUR SKIES SET UP FOR THIS WEEK AT 11 P.M. FACING NORTHEAST.
IF YOU LOOK MORE TO THE EAST, YOU'LL SEE WHAT LOOKS LIKE A TINY LITTLE DIPPER-SHAPED CLUSTER OF STARS,
THE BEAUTIFUL SEVEN SISTERS.
NOW, MOST PEOPLE CAN SEE ONLY 6 STARS HERE WITH THE NAKED EYE, BUT IF YOU HAVE REALLY GOOD EYESIGHT (OR ARE WEARING THICK GLASSES LIKE FOUR-EYES OVER THERE)
YOU MAY SEE SEVEN.

JAMES:

AND WITH A PAIR OF BINOCULARS YOU CAN SEE SEVERAL DOZEN. IN REALITY HOWEVER, THERE ARE OVER 250 STARS HERE, ALL MUCH LARGER THAN OUR OWN SUN, AND BURNING MUCH, MUCH HOTTER. COSMICALLY SPEAKING, THEY'RE NOT VERY DISTANT, ONLY 400 LIGHT YEARS AWAY.
WHICH MEANS WE SEE THE PLEIADES NOT AS THEY EXIST NOW, BUT AS THEY

EXISTED 400 YEARS AGO, AT ABOUT THE SAME TIME GALILEO TRAINED A TELESCOPE ON THEM AND DISCOVERED THEM TO BE A FAMILY OF DOZENS OF SUNS.

DEAN:

NEARBY WE HAVE THE DOUBLE CLUSTER, WHICH IS IN THE CONSTELLATION PERSEUS.

FIRST LOOK UP AND TO THE RIGHT OF THE NORTH STAR WHERE YOU'LL SEE THE 5 STARS THAT TRACE OUT THE 'M'-SHAPED CONSTELLATION OF CASSIOPEIA THE QUEEN.

THE DOUBLE CLUSTER IS DOWN AND TO THE RIGHT OF CASSIOPEIA-AND YOU PROBABLY WILL NEED BINOCULARS TO SEE THEM.

BUT IF YOU ARE FAR AWAY FROM CITY LIGHTS, YOU'LL NOTICE THAT THEY ARE EMBEDDED IN THE RIVER OF LIGHT WE CALL THE MILKY WAY.

----(STOP - SKY BOARDS)

JAMES:

THE DOUBLE CLUSTER

OF PERSEUS MIGHT NOT LOOK LIKE MUCH AT FIRST, BUT EACH CLUSTER HAS ABOUT

100 MORE STARS THAN THE PLEIADES,

THE REASON THEY AREN'T AS BRIGHT AS THE PLEIADES IS BECAUSE THEY ARE A WHOPPING SEVEN THOUSAND LIGHT YEARS AWAY.

MUCH FURTHER AWAY THAN THE PLEIADES, WHICH MEANS WE SEE THEM NOT AS THEY EXIST NOW, BUT AS THEY EXISTED SEVEN THOUSAND YEARS AGO.

DEAN:

HOWEVER, LIKE THE PLEIADES, THE DOUBLE CLUSTER ALSO CONSISTS OF SUPER-HOT

BLUE-WHITE STARS.

AND THROUGH A SMALL TELESCOPE YOU MAY BE ABLE TO DETECT A FEW MUCH COOLER RED ONES.

JAMES:

AND IMAGINE, IF YOU CAN, WHAT THE TWIN CLUSTERS OF PERSEUS WOULD LOOK LIKE IF THEY COULD BE MAGICALLY POSITIONED IN OUR SKIES AS

CLOSE AS THE SEVEN

SISTERS ARE.

THEY'D BE A DAZZLING SIGHT TO SEE!

DEAN:

SPEAKING OF DAZZLING STARS, THERE ARE TWO IN PERSEUS THAT WE WANT YOU TO

CHECK OUT.

LET'S HEAD BACK TO EARTH!

----(STOP AND DROP)

JAMES:

OK, WE STILL HAVE OUR SKIES SET TO 11 P.M.
AND AT THE CENTER OF THE CONSTELLATION PERSEUS, YOU'LL SEE A STAR
NAMED MIRFAK. MIRFAK IS ARABIC FOR ELBOW.

DEAN:

LOOKS MORE LIKE HIS CHEST TO ME.
ANYWAY, TO THE RIGHT OF MIRFAK WE SEE PERSEUS HOLDING SOMETHING
IN HIS OUTSTRETCHED ARM.
TO THE ANCIENT GREEKS ITS THE STAR ALGOL A.K.A. THE WINKING EYE OF
MEDUSA.
SHE'S THE GORGON WITH SNAKES FOR HAIR THAT COULD TURN YOU
TO STONE.

JAMES:

BUT OTHER CULTURES HAD SOME VERY FRIGHTENING NAMES FOR THIS
STAR, LIKE:
THE SPECTRES HEAD, GHOSTS HEAD,
SATANS HEAD, THE DOUBLE EYE, AND
DEAN'S PERSONAL FAVORITE, PILED UP CORPSES! WHY SUCH SCARY
NAMES?

DEAN:

WELL, ALGOL IS NO ORDINARY STAR - IT'S A SPECIAL TYPE OF STAR CALLED
AN ECLIPSING VARIABLE.
ALGOL IS REALLY TWO STARS THAT ORBIT EACH OTHER.
WHEN THE BIGGER, DIMMER STAR BLOCKS THE LIGHT OF THE SMALLER
BRIGHTER STAR, ALGOL DIMS LIKE CLOCKWORK EVERY
2.87 DAYS.

----(STOP)

JAMES:

PERSEUS IS USING MEDUSA'S HEAD TO SAVE PRINCESS ANDROMEDA FROM
THE SEA MONSTER CONSTELLATION, CETUS. LOOK FARTHER TO THE
SOUTHEAST, AND MAYBE YOU CAN MAKE OUT THE SEA MONSTER.

DEAN:

HIS OUTLINE LOOKS MORE LIKE A RECLINER CHAIR.

JAMES:

NEVERTHELESS, THIS WAS POSEIDONS VICIOUS PET SEA MONSTER WHO WE

SEE TURNED TO STONE BY...

DEAN:
MEDUSA'S HEAD!

JAMES:
ALGOL STRIKES AGAIN!

DEAN:
SO GO OUTSIDE AND CHECK OUT THE PLEIADES...

JAMES:
AND THE DOUBLE CLUSTER OF PERSEUS, ALONG WITH MIRFAK,
HIS ELBOW...

DEAN:
AND ALGOL, THE WINKING EYE OF MEDUSA.
IT'S ALL THERE WHEN YOU...

BOTH:
KEEP LOOKING UP!
