

STAR GAZERS
SG 1711 - 5M
MARCH 13-19, 2017

"EQUINOX" (REPEAT OF 1311)

JAMES: WELCOME TO STAR GAZERS. I'M JAMES ALBURY, DIRECTOR OF THE KIKA SILVA PLA PLANETARIUM IN GAINESVILLE FLORIDA.

DEAN: AND I'M DEAN REGAS, ASTRONOMER FROM THE CINCINNATI OBSERVATORY.

JAMES: NEXT MONDAY, MARCH 20TH IS THE VERNAL EQUINOX, ALSO KNOWN AS THE OFFICIAL SPRING OF THE LEAF DAY

DEAN: MEANWHILE NEXT SATURDAY, MARCH 25TH MARKS THE OFFICIAL SPRING OF THE YEAR DAY.

JAMES: PLUS, WE HAVE A REALLY COOL DOUBLE PAIRING OF PLANETS, STARS AND OUR MOON ON THE NIGHT OF MARCH 20TH. WHAT ARE WE TALKING ABOUT? LET'S SHOW YOU!

----(STOP)

JAMES: HAVE YOU EVER WONDERED WHY WE CALL SPRING, SPRING? WELL, THAT WORD "SPRING" IS SIMPLY SHORT FOR THE PHRASES 'SPRING OF THE LEAF' AND 'SPRING OF THE YEAR'. NOW SPRING OF THE LEAF IS PRETTY OBVIOUS BECAUSE AT THIS TIME OF THE YEAR LEAVES LITERALLY DO SPRING UP OUT OF THE BRANCHES AND GRASS SPRINGS UP OUT OF THE GROUND AND THAT'S WHY WE CALL SPRING, SPRING.

DEAN: BUT WHAT DOES SPRING OF THE YEAR MEAN? WELL, BELIEVE IT OR NOT, BEFORE 1752 IN ENGLAND AND AMERICA, THE NEW YEAR OFFICIALLY BEGAN WHEN SPRING BEGAN, ON MARCH 25TH. OR TO PUT IT QUITE SIMPLY, THE NEW YEAR SPRANG UP AT THE SAME TIME THE LEAVES AND GRASS DID.

JAMES: IN FACT, WHEN GEORGE WASHINGTON AND BEN FRANKLIN WERE YOUNG, THEY AND ALL THE OTHER AMERICAN COLONISTS WISHED EACH OTHER HAPPY NEW YEAR AND HAPPY SPRING ON THE SAME DAY ON MARCH 25TH. HOWEVER, WHEN THE ENGLISH CALENDAR WAS REFORMED, PARLIAMENT DECLARED THAT STARTING IN 1752, THE NEW YEAR WOULD NO LONGER BEGIN IN MARCH, BUT WOULD BE CELEBRATED ON JANUARY 1ST, A TRADITION BEGUN BY THE ROMANS IN 153 B.C.

DEAN: NOW BOTH SPRINGS ARE RELATED TO THE VERNAL EQUINOX, WHICH HAPPENS THIS YEAR ON MONDAY, MARCH 20TH AT 6:29 A.M. EASTERN DAYLIGHT TIME.

JAMES: BUT WHAT DOES THE TERM VERNAL EQUINOX REALLY MEAN? LET'S NOT FORGET THAT THE FIRST DAY OF SPRING IS REALLY AN ASTRONOMICAL EVENT, WHICH MARKS ONE OF THE TWO DAYS OF THE YEAR WHEN OUR SUN IS SMACK DAB ON THE CELESTIAL EQUATOR.

DEAN: THE OTHER DAY BEING THE FIRST DAY OF AUTUMN. WHEN THIS HAPPENS IN SEPTEMBER, WE CALL IT THE AUTUMNAL EQUINOX AND WHEN IT HAPPENS IN MARCH, WE CALL IT THE VERNAL EQUINOX.

---(STOP)

JAMES: MOST PEOPLE TODAY DON'T KEEP TRACK OF THE SUN AND ITS MOVEMENTS THROUGHOUT THE SEASONS LIKE OUR ANCESTORS DID, BUT IT'S A LOT OF FUN TO WATCH THE SUN CHANGE ITS PLACE ON THE HORIZON EVERY DAY FROM EQUINOX TO EQUINOX.

DEAN: STARTING THIS WEEK, IF YOU MAKE NOTE OF WHERE THE SUN RISES AND SETS ON THE HORIZON EACH DAY USING LANDMARKS LIKE TREES OR BUILDINGS, YOU'LL NOTICE THAT THE SUN WILL RISE JUST A LITTLE BIT FARTHER NORTH OF EAST EACH DAY AND WILL SET A LITTLE BIT FARTHER NORTH OF WEST EACH DAY

JAMES: THE SUN WILL CONTINUE MOVING NORTHWARD WEEK AFTER WEEK UNTIL JUNE 21ST, THE FIRST DAY OF SUMMER (THE SUMMER SOLSTICE), WHEN IT WILL RISE ITS FARTHEST NORTH OF EAST AND SET ITS FARTHEST NORTH OF WEST.

DEAN: AFTER WHICH IT WILL START TO MOVE SOUTHWARD WEEK AFTER WEEK UNTIL ONCE AGAIN IT WILL RISE DUE EAST AND SET DUE WEST ON THE AUTUMNAL EQUINOX, THE FIRST DAY OF AUTUMN IN SEPTEMBER.

JAMES: ALRIGHT, LETS SEE WHAT THE PLANETS ARE DOING ON THE EQUINOX.

---(STOP)

JAMES: OK, WEVE GOT OUR SKIES SET TO AN HOUR BEFORE SUNRISE ON THE MORNING OF MONDAY, MARCH 20TH, THE VERNAL EQUINOX. IF YOU LOOK TO THE SOUTHWEST, YOU'LL SEE THE GIANT PLANET JUPITER NEAR VIRGO'S BRIGHT BLUE STAR, SPICA.

DEAN: JUPITER IS PARTICULARLY DAZZLING RIGHT NOW BECAUSE IN JUST A FEW WEEKS, ON APRIL 7TH, JUPITER WILL BE AT OPPOSITION AND WILL APPEAR THE BIGGEST AND BRIGHTEST IT WILL BE ALL YEAR.

JAMES: IF YOU THEN LOOK TOWARD THE SOUTH, YOU WILL SEE A LAST QUARTER MOON JUST 5 FULL MOON WIDTHS ABOVE THE RINGED PLANET SATURN. THE MOON AND SATURN WILL BE IN THE CONSTELLATION OPHIUCHUS THE SERPENT BEARER. HE'S RUNNING INTERFERENCE BETWEEN SCORPIUS THE SCORPION AND SAGITTARIUS THE CENTAUR ARCHER.

---(STOP - CLOSE UP ENDING)

JAMES: WELL, THERE YOU HAVE IT! A SPRING TIME PAIRING OF ASTRONOMICAL PROPORTIONS!

DEAN: SO HAPPY SPRING OF THE LEAF AND HAPPY OLD FASHIONED NEW YEAR.

BOTH: KEEP LOOKING UP!

---(STOP)