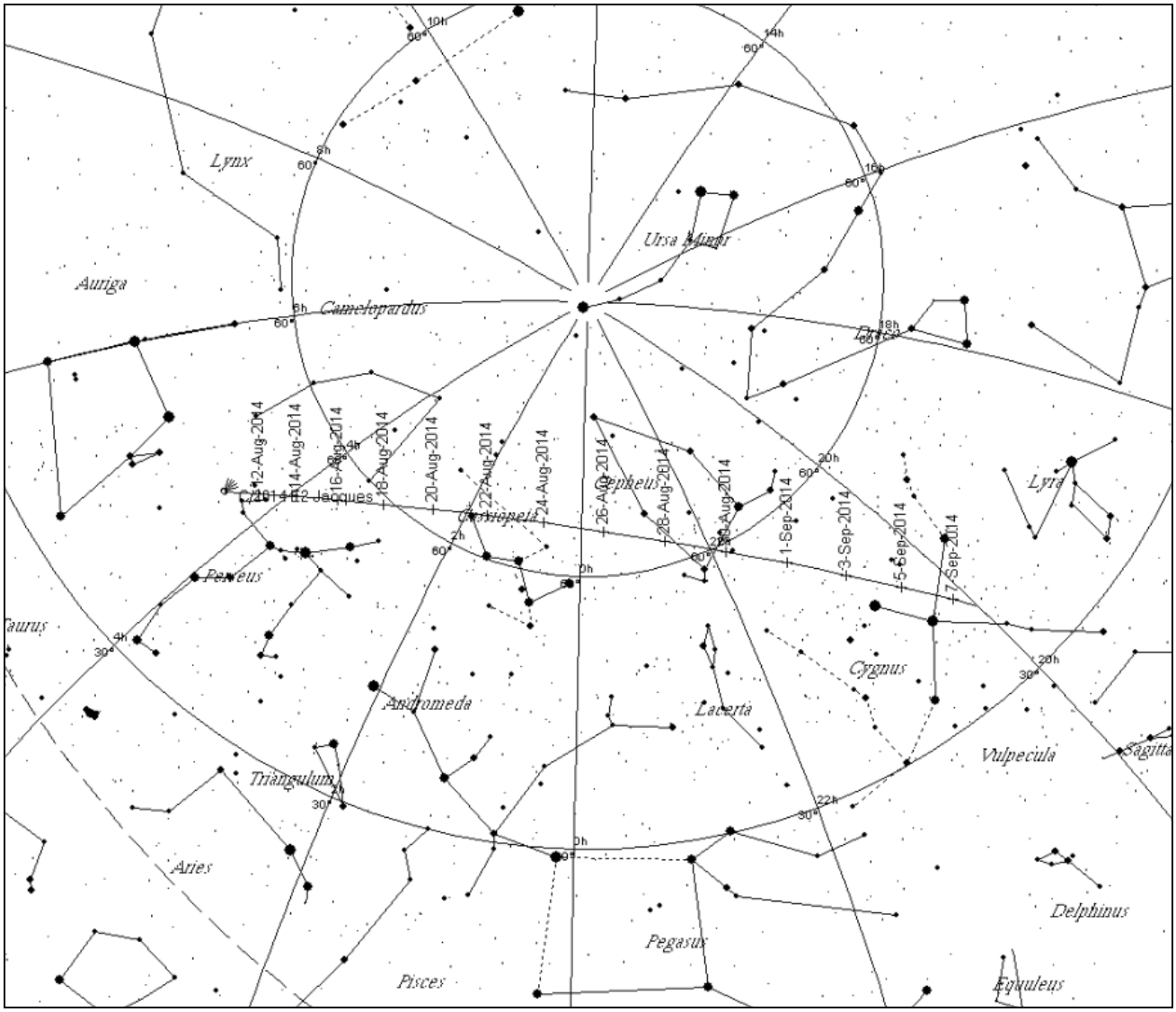
* NOVA *

N. 681 - 4 AGOSTO 2014

ASSOCIAZIONE ASTROFILI SEGUSINI

COMETA C/2014 E2 JACQUES



Percorso della cometa C/2014 E2 Jacques. Le posizioni indicate si riferiscono alle ore 22 CEST, calcolate per il caposaldo AAS.

Scoperta il 13 marzo 2014, quando era di 14.7 magnitudini, da Cristovao Jacques (SONEAR Observatory, Oliveira, Brazil), è una cometa con orbita ellittica a lunghissimo periodo e un'alta inclinazione che la fa muovere tra le costellazioni in modo retrogrado (come la Halley).

La cometa, secondo le previsioni di Seeichi Yoshida, dovrebbe raggiungere la 6ª magnitudine (v. http://www.aerith.net/comet/catalog/2014E2/2014E2.html) ed essere quindi osservabile con un binocolo.

Nelle prossime pagine riportiamo le effemeridi del Jet Propulsion Laboratory, calcolate per il Grange Observatory.

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*******************************************************************************
JPL/HORIZONS                  Jacques (C/2014 E2)           2014-Aug-04 05:41:54
Rec #:904013 (+COV)   Soln.date: 2014-Jul-28_13:13:28    # obs: 2042 (137 days)

FK5/J2000.0 helio. ecliptic osc. elements (au, days, deg., period=Julian yrs):


*******************************************************************************
Ephemeris / WWW_USER Mon Aug  4 05:41:54 2014 Pasadena, USA      / Horizons
*******************************************************************************
Target body name: Jacques (C/2014 E2)              {source: JPL#17}
Center body name: Earth (399)                      {source: DE-0431LE-0431}
Center-site name: Grange Observatory, Bussoleno
*******************************************************************************
Start time      : A.D. 2014-Aug-15 20:00:00.0000 UT
Stop  time      : A.D. 2014-Sep-15 20:00:00.0000 UT
Step-size       : 1440 minutes
*******************************************************************************

*******************************************************************************************************************************
 Date__(UT)__HR:MN     R.A._(ICRF/J2000.0)_DEC Azi_(a-appr)_Elev  T-mag  N-mag           delta      deldot    S-O-T /r
*******************************************************************************************************************************

 2014-Aug-15 20:00 A   03 46 30.06 +54 36 05.1  19.6745  13.9579   8.07  15.07 0.70629329609241 -33.9240191  77.7699 /L
 2014-Aug-16 20:00 A   03 35 10.89 +56 09 09.4  20.9991  16.2946   8.12  15.02 0.68720044269800 -32.3813564  79.9226 /L
 2014-Aug-17 20:00 A   03 22 10.48 +57 42 46.1  22.3393  18.7713   8.17  14.96 0.66905360938753 -30.6574671  82.1325 /L
 2014-Aug-18 20:00 A   03 07 10.70 +59 15 25.3  23.6990  21.3915   8.22  14.91 0.65196021176760 -28.7421225  84.3973 /L
 2014-Aug-19 20:00 A   02 49 51.81 +60 45 04.9  25.0830  24.1568   8.27  14.85 0.63603305776603 -26.6268437  86.7127 /L
 2014-Aug-20 20:00 A   02 29 54.22 +62 09 03.8  26.4973  27.0670   8.32  14.80 0.62138908512028 -24.3057802  89.0718 /L
 2014-Aug-21 20:00 A   02 07 02.03 +63 23 59.0  27.9490  30.1192   8.38  14.74 0.60814755941331 -21.7766957  91.4649 /L
 2014-Aug-22 20:00 A   01 41 08.75 +64 25 48.2  29.4472  33.3074   8.44  14.69 0.59642768896601 -19.0419937  93.8793 /L
 2014-Aug-23 20:00 A   01 12 24.84 +65 10 05.5  31.0030  36.6222   8.50  14.64 0.58634566235468 -16.1096794  96.2985 /L
 2014-Aug-24 20:00 A   00 41 24.46 +65 32 32.9  32.6307  40.0504   8.57  14.59 0.57801118528481 -12.9941170  98.7028 /L
 2014-Aug-25 20:00 A   00 09 06.81 +65 29 46.2  34.3488  43.5748   8.65  14.55 0.57152368021938  -9.7164266 101.0692 /L
 2014-Aug-26 20:00 A   23 36 47.93 +65 00 00.1  36.1812  47.1744   8.73  14.51 0.56696840144317  -6.3043717 103.3719 /L
 2014-Aug-27 20:00 A   23 05 44.36 +64 03 33.9  38.1604  50.8246   8.81  14.48 0.56441279046185  -2.7916411 105.5838 /L
 2014-Aug-28 20:00 A   22 36 56.51 +62 42 44.1  40.3304  54.4980   8.91  14.46 0.56390342953763   0.7834888 107.6767 /L
 2014-Aug-29 20:00 A   22 10 59.97 +61 01 09.9  42.7529  58.1645   9.01  14.45 0.56546392703424   4.3800133 109.6240 /T
 2014-Aug-30 20:00  m  21 48 06.34 +59 03 09.7  45.5166  61.7921   9.11  14.44 0.56909398174905   7.9563834 111.4011 /T
 2014-Aug-31 20:00  m  21 28 09.84 +56 53 04.5  48.7530  65.3469   9.23  14.45 0.57476973640873  11.4727461 112.9877 /T
 2014-Sep-01 20:00  m  21 10 54.93 +54 34 54.7  52.6640  68.7920   9.35  14.47 0.58244537052201  14.8929638 114.3687 /T
 2014-Sep-02 20:00  m  20 56 02.11 +52 12 08.2  57.5710  72.0840   9.47  14.50 0.59205573476713  18.1861856 115.5346 /T
 2014-Sep-03 20:00  m  20 43 11.60 +49 47 37.3  64.0019  75.1667   9.60  14.53 0.60351972374454  21.3278361 116.4823 /T
 2014-Sep-04 20:00  m  20 32 05.14 +47 23 39.7  72.8344  77.9548   9.74  14.58 0.61674403798398  24.2999940 117.2145 /T
 2014-Sep-05 20:00  m  20 22 26.75 +45 02 01.6  85.4364  80.3042   9.88  14.63 0.63162699876190  27.0912263 117.7388 /T
 2014-Sep-06 20:00  m  20 14 02.85 +42 44 02.3 103.2956  81.9711  10.02  14.69 0.64806213567506  29.6960004 118.0672 /T
 2014-Sep-07 20:00  m  20 06 42.02 +40 30 38.2 125.7861  82.6471  10.16  14.76 0.66594134605605  32.1138198 118.2146 /T
 2014-Sep-08 20:00  m  20 00 14.80 +38 22 27.1 147.9524  82.2234  10.31  14.83 0.68515750851223  34.3482230 118.1975 /T
 2014-Sep-09 20:00  m  19 54 33.34 +36 19 52.0 165.2021  80.9739  10.46  14.90 0.70560650840517  36.4057663 118.0335 /T
 2014-Sep-10 20:00  m  19 49 31.13 +34 23 04.4 177.2924  79.2763  10.61  14.98 0.72718869530401  38.2950855 117.7400 /T
 2014-Sep-11 20:00  m  19 45 02.76 +32 32 06.6 185.7595  77.3828  10.75  15.06 0.74980983772587  40.0260978 117.3338 /T
 2014-Sep-12 20:00  m  19 41 03.73 +30 46 54.7 191.9201  75.4261  10.90  15.14 0.77338166564942  41.6093701 116.8305 /T
 2014-Sep-13 20:00     19 37 30.26 +29 07 20.1 196.6076  73.4726  11.05  15.22 0.79782209637491  43.0556469 116.2445 /T
 2014-Sep-14 20:00     19 34 19.19 +27 33 10.7 200.3229  71.5556  11.20  15.30 0.82305522965177  44.3755152 115.5886 /T
 2014-Sep-15 20:00     19 31 27.82 +26 04 12.7 203.3715  69.6915  11.34  15.39 0.84901118178739  45.5791741 114.8741 /T

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Column meaning:

TIME

Prior to 1962, times are UT1. Dates thereafter are UTC. Any 'b' symbol in the 1st-column denotes a B.C. date. First-column blank (" ") denotes an A.D. date. Calendar dates prior to 1582-Oct-15 are in the Julian calendar system. Later calendar dates are in the Gregorian system.

Time tags refer to the same instant throughout the universe, regardless of where the observer is located.

The dynamical Coordinate Time scale is used internally. It is equivalent to the current IAU definition of "TDB". Conversion between CT and the selected non-uniform UT output scale has not been determined for UTC times after the next July or January 1st. The last known leap-second is used over any future interval.

NOTE: "n.a." in output means quantity "not available" at the print-time.

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SOLAR PRESENCE (OBSERVING SITE)
  Time tag is followed by a blank, then a solar-presence symbol:

        '*'  Daylight (refracted solar upper-limb on or above apparent horizon)
        'C'  Civil twilight/dawn
        'N'  Nautical twilight/dawn
        'A'  Astronomical twilight/dawn
        ' '  Night OR geocentric ephemeris

LUNAR PRESENCE (OBSERVING SITE)
  The solar-presence symbol is immediately followed by a lunar-presence symbol:

        'm'  Refracted upper-limb of Moon on or above apparent horizon
        ' '  Refracted upper-limb of Moon below apparent horizon OR geocentric
             ephemeris

 R.A._(ICRF/J2000.0)_DEC =
   J2000.0 astrometric right ascension and declination of target center.
Adjusted for light-time. Units: HMS (HH MM SS.ff) and DMS (DD MM SS.f)

 Azi_(a-appr)_Elev =
   Airless apparent azimuth and elevation of target center. Adjusted for
light-time, the gravitational deflection of light, stellar aberration,
precession and nutation. Azimuth measured North(0) -> East(90) -> South(180) ->
West(270) -> North (360). Elevation is with respect to plane perpendicular
to local zenith direction.  TOPOCENTRIC ONLY. Units: DEGREES

 T-mag N-mag =
   Comet's approximate apparent visual total magnitude ("T-mag") and nuclear
magnitude ("N-mag") by following standard IAU definitions:
    T-mag =  M1 + 5*log10(delta) + k1*log10(r)
    N-mag =  M2 + 5*log10(delta) + k2*log10(r) + phcof*beta
   Units: MAGNITUDES

 delta  deldot =
   Range ("delta") and range-rate ("delta-dot") of target center with respect
to the observer at the instant light seen by the observer at print-time would
have left the target center (print-time minus down-leg light-time); the
distance traveled by a light ray emanating from the center of the target and
recorded by the observer at print-time. "deldot" is a projection of the
velocity vector along this ray, the light-time-corrected line-of-sight from the
coordinate center, and indicates relative motion. A positive "deldot" means the
target center is moving away from the observer (coordinate center). A negative
"deldot" means the target center is moving toward the observer.
Units: AU and KM/S

 S-O-T /r =
    Sun-Observer-Target angle; target's apparent solar elongation seen from
observer location at print-time. If negative, the target center is behind
the Sun. Angular units: DEGREES.

    The '/r' column is a Sun-relative code, output for observing sites
with defined rotation models only.

         /T indicates target trails Sun (evening sky)
         /L indicates target leads Sun  (morning sky)

    NOTE: The S-O-T solar elongation angle is the total separation in any
direction. It does not indicate the angle of Sun leading or trailing.


 Computations by ...
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