MPEC 2015-Y40 : 2015 YB1

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2015 YB1

Observations:

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     K15Y01B* C2015 12 17.36820 08 01 00.55 +08 32 00.0          18.9 VqEY040703
     K15Y01B  C2015 12 17.37271 08 01 01.70 +08 32 38.0          18.7 VqEY040703
     K15Y01B  C2015 12 17.37723 08 01 02.90 +08 33 15.4          18.6 VqEY040703
     K15Y01B  C2015 12 17.38174 08 01 04.06 +08 33 52.7          19.0 VqEY040703
     K15Y01B  C2015 12 17.49071 08 01 32.17 +08 49 06.9          18.9 VqEY040703
     K15Y01B  C2015 12 17.49306 08 01 32.82 +08 49 26.5          18.6 VqEY040703
     K15Y01B  C2015 12 17.49541 08 01 33.43 +08 49 47.0          18.9 VqEY040703
     K15Y01B  C2015 12 17.72554 08 02 40.25 +09 22 35.8          19.5 RoEY040300
     K15Y01B  C2015 12 17.72855 08 02 41.07 +09 23 02.0          19.2 RoEY040300
     K15Y01B  C2015 12 17.73155 08 02 41.90 +09 23 28.3          19.2 RoEY040300
     K15Y01B  C2015 12 17.73455 08 02 42.69 +09 23 54.5          19.3 RoEY040300
     K15Y01B  C2015 12 17.73755 08 02 43.49 +09 24 20.0          19.3 RoEY040300
     K15Y01B KC2015 12 17.90655 08 03 34.91 +09 48 49.2          18.7  tEY040104
     K15Y01B KC2015 12 17.91024 08 03 35.95 +09 49 21.9          18.8  tEY040104
     K15Y01B KC2015 12 17.91411 08 03 37.05 +09 49 56.4          18.5  tEY040104
     K15Y01B KC2015 12 17.93723808 03 43.57 +09 53 20.2          18.7  tEY040B04
     K15Y01B KC2015 12 17.94112608 03 44.71 +09 53 54.9          18.8  tEY040B04
     K15Y01B KC2015 12 17.94974608 03 47.11 +09 55 12.1          18.8  tEY040B04
     K15Y01B KC2015 12 17.99194 08 03 59.01 +10 01 22.1          19.0 VqEY040Z99
     K15Y01B KC2015 12 17.99637 08 04 00.25 +10 02 02.2          19.0 VqEY040Z99
     K15Y01B KC2015 12 18.00080 08 04 01.59 +10 02 41.6          19.0 VqEY040Z99
     K15Y01B  C2015 12 18.34054 08 05 43.60 +10 54 33.4          18.6 VqEY040I52
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     K15Y01B  C2015 12 18.34714 08 05 45.49 +10 55 34.4          18.2 VqEY040I52
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     K15Y01B  C2015 12 18.44315 08 06 13.06 +11 10 33.1          19.3 RuEY040926
     K15Y01B  C2015 12 18.44566 08 06 13.75 +11 10 55.8          19.4 RuEY040926
     K15Y01B  C2015 12 18.50455 08 06 30.94 +11 20 09.3          19.3 RuEY040926
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     K15Y01B  C2015 12 18.52817 08 06 37.92 +11 23 51.7          19.4 RuEY040926
     K15Y01B  C2015 12 18.53075 08 06 38.67 +11 24 17.0          19.5 RuEY040926
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     K15Y01B KC2015 12 18.98672 08 09 09.47 +12 37 55.2          18.6 VqEY040I93
     K15Y01B KC2015 12 18.99220 08 09 11.20 +12 38 50.0          18.6 VqEY040I93
     K15Y01B KC2015 12 18.99785 08 09 12.98 +12 39 46.7          18.3 VqEY040I93
     K15Y01B KC2015 12 19.29537 08 10 52.56 +13 30 09.7          18.0 RqEY040H36
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     K15Y01B  C2015 12 19.30146 08 10 55.44 +13 31 16.6          18.2 VqEY040I52
     K15Y01B KC2015 12 19.30488 08 10 55.61 +13 31 47.8          18.3 RqEY040H36
     K15Y01B  C2015 12 19.30662 08 10 57.10 +13 32 09.9          18.2 VqEY040I52
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     K15Y01B ]C2015 12 19.36547 08 11 16.22 +13 42 21.8          18.0 RoEY040695
     K15Y01B ]C2015 12 19.36747 08 11 16.86 +13 42 42.7          18.0 RoEY040695
     K15Y01B KC2015 12 19.38046 08 11 19.48 +13 44 53.9          17.9 RuEY040850
     K15Y01B KC2015 12 19.39625 08 11 24.61 +13 47 38.0          18.0 RuEY040850
     K15Y01B KC2015 12 19.42896 08 11 35.33 +13 53 18.2          18.1 RuEY040850
     K15Y01B IC2015 12 19.43215 08 11 36.69 +13 53 44.4                tEY040754
     K15Y01B KC2015 12 19.43694 08 11 38.29 +13 54 34.4          18.7  tEY040754
     K15Y01B KC2015 12 19.44159 08 11 39.84 +13 55 22.8          18.6  tEY040754
     K15Y01B KC2015 12 19.44717 08 11 41.36 +13 56 27.7          18.3 RuEY040850

Observer details:
104 San Marcello Pistoiese.  Observer P. Bacci.  Measurers P. Bacci, L. Tesi,
    G. Fagioli.  0.60-m f/4 reflector + CCD.
300 Bisei Spaceguard Center--BATTeRS.  Observers K. Nishiyama, S. Okumura,
    T. Fujiwara.  1.0-m f/3.0 reflector + CCD.
695 Kitt Peak.  Observers L. Lebofsky, M. Trueblood, R. Crawford.  Measurer
    R. Crawford.  2.3-m f/3.0 Ritchey-Chretien + CCD.
703 Catalina Sky Survey.  Observers G. J. Leonard, R. G. Matheny.  Measurers
    E. J. Christensen, D. C. Fuls, A. R. Gibbs, A. D. Grauer, J. A. Johnson,
    R. A. Kowalski, S. M. Larson, G. J. Leonard, R. G. Matheny, R. L. Seaman,
    F. C. Shelly.  0.68-m Schmidt + CCD.
754 Yerkes Observatory, Williams Bay.  Observer V. L. Hoette.  Measurers
    V. L. Hoette, A. W. Puckett, R. L. Sanchez, T. R. Linder.  1.02-m f/8.04
    Cassegrain reflector + CCD.
850 Cordell-Lorenz Observatory, Sewanee.  Observer D. T. Durig.  0.3-m f/2.5
    Schmidt-Cassegrain + CCD.
926 Tenagra II Observatory.  Observers M. Schwartz, P. R. Holvorcem.  Measurer
    M. Schwartz.  0.41-m f/3.75 astrograph + CCD.
B04 OAVdA, Saint-Barthelemy.  Observers A. Carbognani, P. Pellissier.  0.81-m
    f/7.9 reflector + CCD.
H36 Sandlot Observatory, Scranton.  Observer G. Hug.  0.56-m reflector + CCD.
I52 Steward Observatory, Mt. Lemmon Station.  Observer R. A. Kowalski.
    Measurers E. J. Christensen, D. C. Fuls, A. R. Gibbs, A. D. Grauer,
    J. A. Johnson, R. A. Kowalski, S. M. Larson, G. J. Leonard, R. G. Matheny,
    R. L. Seaman, F. C. Shelly.  1.0-m reflector + CCD.
I93 St Pardon de Conques.  Observer F. Losse.  0.40-m f/3.7 reflector + CCD.
Z99 Clixby Observatory, Cleethorpes.  Observer A. Mickleburgh.  0.36-m f/8
    Schmidt-Cassegrain + CCD.

Orbital elements:
2015 YB1                                          Earth MOID = 0.0902 AU
Epoch 2016 Jan. 13.0 TT = JDT 2457400.5           MPC
M 343.22090          (2000.0)           P              Q
n   0.51918416     Peri.   65.53716     -0.81732453     -0.32254993
a   1.5331633      Node    92.57126     +0.17360226     -0.92797325
e   0.4086900      Incl.   28.54925     +0.54940229     -0.18662046
P   1.90           H   21.4           G   0.15           U   8
Residuals in seconds of arc
151217 703  0.3-  0.5-    151218 Z99  1.0+  0.1-    151218 I93  0.0   0.2-
151217 703  0.4-  0.1-    151218 I52  0.1-  0.3-    151218 I93  0.0   0.2-
151217 703  0.2+  0.4-    151218 I52  0.1-  0.0     151218 I93  0.0   0.0
151217 703  0.3+  0.8-    151218 I52  0.2-  0.7-    151219 H36  0.0   0.5+
151217 703  0.4-  0.3-    151218 I52  0.3-  0.2-    151219 I52  0.1-  0.1-
151217 703  0.1+  0.5-    151218 I52  0.3-  0.1-    151219 H36  0.2-  0.1+
151217 703  0.1+  0.2+    151218 I52  0.2-  0.2+    151219 I52  0.1-  0.2-
151217 300  0.2+  0.3+    151218 I52  0.0   0.1-    151219 H36  0.3-  0.3+
151217 300  0.5+  0.4+    151218 926  0.8-  1.3+    151219 I52  0.3-  0.3-
151217 300  0.9+  0.7+    151218 926  0.2-  0.5+    151219 I52  0.5+  0.6+
151217 300  0.8+  0.8+    151218 926  0.7-  0.3-    151219 695  0.2+  0.2+
151217 300  0.8+  0.3+    151218 926  0.3-  0.1+    151219 695  0.2+  0.1+
151217 104  0.0   0.1+    151218 926  0.7-  0.0     151219 695  0.1+  0.2+
151217 104  0.0   0.0     151218 926  0.5+  0.2-    151219 850  0.0   0.2-
151217 104  0.1+  0.2+    151218 926  0.7-  0.9-    151219 850  0.0   0.1-
151217 B04  0.4-  0.1-    151218 926  0.3-  0.0     151219 850  0.3+  0.1-
151217 B04  0.2+  0.0     151218 926  0.6-  1.0+    151219 754  0.2+  0.4-
151217 B04  0.2-  0.3+    151218 300  0.3+  0.2+    151219 754  0.4+  0.3-
151217 Z99  0.0   0.3-    151218 300  0.1+  0.0     151219 754  0.5+  0.4-
151217 Z99  0.3-  0.2+    151218 300  0.4-  0.2-    151219 850  0.6+  0.3-

Ephemeris:
2015 YB1                a,e,i = 1.53, 0.41, 29                 q = 0.9066
Date    TT    R. A. (2000) Decl.     Delta      r     Elong.  Phase     V
2015 11 19    06 59 34.1 -12 25 12   0.4631  1.2870   120.5    41.4    21.9
...
2015 12 04    07 23 11.8 -07 54 07   0.2923  1.1941   129.8    39.4    20.7
...
2015 12 12    07 41 34.7 -00 50 40   0.2083  1.1456   136.9    36.0    19.8
...
2015 12 18    08 03 59.7 +10 03 08   0.1528  1.1103   143.3    32.0    18.9
2015 12 19    08 09 11.7 +12 40 34   0.1447  1.1045   144.2    31.4    18.8
2015 12 20    08 15 02.4 +15 36 11   0.1371  1.0988   144.9    31.0    18.6
...
2015 12 26    09 14 36.5 +40 07 27   0.1055  1.0653   139.0    37.3    18.2
...
2016 01 03    13 38 01.2 +66 47 32   0.1195  1.0237   106.5    67.1    19.2
...
2016 01 18    17 46 58.5 +50 46 43   0.2374  0.9587    77.0    89.0    21.3

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