

Z55 Uraniborg Observatory, ÉcijaObserver R. Farfan. 0.28-m $f/6.3$ Schmidt-Cassegrain + CCD.

(904), 6, 1, 0; (1400), 10, 1, 0; (1410), 8, 1, 0; (4092), 39, 5, 13; [63, 4, 0*, 2020/08/24–2021/02/22]

Z79 Calar Alto TNO SurveyObservers I. d. l. Cueva, J. L. Ortiz. Measurer I. d. l. Cueva. 3.50-m $f/3.9$ reflector + CCD.2017 GL₁₃, 6, 1, 0; [6, 1, 0*, 2015/09/19]**Z80 Northolt Branch Observatory**Observer G. Wells. Measurers G. Wells, D. Bamberger. 0.25-m $f/8.0$ Ritchey-Chrétien + CCD.1999 EO₃, 3, 1, 0; 1999 RM₄₅, 20, 6, 14; 2004 QD₃, 3, 1, 0; 2008 BC₂₂, 2, 1, 0; 2011 DW, 3, 1, 0; 2015 NU₁₃, 6, 2, 4; 2015 TH₁₄₅, 15, 5, 7; 2016 CL₁₃₆, 10, 3, 4; 2016 DV₁, 2, 1, 0; 2017 SG₁₄, 3, 1, 0; 2018 PP₁₀, 3, 1, 0; 2018 RB, 3, 1, 0; 2020 AQ₁, 3, 1, 0; 2020 CX₁, 4, 1, 0; 2020 TB₁₂, 2, 1, 0; 2020 XU₆, 6, 2, 7; 2021 AL₂, 3, 1, 0; 2021 BK₃, 3, 1, 0; 2021 BS₃, 6, 2, 6; 2021 CG, 3, 1, 0; 2021 CO, 8, 1, 0; 2021 CU, 3, 1, 0; 2021 CC₂, 12, 4, 3; 2021 CW₄, 3, 1, 0; 2021 CS₆, 2, 1, 0; 2021 CU₆, 3, 1, 0; 2021 CC₇, 3, 1, 0; 2021 CF₈, 8, 3, 3; 2021 DE, 13, 3, 2; 2021 DO, 3, 1, 0; 2021 DP, 3, 1, 0; 2021 DK₁, 2, 1, 0; 2021 DP₁, 3, 1, 0; 2021 DW₁, 9, 2, 3; 2021 DX₁, 14, 5, 11; 2021 EJ, 3, 1, 0; 2021 EO, 3, 1, 0; 2021 ER, 3, 1, 0; 2021 EZ, 2, 1, 0; 2021 EL₁, 3, 1, 0; 2021 EO₁, 2, 1, 0; 2021 EX₁, 3, 1, 0; 2021 ER₃, 3, 1, 0; 2021 EX₃, 3, 1, 0; 2021 EB₄, 3, 1, 0; 2021 EM₄, 3, 1, 0; 2021 EP₄, 2, 1, 0; 2021 ET₄, 14, 4, 4; 2021 FB, 3, 1, 0; 2021 FH, 11, 2, 1; 2021 FF₁, 5, 2, 4; 2021 FH₁, 9, 2, 2; (4), 3, 1, 0; (5345), 4, 1, 0; (5879), 6, 2, 13; (6465), 3, 1, 0; (11873), 3, 1, 0; (20476), 2, 1, 0; (22018), 3, 1, 0; (52768), 3, 1, 0; (65717), 9, 3, 8; (76267), 2, 1, 0; (99942), 67, 20, 42; (136108), 3, 1, 0; (136472), 3, 1, 0; (147075), 2, 1, 0; (153195), 3, 1, 0; (174050), 10, 3, 26; (271480), 3, 1, 0; (311554), 6, 2, 3; (351545), 6, 2, 3; (438902), 9, 3, 14; (462550), 5, 2, 5; (468727), 6, 3, 4; [431, 75, 0*, 2020/01/18–2021/03/24]**Z84 Calar Alto-Schmidt**Observers M. Micheli, D. Koschny, L. Conversi, E. Petrescu, E. Schwab. 0.8-m $f/3$ Schmidt + CCD. (01)Observers E. Schwab, D. Koschny. Measurers E. Schwab, D. Koschny, M. Micheli, E. Petrescu. 0.8-m $f/3$ Schmidt + CCD. (02)Observers E. Schwab, D. Koschny. 0.8-m $f/3$ Schmidt + CCD. (52){1} 2008 TD₂, 2, 1, 0; 2021 BA₂, 2, 1, 0; 2021 CD, 3, 1, 0; 2021 FW₂, 3, 1, 0; (99942), 21, 6, 36; [31, 5, 0*, 2021/01/20–2021/03/25]{2} 2005 JC₇, 6, 2, 1; 2005 OC₃₄, 3, 1, 0; 2006 BT₁₈₈, 3, 1, 0; 2008 SL₁₄₈, 3, 1, 0; 2009 FN₈₀, 3, 1, 0; 2010 PK₁₁, 7, 2, 1; 2010 SL₄₄, 3, 1, 0; 2011 HY₁₅, 3, 1, 0; 2011 UG₄₆₉, 3, 1, 0; 2012 TJ₃₆₈, 8, 2, 1; 2013 AS₂₀₁, 3, 1, 0; 2013 VP₆₃, 4, 1, 0; 2013 YN₁₁₂, 3, 1, 0; 2014 BD₈₃, 7, 2, 1; 2014 EQ₁₆, 10, 3, 2; 2014 GT₅₅, 7, 2, 1; 2014 QJ₄₇₅, 3, 1, 0; 2015 HD₁₀₃, 3, 1, 0; 2016 CF₃₆₇, 7, 2, 1; 2016 EB₁₇₂, 3, 1, 0; 2016 EG₂₈₈, 8, 2, 1; 2016 QY₂₂, 7, 2, 2; 2016 UQ₂₅₂, 3, 1, 0; 2017 BD₁₇₇, 6, 2, 1; 2017 RV₁₅, 6, 2, 3; 2018 EB₁₃, 3, 1, 0; 2019 RX₅₉, 3, 1, 0; 2020 BN₆₃, 3, 1, 0; 2020 OL₆₃, 3, 1, 0; 2020 RL₈₉, 6, 2, 2; 2020 SQ₅₃, 3, 1, 0; 2020 SC₇₂, 3, 1, 0; 2021 AO₈, 7, 2, 1; 2021 AW₈, 4, 1, 0; 2021 AX₈, 7, 2, 1; 2021 AF₉, 8, 2, 1; 2021 AH₉, 7, 2, 1; 2021 AW₉, 4, 1, 0; 2021 AX₉ *, 9, 3, 2; 2021 AN₁₀, 10, 3, 2; 2021 BJ₁₀ *, 12, 3, 2; (4846), 4, 1, 0; (28149), 3, 1, 0; (33165), 4, 1, 0; (76966), 3, 1, 0; (92484), 3, 1, 0; (101027), 3, 1, 0; (108946), 3, 1, 0; (109110), 7, 2, 2; (113169), 10, 3, 2; (120077), 3, 1, 0; (135551), 4, 1, 0; (148738), 6, 2, 1; (150845), 3, 1, 0; (219401), 3, 1, 0; (223763), 6, 2, 1; (224581), 3, 1, 0; (232925), 7, 2, 1; (235732), 4, 1, 0; (236591), 4, 1, 0; (238958), 4, 1, 0; (244574), 3, 1, 0; (262679), 3, 1, 0; (266878), 2, 1, 0; (273072), 4, 1, 0; (284744), 3, 1, 0; (287799), 3, 1, 0; (290991), 3, 1, 0; (294227), 3, 1, 0; (295291), 4, 1, 0; (332673), 3, 1, 0; (333351), 3, 1, 0; (345389), 3, 1, 0; (390858), 3, 1, 0; (477422), 3, 1, 0; (502354), 4, 1, 0; (540332), 3, 1, 0; (542081), 4, 1, 0; [355, 78, 2*, 2020/01/29–2021/03/25]{52} 2007 BZ₁₁₇, 4, 1, 0; 2008 TE₂₂₆, 3, 1, 0; 2009 BV₂₁₀, 8, 2, 4; 2011 UG₄₆₉, 4, 1, 0; 2014 GP₈₁, 8, 2, 1; 2014 PA₉₄, 4, 1, 0; 2016 AY₂₀₃, 8, 2, 2; 2016 AN₃₂₉, 4, 1, 0; 2018 BV₂₃ *, 3, 1, 0; 2020 BP₅₉, 4, 1, 0; 2020 BE₆₀, 6, 1, 0; 2020 CB₆, 15, 4, 5; 2020 DU₈ *, 12, 3, 3; 2020 DW₈ *, 7, 2, 1; 2020 DH₉, 5, 1, 0; 2020 DL₉, 8, 2, 3; 2020 DN₉, 5, 1, 0; 2020 GD₁₄, 4, 1, 0; 2020 JH₂₅, 7, 2, 1; 2020 JK₂₅, 5, 2, 1; 2020 KE₃₁ *, 4, 1, 0; 2020 PV₄₃, 4, 1, 0; 2020 PM₅₉, 3, 1, 0; (166104), 4, 1, 0; (296345), 4, 1, 0; [143, 25, 4*, 2018/01/17–2020/09/11]**Z86 St. Mellons**

Observer K. Denver. 0.35-m reflector + CCD.

(101717), 3, 1, 0; (124392), 3, 1, 0; [6, 2, 0*, 2021/03/09]

Z92 Almalex Observatory, LeedsObserver A. R. Pratt. 0.28-m $f/10$ Schmidt-Cassegrain + CCD + $f/3.3$ focal reducer.1999 RM₄₅, 4, 1, 0; [4, 1, 0*, 2021/02/28]**Z99 Clixby Observatory, Cleethorpes**Observer A. Mickleburgh. 0.36-m $f/8$ Schmidt-Cassegrain + CCD.1999 EO₃, 5, 1, 0; 1999 RM₄₅, 5, 1, 0; 2001 YU₃, 5, 1, 0; 2004 QD₃, 4, 1, 0; 2010 EB₄₃, 5, 1, 0; 2014 QT₂₉₆, 6, 1, 0; 2015 AS₄₅, 5, 1, 0; 2017 SG₁₄, 5, 1, 0; 2017 SE₁₉, 10, 2, 22; 2017 XH₆₂, 5, 1, 0; 2018 PP₁₀, 5, 1, 0; 2020 UU₃, 5, 1, 0; 2020 WU₅, 3, 1, 0; 2021 AG, 4, 1, 0; 2021 AF₈, 5, 1, 0; 2021 BM₃, 3, 1, 0; 2021 CC, 3, 1, 0; 2021 CU, 10, 1, 0; 2021 CV₁, 5, 1, 0; 2021 CC₂, 5, 1, 0; 2021 CQ₂, 5, 1, 0; 2021 CS₃, 5, 1, 0; 2021 CU₃, 5, 1, 0; 2021 CV₃, 4, 1, 0; 2021 CG₄, 4, 1, 0; 2021 CV₄, 3, 1, 0; 2021 CU₅, 4, 1, 0; 2021 CC₆, 3, 1, 0; 2021 CF₈, 4, 1, 0; 2021 DE, 5, 1, 0; 2021 DL, 3, 1, 0; 2021 DO, 3, 1, 0; 2021 DP, 3, 1, 0; 2021 DR, 3, 1, 0; 2021 DB₁, 2, 1, 0; 2021 DC₁, 3, 1, 0; 2021 DD₁, 3, 1, 0; 2021 DK₁, 8, 2, 4; 2021 DP₁, 5, 1, 0; 2021 DX₁, 9, 2, 4; 2021 DA₂, 4, 1, 0; 2021 DO₂, 3, 1, 0; 2021 EB₄, 6, 1, 0; 2021 EL₄, 5, 1, 0; 2021 EM₄, 6, 1, 0; 2021 ET₄, 4, 1, 0; 2021 FB, 3, 1, 0; 2021 FE, 3, 1, 0; 2021 FG, 3, 1, 0; 2021 FH, 3, 1, 0; 2021 FK, 3, 1, 0; 2021 FF₁, 3, 1, 0; 2021 FH₁, 3, 1, 0; (12186), 5, 1, 0; (38877), 3, 1, 0; (39802), 5, 1, 0; (59692), 4, 1, 0; (61658), 3, 1, 0; (74080), 5, 1, 0; (77288), 3, 1, 0; (83812), 3, 1, 0; (99942), 23, 4, 27; (100591), 3, 1, 0; (103114), 5, 1, 0; (110943), 5, 1, 0; (110978), 5, 1, 0; (179169), 5, 1, 0; (197266), 5, 1, 0; (222157), 4, 1, 0; (237235), 5, 1, 0; [327, 70, 0*, 2021/01/26–2021/03/24]**ORBITAL ELEMENTS**

Orbital elements have been computed and identifications found by the following contributors:

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R. Pike

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