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(42355) 2002 CR₄₆

K. S. Noll, Space Telescope Science Institute; W. M. Grundy, Lowell Observatory; D. C. Stephens, Johns Hopkins University; and H. F. Levison, Southwest Research Institute, report the detection of a binary companion to this centaur-type object (*MPECs* 2002-C84, 2002-H53; *MPS* 50182) when at 16.68 AU from the earth on Jan. 20.410–20.426 UT with the High Resolution Camera (+ clear filter) of the Advanced Camera for Surveys (HRC/ACS) on the Hubble Space Telescope as part of an ongoing observing program. The minor planet was observed with one 300-sec exposure at each of four dithered positions on the detector. Two components are clearly resolved in each image and in the co-added image. The fainter component is ≈ 1.2 magnitudes fainter than the brighter of the two. The two components are separated in the images by an angular distance of $0''.11 \pm 0''.01$, with the fainter component at p.a. 226° as measured from the primary. The spacecraft tracked the motion of (42355) as it moved at an average rate of $0''.085/\text{min}$; the relative position of the two components remained the same during the orbit. The projected separation of the objects in the plane of the sky is 1330 ± 130 km.

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K. S. Noll, W. M. Grundy, H. F. Levison, and D. C. Stephens also report the detection of a binary companion to this transneptunian minor planet (*MPEC* 2000-J45, 2002-D20; *MPO* 44436), obtained as above on Jan. 16.276–16.292 UT, when it was more than 41 AU from the earth. Two components are clearly resolved in each image and in the co-added image. The two components are separated in the images by an angular distance of $0''.073 \pm 0''.006$ with the fainter component at a position angle of $155^\circ.2$ as measured from the primary. The projected separation of the objects in the plane of the sky is 2200 ± 200 km. The fainter component is ≈ 0.5 magnitude fainter than the brighter of the two. The spacecraft tracked the motion of (60458) as it moved at an average rate of $0''.047/\text{min}$; the relative position of the two components remained the same throughout the orbit.

SUPERNOVAE 2005my, 2006O, 2006C, 2006J, 2006Y, 2006ai, 2006ao

Supernovae 2005my (cf. *IAUC* 8655), 2006O (*IAUC* 8662), 2006C (*IAUC* 8657), 2006J (*IAUC* 8661), 2006Y (*IAUC* 8668), 2006ai (*IAUC* 8674), and 2006ao (*IAUC* 8681) all appear to be type-II supernovae; details appear on *CBETs* 358, 378, 380, 417, and 422.