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JUPITER

As noted on *CBET* 1882, J. H. Rogers, Jupiter Section Director, British Astronomical Association, reported the discovery by Anthony Wesley (Murrumbateman, NSW, Australia) on CCD images taken around July 19.56 UT of a "virtually black" spot in Jupiter's South Polar Region, very similar in appearance to the impact spots of comet D/1993 F2 in July 1994. Rogers adds that the spot is at longitude 216° (System II) and that T. Mishina (Japan) also reported the spot in an image taken at about the same time.

CBET 1882 also contains the report by F. Marchis and M. H. Wong that analysis of observations of Jupiter's atmosphere collected by P. Kalas, M. Fitzgerald, and J. Graham using the NIRC2 near-infrared camera at the W. M. Keck II telescope during July 20.468–20.474 UT (central meridian longitudes 283°–288°, System III) revealed the presence of an anomalous bright feature centered at planetographic coordinates 305° ± 1°.5 west, 57° ± 1°.5 south. This feature is apparently the same as Wesley's dark spot, interpreted to be an impact in the atmosphere of Jupiter. The scar, having an area of about 200 million square km and well seen in the K_p filter centered at 2.124 μm, has a complex shape, composed of an impact site with two prominent features separated by $\sim$ 2° and an ejecta field that extends some 10° toward the west. The scar is marginally detected in observations recorded in H-band (centered at 1.633 μm) and in CH_4 (centered at 1.681 μm) filters. Further observations during July 20.619–20.627 (central meridian longitudes 54°–62°) do not show evidence for additional impacts.

F. Marchis, University of California at Berkeley and SETI Institute; and R. Hueso Alonso, University of the Basque Country, further report on a preliminary analysis of observations of Jupiter's atmosphere collected by O. Mousis, Observatoire de Besançon; G. Orton and L. Fletcher, Jet Propulsion Laboratory; and S. Perez-Hoyos, University of the Basque Country, recorded with the Very Large Telescope (Yepun) and its adaptive-optics system NACO during July 26.311–26.370. Images taken with the IB248 filter (centered at 2.48 μm; width 0.06 μm) revealed that the feature located between 295° and 315° west longitude (in System III) and centered at 55° south latitude has a significantly evolved shape by comparison with the Keck telescope K_p (2.12 μm) data taken on July 20.468 (noted above). Six days after this observation, the two maxima are now barely distinguishable, separated by 8° in latitude. The brightest peak is centered at 312° west. The continued longitudinal shearing is consistent with several amateur observations of the site and with the behavior of the impact sites associated with the impacts of D/1993 F2 in 1994.

2009 July 31 *Daniel W. E. Green*