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Mailstop 18, Smithsonian Astrophysical Observatory, Cambridge, MA 02138, U.S.A.
IAUSUBS@CFA.HARVARD.EDU or FAX 617-495-7231 (subscriptions)
CBAT@CFA.HARVARD.EDU (science)
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SATELLITES OF JUPITER

A. A. Christou, Armagh Observatory, reports that his CCD photometry of Jupiter V (Amalthea), obtained by F. Lewis (Faulkes Telescope Project, Open University) using the 2-m Faulkes Telescope South (+ Pan-STARRS z' filter) reveals an eclipse of this satellite by Jupiter I (Io) on June 23 UT. Twenty-five 5-sec exposures were acquired between June 23.64799 and 23.66425. Amalthea was visible in all these frames with the exception of those starting at June 23.65317 and 23.65379 UT, consistent with a totality between June 23.65292 and 23.65401 predicted by utilizing a generic mutual-eclipse model (Christou 2005, *Icarus* **178**, 171) in combination with the SPICE ephemeris kernel JUP230 for the Galilean satellites and Amalthea. Observations at high cadence ($\ll 60$ s) of further eclipses of Amalthea by Io are encouraged during the current Jovian equinox season. Predictions for July and August 2009 are given at website URL `http://www.arm.ac.uk/ãac/amalthea/`.

COMETS C/2009 A7, C/2009 B8–B11, AND C/2009 C3–C4 (SOHO)

Further to *IAUC* 9042, additional apparent comets have been found on SOHO website images — all Kreutz sungrazers except for C/2009 B10 (Meyer group). C/2009 A7 was stellar in appearance (mag $\sim$ 7–7.5) in the C3 images; it was also imaged with the SECCHI HI-1A camera, which showed it to be small and slightly diffuse at mag $\sim$ 11. C/2009 B8 was slightly diffuse (mag $\sim$ 7). C/2009 B9 was stellar in appearance (mag $\sim$ 7.5). C/2009 B10 was stellar in appearance (mag $\sim$ 7.5) and perhaps slightly elongated. C/2009 B11 was also stellar in appearance (mag $\sim$ 7–7.5). C/2009 C3 was bright (mag $\sim$ 2–3) with a thin tail in C3 images, while in C2 images it showed a long, thin tail that went past the field-of-view and showed no appreciable 'head'. C/2009 C4 was slightly elongated, peaking at mag $\sim$ 7 (and brightening in the last image).

Comet	2009	UT	α_{2000}	δ_{2000}	Inst.	F	*MPEC*
C/2009 A7	Jan.	4.513	$19^{\rm h}14\overset{\rm m}{.}0$	$-24^\circ 40'$	C3*	AK	2009-M41
C/2009 B8		20.971	20 28.0	−21 46	C3	BZ	2009-M41
C/2009 B9		29.238	21 01.3	−20 01	C3	ZX	2009-M41
C/2009 B10		29.271	20 51.3	−16 28	C2	ZX	2009-M42
C/2009 B11		30.804	21 09.7	−18 51	C3	TH	2009-M42
C/2009 C3	Feb.	4.279	21 40.6	−18 41	C3/2	RM	2009-M42
C/2009 C4		7.936	21 52.8	−17 05	C3	BZ	2009-M54

2009 July 6 *Daniel W. E. Green*