

**Central Bureau for Astronomical Telegrams
INTERNATIONAL ASTRONOMICAL UNION**

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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Phone 617-495-7440/7244/7444 (for emergency use only)

COMET C/2004 YJ₃₅ (LINEAR)

An apparently asteroidal object discovered by the LINEAR project (discovery observation below from *MPEC* 2005-A47 and *MPS* 124152) has been found by S. S. Sheppard to have a centrally condensed coma with a tail $\sim 1''.5$ wide and $\sim 10''$ long in p.a. 330° on CCD frames taken on Nov. 30.34 and Dec. 1.33 UT with the Dupont 2.5-m reflector at Las Campanas (*MPEC* 2005-X12; $T = 2005$ Mar. 3, $q = 1.78$ AU, $i = 52^\circ$, $e = 0.9999$).

2004	UT	α_{2000}	δ_{2000}	Mag.
Dec.	31.07192	21 ^h 09 ^m 18. ^s 11	+69°18'19.5"	19.4

COMET 101P/CHERNYKH

E. J. Christensen has found an object with a well-condensed $15''$ coma moving $\sim 21''.5$ ahead of what has been presumed to be the primary component of comet 101P (corresponding to $\Delta T = -0.9$ day) on 90-s images taken with the Catalina Sky Survey 0.68-m Schmidt telescope on Nov. 30.2 UT; his Dec. 2.2 images show a $15''$ asymmetric coma elongated in p.a. 50° (the ~ 2.5 -mag-brighter component showing a $10''$ central condensation surrounded by a $1'$ asymmetric coma also oriented in p.a. 50°). Observations with the Mt. Lemmon Survey 1.5-m reflector by A. D. Grauer and E. C. Beshore on Dec. 1.2 show this fainter component to have a broad $10''$ – $15''$ tail in p.a. $\sim 57^\circ$. The available astrometry is provided below. Following the reasoning by Sekanina (*IAUC* 5391), it is unlikely that the companion observed in 1991 (*IAUC* 5347) has survived.

2005	UT	α_{2000}	δ_{2000}	Mag.	Observer
Nov.	30.19707	0 ^h 19 ^m 57. ^s 46	-4°57'00.8"	17.8	Christensen
	30.20586	0 19 57.82	-4 56 58.5	17.9	"
	30.21450	0 19 58.15	-4 56 55.7	18.3	"
	30.22309	0 19 58.44	-4 56 51.7	18.2	"
Dec.	1.23064	0 20 36.93	-4 50 52.2	17.9	Grauer
	1.23152	0 20 36.97	-4 50 51.8	18.1	"
	1.23241	0 20 36.99	-4 50 51.4	18.2	"
	1.23329	0 20 36.95	-4 50 51.9		"
	2.20865	0 21 15.62	-4 44 53.9	17.9	Christensen
	2.21893	0 21 15.98	-4 44 49.8	18.3	"
	2.22922	0 21 16.45	-4 44 46.3	18.1	"
	2.23962	0 21 16.81	-4 44 43.0	17.8	"