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- Processing (Info)

MPEC 2019-T44 : COMET 2I/Borisov

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M.P.E.C. 2019-T44 Issued 2019 October 2, 17:05 UT

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COMET 2I/Borisov

Observations:

0002I	C2019 09 18.77219 09 03 36.69 +27 42 36.7	17.2	RmET044349
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0002I	S2019	10	01.1675941	-	3245.4207	+ 5935.8978	- 2320.6672				ET044C53
0002I	S2019	10	01.17199309	26	42.84	+23	05	18.1			LET044C53
0002I	S2019	10	01.1719931	-	3034.4154	+ 6458.7997	+ 443.4315				ET044C53
0002I	C2019	10	01.17279	09	26	43.10	+23	05	13.3	18.2	RVET044A511
0002I	C2019	10	01.17410	09	26	43.26	+23	05	11.4	18.1	RVET044A511
0002I	C2019	10	01.17593	09	26	43.45	+23	05	08.7	18.2	RVET044A511
0002I	S2019	10	01.17639209	26	43.20	+23	05	11.8			LET044C53
0002I	S2019	10	01.1763921	-	2351.0637	+ 5976.3193	+ 3138.2885				ET044C53
0002I	C2019	10	01.17724	09	26	43.61	+23	05	06.8	18.2	RVET044A511
0002I	C2019	10	01.17854	09	26	43.75	+23	05	04.9	18.2	RVET044A511
0002I	KC2019	10	01.40523	09	27	09.01	+22	59	35.0	17.9	VqET044A850
0002I	KC2019	10	01.41857	09	27	10.51	+22	59	16.8	17.7	VqET044A850
0002I	KC2019	10	01.43178	09	27	11.87	+22	58	58.2	17.5	VqET044A850

Observer details:

104 San Marcello Pistoiese. Observers P. Bacci, M. Maestriperieri. Measurers P.

Bacci, L. Tesi, G. Fagioli. 0.60-m reflector + CCD.

118 Astronomical and Geophysical Observatory, Modra. Observer S. Gajdos.

0.6-m f/5.5 reflector + CCD.

152 Moletai Astronomical Observatory. Observers K. Cernis, J. Zdanavicius.

Measurer K. Cernis. 1.65-m f/3.2 reflector + CCD.

349 Agoe. Observer K. Kadota. 0.25-m f/5.0 reflector + CCD.

470 Ceccano. Observer G. Masi. 0.43-m f/6.8 astrograph + CCD.

511 Haute Provence. Observers J. Desmars, W. Thuillot, S. Bouquillon, V.

Robert, M. Dennefeld, F. Taris, M. Delbo, B. Carry, P. Tanga, D. Souami.

Measurers J. Desmars, W. Thuillot, S. Bouquillon, F. Taris, T. Carlucci, C.

Barache. 1.20-m f/6 reflector + CCD.

585 Kyiv comet station. Observer A. Baransky. 0.7-m f/4 reflector + CCD.

586 Pic du Midi. Observers F. Colas, M. Birlan, A. Sonka, F. Sevres.

850 Cordell-Lorenz Observatory, Sewanee. Observer D. T. Durig. 0.3-m f/5.0

Schmidt-Cassegrain + CCD.

970 Chelmsford. Observer N. James. 0.28-m f/10 Schmidt-Cassegrain + CCD.

A71 Stixendorf. Observers M. Jaeger, E. Prosperi, S. Prosperi. Measurer M.

Jaeger. 0.2-m f/2 reflector + CCD.

A77 Observatoire Chante-Perdrix, Dauban. Observers C. Rinner, F. Kugel, J.

Nicolas. Measurers F. Kugel, J. Nicolas. 0.4-m f/2.8 reflector + CCD, 0.41-m f/3.3 reflector + CCD.
A98 Observatory Mazarot-1, Baran. Observer S. Shurpakov. 0.41-m f/3.9 Newtonian reflector + CCD.
 C53 NEOSat. Observer S. Thorsteinson. Measurer D. D. Balam. 0.15-m reflector + CCD.
 D95 Kurihara. Observer T. Takahashi. 0.25-m f/4.2 reflector + CCD.
 G40 Slooh.com Canary Islands Observatory. Observer B. Lutkenhoner. 0.43-m f/6.8 Corrected Dall-Kirkham + CCD.
J01 Observatorio Cielo Profundo, Leon. Observer J. Gonzalez. 0.20-m f/6 Ritchey-Chretien + CCD.
J04 ESA Optical Ground Station, Tenerife. Observer P. Ruiz. Measurers M. Micheli, D. Koschny, M. Busch, A. Knöfel, E. Schwab. 1.0-m f/4.4 reflector + CCD.
J47 Observatorio Nazaret. Observer G. Muler. 0.30-m f/10 Schmidt-Cassegrain.
J57 Centro Astronomico Alto Turia, Valencia. Observers G. Fornas, A. Carreno, V. Mas. Measurers E. Arce, L. Rivas, P. Rosillo, S. Crespo. 0.40-m f/10 Schmidt-Cassegrain + CCD.
J95 Great Shefford. Observer P. Birtwhistle. 0.41-m f/6.3 Schmidt-Cassegrain + CCD.
K61 Rokycany Observatory. Observer M. Adamovsky. 0.51-m f/6.8 reflector + CCD.
K63 G. Pascoli Observatory, Castelvecchio Pascoli. Observer R. Bacci. 0.4-m f/3.2 Newtonian reflector + CCD.
 K74 Muensterschwarzach Observatory, Schwarzach. Observer C. Gerhard. 0.30-m f/4.6 Newtonian reflector + CCD.
 L04 ROASTER-1 Observatory, Cluj-Napoca. Observer L. Hudin. 0.3-m f/5 reflector + CCD.
 Q11 Shinshiro. Observer T. Ikemura. Measurer H. Sato. 0.35-m f/5 reflector + CCD.
 U69 iTelescope SRO Observatory, Auberry. Observer H. Sato. 0.61-m f/6.5 astrograph + CCD.
W34 Squirrel Valley Observatory, Columbus. Observer R. L. Flynn. 0.35-m f/1.9 Schmidt-Cassegrain + CCD.

Orbital elements:

2I/Borisov
 Epoch 2019 Dec. 23.0 TT = JDT 2458840.5
 T 2019 Dec. 8.56658 TT Williams
 q 2.0061181 (2000.0) P Q
 z -1.1737680 Peri. 209.13509 -0.81467296 -0.19296957
 +/-0.0018821 Node 308.14434 +0.56665575 -0.46542418
 e 3.3547172 Incl. 44.05618 -0.12332568 -0.86379574
 From 711 observations 2019 Aug. 30-Oct. 1, mean residual 0".6.

2I/Borisov
 Epoch 2019 Apr. 27.0 TT = JDT 2458600.5
 T 2019 Dec. 8.56364 TT Williams
 q 2.0060362 (2000.0) P Q
 z -1.1739215 Peri. 209.13504 -0.81470408 -0.19295973
 +/-0.0018821 Node 308.14670 +0.56661055 -0.46545755
 e 3.3549290 Incl. 44.05362 -0.12332779 -0.86377996
 From 711 observations 2019 Aug. 30-Oct. 1, mean residual 0".6.

Ephemeris:

Date	TT	R. A. (2000)	Decl.	Delta	r	Elong.	Phase	m1	m2
2019 09 02		08 32 10.5	+32 52 08	3.6544	2.9382	38.9	12.5	18.5	
...									
2019 09 17		09 00 17.5	+28 18 41	3.3225	2.7097	45.2	15.3	17.9	
...									
2019 09 25		09 15 14.0	+25 29 00	3.1485	2.5958	48.6	16.8	17.6	
...									
2019 10 01		09 26 23.6	+23 09 27	3.0207	2.5147	51.0	18.0	17.4	
2019 10 02		09 28 14.9	+22 45 06	2.9997	2.5015	51.5	18.2	17.4	
2019 10 03		09 30 06.1	+22 20 26	2.9788	2.4885	51.9	18.4	17.3	
...									
2019 10 09		09 41 11.2	+19 45 31	2.8553	2.4130	54.3	19.7	17.1	
...									
2019 10 17		09 55 52.2	+15 59 30	2.6974	2.3200	57.5	21.3	16.8	
...									
2019 11 01		10 23 03.0	+07 51 08	2.4287	2.1727	63.3	24.1	16.3	

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