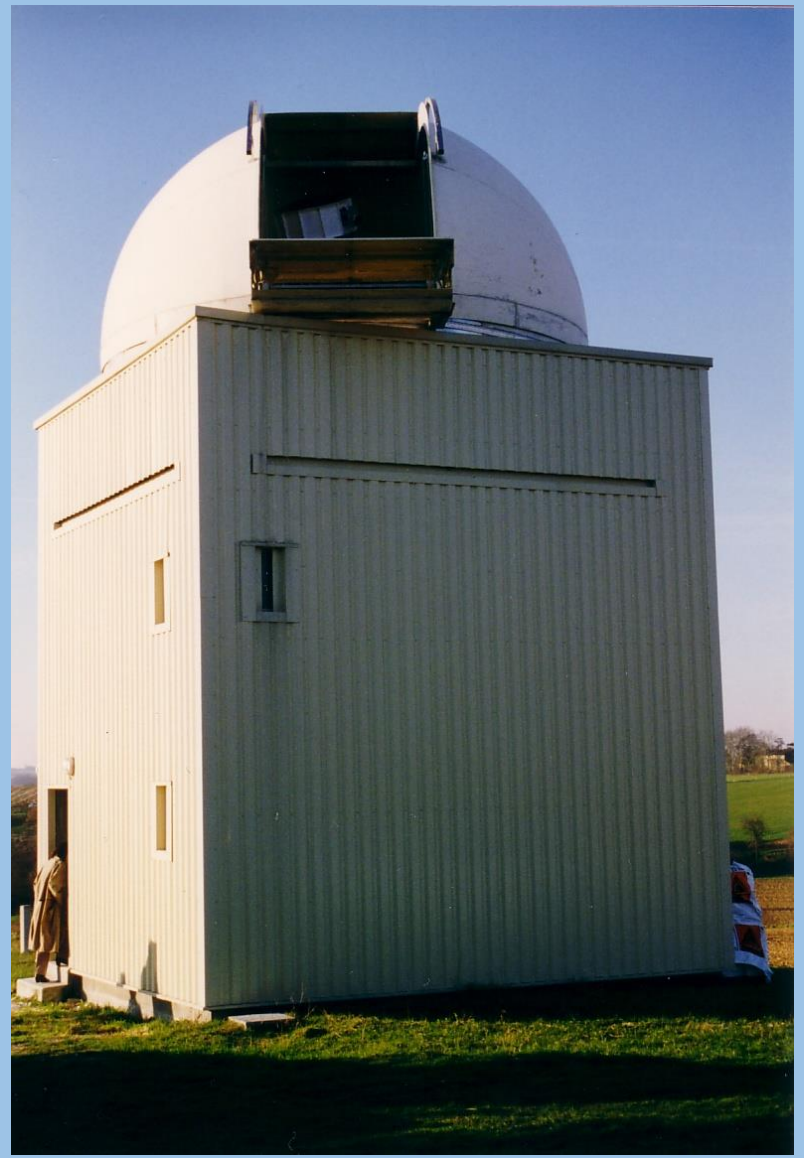
ADAGIO et Bélesta dans l'espace

RICAR – 14/5/2022

L’observatoire de Bélesta en Lauragais et son télescope de 82 cm



Association

pour le Développement

Amateur

d'un Grand

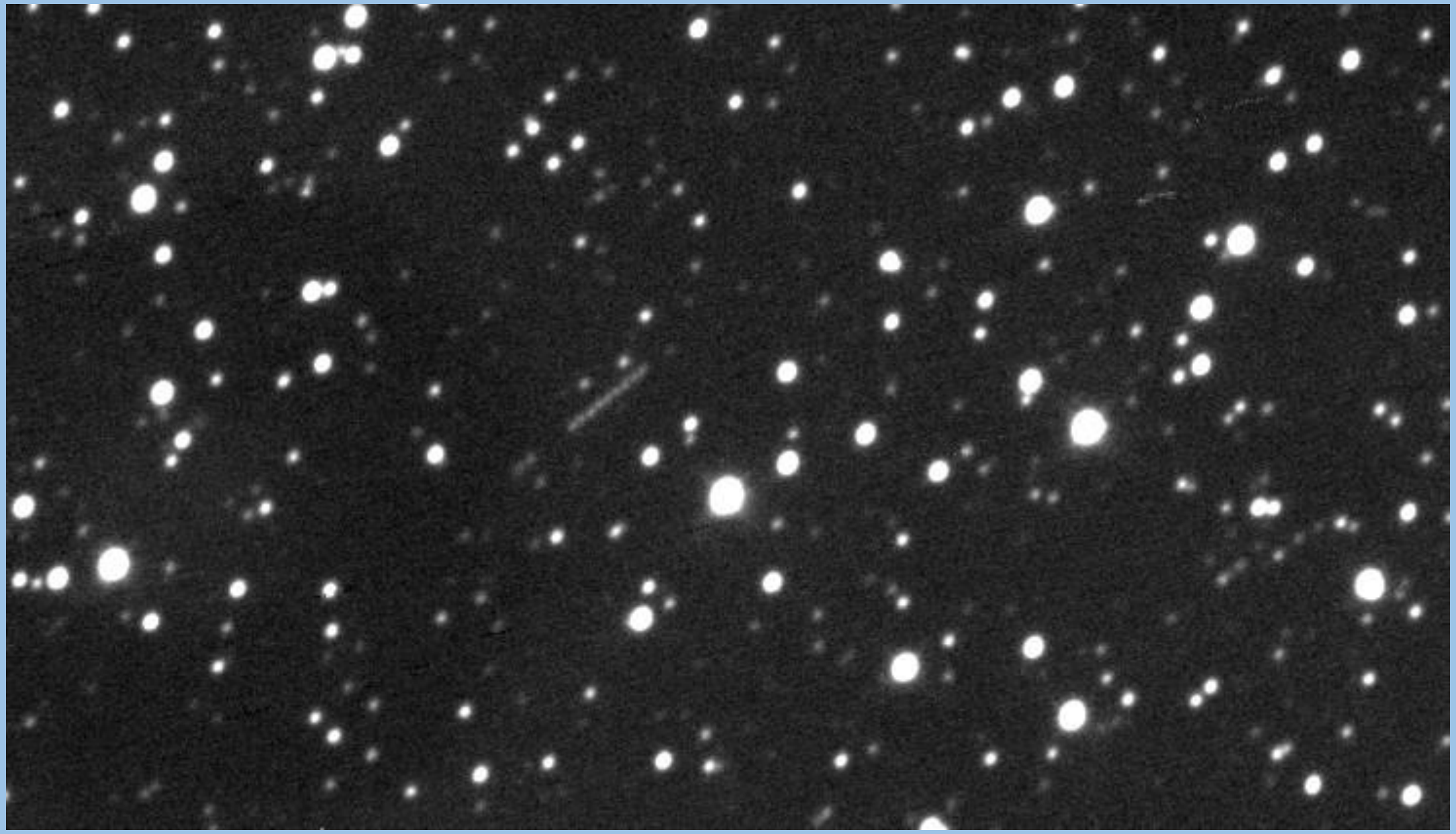
Instrument

d'Observation

En mars 2022, deux des astéroïdes découverts au T82 de l'observatoire de Bélesta en Lauragais ont été baptisés :

- (576901) Adagio : en l'honneur de l'association qui a construit l'observatoire et le T82
- (597993) Bélesta : en l'honneur de l'observatoire de Bélesta en Lauragais

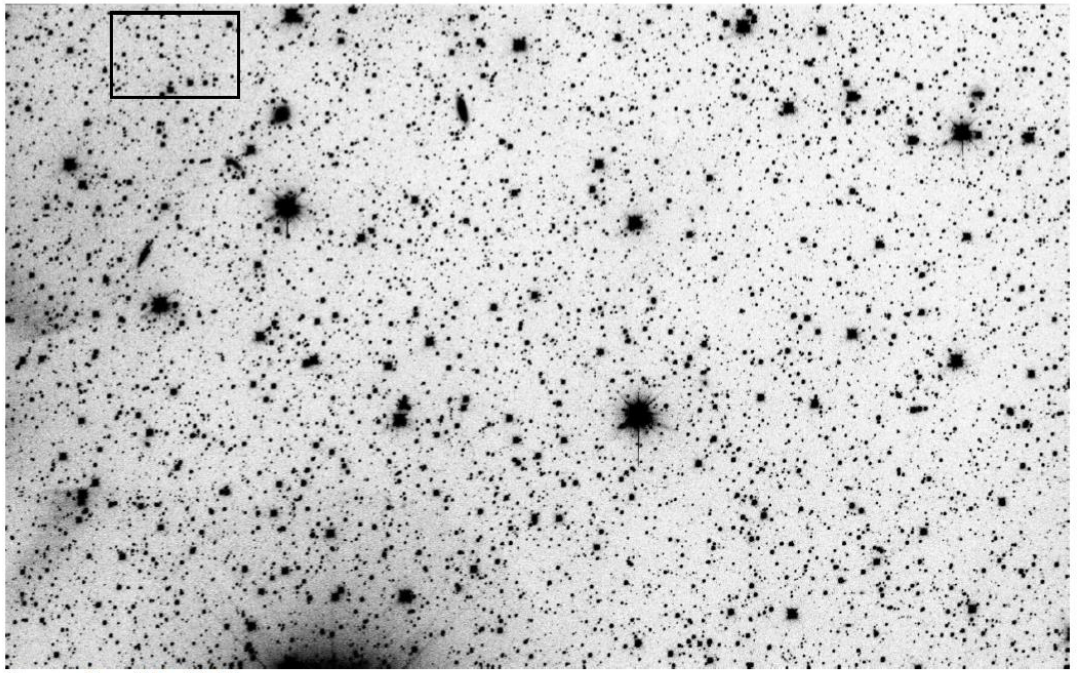
Mais comment peut-on découvrir et baptiser un astéroïde ?



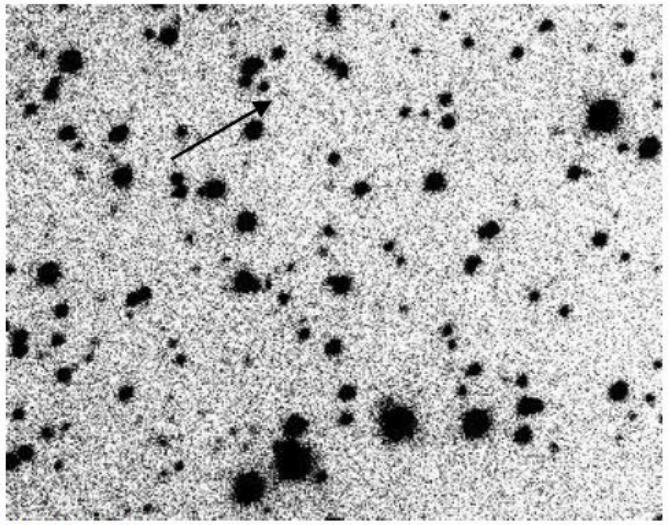
Apophis – 28/01/2013

1 – Trouver des astéroïdes sur les séries d'images de la nuit.

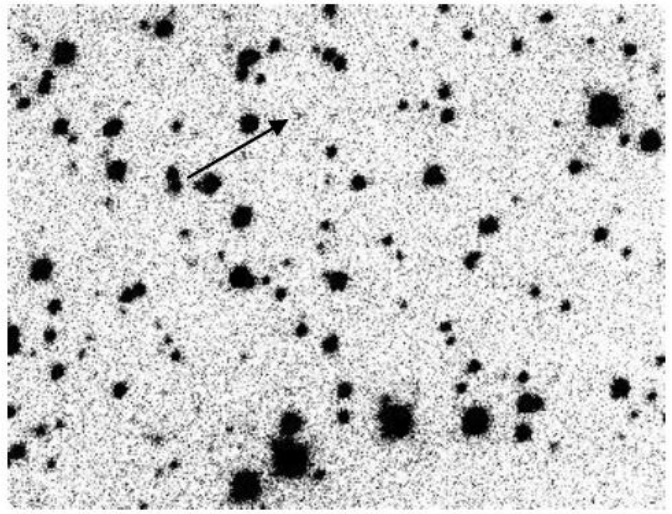
Images of the discovery of 2007RR282



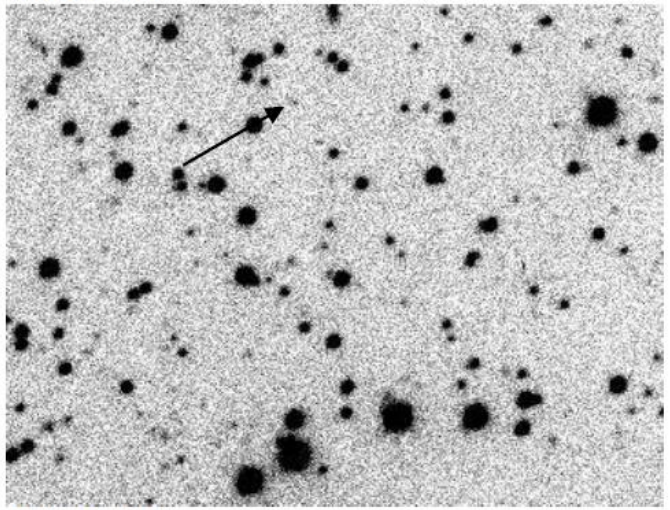
September 8th, 2007



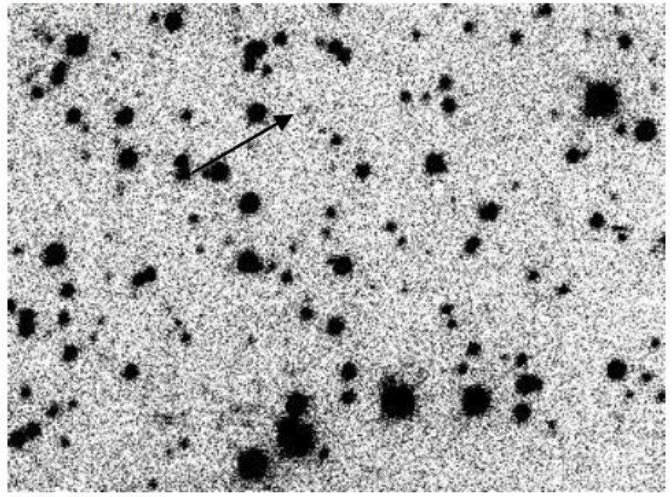
20h10 TU



21h39 TU



20h52 TU



21h51 TU

2 – Vérifier si l’astéroïde trouvé est déjà connu ou non.

MPChecker/CMTChecker/NEOChecker/NEOCMTChecker

Here are the results of your search(es) in the requested field(s) (positions are determined from elements integrated to a nearby epoch) :

The following objects, brighter than $V = 24.0$, were found in the 5.0-arcminute region around R.A. = 14 25 36, Decl. = -15 23 21 (J2000.0) on 2022 05 01.95 UT:

Object designation	R.A. (h m s)	Decl. (° ' ")	V	Offsets R.A.	Offsets Decl.	Motion/hr R.A.	Motion/hr Decl.	Orbit	Further observations? / Comment (Elong/Decl/V at date 1)
2009 TH18	14 25 37.3	-15 24 14	22.5	0.3E	0.9S	38-	9+	20d	Leave for survey recovery.
(83195) 2001 RJ1	14 25 36.8	-15 22 05	20.1	0.2E	1.3N	26-	8+	18o	None needed at this time.
2016 CM338	14 25 29.0	-15 24 30	21.6	1.7W	1.2S	28-	14+	5o	Desirable between 2022 May 2-June 1. (177.2,-15.4,21.6)
(455825) 2005 TL3	14 25 38.5	-15 19 19	20.9	0.6E	4.0N	35-	3+	6o	None needed at this time.

3 – Calculer la position estimée de l'astéroïde trouvé pour les nuits suivantes, et le retrouver lors d'une seconde nuit d'observation.

4 – Envoyer les coordonnées de l'astéroïde découvert au MPC (Minor Planet Center).

```
COD A05
CON P. Martinez, Route de Revel, 31450 Varennes, France
CON [patrick.martinez264@orange.fr]
OBS P. Martinez, P.M. Berge, B. Lazare
MEA P. Martinez
TEL 0.82-m f/3.8 reflector + CCD
AC2 patrick.martinez264@orange.fr
NET USNO-A2
ACK Batch 006

     PMA003 * C2008 01 28.79831 05 33 31.17 +28 44 34.3          20.4 R      A05
     PMA003   C2008 01 28.82624 05 33 30.55 +28 44 37.4                      A05
     PMA003   C2008 01 28.85250 05 33 29.93 +28 44 40.1                      A05

     PMA003   C2008 02 02.79612 05 32 04.21 +28 52 17.6          20.7 R      A05
     PMA003   C2008 02 02.86745 05 32 03.17 +28 52 23.8                      A05
     PMA003   C2008 02 02.89773 05 32 02.76 +28 52 26.0                      A05

     PMA004 * C2008 01 28.79831 05 32 18.40 +28 34 27.3          20.3 R      A05
     PMA004   C2008 01 28.82624 05 32 18.09 +28 34 17.3                      A05
     PMA004   C2008 01 28.85250 05 32 17.79 +28 34 09.0                      A05

     PMA004 * C2008 02 02.80735 05 31 58.21 +28 06 35.6          20.6 R      A05
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     PMA004   C2008 02 02.87515 05 31 58.18 +28 06 13.9                      A05
     PMA004   C2008 02 02.90488 05 31 58.16 +28 06 04.2                      A05

     PMA005 * C2008 01 28.80416 05 35 59.35 +28 33 10.3          20.5 R      A05
     PMA005   C2008 01 28.83232 05 35 58.75 +28 33 12.7                      A05
     PMA005   C2008 01 28.85874 05 35 58.19 +28 33 15.8                      A05

     PMA005   C2008 02 02.85204 05 34 45.76 +28 40 29.3          20.7 R      A05
     PMA005   C2008 02 02.91072 05 34 45.10 +28 40 33.9                      A05

     PMA006 * C2008 01 28.80416 05 34 30.58 +28 33 11.8          20.2 R      A05
     PMA006   C2008 01 28.83232 05 34 29.94 +28 33 12.2                      A05
     PMA006   C2008 01 28.85874 05 34 29.33 +28 33 13.0                      A05

     PMA006   C2008 02 02.88916 05 33 07.46 +28 34 03.4          20.4 R      A05
     PMA006   C2008 02 02.91591 05 33 07.11 +28 34 03.4                      A05
```

5 – Le MPC donne un numéro provisoire chronologique.

6 – Le MPC raccorde l'orbite calculée avec
- éventuellement un astéroïde trouvé précédemment
- une redécouverte ultérieure de cet astéroïde

En théorie, lorsque plusieurs observations concernent le même astéroïde, la découverte est attribuée au premier observateur qui a réalisé au moins une paire de nuits de mesures.

Minor Planet Ephemeris Service: Query Results

Below are the results of your request from the Minor Planet Center's Minor Planet Ephemeris Service. Ephemerides are for observatory code A05.

(336373) 2008 UG47 = 2007 RR282

Display all designations for this object / # of variant orbits available = 3

Perturbed ephemeris below is based on 11-opp elements from *MPO* 648781. Last observed on 2021 Aug. 31.

Discovery date : 2008 10 20
Discovery site : Kitt Peak
Discoverer(s) : Spacewatch

X6373 [H=16.75]

Date	UT	R.A. (J2000)	Decl.	Delta	r	El.	Ph.	V	Sky Motion "/min	Sky Motion P.A.	Object Azi.	Object Alt.	Sun Alt.	Moon Phase	Moon Dist.	Moon Alt.	Uncertainty info 3-sig/"	Uncertainty info P.A.
	h m s																	
2022 05 14	000000	01 33 12.0	+14 24 07	3.481	2.614	26.4	9.9	22.2	1.08	069.9	213	-26	-28	0.94	172	+32	N/A	N/A / Map / Offsets

7 – Après des mesures astrométriques sur plusieurs oppositions, l'orbite peut être calculée avec précision. Le MPC donne alors un numéro définitif à l'astéroïde, et le découvreur a le droit de lui proposer un nom de baptême au WGSBN (Working Group Small Body Nomenclature).

Minor Planet Ephemeris Service: Query Results

Below are the results of your request from the Minor Planet Center's Minor Planet Ephemeris Service. Ephemerides are for observatory code A05.

(597993) Belesta

Display all designations for this object / Show naming citation

Perturbed ephemeris below is based on 6-opp elements from *MPO* 685927. Last observed on 2022 Feb. 24.

Discovery date : 2008 01 28 (*)
Discovery site : Belesta
Discoverer(s) : P. Martinez

```
x7993              [H=16.92]
Date       UT      R.A. (J2000) Decl.    Delta     r     El.    Ph.   V      Sky Motion        Object    Sun   Moon
            h m s                                                          "/min    P.A.    Azi. Alt.  Alt.  Phase Dist. Alt.
2022 05 14 000000 10 05 20.2 +03 24 56   2.378   2.727   99.2  21.5  22.0    0.43    104.6    087  +08   -28   0.94   052  +32
```

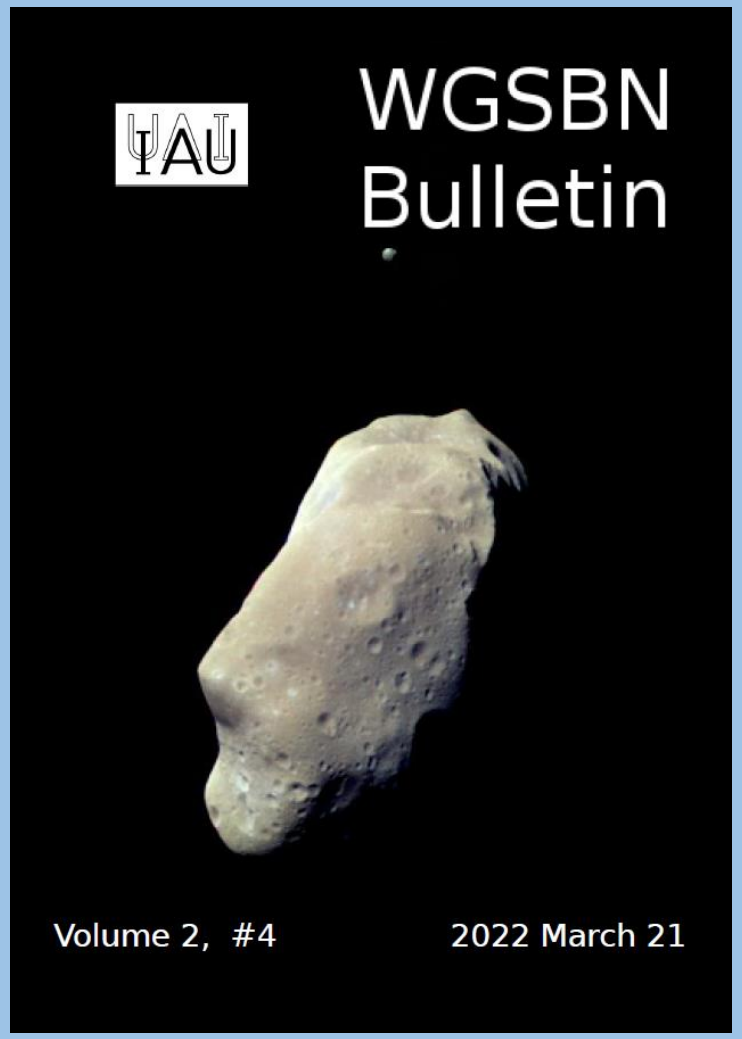
(576901) Adagio = 2008 BA24

Display all designations for this object / Show naming citation

Perturbed ephemeris below is based on 9-opp elements from *MPO* 649582. Last observed on 2021 Sept. 8.

Discovery date : 2008 01 28 (*)
Discovery site : Belesta
Discoverer(s) : P. Martinez

```
v6901              [H=16.04]
Date       UT      R.A. (J2000) Decl.    Delta     r     El.    Ph.   V      Sky Motion        Object    Sun   Moon
            h m s                                                          "/min    P.A.    Azi. Alt.  Alt.  Phase Dist. Alt.
2022 05 14 000000 02 03 08.3 +04 10 40   3.707   2.814   24.0   8.4  21.7    1.01    068.8    209  -38   -28   0.94   172  +32
```



(576901) Adagio = 2012 WM_{27}

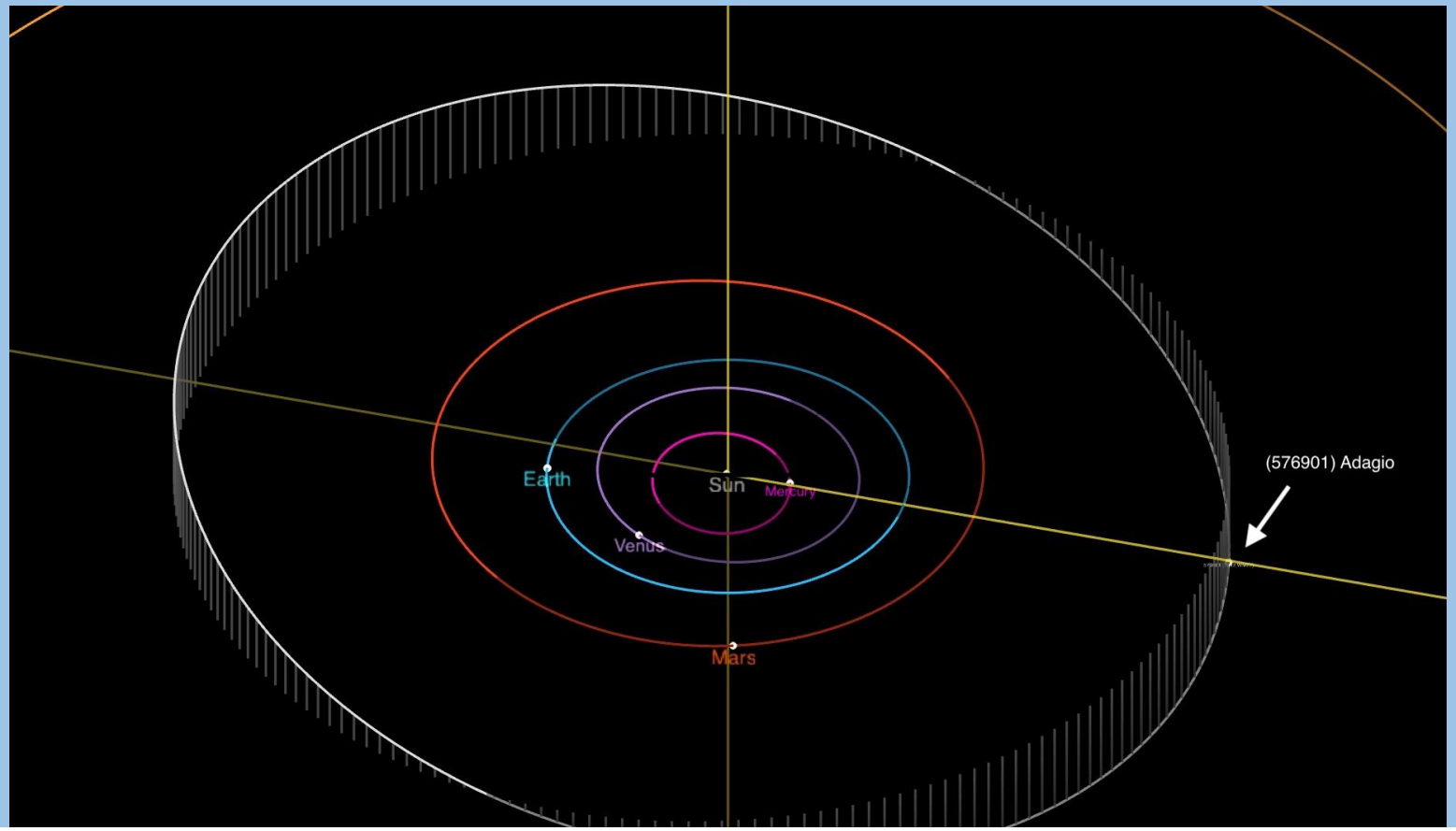
*Discovery: 2008-01-28 / P. Martinez * / Belesta / A05*

The Association pour le Développement Amateur d'un Grand Instrument d'Observation (ADAGIO) is a non-profit astronomical society which operates the 0.82-m telescope used for the discovery of (576901).

(597993) Bélesta = 2008 BZ_{23}

*Discovery: 2008-01-28 / P. Martinez * / Belesta / A05*

Bélesta-en-Lauragais is a small village in south-west France. The village is the site of the observatory where (597993) was discovered. Bélesta is also the name of the observatory.



(576901) Adagio

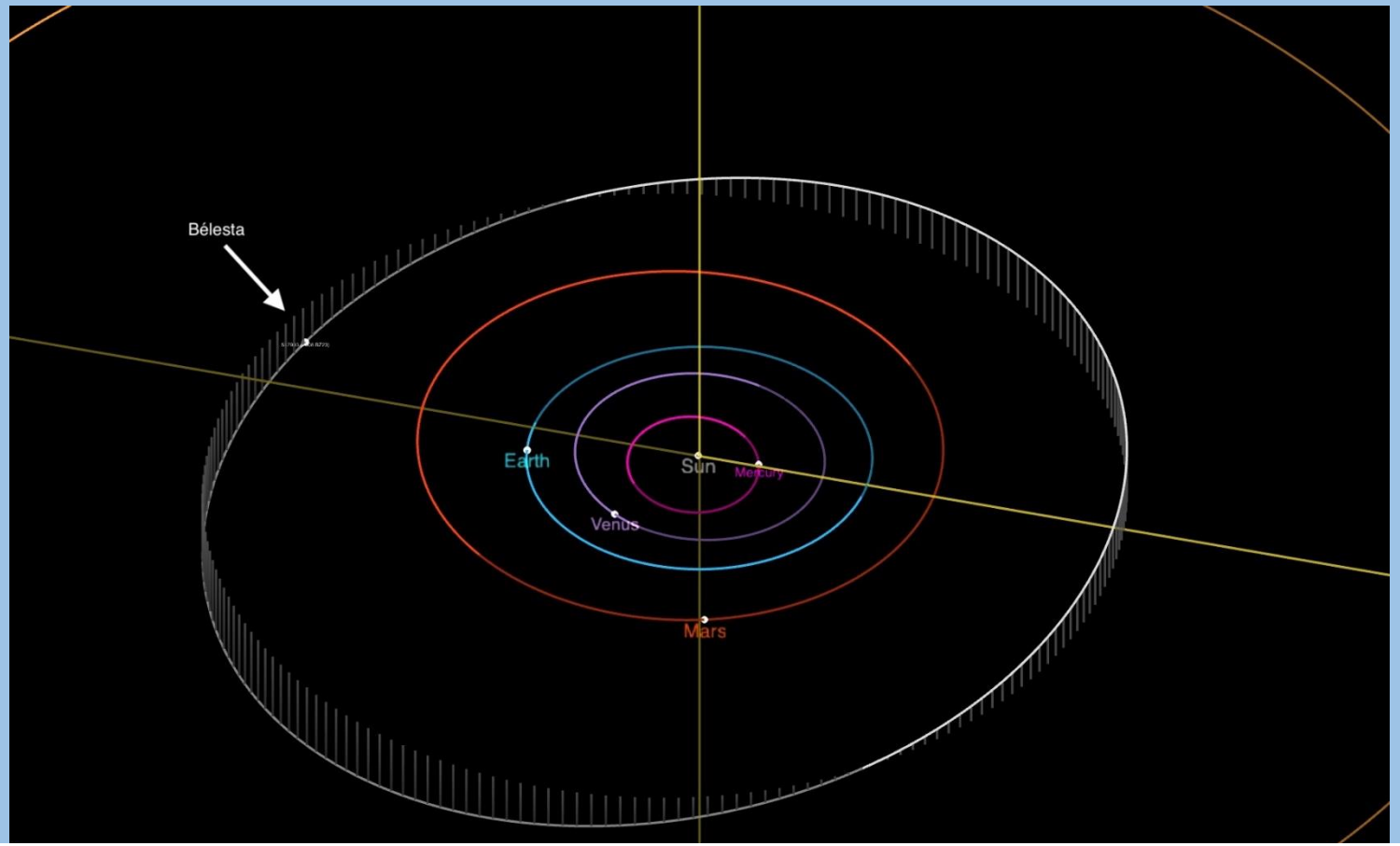
Display all designations for this object / Show naming citation

Perturbed ephemeris below is based on 9-opp elements from *MPO* 649582. Last observed on 2021 Sept. 8.

Discovery date : 2008 01 28 (*)
Discovery site : Belesta
Discoverer(s) : P. Martinez

v6901 [H=16.04]

Date	UT	R.A. (J2000)	Decl.	Delta	r	El.	Ph.	V	Sky Motion "/min	Sky Motion P.A.	Object Azi.	Object Alt.	Sun Alt.	Moon Phase	Moon Dist.	Moon Alt.
	h m s															
2022 11 01	000000	04 31 05.3	+15 19 53	1.937	2.835	149.2	10.3	20.4	0.40	275.9	314	+55	-61	0.47	123	-19
2022 11 11	000000	04 23 37.0	+15 30 01	1.885	2.838	160.6	6.6	20.2	0.52	275.1	332	+60	-63	0.94	014	+64
2022 11 21	000000	04 14 36.5	+15 41 51	1.859	2.841	171.7	2.9	20.0	0.59	275.3	356	+62	-66	0.11	135	-37
2022 12 01	000000	04 05 00.6	+15 56 14	1.864	2.844	172.3	2.7	19.9	0.59	276.4	021	+61	-68	0.54	079	-04
2022 12 11	000000	03 55 54.8	+16 14 15	1.897	2.847	161.2	6.4	20.2	0.53	278.9	042	+57	-69	0.93	050	+60



(597993) Belesta

Display all designations for this object / Show naming citation

Perturbed ephemeris below is based on 6-opp elements from *MPO* 685927. Last observed on 2022 Feb. 24.

Discovery date : 2008 01 28 (*)
Discovery site : Belesta
Discoverer(s) : P. Martinez

x7993 [H=16.92]

Date	UT	R.A. (J2000)	Decl.	Delta	r	El.	Ph.	V	Sky Motion "/min	Sky Motion P.A.	Object Azi.	Object Alt.	Sun Alt.	Moon Phase	Moon Dist.	Moon Alt.
	h m s															
2022 04 09	000000	09 54 18.6	+03 50 50	1.915	2.672	130.0	16.7	21.4	0.083	303.3	063	+31	-39	0.47	045	+17
2022 04 19	000000	09 54 38.0	+03 56 43	2.036	2.688	120.4	18.8	21.6	0.091	088.8	072	+24	-36	0.93	089	+22
2022 04 29	000000	09 57 21.2	+03 52 01	2.167	2.704	111.5	20.3	21.8	0.24	100.3	078	+18	-32	0.04	132	-39
2022 05 09	000000	10 02 12.5	+03 36 35	2.306	2.720	103.1	21.2	21.9	0.37	103.6	084	+11	-29	0.50	019	+16
2022 05 19	000000	10 08 52.7	+03 10 47	2.450	2.735	95.3	21.6	22.1	0.48	105.5	090	+05	-27	0.89	123	+11