



# ARCHIVOS

## DE

# CoRoT Y OMC



Almudena Velasco Trasmonte

14/09/2010



# Archivos de CoRoT y OMC

## Introducción

- Unidad de Archivos y Datos (CAB/INTA-CSIC):
  - Desarrollo de Archivos astronómicos en el marco del Observatorio Virtual
  - Ofrecen al usuario una forma eficaz de acceder a los datos conforme a unos criterios de búsqueda.

Laboratorio de Astrofísica Espacial y Física Fundamental

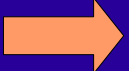
### The Scientific Data Centre at LAEFF

Archives	Theory	Services	Tools
<ul style="list-style-type: none"><li>▶ COROT Public Archive</li><li>▶ DUNES</li><li>▶ DSS-63</li><li>▶ GASPS</li><li>▶ GAUDI System</li><li>▶ INES System (IUE Archive)</li><li>▶ OMC Archive</li><li>▶ The Youngest protostars</li></ul>	<ul style="list-style-type: none"><li>▶ Theoretical Stellar Spectra</li><li>▶ Evolutionary Synthesis Models</li><li>▶ Theoretical Isochrones and Evolutionary Traces</li><li>▶ TSAP interface</li></ul>	<ul style="list-style-type: none"><li>▶ VO SED Analyzer (VOSA)</li></ul>	<ul style="list-style-type: none"><li>▶ Vizier Info Retriever</li></ul>

*The system is developed and maintained by LAEFF, which is part of the Space Science Division of INTA.*



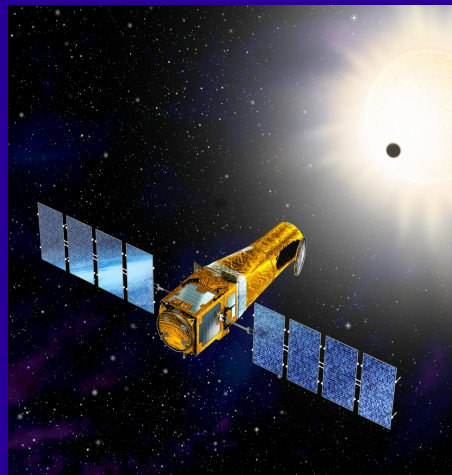
# Archivos de curvas de luz

- Gran conocimiento sobre fenómenos variables en el tiempo   
Muestreo de datos en este dominio es bastante incompleto.
- Situación cambiante gracias al lanzamiento de misiones que trabajan en el dominio del tiempo que están en funcionamiento o en proyecto.
  - COROT (lanzado en 2006): 60 000 estrellas
  - KEPLER (lanzado en 2009): > 100 000 estrellas
  - GAIA (se lanzará en 2012): 1000 millones de estrellas
  - Pan-STARRS, LSST, ...
- Resultados:
  - Descubrimiento de fenómenos desconocidos anteriormente variables en el tiempo.
  - Mejor comprensión de procesos ya conocidos.



## MISIÓN CoRoT ( Convección, Rotación y Tránsitos)

- Lanzado en Diciembre del 2006.
- Misión con dos objetivos principales:
  - Estudio del interior estelar (técnicas astrosismológicas).
  - Descubrimiento de planetas extrasolares (método de los tránsitos).



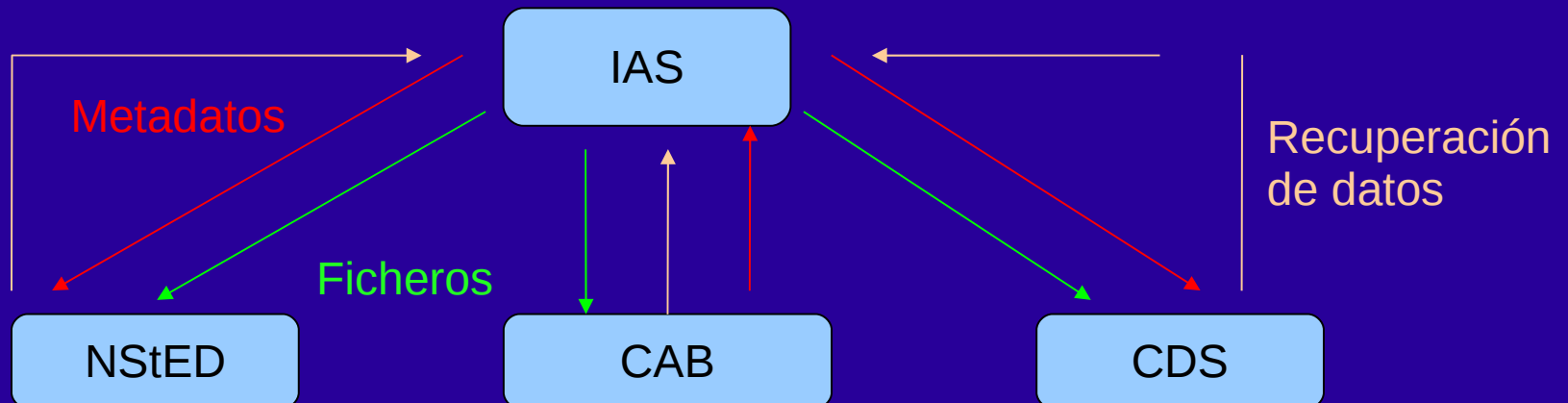
## El archivo de datos públicos de CoRoT en el CAB

- En operación desde Febrero del 2009 en:

<http://sdc.cab.inta-csic.es/corotfa/>

- Existen otros dos archivos públicos: CDS y NStED.

- Por consistencia, los datos públicos de CoRoT están centralizados en el IAS y solamente se transfieren los metadatos.





# Funcionalidades: sistema de noticias



## THE COROT PUBLIC ARCHIVE AT LAEFF: NEWS



## THE COROT PUBLIC ARCHIVE

This data server provides access to the COROT Archive at LAEFF.

### Resources

- ▶ Archive search and data retrieval
  - ▶ News
  - ▶ System Overview
  - ▶ Help Desk
  - ▶ Usage Statistics (private)
- ▶ Outreach/Divulgación
  - ▶ Transiting Exoplanets/ Planetas extrasolares detectados utiliz

The COROT Public Archive has been developed in the framework of the Sp: the CAB (CSIC -INTA).

If you use COROT data in your research, please include the following ackno

2010-03-25

### SUMMARY

RUN	TIME COVERAGE	ASTRO	EXO [MON/CHR]
IRa01	2007-01-31/2007-04-02	10	5972 / 3907
SRc01	2007-04-11/2007-05-09	10	5705 / 1268
LRc01	2007-05-11/2007-10-15	10	7689 / 3719
LRa01	2007-10-18/2008-03-03	10	3938 / 7466
SRa01	2008-03-05/2008-03-31	10	5468 / 2682
SRa02	2008-04-15 / 2008-09-07	10	6585 / 3680
LRc02	2008-10-08 / 2008-11-12	10	7585 / 3823
TOTAL	2007-01-31/2008-11-12	70	42942/26545

- ▶ The Corot Data Server now contains all available public runs including the both new one :
  - astero channel data set for the run LRc02 (10 light curves)
  - exo channel data set for the run SRa02 (10265 light curves)



# Fuentes del Archivo: Visión general



## COROT PUBLIC ARCHIVE AT LAEFF: SYSTEM OVERVIEW

1. Introduction
2. Functionalities
  - Archive search
  - Results from search

## INTRODUCTION

**COROT:** ("CONvection, ROTation and Transits"), is a mission with two principal objectives: the study of stellar interiors using asteroseismology techniques, and the discovery of extrasolar planets using the transit method. Successfully launched in December 2006, CoRoT has been providing the astronomical community with a number of revolutionary results on the internal structure of stars and on the physical properties of extrasolar planets.

The need for an archive for the CoRoT data was identified in the early phases of the project. In March 2003, LAEFF was selected, together with the CDS, to be responsible for the long-term storage and maintenance of the CoRoT Final Archive, which will contain all CoRoT data processed in a homogeneous and uniform way. This Final Archive will represent the legacy of the mission for future generations of researchers and educators. In addition to the Final Archive, efficient data management and data interchange mechanisms have been set up to work during the operational phase of CoRoT. In this framework two types of archives have been defined.

This data server provides access to the COROT

### THE CO

### Resources

- ▶ **Archive search and data retrieval**
- ▶ News
- ▶ **System Overview** ←
- ▶ Help Desk
- ▶ Usage Statistics (private)
  
- ▶ Outreach/Divulgación
  - ▶ Transiting Exoplanets/ Planetas extr

The COROT Public Archive has been developed in the framework of the Spanish Virtual Observatory project (AYA 2008-02156). The system is maintained by the Data Archive Unit of the CAB (CSIC -INTA).

If you use COROT data in your research, please include the following acknowledgement in any resulting publications: **"Based on data from the COROT Archive at LAEFF"**.



# Funcionalidades: sistema de ayuda



## THE COROT PUBLIC ARCHIVE AT LAEFF

This data server provides access to the COROT Archive at LAEFF.

### Resources

- ▶ **Archive search and data retrieval**
  - ▶ News
  - ▶ **System Overview**
  - ▶ Help Desk
  - ▶ Usage Statistics (private)
- 
- ▶ **Outreach/Divulgación**
    - ▶ **Transiting Exoplanets/ Planetas extrasolares detectados utilizando el método de tránsitos.**

The COROT Public Archive has been developed in the framework of the Spanish Virtual Observatory project (AYA 2008-02156). The system is maintained by the Data Archive Unit of the CAB (CSIC -INTA).

If you use COROT data in your research, please include the following acknowledgement in any resulting publications: **"Based on data from the COROT Archive at LAEFF"**.



# Funcionalidades: estadísticas de uso

## THE COROT ARCHIVE: USAGE STATISTICS

**DATE: from** 30 Jul 2009  
**to** 10 Mar 2010

\* Statistics available since: 30-07-2009



## THE COROT PUBLIC ARCHIVE AT

This data server provides access to the COROT Archive at LAEFF.

### Resources

- ▶ Archive search and data retrieval
  - ▶ News
  - ▶ System Overview
  - ▶ Help Desk
  - ▶ Usage Statistics (private) ←
- ▶ Outreach/Divulgación
  - ▶ Transiting Exoplanets/ Planetas extrasolares detectados utilizando COROT

The COROT Public Archive has been developed in the framework of the Spanish Space Agency (CSIC-INTA).

If you use COROT data in your research, please include the following acknowledgment:

## THE COROT ARCHIVE: USAGE STATISTICS

### SUMMARY (EXTERNAL ACCESS):

#### NUMBER OF QUERIES:

Number of queries		Number of Hosts
WEB	SSAP	
471	8100	1201

#### DOWNLOAD INFORMATION:

Number of downloads		Number of Hosts	Number of files		Data volume (MB)
WEB	SSAP		ASTRO	EXO	
30	33	25	27	120	1147

### SUMMARY (LOCAL ACCESS):



# Funcionalidades:Divulgación



## THE COROT PUBLIC ARCHIVE AT LAEFF

This data server provides access to the COROT Archive at LAEFF.

### Resources

- ▶ **Archive search and data retrieval**
- ▶ News
- ▶ System Overview
- ▶ Help Desk
- ▶ Usage Statistics (private)
  
- ▶ **Outreach/Divulgación** ←
- ▶ **Transiting Exoplanets/ Planetas extrasolares detectados utilizando el método de tránsitos.**

The COROT Public Archive has been developed in the framework of the Spanish Virtual Observatory project (AYA 2008-02156). The system is maintained by the Data Archive Unit of the CAB (CSIC -INTA).

If you use COROT data in your research, please include the following acknowledgement in any resulting publications: **"Based on data from the COROT Archive at LAEFF"**.


# Funcionalidades: Divulgación



THE COROT PUBLIC ARCHIVE AT LAEFF

Planetas Extrasolares detectados estableciendo el método de tránsitos

- COROT-Exo-1b
- COROT-Exo-2b
- COROT-Exo-3b
- COROT-Exo-4b
- COROT-Exo-5b
- COROT-Exo-6b
- COROT-Exo-7b



THE COROT PUBLIC ARCHIVE AT LAEFF

COROT-Exo-1b

Star and Planet Basic Parameters / Parámetros básicos de la estrella y el planeta

**Planet parameters**

$k=R_p/R_*$	$0.1388 \pm 0.0021$
$T_c$ [d]	$2454159.4532 \pm 0.0001$
$M_p^{1/3}/R_*$	$0.887 \pm 0.014$
$u_+$	$0.71 \pm 0.16$
$u_-$	$0.13 \pm 0.30$
$P$ [d]	$1.5089557 \pm 0.0000064$
$a/R_*$	$4.92 \pm 0.08$
$e$	0(fixed)
$i$ [deg]	$85.1 \pm 0.5$
$M_p$ [ $M_{Jup}$ ]	$1.03 \pm 0.12$
$R_p$ [ $R_{Jup}$ ]	$1.49 \pm 0.08$
$\rho_p$ [ $g\ cm^{-3}$ ]	$0.38 \pm 0.05$
$T_p$ [K]	$1898 \pm 50$

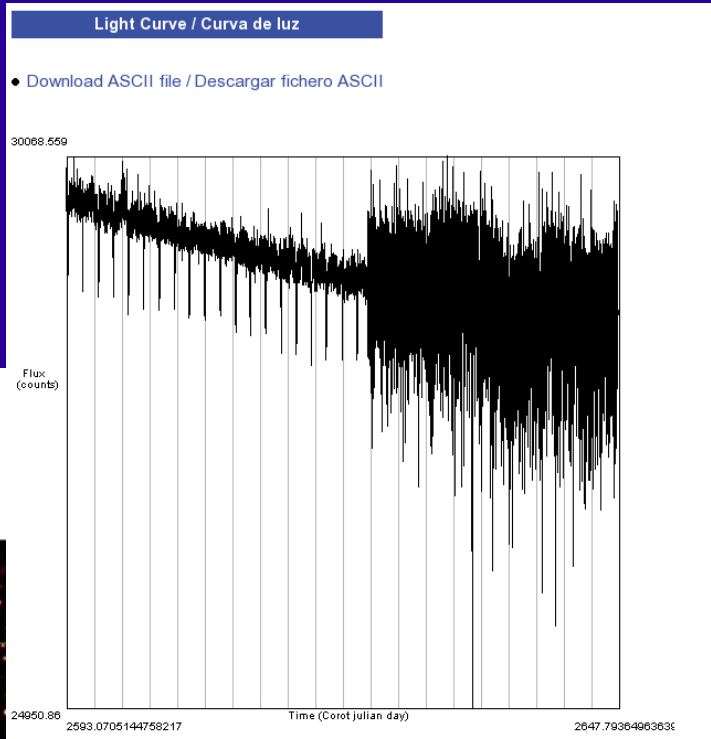
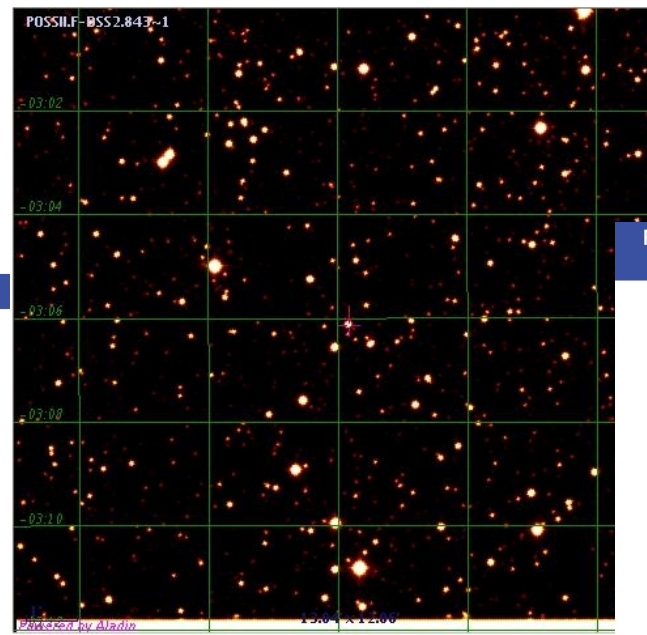
**Star parameters**

CorotID	0102890318
RA[J2000]	$6^h 48^m 19.17^s$
Dec[J2000]	$-3^{\circ} 06' 07.78''$
Vmag	13.6
$V_0$ [Kms $^{-1}$ ]	$23.354 \pm 0.008$
$K$ [m/s]	$188 \pm 11$
$v \sin i$ [Kms $^{-1}$ ]	$5.2 \pm 1.0$
$T_{eff}$ [K]	$5950 \pm 150$
$\log g$	$4.25 \pm 0.30$
[M/H]	$-0.3 \pm 0.25$
$M_*$ [ $M_{\odot}$ ]	$0.95 \pm 0.15$
$R_*$ [ $R_{\odot}$ ]	$1.11 \pm 0.05$

Published in / Publicado en:

Barge et al. 2008 A&A, 482, L17

Image / Imagen



Folded light curve / Curva de luz en fase

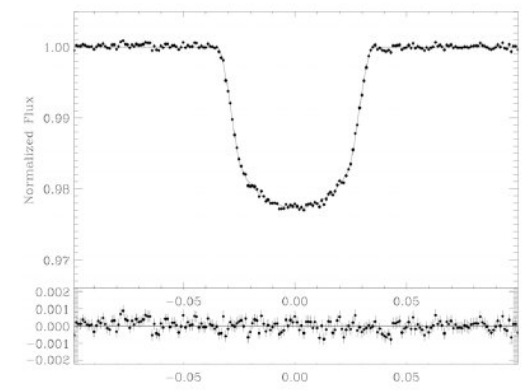


Fig. 1. Normalized and phase-folded light curve of the 34 best transits of CoRoT-Exo-1b (top); the residuals from the best-fit model (bottom). The bin size corresponds to 2.17 min, and the  $1\sigma$  error bars have been estimated from the dispersion of the data points inside each bin.



# Búsqueda y descarga de datos



## THE COROT PUBLIC ARCHIVE AT LAEFF

This data server provides access to the COROT Archive at LAEFF.

### Resources

- ▶ **Archive search and data retrieval** ←
- ▶ News
- ▶ System Overview
- ▶ Help Desk
- ▶ Usage Statistics (private)
  
- ▶ Outreach/Divulgación
  - ▶ Transiting Exoplanets/ Planetas extrasolares detectados utilizando el método de tránsitos.

The COROT Public Archive has been developed in the framework of the Spanish Virtual Observatory project (AYA 2008-02156). The system is maintained by the Data Archive Unit of the CAB (CSIC -INTA).

If you use COROT data in your research, please include the following acknowledgement in any resulting publications: **"Based on data from the COROT Archive at LAEFF"**.



# Aplicación Web: formulario de consulta



## THE COROT PUBLIC ARCHIVE AT LAEFF

Run: 

- All
- IRa01
- SRc01
- LRc01
- LRa01
- SRa01
- LRc02
- SRa02

### Data Type

**Asteroseismology**  
Light curves

**Exoplanet**  
Monochromatic light Curves   
Chromatic Light Curves

### Search

Corot ID:

211599141

Object ID:

HD 50064  
HD 49933

Coordinates List:

102.708 -0.54088

Radius:  deg

\*Coordinates Format:  
deg deg or hh:mm:ss dd:mm:ss

\* 'Object Id' is used only for asteroseismology data.

### Light Curve Filter Criteria

Obs Date:

From:  -  -

To:  -  -

Vmag:  -

B-V:  -

Spectype:

Lumclass:

Variability class **(Important note):**

(Only for exoplanet data)

Relative probabilities for the three most likely classes.

### Select Output:

Format	Order By	Show	Page to show
<input type="button" value="HTML"/>	<input type="button" value="Corot ID"/>	<input type="button" value="50"/>	<input type="text"/>



# Resultados: Descargas múltiples



## THE COROT PUBLIC ARCHIVE AT LAEFF

Found 4 records, displaying page 1 of 1

Retrieval Format:  Mark Fits:  **Mark ASCII:  RAW:  HEL:  HELREG:**

Retrieve Marked Data

### ASTEROSEISMOLOGY

RUN	COROT ID	OBJECT ID	RA(J2000)	DE(J2000)	START DATE	END DATE	SpType	LUM	VMAG	B-V	TEFF	GRAVITY	METAL	BROWSE	FETCH/MARK	FETCH/MARK	VO SERVICES
LRa01	14	<a href="#">HD 50064</a>	102.892	0.29735	2007-10-18	2008-03-03	B6	I	8.29	0.81	27633.0			FITS	FITS <input type="checkbox"/>	raw <input type="checkbox"/> hel <input type="checkbox"/> helreg <input type="checkbox"/>	17
LRa01	20	<a href="#">HD 49933</a>	102.708	-0.54088	2007-10-18	2008-03-03	F2	V	5.77	0.39	6467.0	4.27	-0.37	FITS	FITS <input type="checkbox"/>	raw <input type="checkbox"/> hel <input type="checkbox"/> helreg <input type="checkbox"/>	8
IRa01	20	<a href="#">HD 49933</a>	102.708	-0.54088	2007-01-31	2007-04-02	F2	V	5.77	0.39	6467.0	4.27	-0.37	FITS	FITS <input type="checkbox"/>	raw <input type="checkbox"/> hel <input type="checkbox"/> helreg <input type="checkbox"/>	8

### EXOPLANET

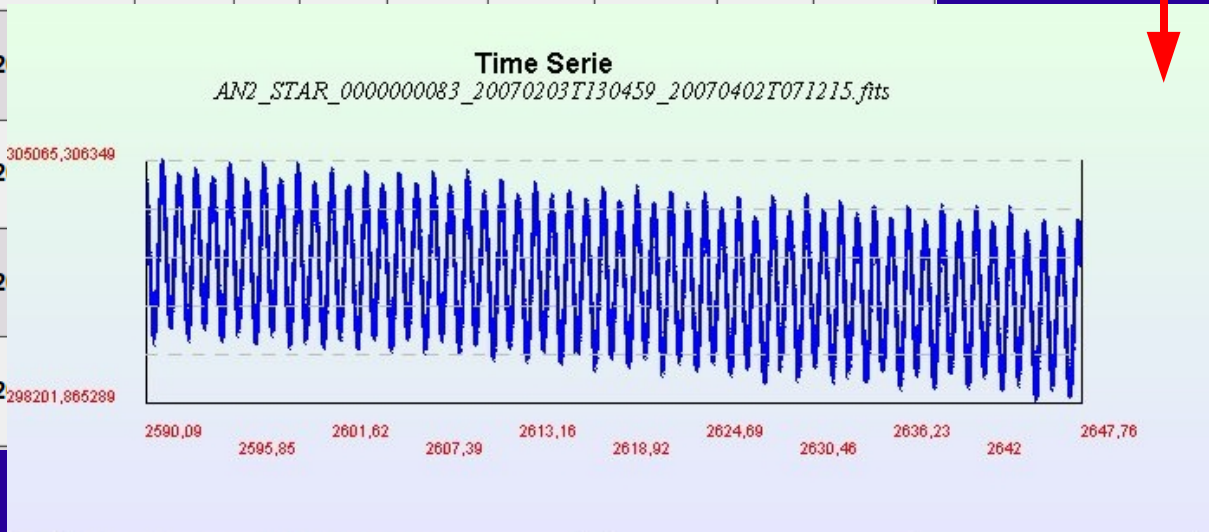
RUN	COROT ID	TYPE	RA(J2000)	DE(J2000)	START DATE	END DATE	SpType	LUM	VMAG	B-V	BROWSE	FETCH/MARK	VAR1	PROB1	VAR2	PROB2	VAR3	PROB3	VO SERVICES
SRc01	211599141	chromatic	284.681	4.3994	2007-04-19	2007-05-09			15.3		FITS	FITS <input type="checkbox"/>	SPDS	0.974025	SDBV	0.01998	FUORI	0.001998	190
SRc01	211601089	monochromatic	284.747	4.02211	2007-04-19	2007-05-09			17.9		FITS	FITS <input type="checkbox"/>	SPDS	0.2997	LBV	0.1221	HAEBE	0.110075	212





# Resultados: Visualizador de curvas de luz

RUN	COROT ID	OBJECT ID	RA(J2000)	DE(J2000)	START DATE	END DATE	SpType	LUM	VMAG	B-V	TEFF	GRAVITY	METAL	BROWSE
LRa01	1	HD 49808	102.555	0.13704	2007-10-18	2008-03-03	F0	V	7.98	0.38	7117.0	3.6	-0.19	FITS
LRa01	14	HD 50064	102.892	0.29735	2007-10-18	2								
LRa01	18	HD 49385	102.048	0.30497	2007-10-18	2								
LRa01	20	HD 49933	102.708	-0.54088	2007-10-18	2								
IRa01	20	HD 49933	102.708	-0.54088	2007-01-31	2								



HLFCCDDID= 'A1R' /ref. of the half ccd  
ALPHA = 103.654 /Right ascension of the star  
DELTA = -0.452640 /Declination of the star  
STARNAME= 'HD 50773' /Usual name of the star (COROT)  
MAGNIT\_V= 9.36000 /Star mag. V (COROTSKY)  
ABSM\_V = 1.75000 /Absolute. star mag. V (COROTSKY)  
COL\_B\_V= 0.140000 /Color difference (COROTSKY)  
SPECTYPE= 'A' /Spectral type (COROTSKY)  
SUBCLASS= '2' /Spectral subclass (COROTSKY)  
LUMCLASS= ' ' /Luminosity class (COROTSKY)  
TEFF = 8421.00 /Star effective temperature (COROT)  
GRAVITY = 0.00000 /Star gravity (COROTSKY)  
METAL = 0.00000 /Star metallicity (COROTSKY), dex  
LC\_MEAN = 301667. /Mean of the lightcurve, electrons  
LC\_RMS = 1522.51 /RMS of the light curve, electrons  
NBHOTPIX= -1 /Number of hot pixels detected in the  
END

Legend colour	Red
Set Dots Colour	Blue
Dot Format	Point
Dot Union	Yes
Reset	Zoom
X-Axis	1 - 'DATEJDHELREG'
Y-Axis	2 - 'FLUXHELREG'
Xtension	3 - 'HELREG'
Show Data	Plot



# Búsquedas por tipo de objeto



## Light Curve Filter Criteria

Obs Date: From: [ ] - [ ] - [ ] To: [ ] - [ ] - [ ]  
 Vmag: [ ] - [ ] B-V: [ ] - [ ]

Spectype:

O  
B  
A  
F  
G  
K

Lumclass:

I  
II  
III  
II-III  
IV

Variability class **(Important note):**  
 (Only for exoplanet data)

ACT [Activity]  
 BCEP [Beta-Cephei stars]  
 BE [Variable Be-stars]  
 CLCEP [Classical Cepheids]  
 CP [Chemically peculiar stars]

Relative probabilities for the three most likely classes.



## Select Output:

Format: HTML Order By: Probability

Found 69487 records, displaying page 1 of 1390

Retrieval Format: zip Mark Fits:

Retrieve Marked Data

## EXOPLANET

RUN	COROT ID	TYPE	RA(J2000)	DE(J2000)	START DATE	END DATE	SpType	LUM	VMAG	B-V	BROWSE	FETCH/MARK	VAR1	PROB1	VAR2	PROB2	VAR3	PROB3
LRc01	100396342	monochromatic	290.557	1.70154	2007-05-16	2007-10-05	K0	IV	15.744	1.247	FITS	FITS <input type="checkbox"/>	ACT	0.998216	MISC	0.00174	BE	4.3E-5
LRc01	100400072	monochromatic	290.566	1.73574	2007-05-16	2007-10-05	G5	IV	16.215	1.057	FITS	FITS <input type="checkbox"/>	ACT	0.998586	MISC	0.001138	BE	2.76E-4
LRc01	100401721	monochromatic	290.569	1.66592	2007-05-16	2007-10-05	K5	V	15.684	1.387	FITS	FITS <input type="checkbox"/>	BE	0.987185	MISC	0.012815	ECL	0.001138
LRc01	100402467	monochromatic	290.571	1.64474	2007-05-16	2007-10-05	M0	V	15.139	1.562	FITS	FITS <input type="checkbox"/>	ACT	0.999821	MISC	1.7E-4	BE	9.0E-6
LRc01	100405256	monochromatic	290.575	1.63482	2007-05-16	2007-10-05	M0	V	15.809	1.663	FITS	FITS <input type="checkbox"/>	MISC	0.648002	ACT	0.341214	BE	0.010784
LRc01	100405261	monochromatic	290.575	1.73144	2007-05-16	2007-10-05	K0	IV	15.705	1.146	FITS	FITS <input type="checkbox"/>	ACT	0.99866	MISC	0.001298	BE	4.2E-5
LRc01	100406897	monochromatic	290.577	1.72211	2007-05-16	2007-10-05	K5	V	15.505	1.531	FITS	FITS <input type="checkbox"/>	MISC	0.775133	ACT	0.195211	BE	0.029447
LRc01	100407529	monochromatic	290.578	1.64558	2007-05-16	2007-10-05	M0	V	16.369	1.632	FITS	FITS <input type="checkbox"/>	ACT	0.550124	MISC	0.442507	BE	0.007369
LRc01	100408489	monochromatic	290.58	1.66347	2007-05-16	2007-10-05	M0	V	15.924	1.663	FITS	FITS <input type="checkbox"/>	ACT	0.995317	MISC	0.004482	BE	2.01E-4
LRc01	100411234	monochromatic	290.584	1.62374	2007-05-16	2007-10-05	K0	V	16.035	1.036	FITS	FITS <input type="checkbox"/>	BE	0.827168	MISC	0.149501	GDOR	0.023189
LRc01	100411312	monochromatic	290.584	1.73514	2007-05-16	2007-10-05	M0	V	16.549	1.638	FITS	FITS <input type="checkbox"/>	ACT	0.999315	MISC	6.16E-4	BE	6.9E-5
LRc01	100411979	chromatic	290.585	1.69915	2007-05-16	2007-10-05	M0	V	14.875	1.722	FITS	FITS <input type="checkbox"/>	ACT	0.899614	MISC	0.100022	BE	3.65E-4






# Herramienta VO Discovery

RUN	COROT ID	TYPE	RA(J2000)	DE(J2000)	START DATE	END DATE	SpType	LUM	VMAG	B-V	BROWSE	FETCH/MARK	VAR1	PROB1	VAR2	PROB2	VAR3	PROB3	VO SERVICES
SRc01	211600232	monochromatic	284.718	4.37014	2007-04-19	2007-05-09			19.7		FITS	FITS <input type="checkbox"/>	PVSG	0.23715	CP	0.19221	TTAU	0.18178	165
SRc01	211602304	chromatic	284.785	3.45467	2007-04-19	2007-05-09			16.1		FITS	FITS <input type="checkbox"/>	SPDS	0.531944	PVSG	0.16229	ELL	0.102485	207
SRc01	211602333	monochromatic	284.785																
SRc01	211603123	monochromatic	284.81																
SRc01	211606232	monochromatic	284.918																
SRc01	211606523	monochromatic	284.928																
SRc01	211608236	monochromatic	284.987																

Mozilla Firefox

http://giacconi-dev/corotfa/jsp/voresources.jsp?corotid=211600232

Spanish Virtual Observatory :: SVO http://giacconi-dev/corotfa/jsp/voresources.jsp?corotid=211600232



THE COROT PUBLIC ARCHIVE AT LAEFF

COROT ID	RA	DEC	RAD
211600232	284.718	4.37014	5 arcsec

### VO SERVICES

#### CONE

Name	URLs
2MASS-PSC(CDS)	<a href="http://vizier.u-strasbg.fr/viz-bin/votable/-dtd/-A?-source=2MASS&amp;RA=284.7178&amp;DEC=4.370137&amp;SR=0.001388889">http://vizier.u-strasbg.fr/viz-bin/votable/-dtd/-A?-source=2MASS&amp;RA=284.7178&amp;DEC=4.370137&amp;SR=0.001388889</a>
GSC22(CDS)	<a href="http://vizier.u-strasbg.fr/viz-bin/votable/-dtd/-A?-source=GSC2&amp;RA=284.7178&amp;DEC=4.370137&amp;SR=0.001388889">http://vizier.u-strasbg.fr/viz-bin/votable/-dtd/-A?-source=GSC2&amp;RA=284.7178&amp;DEC=4.370137&amp;SR=0.001388889</a>
MSX	<a href="http://heasarc.gsfc.nasa.gov/cgi-bin/vo/cone/coneGet.pl?table=msxpsc&amp;RA=284.7178&amp;DEC=4.370137&amp;SR=0.001388889">http://heasarc.gsfc.nasa.gov/cgi-bin/vo/cone/coneGet.pl?table=msxpsc&amp;RA=284.7178&amp;DEC=4.370137&amp;SR=0.001388889</a>
NOMAD	<a href="http://www.nofs.navy.mil/cgi-bin/vo_cone.cgi?CAT=NOMAD&amp;RA=284.7178&amp;DEC=4.370137&amp;SR=0.001388889">http://www.nofs.navy.mil/cgi-bin/vo_cone.cgi?CAT=NOMAD&amp;RA=284.7178&amp;DEC=4.370137&amp;SR=0.001388889</a>
USNO-A2	<a href="http://www.nofs.navy.mil/cgi-bin/vo_cone.cgi?CAT=USNO-A2&amp;RA=284.7178&amp;DEC=4.370137&amp;SR=0.001388889">http://www.nofs.navy.mil/cgi-bin/vo_cone.cgi?CAT=USNO-A2&amp;RA=284.7178&amp;DEC=4.370137&amp;SR=0.001388889</a>
USNO-A2.0	<a href="http://archive.noao.edu/nvo/usno.php?cat=a&amp;RA=284.7178&amp;DEC=4.370137&amp;SR=0.001388889">http://archive.noao.edu/nvo/usno.php?cat=a&amp;RA=284.7178&amp;DEC=4.370137&amp;SR=0.001388889</a>
USNO-A2.0 CDS	<a href="http://vizier.u-strasbg.fr/viz-bin/votable/-dtd/-A?-source=USNO2&amp;RA=284.7178&amp;DEC=4.370137&amp;SR=0.001388889">http://vizier.u-strasbg.fr/viz-bin/votable/-dtd/-A?-source=USNO2&amp;RA=284.7178&amp;DEC=4.370137&amp;SR=0.001388889</a>
USNO-B1	<a href="http://www.nofs.navy.mil/cgi-bin/vo_cone.cgi?CAT=USNO-B1&amp;RA=284.7178&amp;DEC=4.370137&amp;SR=0.001388889">http://www.nofs.navy.mil/cgi-bin/vo_cone.cgi?CAT=USNO-B1&amp;RA=284.7178&amp;DEC=4.370137&amp;SR=0.001388889</a>
USNO-SA2.0	<a href="http://archive.noao.edu/nvo/usno.php?cat=sa&amp;RA=284.7178&amp;DEC=4.370137&amp;SR=0.001388889">http://archive.noao.edu/nvo/usno.php?cat=sa&amp;RA=284.7178&amp;DEC=4.370137&amp;SR=0.001388889</a>
N/A	<a href="http://casu.asi.cam.ac.uk/ag/CMC14-catalogue/SubmitCone?RA=284.7178&amp;DEC=4.370137&amp;SR=0.001388889">http://casu.asi.cam.ac.uk/ag/CMC14-catalogue/SubmitCone?RA=284.7178&amp;DEC=4.370137&amp;SR=0.001388889</a>

#### SIAP

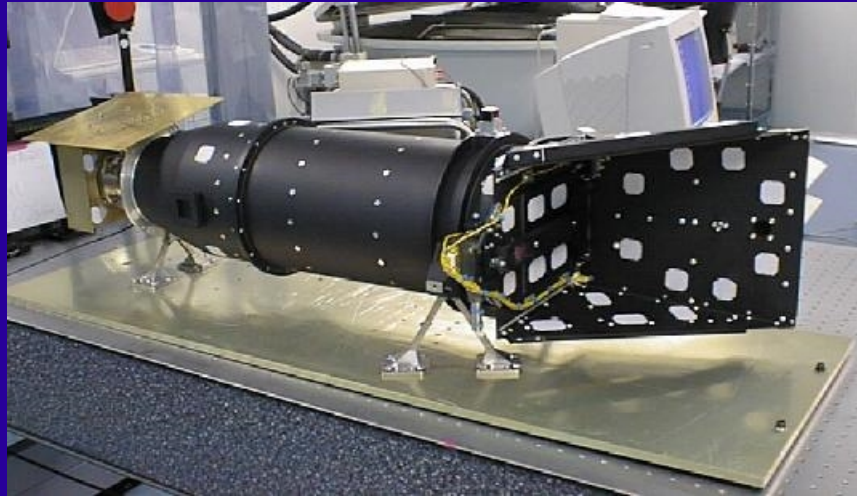
Name	URLs
2MASS ASKY AT	<a href="http://irsa.ipac.caltech.edu/cgi-bin/2MASS/IM/nph-im?ds=asky&amp;atdir=/ti06&amp;dh=990810s&amp;scan=055&amp;name=hi0550080.fits">http://irsa.ipac.caltech.edu/cgi-bin/2MASS/IM/nph-im?ds=asky&amp;atdir=/ti06&amp;dh=990810s&amp;scan=055&amp;name=hi0550080.fits</a> <a href="http://irsa.ipac.caltech.edu/cgi-bin/2MASS/IM/nph-im?ds=asky&amp;atdir=/ti06&amp;dh=990810s&amp;scan=055&amp;name=ji0550080.fits">http://irsa.ipac.caltech.edu/cgi-bin/2MASS/IM/nph-im?ds=asky&amp;atdir=/ti06&amp;dh=990810s&amp;scan=055&amp;name=ji0550080.fits</a> <a href="http://irsa.ipac.caltech.edu/cgi-bin/2MASS/IM/nph-im_key?ds=asky&amp;key=845901&amp;band=H">http://irsa.ipac.caltech.edu/cgi-bin/2MASS/IM/nph-im_key?ds=asky&amp;key=845901&amp;band=H</a> <a href="http://irsa.ipac.caltech.edu/cgi-bin/2MASS/IM/nph-im_key?ds=asky&amp;key=845901&amp;band=J">http://irsa.ipac.caltech.edu/cgi-bin/2MASS/IM/nph-im_key?ds=asky&amp;key=845901&amp;band=J</a> <a href="http://irsa.ipac.caltech.edu/cgi-bin/2MASS/IM/nph-im_key?ds=asky&amp;key=845901&amp;band=K">http://irsa.ipac.caltech.edu/cgi-bin/2MASS/IM/nph-im_key?ds=asky&amp;key=845901&amp;band=K</a>
	<a href="http://aladin.u-strasbg.fr/cgi-bin/nph-HTTP3.cgi?out=image&amp;position=280.000000+0.000000&amp;survey=IRAS-IRIS&amp;color=100MU&amp;mode=view">http://aladin.u-strasbg.fr/cgi-bin/nph-HTTP3.cgi?out=image&amp;position=280.000000+0.000000&amp;survey=IRAS-IRIS&amp;color=100MU&amp;mode=view</a> <a href="http://aladin.u-strasbg.fr/cgi-bin/nph-HTTP3.cgi?out=image&amp;position=280.000000+0.000000&amp;survey=IRAS-IRIS&amp;color=12MU&amp;mode=view">http://aladin.u-strasbg.fr/cgi-bin/nph-HTTP3.cgi?out=image&amp;position=280.000000+0.000000&amp;survey=IRAS-IRIS&amp;color=12MU&amp;mode=view</a> <a href="http://aladin.u-strasbg.fr/cgi-bin/nph-HTTP3.cgi?out=image&amp;position=280.000000+0.000000&amp;survey=IRAS-IRIS&amp;color=25MU&amp;mode=view">http://aladin.u-strasbg.fr/cgi-bin/nph-HTTP3.cgi?out=image&amp;position=280.000000+0.000000&amp;survey=IRAS-IRIS&amp;color=25MU&amp;mode=view</a> <a href="http://aladin.u-strasbg.fr/cgi-bin/nph-HTTP3.cgi?out=image&amp;position=280.000000+0.000000&amp;survey=IRAS-IRIS&amp;color=60MU&amp;mode=view">http://aladin.u-strasbg.fr/cgi-bin/nph-HTTP3.cgi?out=image&amp;position=280.000000+0.000000&amp;survey=IRAS-IRIS&amp;color=60MU&amp;mode=view</a> <a href="http://aladin.u-strasbg.fr/cgi-bin/nph-HTTP3.cgi?out=image&amp;position=280.000000+10.000000&amp;survey=IRAS-IRIS&amp;color=100MU&amp;mode=view">http://aladin.u-strasbg.fr/cgi-bin/nph-HTTP3.cgi?out=image&amp;position=280.000000+10.000000&amp;survey=IRAS-IRIS&amp;color=100MU&amp;mode=view</a>



## Herramienta VO Discovery

- El sistema proporciona acceso a la información (espectros, imágenes y catálogos) disponibles en los servicios VO.
- > 40 servicios VO que contienen espectros
- > 170 servicios VO que contienen imágenes
- Miles de catálogos (inclusive Vizier)
- Actualmente, solo para IRa01 y SRc01


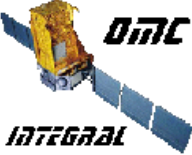
## ARCHIVO OMC



- Cámara de monitorización óptica (OMC) ➡ Satélite INTEGRAL
- Objetivo: observación en el rango óptico de las fuentes de altas energías.
- Tras 6 años ➡ más de 100 000 objetos de interés científico
- Archivo Científico de OMC ➡ <http://sdc.cab.inta-csic.es/omc/>



# Recursos ofrecidos : Cambio de contraseña



Not logged in Log in

## The OMC Archive

This data server provides access to the INTEGRAL Optical Monitoring Camera (OMC) Archive.

**ARCHIVE NEWS**

The OMC Data Server includes now all data from revolutions 11-821 (publicly available on Aug 18, 2010) and Core Programme OMC data up to revolution 940.

### Resources

- ▶ Archive search and data retrieval
- ▶ News
- ▶ System Overview
- ▶ Help Desk
- ▶ Project Documentation
- ▶ **Change your password** ←


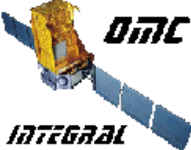
The system is developed and maintained by [LAEFF](#), based on data pre-processed by [ISDC](#). LAEFF is part of the Space Science Division of [INTA](#).  
If you use OMC data in your research, please include the following acknowledgement in any resulting publications:  
**"Based on data from the OMC Archive at LAEFF, pre-processed by ISDC".**

---

Version 2.3 - October 2006 © LAEFF-INTA Home - LAEFF



# OMC: formulario de búsqueda



Not logged in Log in

**Object ID:**  Enviar consulta [Reset](#)

Examples: IOMC 2677000065, IOMC 26770000%, V1011 Cyg

---

**Object List:**

**Object Type:**

- [Blue object] Blue object
- [Composite object] Association of Stars
- [Composite object] Cataclysmic Var. AM Her type
- [Composite object] Cataclysmic Var. DQ Her type
- [Composite object] Cataclysmic Variable Star
- [Composite object] Cluster of Galaxies

Magnitude Range:  < V <

---

**Position:** R.A.:    DEC.:    Radius:

**Date:** From:    To:

**Sampling Time:**  630 seconds. **Centroid method:**  Brightest pixel  Source coordinates

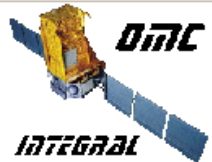
**S. Star:**  **Num. Points:** More than  points.

---

**Output Format:**  HTML **Order Output By:**  **Number of Results per Page:**  50 **Page to Show:**  1



# OMC: Resultados



Not logged in

Log in

2 Objects found matching your criteria (Sampling time: 630\* seconds. Centroid method: Source coordinates)

\* This sampling time implies the rejection of shots with exposure time shorter than 20s

Objects 1 to 2 (Page 1 of 1)

New Search

Download selected in zip format

Mark all:

Light Curves:

Object ID	OMC ID	RA (2000.0)	DEC (2000.0)	V	S.Star	Prio.	Init Time	End Time	Points	N.C.	Light Curve		
IOMC 2677000046	2677000046	297.05833333	34.86666667	16.4		7	2002-11-16 20:19:45	2009-05-22 11:28:29	2061 <span style="color: green;">●</span>		Plot	Header	Fetch <input type="checkbox"/>
V1011 Cyg	2677000065	298.8125	34.20833333	12.2		6	2002-11-16 20:19:45	2009-05-22 11:28:29	2088 <span style="color: green;">●</span>		Plot	Header	Fetch <input type="checkbox"/>

Objects 1 to 2 (Page 1 of 1)

New Search





# Visualización: Header y curva de luz

Header listing for HDU #0:

```

SIMPLE = T / Java FITS: Thu Sep 09 16:06:10 UTC 2010
BITPIX = 8 / number of bits per data pixel
NAXIS = 0 / number of data axes
EXTEND = T / FITS dataset may contain extensions
COMMENT FITS (Flexible Image Transport System) format is defined in 'Astronomy
COMMENT and Astrophysics', volume 376, page 359; bibcode: 2001A&A...376..359H
COMMENT
COMMENT This file was written by the ISDC Data Access Layer (DAL) version
COMMENT 3.0.2. For Questions or further information contact the ISDC at:
COMMENT
COMMENT INTEGRAL Science Data Centre
COMMENT Chemin d'Ecogia 16
COMMENT CH-1290 Versoix, Switzerland
COMMENT
COMMENT The data structures within make use of the FITS Hierarchical
COMMENT Grouping Convention by Jennings, Pence, Folk and Schlesinger. See
COMMENT The NASA/GSFC FITS Users Guide Version 4.0 for more information.
COMMENT Cfitsio version: 2.490000
END
  
```

Header listing for HDU #1:

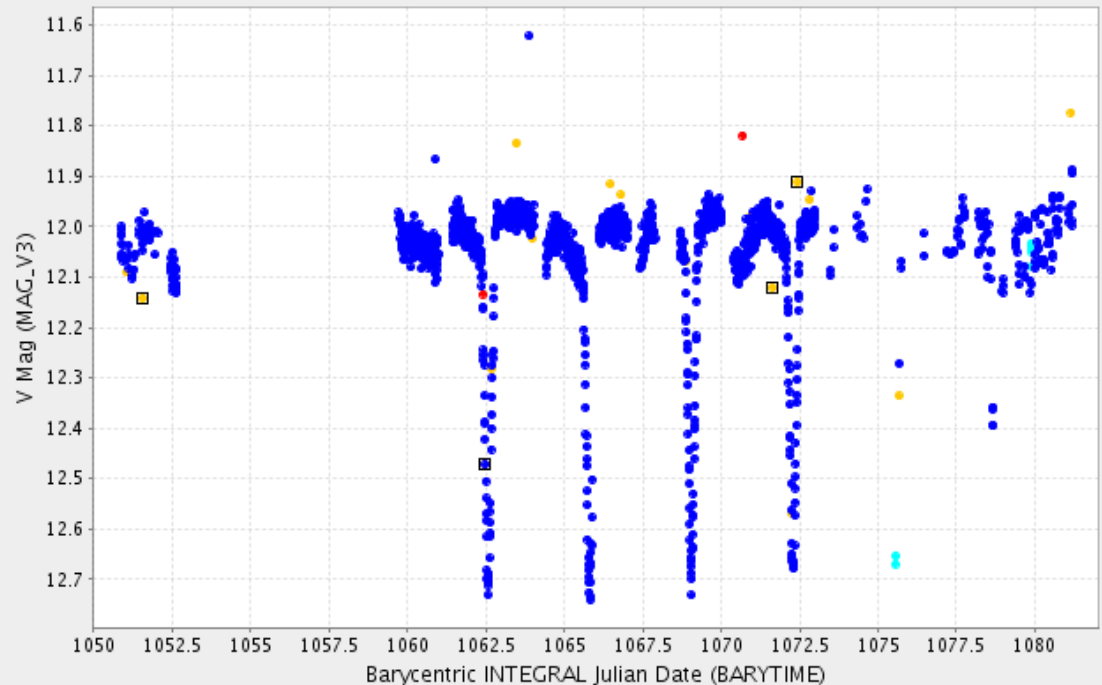
```

XTENSION= 'BINTABLE' / binary table extension
BITPIX = 8 / 8-bit bytes
NAXIS = 2 / 2-dimensional binary table
NAXIS1 = 243 / width of table in bytes
NAXIS2 = 2088 / number of rows in table
PCOUNT = 0 / size of special data area
GCOUNT = 1 / one data group (required keyword)
TFIELDS = 45 / number of fields in each row
TTYPE1 = 'REVOL' / label for field 1
TFORM1 = 'I' / data format of field: 2-byte INTEGER
TTYPE2 = 'SWID' / label for field 2
TFORM2 = 'A' / data format of field: ASCII Character
TTYPE3 = 'TFIRST' / label for field 3
TFORM3 = 'D' / data format of field: 8-byte DOUBLE
TUNIT3 = 'd' / physical unit of field
TTYPE4 = 'BARYTIME' / label for field 4
TFORM4 = 'D' / data format of field: 8-byte DOUBLE
TUNIT4 = 'd' / physical unit of field
TTYPE5 = 'TELAPSE' / label for field 5
TFORM5 = 'D' / data format of field: 8-byte DOUBLE
TUNIT5 = 's' / physical unit of field
TTYPE6 = 'EXPOSURE' / label for field 6
TFORM6 = 'D' / data format of field: 8-byte DOUBLE
TUNIT6 = 's' / physical unit of field
TTYPE7 = 'SHOTTYPE' / label for field 7
TFORM7 = 'I' / data format of field: 2-byte INTEGER
TTYPE8 = 'OMC_ID' / label for field 8
TFORM8 = 'A' / data format of field: ASCII Character
TTYPE9 = 'TYPE_TAR' / label for field 9
TFORM9 = 'I' / data format of field: 2-byte INTEGER
TTYPE10 = 'RA_OBJ' / label for field 10
  
```

Terminado

IOMC\_2677000065.fits

Plotting 2088 points.



● Good  
  Centroid too far from source coord.  
 ▲ Brightest pixel forced  
 ● Bad Centroid  
 ● Bad PSF  
 ● Bad Pixels  
 ● Bad Background  
 ● Mosaic

	Min.	Max.
<b>IJD</b>	<b>1050</b>	<b>1082</b>
<b>Mag</b>		
	Zoom	Reset



*FIN*

Almudena Velasco Trasmonte  
14/09/2010