

IAS is the official archive repository for the CoRoT mission data. In addition of data archiving in a secure way, IAS proposes several interfaces corresponding to different level of data and different kind of users. We present here the recent changes made aiming at improving our interfaces with real added-value services related to the available data. In particular, we provide a set of web services which permit to give access to additional informations on a given target such as online lightcurve plotting or periodogram computing and plotting. In addition, future developments are outlined.



<http://idoc-corot.ias.u-psud.fr>

## An ergonomic interface to follow observations and news on the CoRoT archives

The **timeline** shows all the runs observed by Corot and displays information on each run (duration of the run, number of stars observed,...)



By subscribing to **RSS feeds**, you can monitor real-time news on the archive (new products, new services,...)

CoRoT N2 Archive News RSS subscribe (How to)

- News 64 : release of the N3 Variable Classifier Products for the run LRC06. May 09th, 2011
- News 63 : release of the astero channel data set for the run LRA04 (version 3.0). April 08th, 2011
- News 62 : release of the exo channel data set (version 2.2) for the run LRC06. March 10th, 2011
- News 61 : release of the first version of N2 light curves from images (version 1.2) for the run LRC06. March 09th, 2011
- News 60 : release of the astero channel data set for the run LRC06 (version 3.0). January 20th, 2011

Subscribe directly here : [http://idoc-corotn2-public.ias.u-psud.fr/jsp/rss/news\\_private.xml](http://idoc-corotn2-public.ias.u-psud.fr/jsp/rss/news_private.xml)

## Additional features

**Selection based on star pulsation characteristics**  
(Informations extracted from N3 products)  
For each star, there are a class code ('classcode1-3') and corresponding probabilities ('classprob1-3')

**Export search results in a csv format**  
This allows for data mining on CoRoT metadata

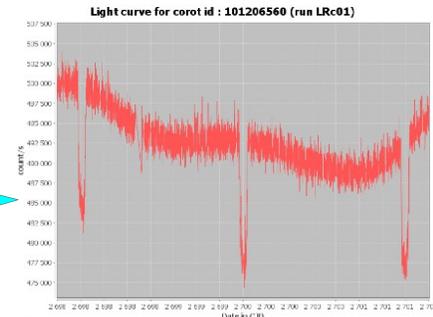
Selection based on the class of variability of the star

Declination from: CHOOSE FROM  
Magnitude difference (B-V) from: CHOOSE FROM  
Spectral type from: CHOOSE FROM  
Spectral type: CHOOSE FROM  
Luminosity class: CHOOSE FROM  
Long Run (end initial Run): CHOOSE FROM  
Short run: CHOOSE FROM  
Run: CHOOSE FROM  
Variability class: CHOOSE FROM  
Type of variability: CHOOSE FROM  
Probability of variability: CHOOSE FROM

## A set of added value services to CoRoT data Example with corot-2b

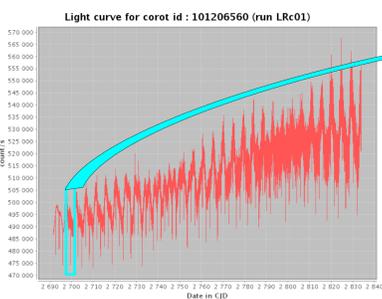
**Lightcurve Service** allows direct visualization of the light curve. It is possible to select an area with the mouse to zoom in a part of the curve.

This service was developed as a RESTful web service and can be called from an external program.



**VOTable** is designed as a flexible storage and exchange format for tabular data. It uses XML standards.

This service was developed as a RESTful web service and can be called from an external program. For this, simply use a direct link



Zoom in 4 days

CoRoT id 101206560 in run LRC01 - N2 data for VOTable

[VOTable \(Table\)](#) [VOTable \(Table\)](#) [VOTable \(Table\)](#)

**Warning: XML output may be too large to be opened directly in your browser!**

**VOTable RESTful web service**

This service allows you to export CoRoT data in VOTable format (see [VOTable Format Definition](#) for more information) in the 3 different LIA type (TABLEDATA, BINARY-inline and FITS-inline). If you want a direct access to these data, please use the links below:

**CoRoT N2 data for Co-Investigators (authentication required)**

Example:

```
http://idoc-corot-observatoire.ias.u-psud.fr/rest/private/VOTable/TABLEDATA/101206560/LRC01/101206560
http://idoc-corot-observatoire.ias.u-psud.fr/rest/private/VOTable/BINARY/101206560/LRC01/101206560
http://idoc-corot-observatoire.ias.u-psud.fr/rest/private/VOTable/FITS/101206560/LRC01/101206560
```

Extract database with id : 0101206560

**fu\_targets**

OBJECT_ID	RA	DEC	RA_1	DEC_1	RA_2	DEC_2	RA_3	DEC_3	RA_4	DEC_4	RA_5	DEC_5	RA_6	DEC_6	RA_7	DEC_7	RA_8	DEC_8	RA_9	DEC_9	RA_10	DEC_10		
101206560	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777

**exo\_planet**

OBJECT_ID	COORDINATE	PLANET	NAME	RA	DEC	RA_1	DEC_1	RA_2	DEC_2	RA_3	DEC_3	RA_4	DEC_4	RA_5	DEC_5	RA_6	DEC_6	RA_7	DEC_7	RA_8	DEC_8	RA_9	DEC_9	RA_10	DEC_10
101206560	120.204	291.777	101206560	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777

**v\_jovian\_size**

OBJECT_ID	RA	DEC	RA_1	DEC_1	RA_2	DEC_2	RA_3	DEC_3	RA_4	DEC_4	RA_5	DEC_5	RA_6	DEC_6	RA_7	DEC_7	RA_8	DEC_8	RA_9	DEC_9	RA_10	DEC_10	RA_11	DEC_11	RA_12	DEC_12
101206560	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777	120.204	291.777

**Exodat** database provides complementary data for the CoRoT observations.

For more informations on this database, refer to the Poster « Exodat, a VO compliant database for CoRoT mission »

Available on private archive only (exodat account is needed)

**Periodogram service** is furnished by NASA/IPAC/NSIEd.

Periodograms are computed to extract periodic signals from time-series data

For more informations on this service, refer to the Poster « The NstED Periodogram Service and Interface for Public CoRoT Data »

**NSIEd Periodogram Service**

**Power Spectrum**

Star ID: 101206560

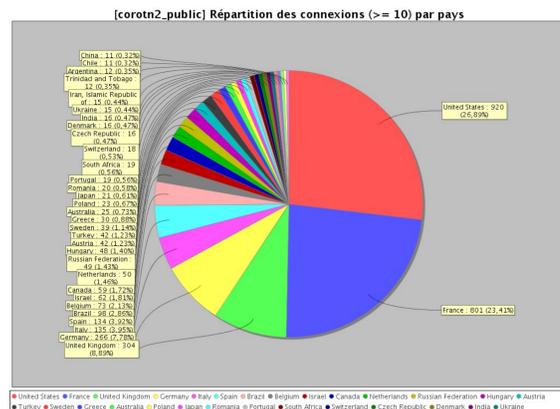
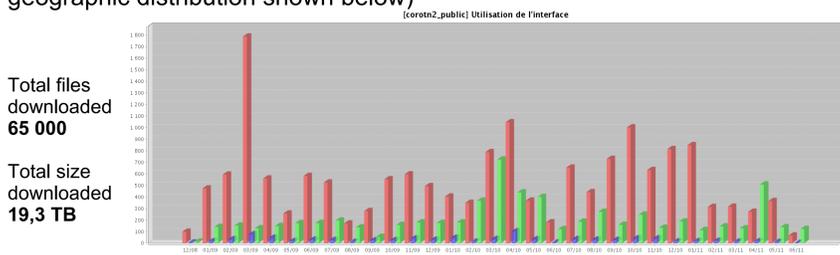
Download Periodogram (ASCII)

Rank	Period	Power	Paravite	Link
1	142.18657	51642.18657	0	Phased curve
2	21.78657	14599.18657	0	Phased curve

Available for public data only

## Some statistics

Since the opening of the public archive (ie December 2007), there were 16500 requests from 3500 unique IP addresses (following the geographic distribution shown below)



## Futur developments

**Migration to SITools2**  
SITools2 is a new CNES generic tool performed by a joint effort between CNES and scientific laboratories.



**New web services**  
New Output formats  
Link to other catalogs  
...