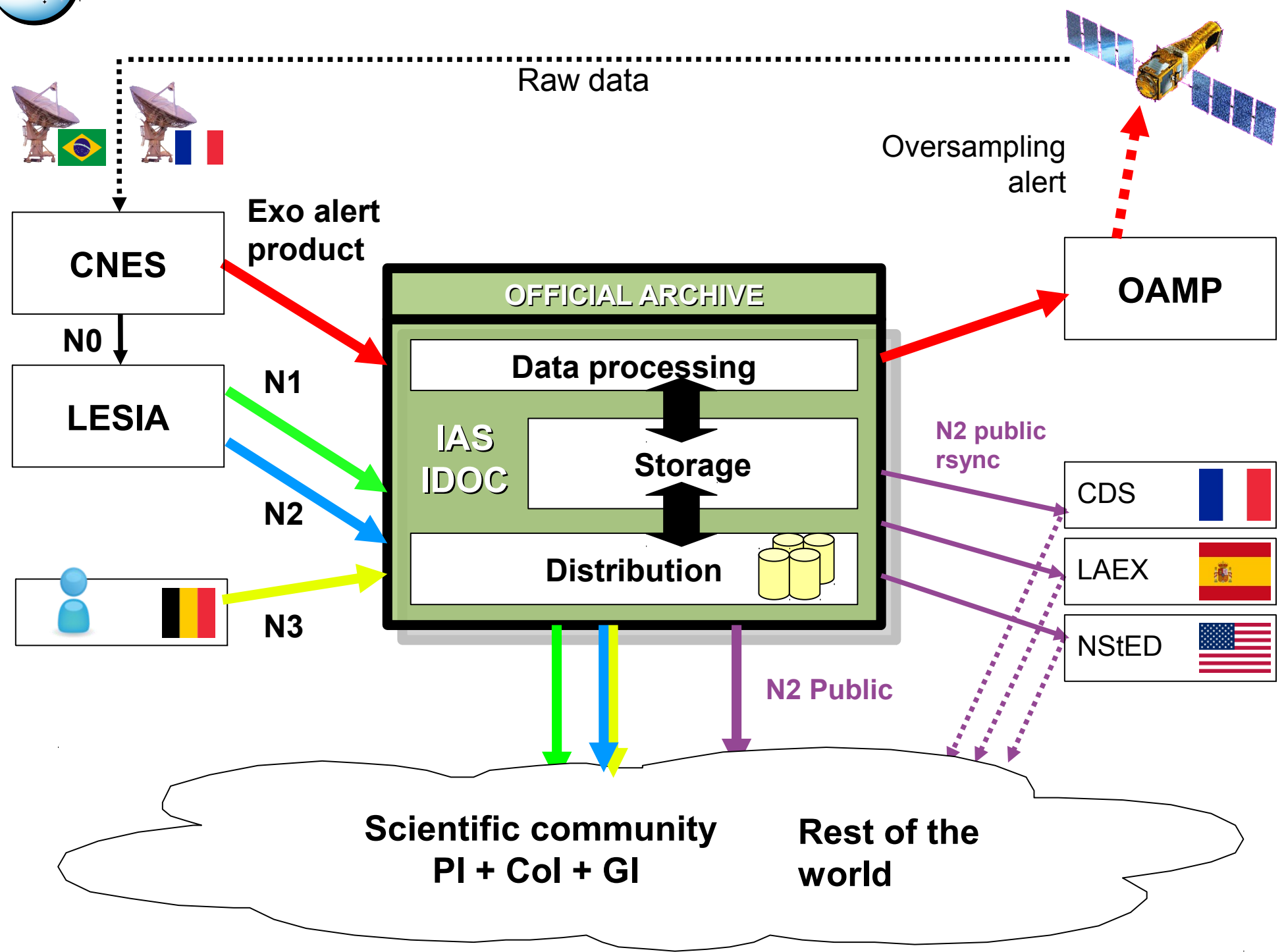


CoRoT Data distribution



The CoRoT Archive at CDS

François Ochsenbein
Françoise Genova
CDS, Strasbourg



CDS and CoRoT

- CDS has been participating on its own resources in the CoRoT adventure since the first observations to promote access to the mission products:
 - the photometric observations (FITS files)
 - the table of observations, built from the FITS headers, is accessible as any of the ~11,000 catalogs now existing in
- Since 2009, the successive versions of the CoRoT-N2 *public* data are mirrored at CDS, thanks to IAS (currently ~500Gb)
- The CDS services being VO-compatible, CoRoT results are *de facto* accessible from any of the many tools aware of the VO protocols. For instance the results on the stars observed by CoRoT are retrieved from generic searches based on a position on the sky.



CoRoT in VizieR

Distribution on the sky

Catalog Selection Page

1 catalogs found

Search Criteria

Keywords

- CoRoT
- corot

Tables Add

- B/corot
- ..astero
- ..exo

Preferences

max: 50

HTML Table

All columns

► Compute

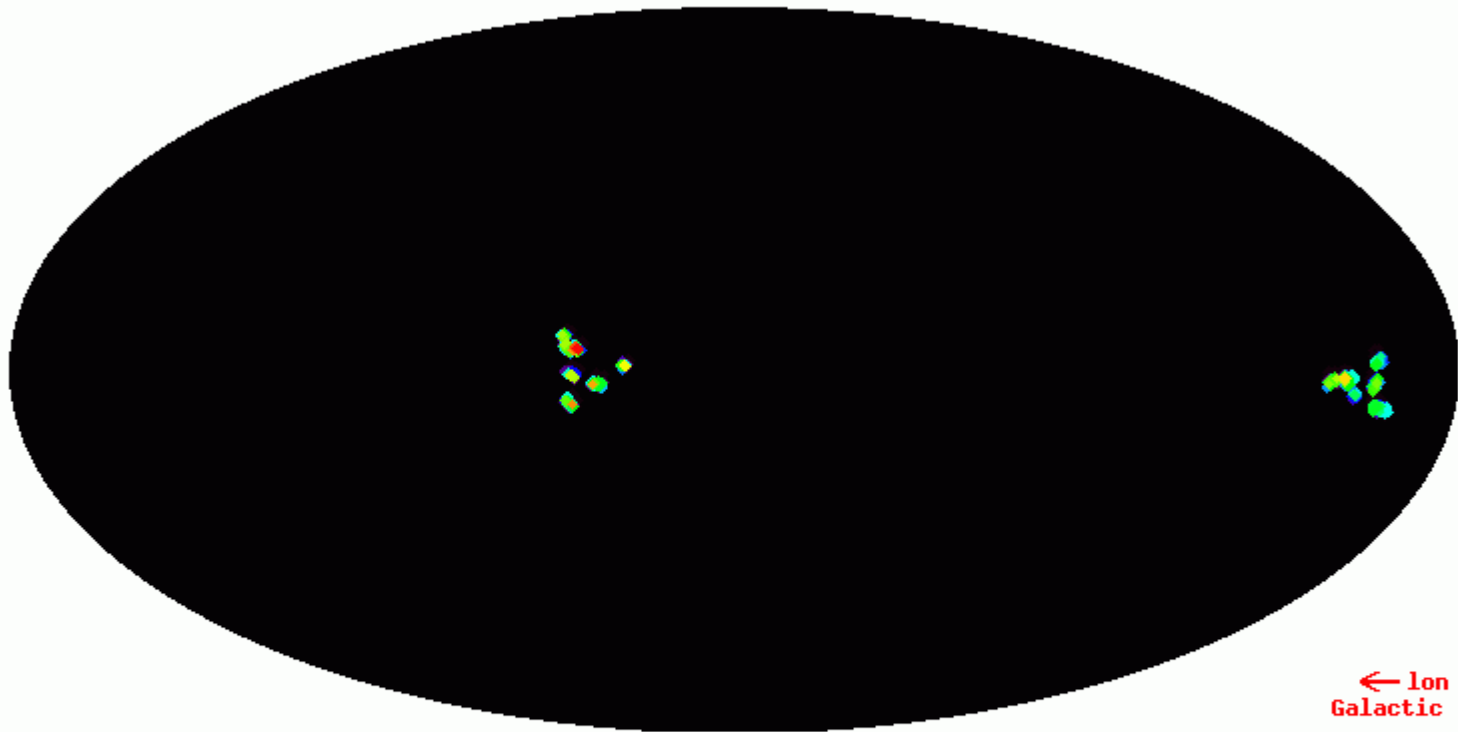
Mirrors

CDS, France



... distribution on the sky

[B/corot] CoRoT observation log Release 12 (CoRoT, 2009-2013)



Galactic
036.95+04.42

Ecliptic
282.20+28.57

Equatorial
18h42m58.9s+05°35'11"

← lon
Galactic

Resolution 8

Projection equatorial aitoff

Projection center 0.0+0.0

Color Map rainbow

Scaling linear

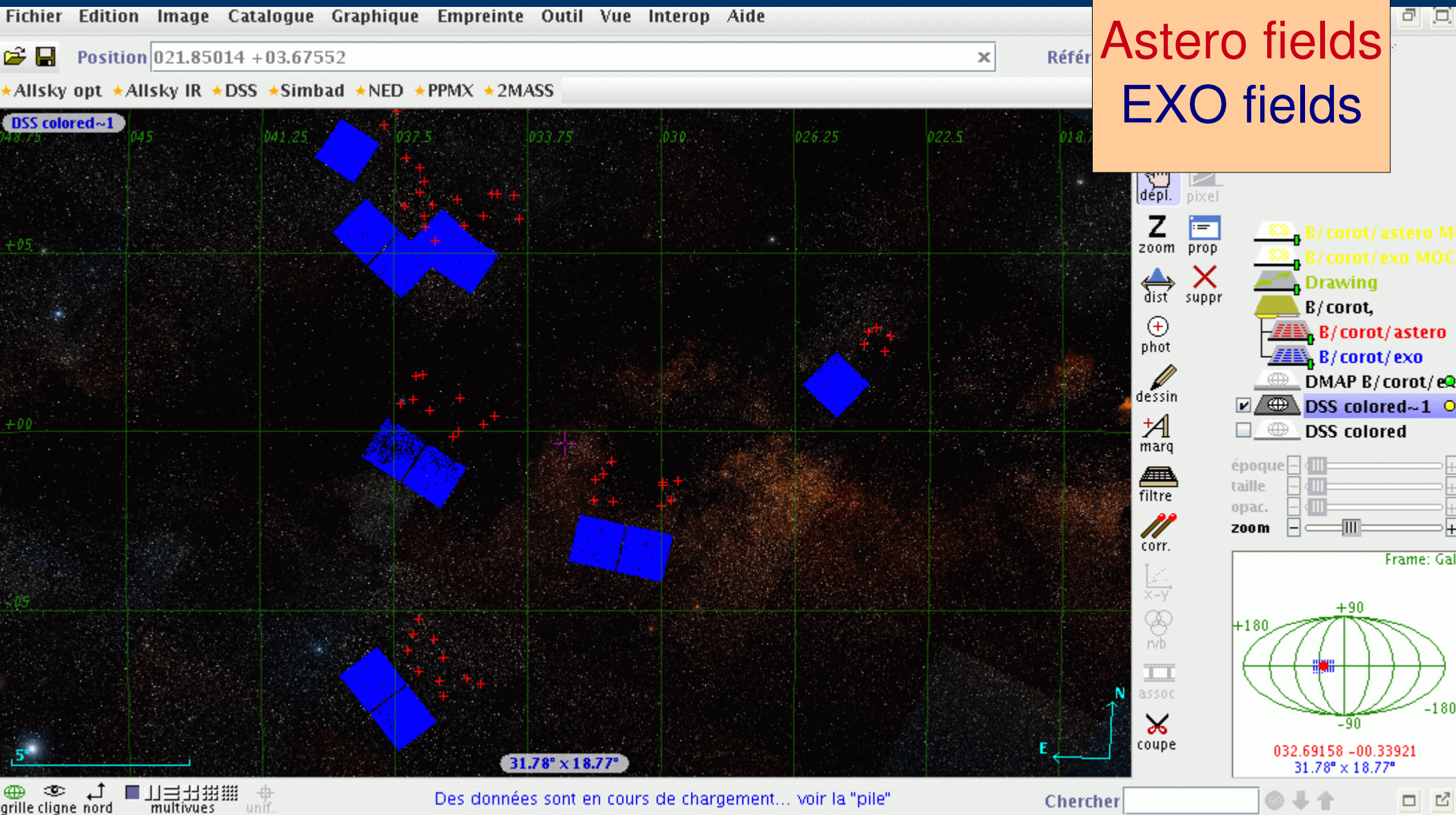
Adapt the Footprint

Aladin gives interactive details of the observations...

The screenshot displays the Aladin software interface. At the top, the menu bar includes "Fichier", "Edition", "Image", "Catalogue", "Graphique", "Empreinte", "Outil", "Vue", "Interop", and "Aide". Below the menu bar, the "Position" field shows "036.94363 +04.80444" and the "Référentiel" dropdown is set to "Gal". A toolbar contains icons for "Allsky opt", "Allsky IR", "DSS", "Simbad", "NED", "PPMX", and "2MASS". The main window displays a star field with a central crosshair and a purple crosshair. The text "DSS colored~1" is visible in the top left of the main window. A toolbar on the right side includes icons for "select", "cont", "dépl.", "pixel", "zoom", "prop", "dist", "suppr", "phot", "dessin", "marq", "filtre", "corr.", "x-y", "rvb", "assoc", and "coupe". A legend on the right side lists various data layers: "B/corot/astero", "B/corot/exo MO", "Drawing", "B/corot", "B/corot/astero", "B/corot/exo", "DMAP B/corot/exo", "DSS colored~1", and "DSS colored". Below the legend are sliders for "époque", "taille", "opac.", and "zoom". A small inset window at the bottom right shows a 3D visualization of the star field with axes labeled "+180", "+90", "-90", and "-180", and coordinates "072.39341 +04.69114" and "340.6° x 180°". The bottom status bar shows "Des données sont en cours de chargement... voir la 'pile'" and a search field.

... zooming into the "center" fields

Astero fields
EXO fields



...and the "anticenter" observations

Astero fields
EXO fields

Fichier Edition Image Catalogue Graphique Empreinte Outil Vue Interop Aide

Position 200.41891 +02.92171

Allsky opt Allsky IR DSS Simbad NED PPMX 2MASS

DSS colored~1

207.5 205 202.5 200

+02

+00

-02

-04

-06

5°

22.06° x 13.03°

des données sont en cours de chargement... voir la "pile"

Chercher

grille cligne nord multivues unif.

pixel prop

zoom

dist

phot

dessin

marq

filtre

corr.

x-y

rvb

assoc

coupe

suppr

B/corot/astero M

B/corot/exo MOC

Drawing

B/corot,

B/corot/astero

B/corot/exo

DMAP B/corot/eO

DSS colored~1

DSS colored

époque

taille

opac.

zoom

Frame: Gal

+180

+90

-90

-180

208.20658 -01.91717

22.06° x 13.03°

CoRoT in VizieR (continued)

Statistics on the usage of the catalog

Catalog Selection Page

1 catalogs found

Search Criteria

Keywords

- CoRoT
- corot

Tables Add

- B/corot
- ..astero
- ..exo

Preferences

max: 50

HTML Table

All columns

Mirrors

CDS, France

1 catalog found

B/corot timeSeries/fits Similar Catalogs ReadMe+ftp

B/corot/astero ^(c) Stars observed in the asterosismology program (135 rows)

B/corot/exo ^(c) Stars observed in the exoplanet detection program. (129018 rows)

ALL Reset All Query selected Tables Join selected Tables

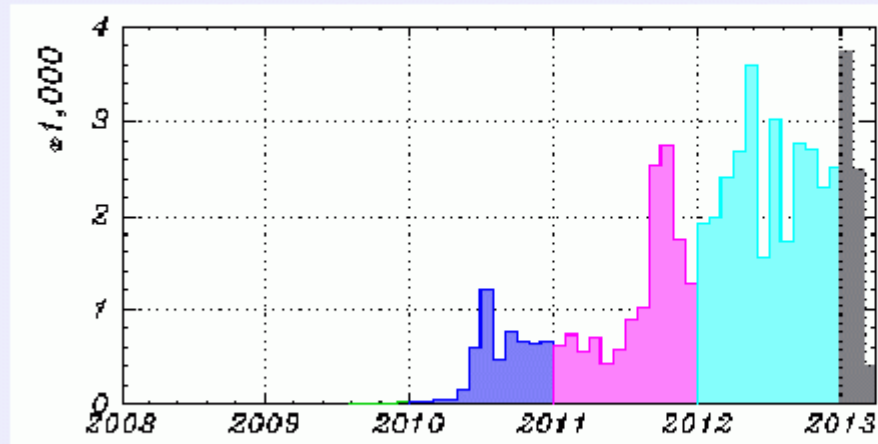
^(c) indicates tables which contain celestial coordinates

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[Contact](#)

Statistics on Catalog Usage

VizieR popularity of catalog [B/corot](#) [[Back](#)] · [[Forwd](#)] · [[Print](#)] · [[Close](#)]

[B/corot](#) CoRoT observation log Release 12 (CoRoT, 2009-2013)



The plot shows the number of monthly requests addressed to catalog [B/corot](#) on all VizieR mirrors.

The raw numbers of monthly requests addressed to catalog [B/corot](#) (on all VizieR mirrors) may be found [here](#)

Show the plot in [log scale](#)

The popularity represented as a progress bar in the VizieR pages is computed as the percentage of queries addressed to catalog [B/corot](#) on a log scale.

Statistics about the usage of the CoRoT data can be retrieved at any time, as a plot or as a table of monthly numbers (currently ~100 daily requests)

Querying the CoRoT catalog

[B/corot/astero](#)

[CoRoT observation log Release 12 \(CoRoT, 2009-2013\)](#)

[ReadMe+ftp](#)



[Post annotation](#)

Stars observed in the asteroseismology program (135 rows) [\[METAtab\]](#) [\[METAcola\]](#) [\[stats\]](#)

Full	_RAJ2000 "h:m:s"	_DEJ2000 "d:m:s"	_img	_date1 s	_date2 s	_CoRoT	_SpT	_Run	_Vmag mag	_(B-V) mag	_RAJ2000 deg	_DEJ2000 deg	_size Mbyte	_Star	_Plot	_FITS
1	18 31 04.56	+04 37 37.1		2010-04-06	2010-07-05	8303	B5	LRc05	7.730	0.190	277.76900	+04.62696	21.194	HD 170783	Plot	FITS
2	18 30 05.04	+04 03 55.3		2010-04-06	2010-07-05	8252	B2V	LRc05	6.700	0.100	277.52100	+04.06536	21.194	HD 170580	Plot	FITS
3	18 32 06.96	+03 39 34.6		2010-04-06	2010-07-05	8081	A0	LRc05	6.430	-0.040	278.02900	+03.65960	21.194	HD 170913	Plot	FITS
4	18 33 40.80	+04 35 32.5		2010-04-06	2010-07-05	8167	K0	LRc05	8.090	0.840	278.42000	+04.59237	21.194	HD 171264	Plot	FITS
5	18 30 41.28	+04 30 39.0		2010-04-06	2010-07-05	8301	A2	LRc05	6.956	0.188	277.67200	+04.51083	21.194	HD 170699	Plot	FITS
6	06 09 07.25	+07 30 48.7		2010-12-17	2011-03-22	5631	G0	LRa05	6.655	0.887	092.28020	+07.51353	22.280	HD 42089	Plot	FITS
7	06 12 00.58	+06 46 59.1		2010-12-17	2011-03-22	4910	G4V	LRa05	6.870	0.630	093.00240	+06.78308	22.222	HD 42618	Plot	FITS
8	06 10 10.06	+06 19 12.5		2010-12-17	2011-03-22	4977	A3	LRa05	7.640	0.230	092.54190	+06.32013	22.320	HD 42299	Plot	FITS
9	06 11 58.73	+07 23 28.8		2010-12-17	2011-03-22	5175	B1V	LRa05	7.040	-0.110	092.99470	+07.39132	22.320	HD 42597	Plot	FITS
10	06 06 40.58	+06 43 49.9		2010-12-17	2011-03-22	5685	A5	LRa05	7.860	0.270	091.66910	+06.73053	22.320	HD 41641	Plot	FITS

Download the
FITS time serie
file

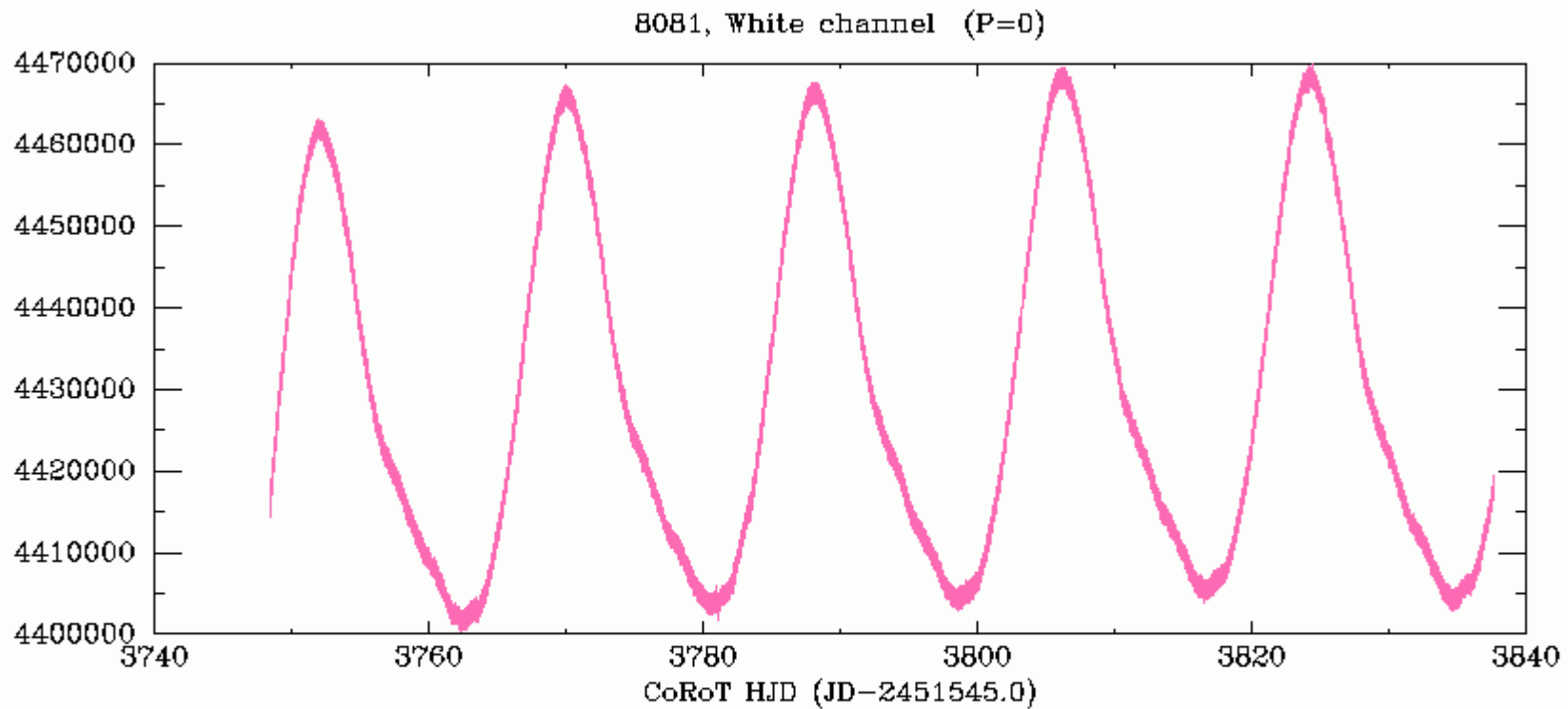


... visualisation

Complement to [B/corot](#)

[\[Back\]](#) · [\[Forwd\]](#) · [\[Print\]](#) · [\[Close\]](#)

Light curve of [CoRoT 8081](#) in **White** (P=0) (points with status=0)



[Postscript Figure](#)

[Data as a Table](#)

Adapt
Plot

Band **White** ▾

P

x cuts:

xlog Bitmap size:

y cuts:

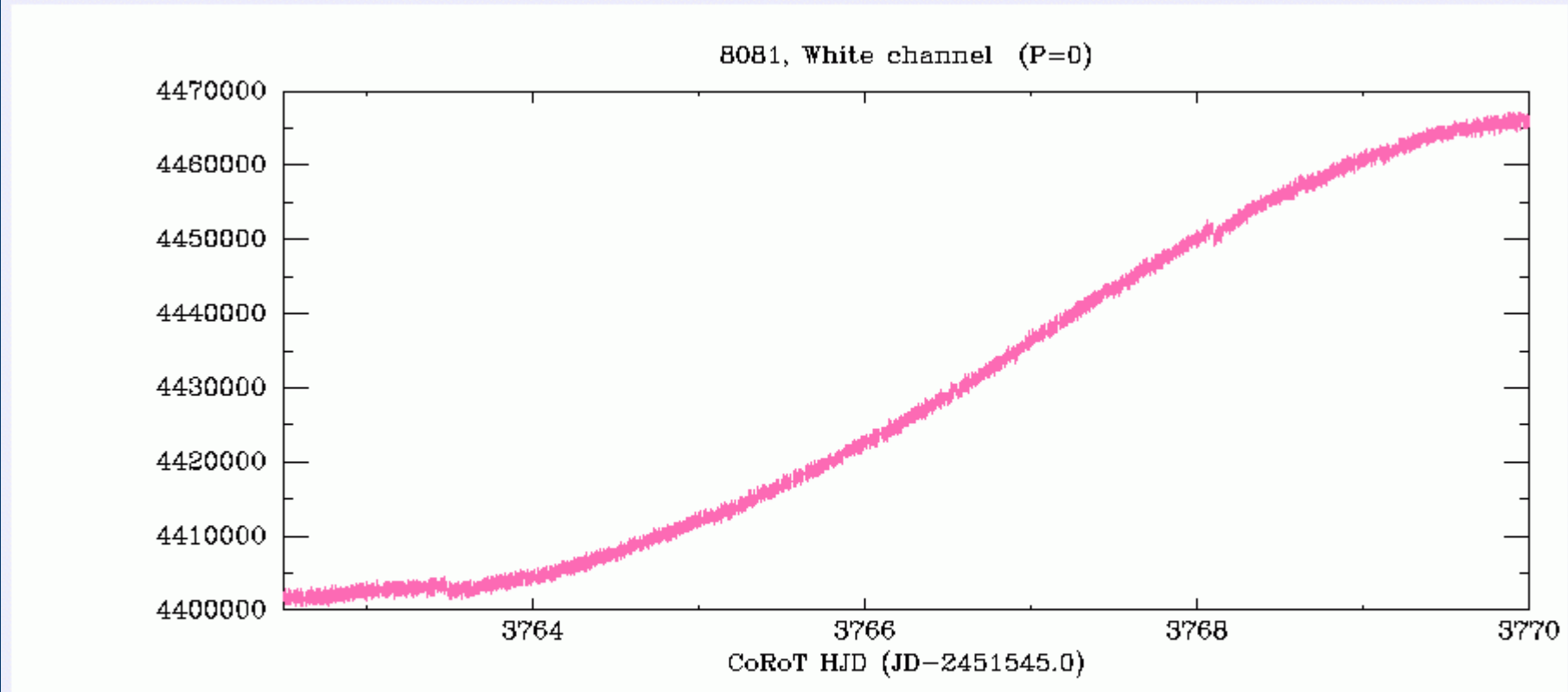
ylog

... some details of the light curve...

Complement to [B/corot](#)

[\[Back\]](#) · [\[Forwd\]](#) · [\[Print\]](#) · [\[Close\]](#)

Light curve of [CoRoT 8081](#) in **White** (P=0) (points with status=0)

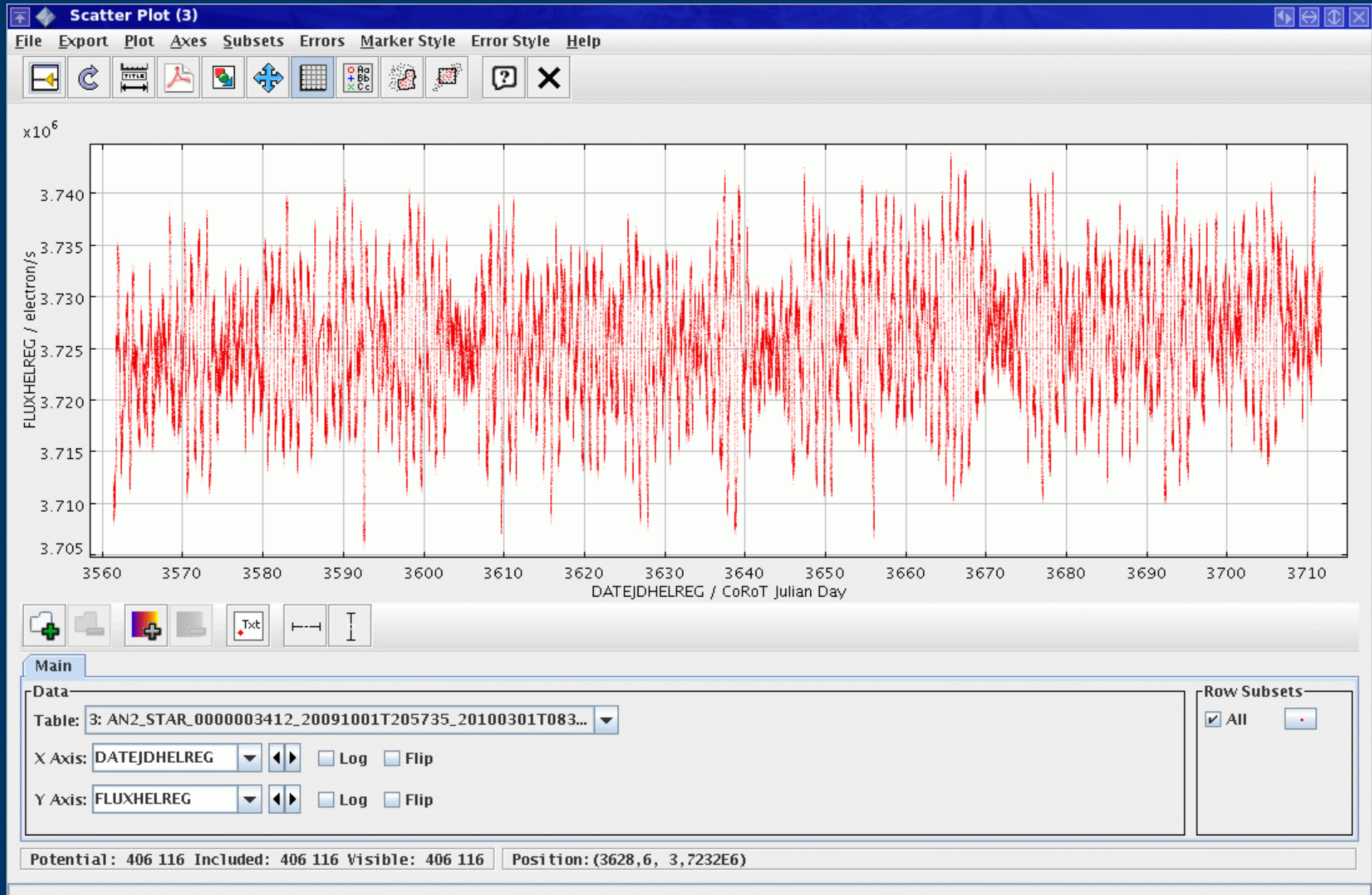


[Postscript Figure](#)

[Data as a Table](#)

Adapt Plot	Band <input type="text" value="White"/>	x cuts: <input type="text" value="3762.5"/> <input type="text" value="3770"/>	xlog <input type="checkbox"/>	Bitmap size: <input type="text" value="900x400"/>
	P <input type="text" value="0"/>	y cuts: <input type="text"/> <input type="text"/>	ylog <input type="checkbox"/>	<input type="button" value="Adapt the plot"/>

...visualisation with VTools (TOPcat)...



Fast cross-match with other catalogs

CDS X-Match Service


X-match

Tables management

[Documentation](#)


fox1 [Preferences](#) [Admin](#) [Logout](#)

Choose tables to cross-match

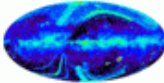
B/corot/exo  SIMBAD

VizieR SIMBAD My store VizieR SIMBAD My store

[CoRoT observation log Release 12 \(CoRoT, 2009-2013\)](#)
129,018 rows



[SIMBAD astronomical database](#)
6,862,047 objects with position







cross-match with any VizieR or user-provided catalog
(here cross-match with Simbad in <10s)

Show options

Begin the X-Match

Visualize and manage your cross-match jobs

List of X-match jobs

Table 1	Table 2	Options	Begin	Status	Actions
B/corot/exo	SIMBAD	fixed radius 	14/03/2013 at 23:21	completed  	 Get result <input type="checkbox"/>

job executed in **5s**
2s to correlate
2s to generate file
Result: **4,906** rows (1MB)

(s):  **Delete**

A fruitful collaboration...

- brings a good visibility to CoRoT data and results
 - through VizieR (*average of 460.000 queries/day*)
 - from the Virtual Observatory tools (*Aladin, topcat, ...*)
 - easily connected to database and surveys (*Simbad, cross-matches with surveys*)
- CDS is ready to host other products (e.g. from LAM)

Thank you !
