

Exoplanets Program

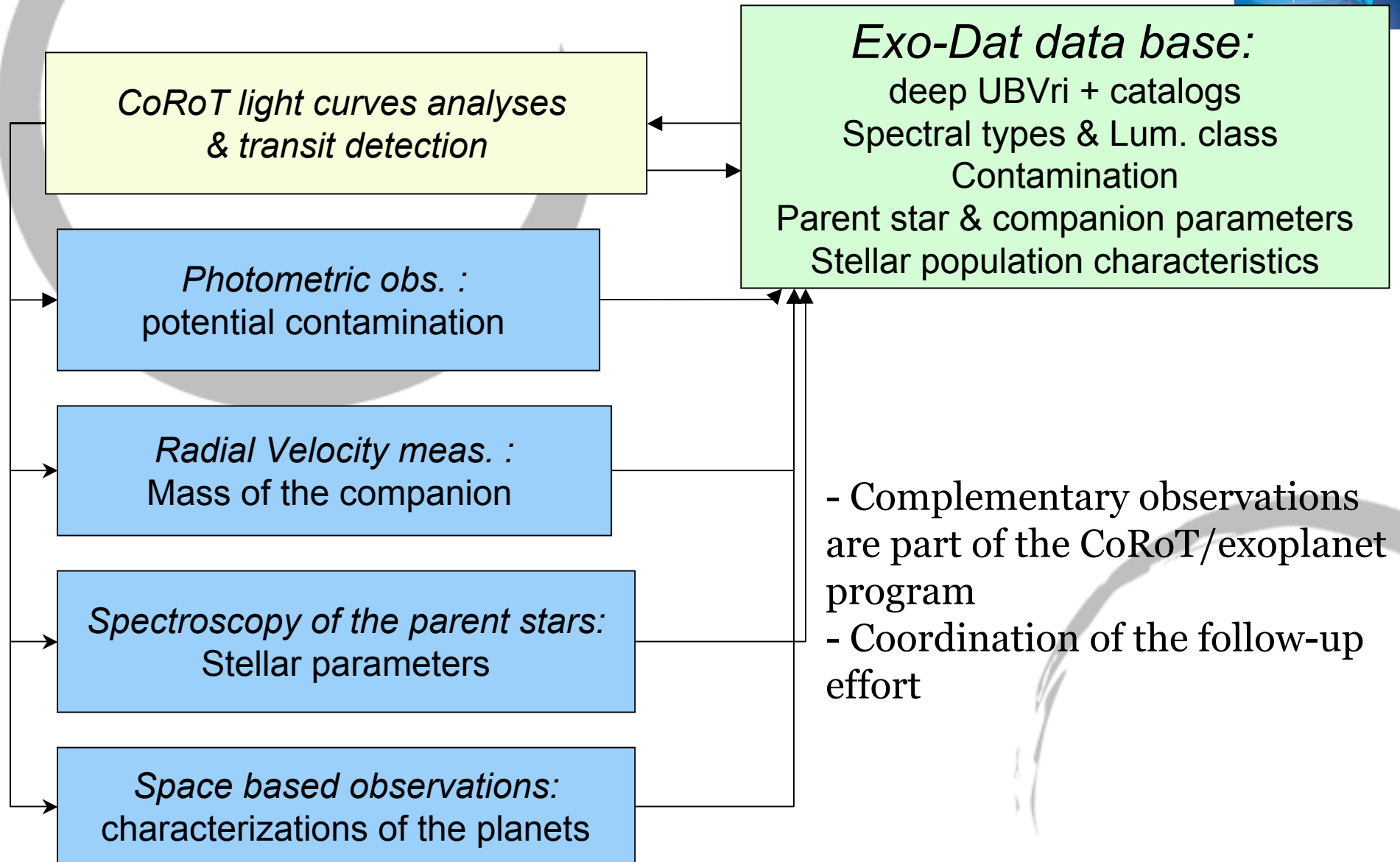
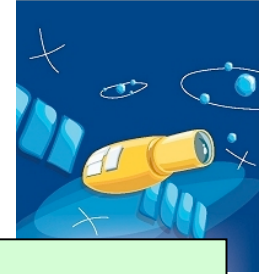
Follow-up observations



LRc01 data used to train the FU observations & the group organization

- *Motivations:*
 - remove any ambiguities in the nature of the transiting bodies
 - characterize the detected planets
- *Organization :*
 - protected wiki pages to exchange information
 - regular teleconfs of the *coordination group*

Exoplanet group



CoRoT Exoplanet Science Team

Exoplanet
Wiki pages

These wiki pages are intended as a place where to organise the work on the detection and follow-up of transit candidates in the CoRoT light curves. It is also an information repository where the team members can exchange documents.

News

- 16jul07: The periods and epochs of candidates lrc01_e2_0192 and e1_0499 have been updated (Roi)
- 11jun07: A link to the Transit and Phase Predictor has been included; see new section on Tools below (HJD)
- Some interesting results from the BEST telescope ... see the personal page [HeikeRauer](#)
- **Corot Data Embargo**

People

- [CorotTeams](#): the various teams and CEST members. Please update the information.
- [CorotMissionGroup](#) : the whole CoRoT mission group (personal pages)
- [ExoplanetScienceTeam](#) : the whole CEST team
- [exo-cois](#) : the list of the Exoplanet Co-Is
- [FuGroup](#) : Coordination Working Group for the management of the FU operations.
- General Organisation of CEST: [GeneralAspects](#)

Meetings

- [CestMeetings](#): dates, location and agenda of upcoming meetings
- [CestTelecon](#): in between two successive CEST meetings
- [lists](#) : exoplanet distribution lists

Proposals for telescope time allocation

- [Proposals](#)

On-going Follow-up observations

- follow-up tests: [OnGoingFollowUp](#)
- Candidates LRc01: [OnGoingFU-LRc01](#)

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Working Groups

- Exopipe: [ExoPage](#)
Proposed tasks to contribute to the Exopipe effort: [CestContribution](#)
- Detection: [DetPage](#)
- Coordination: [CoordPage](#)
- Photometry: [PhotPage](#)
- Radial Velocity: [DopPage](#)
- Space observations: [SPage](#)
- Stellar Fundamental Parameters: [FundPage](#)
- Database: Exodat (link under construction - to be provided April 2007)
- Science Working Groups:

Repository

- [Documents](#) : documents relative to the organisation and the data policy
- [TestData](#) : for impatient people some N1 test data.
- [Posters and other illustrative materials](#)

Tools

- [TransitPhasePredictor](#) : Online predictor for candidate transit times and phases

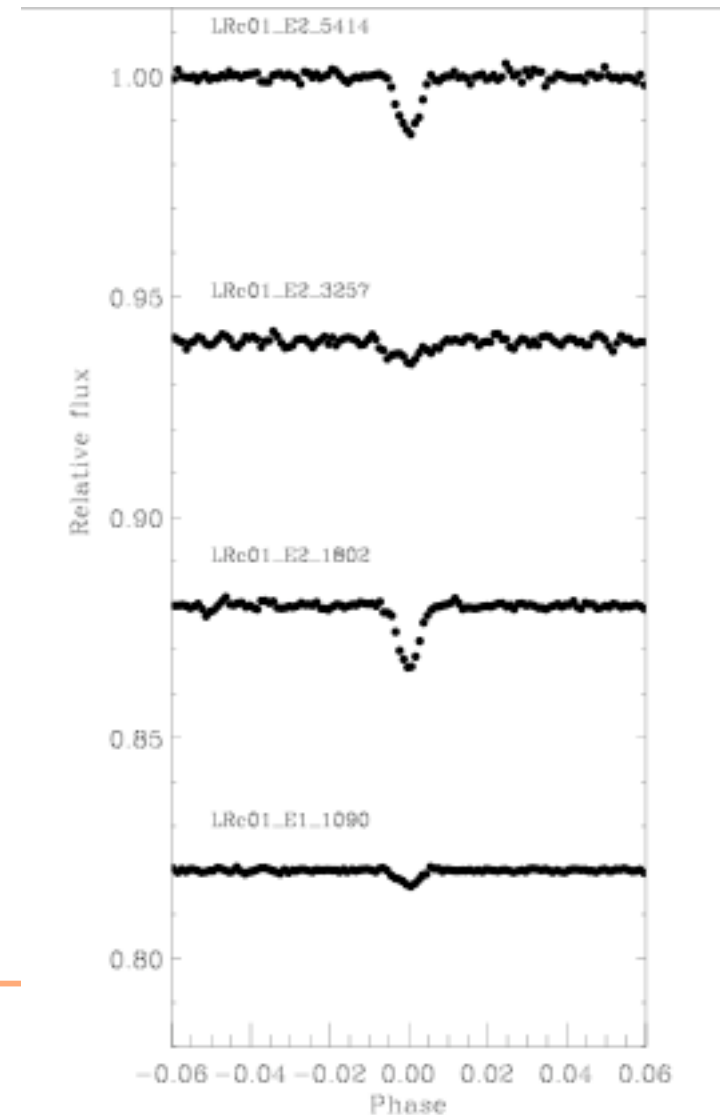
• *Transit detection from alarm analyses*

Beginning of July 2007: selection of a few LCs with transit-like features

No strict selection (training test)

- Mono-transit events
- triangular shapes

General information on the wiki
Coordinates + targets characteristics
provided to the tasks coordinators



- ***Transit detection from alarm analyses***

Beginning of July 2007: selection of a few LCs with transit-like features

- ***Photometric observations***

4 teams - August & september 2007:

- identify source of the variation : central source versus nearby star
- secure the transit depth

- ***Radial velocity measurements***

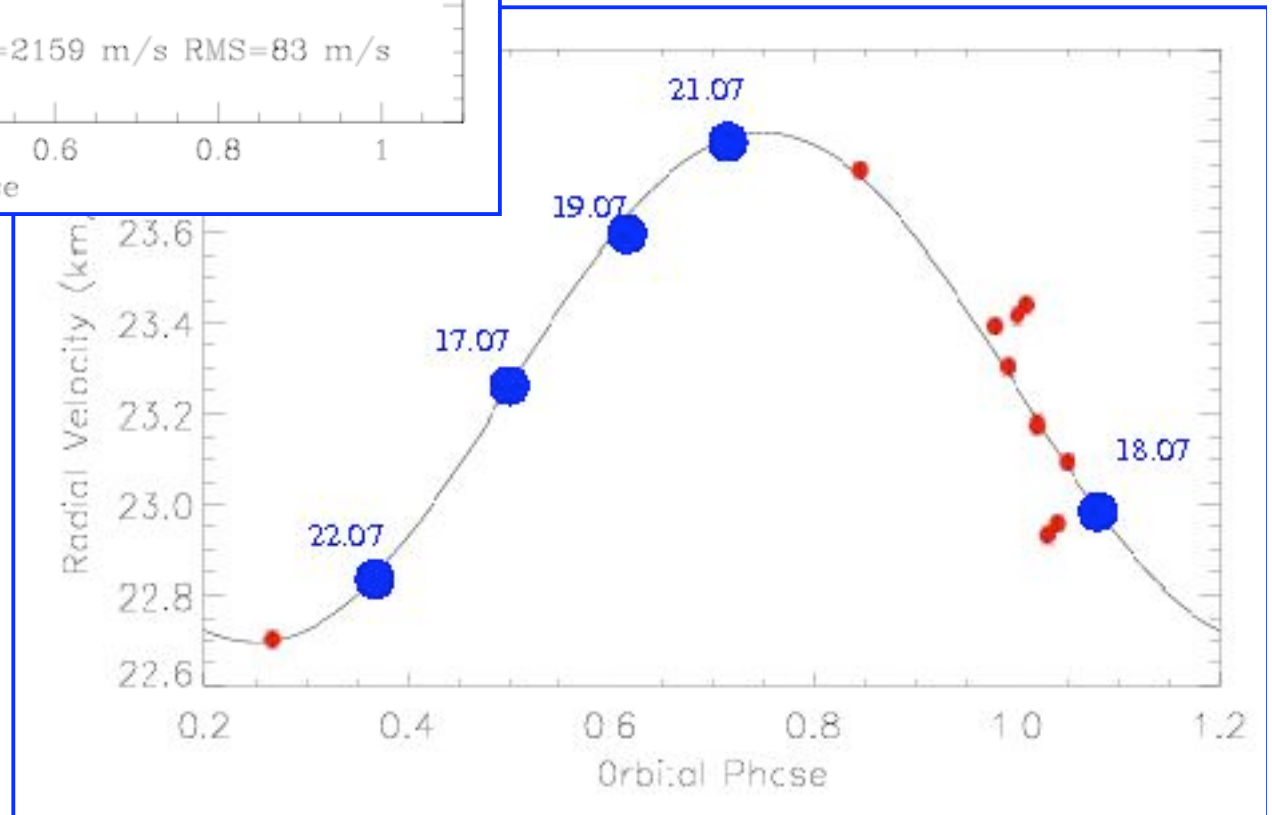
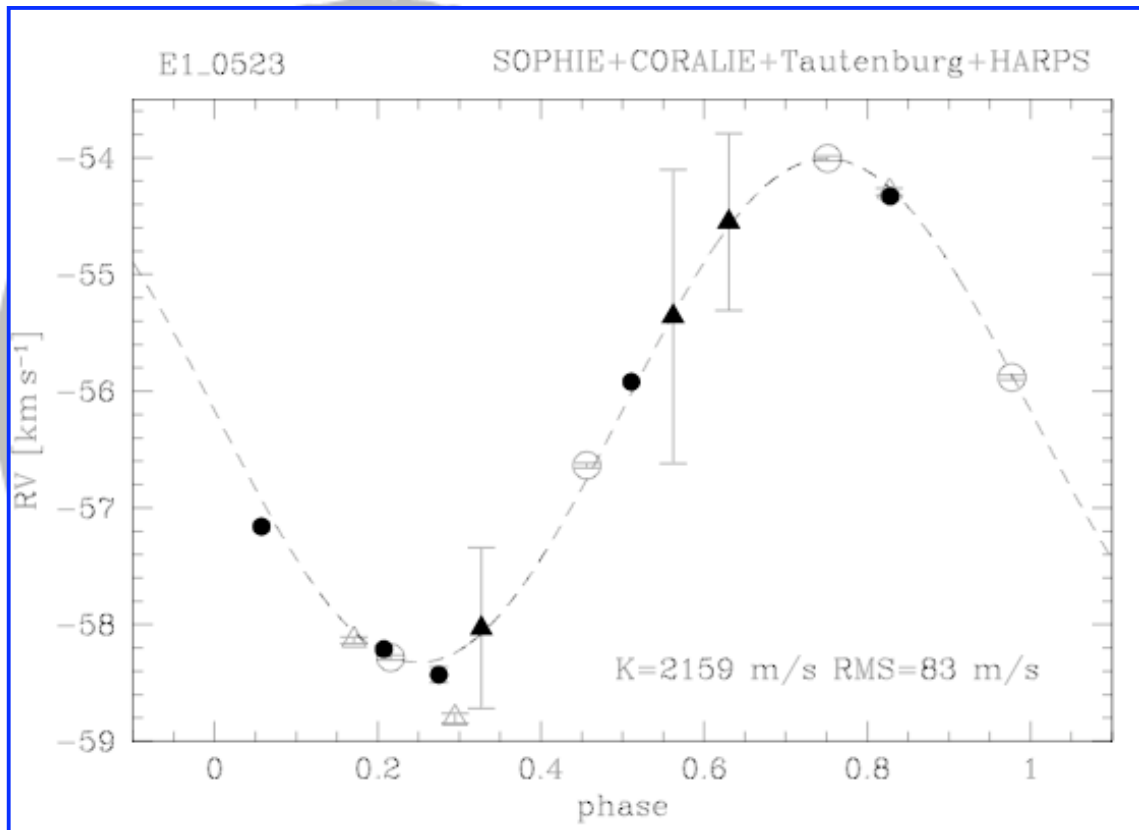
3 teams - July 2007 : SOPHIE observations, August 2007 : Tautenburg, HARPS & ELODIE observations

- rejection of a few planet candidates (EB)
- mass & eccentricity estimate
- Rossiter effect

- ***Stellar population***

Spectral analyses of the cumulated SOPHIE spectra : first estimate of the planets mass and radius

Prepare UVES observations of the secured planets (october 2007)



- **Conclusion :**

A good exercise : organization went smoothly - improvements
2 planets well-characterized (one possible Brown dwarf)

- **Foreseen**

Period 80 (winter 2008)

- *SOPHIE : 15 nights*
- *HARPS GTO : 10 nights*
- *UVES 15 hours : oct. 2007 : spectra of CoRoT-exo-1b, and the two new planets/BD*
- *FORS 14 hours allocated*

Period 81 (summer 2008)

- ESO proposal - not a large program
FORS + UVES & FLAMES (radial velocity screen out + statistical analyses of the stellar population)
- SPITZER proposal
- ESPADON proposal : detection of a possible magnetic field on CoRoT-exo-2b / planet-star interaction
- MegaCam observations