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Minutes of the 17th Scientific Committee

Held in ESTEC/Noordwijk on December 5th and 9th 2005.

Prepared by par:	
Annie Baglin	
Accepted by:	
The SC members	

MODIFICATIONS OF THE DOCUMENT

Ed.	Revs.	Date	Modifications	Visa
1				

REFERENCE DOCUMENTS

Index	Reference	Title of the document
DR1:	COROT.DESPA.01.014 Version 3	Scientific policy and Data rights
DR2	COR-0-PL-2061-CNES	Plan général d'opérations

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DIFFUSION:

G. ALECIAN	OPM	X
M. AUVERGNE	OPM/LESIA	X
A. BAGLIN	OPM/LESIA	Х
P. BARGE	LAM	Х
C. CATALA	OPM/LESIA	Х
M. DELEUIL	LAM	Х
F. FAVATA	RSSD/Estec	Х
R. GARRIDO	IAA/Spain	Х
T. GUILLOT	OCA	Х
E. JANOT-PACHECO	Sao Paulo University	Х
L. JORDA	LAM	Х
E. MICHEL	OPM/LESIA	Х
A. NOELS	IA Liège	Х
M. OLLIVIER	IAS	Х
H. RAUER	DLR Berlin	Х
D.ROUAN	LESIA	Х
I. ROXBURGH	QMW London	Х
J. SCHNEIDER	OPM	Х
G. VAUCLAIR	OMP	Х
W. WEISS	IA Vienna	Х
P. BODIN	CNES	Х
L. BOISNARD	CNES	Х
J-L. COUNIL	CNES	Х
T. LAM-TRONG	CNES	Х
C. IMAD	OPM/LESIA/secretariat	Х

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Participants:

All members were present except D. Rouan

T Lam-Trong attended only the Monday sesssion and JL Counil the Friday session.

1. The observations

1.1. Planning and consequences of the delay on the observations scheduling

T. Lam – Trong explains that due to the delay of the launch of Calipso, the CoRoT platform will be delivered slightly later than expected. After discussions with Alcatel, it is now possible to limit this delay, whatever the launch date of Calipso.

The launch date is fixed at October 15^{th} .

To a question about the launcher, Thien answers, that the delay is not sufficient to ask for another version of the launcher. The risk for CoRoT is the engine of the last stage. This development is followed very carefully by DLA(CNES) and, if problems, DLA will ask for an older launcher; answer within 2 or 3 months.

Officially there is presently no delay on the launcher development but

Thien reminds that the period of validity of the contract ends on October 31st. So we have to be ready before that!

This launch date means that the mission will start exactly at the beginning of the 6 months observation period in the anticentre.

Due to the fact that at least 2 months are necessary for commissioning, the available time in the anticentre is limited to 4 months at maximum. In this conditions is it worth keeping a first long run as planned, on probably the best field we have?

It is recalled that this 4 months period will be considered as belonging to the CORE PROGRAMME, which means that it has to fulfill the requirements of both seismology and exoplanet community.

After discussion in the first session of the SC, then during the CW in the working groups sessions, it is proposed that these 4 months will be devoted to several (2 or 3) runs of intermediate duration called INITIAL RUNS, preferably located in regions of the "eyes" where we have already ground based observations. The SC accepts this strategy.

SWG and ECOWG will make propositions for pointing direction, after discussion through internet forums, organised by both coordinators. The planning will be the following:

* Dec 2005: EM and MD . Open a Forum (or 2 if easier) edit a document describing the fields where exodata are available Ask for potential fields for each programme in these regions before february 1st

* February 15th EM and MD propose a synthesis and circulate it

* March 31th Final proposal to the SC

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Action SC 17-1 Eric M. and Magali D.: organise the forum and present the results at the next SC.

Decisions will be taken at the next SC scheduled on April 5th and 6th.

Just after this meeting, a restricted AO for Additional Programmes (AO-1b) will be issued, only for proposers who request specific targets.

The accepted proposals of the AO-1 requiring non specific targets will be considered as accepted also for the initial runs, and do not need to be reproposed.

1.2. Targets for the long runs

* Targets of Lrc1 and La1

The list of seismology targets proposed during CW9 for the two first long runs: LRc1 and LRa1 are accepted. The density of faint stars is considered as acceptable for the exoplanet programme. The SWG is asked to extend the list of targets to 7 or 8 per CCD so as to have a backup.

EM will provide a synthetic list of these targets and the corresponding HR diagramme (January 15^{th})

* LRc2 and Lra2 selection

For the anticentre direction, the SWG proposes

- the field around HD52265 for LRA2

- the field around HD43587 for LRA3.

Precise position of the fields and target lists remain to be determined.

For the selection of the LRC2 field, decision could not be made during this CW. A planning is proposed.

* EM asks for proposals till March 31th.

* EM circulates the synthesis of the proposition among the SWG for discussion

* Conclusions will be presented at CW10

1.3. Sismo and AP short runs : priorities

I. Roxburgh says that it should not be a good idea to push the APs short runs at the end of the mission, but to work more on the basis of a 1 /1 alternance.

The nominal duration of the mission is 3 years, including commissioning, e.g. 5 semesters after the first one. But Thien reminds that Jason has already been working for almost 5 years.....

Concerning the sismo short runs a planning has been set up

* EM edits a document analogous to the one presented at CW9 indicating possible targets, in already preselected fields and those of the APs and ask for completion and proposal till March 31th. * EM circulates the synthesis of the proposition among the SWG for discussion

* Conclusions with ranking will be presented at CW10

1.4. The exoplanet programming tools

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For these two subjects, the responsability to provide the information to the operational group is at LAM, but we need an agreement of the SC on the methods

* Templates

The tools presented by A. Llebaria and P. Guterman to compute the templates and to assign them to targets as described in the document "Building up photometric apertures for the exoplanet channel of the CoRoT mission" which has been distributed as a draft are validated by the SC. The final version will be issued as an official document till the end of the year.

Action SC17-2: Annie B: Edition of the document on templates, by the end of the year

Some tunning is still necessary and the allocation using real on flight images is in progress, as presented by F. Karioty.

* "alarm" mode

Some algorithms have been presented as well as a first idea of the strategy. It is too early to conclude. This will be put again on the agenda of the next CW.

Action SC17-3: P. Barge: Presentation of a strategy and algorithms for the alarm mode

1.5. Scientific group for operations (A. Baglin)

As required by the organisation of the "Operation phase" defined in the document "Plan General d'Operations CoRoT" COR-0-PL-2061-CNES (DR2), a group called in french(!) "Groupe de Coordination Scientifique" will be have to take all decisions during the operations related to the scientific objectives and the validation of the results of the commissioning phase.

It has to be nominated by the SC.

AB proposes that this group be identical to the Advisory Board of the SC

Jean S. proposes to participate to this group.

A large majority of the SC is in favor of nominating the Advisory board as it is (Coordinators of the Wgs + IS + PI).

2. Data production and distribution

2.1. Preparation of the meeting of Co-Is and GIs

It is agreed that the agenda of this meeting should contain

- a brief description of the policy, on data rights, and the planning of data release.

- a recall of rights and duties of the Co-Is and GIs (presented by C. Catala)
- a recall of the publication policy (M. Deleuil)

as described in the document (DR1): DESPA.COROT.DESPA.01.014, Version 3, 26/03/05, Available at http://corot/oamp/fr

It will be recalled that a policy violation means that the scientist and its collaborators will loose his CO-I(or GI) ship.

2.2. Publication rules of the exoplanet Core Programme :

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P. Barge informs the SC that the exoplanet community is preparing a document trying to define precisely rules for publications of transits. But up to now the process has not yet converged.

Some members of the SC express some concern about setting up such rules, as it could be interpreted as contradictory with the rule saying that "All Co-Is access all the data". However, the exoplanet group, composed of people who have worked very hard during the preparation period, would like to make sure that they will be the authors of the papers presenting the results.

Discussions will go on inside the exoplanet group and a draft version of the document will be presented and discussed at the next CW.

Action SC17-4: MD and PB Present the first version of the definition of the publications rules for the exoplanet Core programme (next CW)

2.3. N3 products

N3. 5. Classification of variables

During this meeting the different groups interested in this task have reach an agreement. The Madrid group will be in charge of producing the learning machine, whereas C. Aerts will coordinate a group of experts in variables who will specify the classes. It has been decided that CoRoT artificial light curves will be gathered by CA and given to the Madrid group to feed the learning machine and test the classifiers.

N3.2. Frequencies for seismology

The DATeam proposes to take the responsibility to label CoRoT frequencies using a tool developped and assembled by the group.

It is clear that it does not prevent any one to derive frequencies on their own risk, but that the frequencies labelled by the CoRoT DatTeam will be the reference included in the Archive.

N3.4. Absolute photometric calibration

Michel A. stresses that a calibration will be needed to prepare observations.

It will be done by comparing the observed fluxes to the predicted ones. This task can be considered as belonging to calibrations, and does not need a very high precision.

But, considering that if well calibrated, the CoRoT magnitudes will certainly be the most precise ones ever obtained, a more complete work can be envisaged to set up a CoRoT magnitude scale, related to other photometric systems. It could also allow a precise determination of the transmission of the instrument and its evolution during the mission.

The photometric properties will be different on the seismology field and on the exoplanet field, due to the prism. It is not completely clear if such an absolute calibration is possible in the exoplanet field.

A scientist will be needed to do this part of the work.

2.4. EXODAT/EXOSKY policy (M. Deleuil)

The document is almost ready and will be presented and discussed at the next CW.

Action SC17-5: MD Present the document describing the EXODAT policy (next CW)

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3. Public Relation Organisation for next year

J. Schneider introduces the discussion by describing the different possible activities:

The targets:	Institutions Professional astronomers General pubic, journalists
The authors/actors	SC Official press release National communities (e.g. CNES, Space Agencies)
The content	Local groups (country, labs) General message: 2.5 missions for the price of 1 The 3 scientific programmes
General rules	Rules for the embargoes (Dates, etc.)
Tools/products	Websites Press release, press conferences, seminars Images, animation (count down before launch)

T. Lam-Trong, says that before and during launch, the PR activities are in the hands of the agencies.

After launch it should be driven by Scientists.

CNES has nominated Agnes Lerr as responsible for the PR activities on CoRoT

Thien proposes to discuss with her to start to plan the activities and propose a contract to CNES covering the funding of this type of activity.

We propose to set-up a small committee representing the SC, which could be called CoRoTSOC. Volunteers have manifested their interest:

Jean, Eric, Marc, Tristan, Fabio, Heike, Rafa, Arlette, Laurent J.

Action SC17-6 Thien : Propose a unique copyright to be added to all the papers referring to CoRoT Data.

4. Classical business

4.1. Debrief of CW9

Good quality, the place was extremely convenient for the meeting. Still difficulties with overlapping of splinter sessions...but difficult to avoid at the end..... The posters were nicely presented but may have been insufficiently advertised.

4.2. CW 10:

* Organisation (T. Guillot)

At "La Maison du seminaire" in Nice, June 5th to 9th, limited to 120 people.

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T.G. will prepare a Web page for early registration, indicating that in case of over registration, the labs and the teams will be asked to limit their participation.

Alcatel proposes to have one day at Cannes, with the visit of the Satellite, and a reception. The SC accepts this.

During this day the SC proposes to have a simplified "Instrument session" with a talk by Thien on the project status and one talk on the performance of the instrument. The other WG sessions will be as usual.

* Scientific Objectives Detailed presentation of the First observations, initial runs, with precise pointing, characteristics of the fields, AP/EXO programmes Decisions on short runs.

4.3. Further meetings

It seems that another CW in fall around the launch would not be easy to organise. It is decided to postpone the following meetings to early 2007

4.4. List of Co-Is and GIs

No modification for the Co-Is, 10 GIs from AO-1. The list will be revised at the next SC more carefully.

4.5. Evolution of the WG, new teams, thematic teams

* Presentation of the proposal of the DATeam of SWG

The final definition of this team has been accepted by all members; stressing that this team, under the responsibility of T. Appourchaux, is open to any Co-I or Associated scientist who wants to participate.

<u>* The follow-up activities</u> They are under the responsibility of the ground based working groups

For the exoplanet programme, where an enormous work is foreseen, some organisation has started to be discussed, with 5 teams, each with a well-identified leader.

A draft document will be issued in January and a final version presented at the next CW.

Action SC17-7 Magali D: Present a document at the next CW

<u>* Variable classification team</u> See above § 2.3 A document has to be written by Rafa G. to describe the organisation and presented at the next CW

Action SC17-8 Rafa G.: Present a document at the next CW

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5. ESA-SP/CNES publication

Due to the contribution of CNES, we will have a volume in colours. The deadline for manuscripts is still End of March Several members have proposed to contribute A.B will produce soon a more detailed summary

Action SC17-9 Annie B: Summary of the ESA-SP/CNES publication January 3rd

6. Relations to groups outside the CoRoT community

The discussion shows that there are two different types of propositions to participate

- Institutions

- Individuals or group

The policy should be different.

<u>* In the case of individuals or small groups</u> joining an existing activity, it seems possible to accept their contributions as Associated Scientists, in the corresponding team, under the responsibility of the Co-I who leads the team.

Decisions will be taken on a case-to-case basis.

H.R. presents the case of the Israelian team, which enters in this framework. After discussion the SC proposes that:

- External teams should specify clearly what they want to contribute to CoRoT and also what they want in return for it,

- The CoRoT SC, then decides whether this contribution is really needed

- A decision will then be made depending on the balance between contribution and requested return

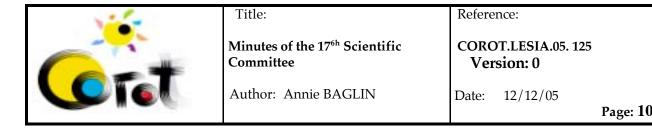
<u>* The case of institutions</u> is very different, and has to be treated on a political level. The relationship with NASA, as illustrated by the letter send by C. Beichman, proposing to participate to the follow-up observations, deserves more attention.

During this meeting, no decision has been taken.

But, as C. Beichman is invited to participate to CW10, we have to define a policy before that. It is proposed to put this subject on the agenda of SC18th in April.

7. Next meeting

Fixed in Paris, at ESA-HQ, on April 5th pm and 6th all the day.



8. Actions

8.1. Actions still open

SC12-10	Presentation EXODAT policy	MD		Postponed to CW10
SC12-11	Designation of an outreach person	Non French SCM	ASAP	For some only

8.2. Actions from SC17

SC17-1	Organise the forum and present the results at the next SC.	EM + MD	SC18
SC17-2	Edition of the document on the templates	AB	End 2005
SC17-3	Alarm mode	PB, MD, WW	CW10
SC17-4	Present the first version of the definition of the publications rules for the exoplanet Core programme		CW10
SC17-5	Document on EXODAT policy	MD	CW10
SC17-6	Standard copyright	TLT	SC 18
SC17-7	Document on follow-up activities	MD	CW10
SC17-8	Document on classification of variables	RG	CW10
SC17-9	ESA publication	AB	SC17



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Table 1: List of Co-Is and GIs

Co-Is

Name	first name	Country/lab	o Institution	activity	WG
RAUER HATZES PAETZOLD WUCHTERL	Heike Artie Martin Guenther	Germany Germany Germany Germany	DLR Berlin Thueringer Cologne MPI	Dynamics, Hot jupiters GBO exo and sismo Exo atmopsheres Planet formation, mass distributio	E/EGBO E/SGBO E n E
APPOURCHAUX Foing Friedlund Gondoin	Thierry Bernard Malcom Philippe	ESTEC ESTEC ESTEC ESTEC	RSSD RSSD RSSD RSSD	Data analysis, solar type Link to space missions, activity	S A ? ?
NOELS AERTS SCUFLAIRE MAGAIN JORISSEN	Arlette Conny Richard Pierre Alain	Belgium Belgium Belgium Belgium Belgium	Liège Leuven Liege Liege Bruxelles	Stellar evolution Beta Ceph, SPB Non adiabatic analysis Spectroscopic analysis Planetary atmospheres	S S SGBO E
GARRIDO RIBAS DEEG ROCCA-CORTES SOLANO	Rafael Ignacio Hans Theo Enrique	Spain Spain Spain Spain Spain	IAA U. Barcelona IAC IAC LAEFF	GBO photometry Binaries Ecclipsing Transit detection Data analysis and interpretation GB Data base	S A P E S SGBO
WEISS HANDLER LEBZELTER LAMMER ZWINTZ	Werner Gerald Thomas Helmut Konstanz	Austria Austria Austria Austria Austria	Vienna Vienna Graz Vienna	APWG +lambda Boo, Ro Ap Gam Dor AGBs planetary atmospheres PMS	S/AP/SGB APS AP E S
Roxburgh Collier-Cameron Queloz Kjedsen Monteiro	lan Andrew Didier Hans Mario	U K UK Switzerland Danemark Portugal	QMW London St Andrews Geneve Aarhus Porto	Excitation and amplitudes Activity modeling GB follow-up TBC Stellar modeling (TBC)	S AP EGBO SGBO S

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JANOT-PACHECO	DEduardo	Brazil	U Sao-Paulo	Seismology Be stars	S
Gregorio-Hetem	Jane	Brazil	U Sao-Paulo	PMS Stars	AP
de la Reza	Ramiro	Brazil	ON Rio	Proto-planets	E
Cuisinier	François	Brazil	O Vallongo, Rio	Gaints	AP
Renan de Medeiros	José	Brazil	U Rio Grande del Nort	e Rotation	S/AP
PORETTI	Enio	Italy	Merate	Spectroscopy/delta scuti	SGBO
MICHEL	Eric	France	LESIA	SWG+delta scuti analysis	S
CATALA	Claude	France	LESIA	SGBOWG	SGBO
ROUAN	Daniel	France	LESIA	Onboard treatment	E
GOUPIL	Marie-Jo	France	LESIA	Moderate rotation	S
MOSSER	Benoit	France	LESIA	Solar planets	E/S
SAMADI	Reza	France	LESIA	Amplitudes	S
TIPHENE	Didier	France	LESIA	Instrument	Instr
BARBAN	Caroline	France	LESIA	Data analusis	S
SCHNEIDER	Jean	France	LUTH	Planets in multiple systems	E
ALECIAN	Georges	France	LUTH/GEPI	Chemically peculiar stars	S
HUBERT	Anne-Marie		GEPI	Be stars	3 AP/S
LEBRETON	Yveline	France	GEPI	Models	S S
		_			_
LEGER	Alain	France	IAS	Earth like	E
BOUMIER	Patrick	France	IAS	Instrument	Inst
BAUDIN	Frederic	France	IAS	Time frequency analysis	S
OLLIVIER	Marc	France	IAS	Instrument	E/Inst
APPOURCHAUX	Thierry	France	IAS	data analysis	S
BARGE	Pierre	France	LAM	EWG+Hot planet statistics	Е
DELEUIL	Magali	France	LAM	EGBO	EGBO
JORDA	Laurent	France	LAM	Data reduction	Е
MOUTOU	Claire	France	LAM	EGBOWG	EGBO
LLEBARIA	Antoine	France	LAM	Masks in E field	Е
BOUCHY	François	France	IAP	Radial velocities	E
VAUCLAIR	Gerard	France	OMP/LAT	WD	S
TOUBLANC	Dominique	France	OMP/CESR	Catalogues	Е
VAUCLAIR	Sylvie	France	OMP/LAT	Diffusion and mixing	S
RIEUTORD	Michel	France	OMP/LAT	Fast rotation	S
RIEUTURD					

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LIGNIERES	François	France	OMP/LAT	Rotating models	S+SGBO
GUILLOT	Tristan	France	OCA	Hot Jupiters	E
PROVOST	Janine	France	OCA	Direct seismic analysis	S
BERTHOMIEU	Gabrielle	France	OCA	Optimisation interpretati	on S
TOUTAIN	Thierry	France	OCA	Data analysis	S
MATHIAS	Philippe	France	OCA	gamma dor	S
TURCK-CHIEZE	Sylvaine	France	Sap/CEA		S
GARCIA	Rafael	France	Sap/CEA		S
BALLOT	Jerome	France	SaP/CEA		S
AUVERGNE BAGLIN	Michel Annie	France France	LESIA LESIA	IS Pl	Inst

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