SP-1306
October 2006

The CoRoT Mission
Pre-Launch Status

Stellar Seismology and Planet Finding

European Space Agency
Agence spatiale européenne

Publication	The CoRoT Mission, Pre-Launch Status, Stellar Seismology and Planet Finding (ESA SP-1306, November 2006)
Edited by	M. Fridlund ESA Research & Scientific Support Department, A. Baglin, J. Lochard LESIA, Observatoire de Paris, Meudon, France & L. Conroy ESA Publications Division
Published and distributed by	ESA Publications Division ESTEC, Noordwijk, The Netherlands
Price	EUR 60
ISBN ISSN	92-9092-465-9 0379-6566

CONTENTS

Introduction

Part A: The Scientific Programme

High Accuracy Stellar Photometry

Part B: The Space Mission

The Concept and Its Actors

Organisation

Partners

The Spacecraft and Its Instruments

CoRoTlog
Ph. Plasson

Performance de L'Instrument
P. Levacher

CoRoT Instrument Integration and Tests
R. Perez

Les AIT CoRoTCase au LESIA
G. Huntzinger et al

The Satellite: Introduction to Presentations on CD
M. Jouret al

CoRoT Satellite
M. Jouret *ON CD ONLY*

CoRoT AOCS
D. Brethé *ON CD ONLY*

CoRoT Satellite A.I.V.
F. Rassiguier *ON CD ONLY*

Cleanliness and Product Insurance
C. Fauré

The Launcher
T. Lam-Trong

The Operational Ground Segment
L. Boisnard

The CoRoT Satellite Control Center and Stations Network
L. Boisnard & P. Gelie

Le Centre de Mission CoRoT
P. Laudet & S. Chaintreuil

The CoRoT Data Centre: CDC
A. Baglin & S. Chaintreuil

Extraction of the Photometric Information

Ground-Based Observations and Follow-Up

Tools

Evaluation of the Scientific Performance

The Observing Programme

Parallel and Future Projects

Kepler Portayed by CoRoT
P. Barge & J. Schneider

MOST and BRITE-Constellation
W. Weiss et al

PLATO: Planetary Transits and Oscillations of Stars
C. Catala and the PLATO Team

Post CoRoT-Like Science with the ”Super-Earths Explorer”
J. Schneider

Darwin: A Space Observatory for the Direct Detection of Exoplanets
M. Ollivier & A. Léger

A Vision for the Future: Interfero-Asteroseismology from Space
C. Catala

A Step: Towards a Successor to CoRoT on Dome C, Antarctica
F. Fressin et al

SIAMOIS: An Asteroseismic Network with 1 Site in Antarctica
B. Mosser & the SIAMOIS group

The CoRoT Story

The Quest for a European Space Mission in Stellar Seismology and Planet Finding
I.W. Roxburgh

The CoRoT’S BIPRISM Adventure
A. Léger et al

Are You Sure You Know Everything about CoRoT? A Simple Test
M. Ollivier

A Tribute

A Tribute to Frédéric Bonneau
A. Baglin