1. Record Nr. UNINA9910798222903321

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Titolo	Evolutionary history / / Christopher J. Paradise, A. Malcolm Campbell
Pubbl/distr/stampa	New York, [New York] (222 East 46th Street, New York, NY 10017) : , : Momentum Press, , 2016
ISBN	1-60650-966-7
Descrizione fisica	1 online resource (65 pages) : illustrations
Collana	Biology collection
Disciplina	575
Soggetti	Evolution (Biology) Plants - Evolution Human evolution Libros electronicos.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Descent with modification and adaptive radiations can be observed -- Adaptive radiation of orchids from a common ancestor -- Rapid diversification in bats -- 2. Terrestrial plants evolved from aquatic ancestors millions of years ago -- 3. Humans evolved from hominid ancestors in Africa -- Ethical, legal, social implications: eugenics yesterday and today -- Ethical, legal, social implications: evolution has not reached its peak; humans are still evolving -- 4. Evolution can occur quickly in response to strong selection -- Ethical, legal, social implications: overuse of chemicals like pesticides and antibiotics can have detrimental effects -- Conclusion -- Glossary -- Index.
Sommario/riassunto	This book describes how evolutionary history is studied using several well-known examples and also using evolutionary trees. Evolutionary trees are analyzed and used to explain adaptive radiations of orchids and the diversification of bats over geologic time. Evolutionary trees and genetic evidence is used to infer when and from what ancestors terrestrial plants evolved and invaded land. Specific adaptations of early land plants led to the evolution of terrestrial plants and their success

	on land. Evidence about the ancestors and habitats of humans is used to infer and analyze the evolution of the human family tree, whose populations were subject to the same forces of evolution to which other species are subject. Human evolution was not linear, involved offshoot species that did not survive, and took many thousands of years. In contrast, evolution can be seen in just a few years or less in other examples, and analysis of the evolution of mechanisms of pesticide resistance in insects will be used to illustrate this rapid evolution.

2. Record Nr. UNINA9910254187603321

Titolo	The FLP Microsatellite Platform : Flight Operations Manual / / edited by Jens Eickhoff
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-23503-6
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (697 p.)
Collana	Springer Aerospace Technology, , 1869-1730
Disciplina	629.46
Soggetti	Aerospace engineering Astronautics Computers, Special purpose Electronics Microelectronics Aerospace Technology and Astronautics Special Purpose and Application-Based Systems Electronics and Microelectronics, Instrumentation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro; Foreword; Preface; Donation for Life; Contents; Contributors; Abbreviations; 1 Introduction to the Microsatellite Platform; 2 The FLP Platform Operability; 3 Data Handling and Control Concept; 4 Core Data Handling Subsystem; 5 Power Supply Subsystem; 6 Platform Communication Subsystem; 7 Attitude Control Subsystem; 8 Thermal

Control Subsystem; 9 Payload Control Subsystem ; 10 Failure Detection, Isolation and Recovery Concept; 11 Satellite Mission Phases and Planning; 12 Stuttgart Mission Control Infrastructure ; 13 Stuttgart/DLR Infrastructure for LEOP
14 Earth Observation Mission Planning15 Flight Procedures; 16 FLP Mission Information Database; 17 Annexes and Data Sheets; References; Index; Abstract; 1.1 The University Small Satellite Program; 1.2 Satellite Orbit; 1.3 Mechanical Design and Launcher Interface; 1.4 Technology and Payloads; 1.5 Platform Re-usability; 1.6 Platform Redundancy Concept; 1.7 Power Subsystem and Electrical Block Diagram; 1.8 Core Data Handling Subsystem; 1.9 FLP Payload Control Computer; 1.10 Attitude Control Subsystem; 1.11 Reaction Control Subsystem; 1.12 Communication Subsystem; 1.13 Thermal Control Subsystem
1.14 Satellite Deorbiting at End of Life1.15 Possible Mechanical Platform Configurations; Abstract; 2.1 Spacecraft Configuration Handling Concept; 2.2 Spacecraft Telecommand and Telemetry Structure; 2.3 Application Process ID Definitions (APIDs); 2.4 PUS Tailoring Concept; 2.5 Spacecraft Commandability and Observability; 2.6 Spacecraft On-board Time Management; Abstract; 3.1 Onboard Software Architecture; 3.2 OBSW Object Types; 3.3 Observability Functions Provided by the OBSW; 3.4 FLP Software Dynamic Architecture; 3.5 Onboard Software Death Report; Abstract
4.1 On-Board Data Handling Subsystem4.2 Combined Data and Power Management Infrastructure; 4.3 Data Management; 4.4 System Boot at Launcher Separation; 4.5 OBSW Controlled Functions; 4.6 Core DHS Subsystem Control; Abstract; 5.1 Subsystem Overview; 5.2 Solar Panels; 5.3 Solar Array Deployment Mechanism; 5.4 Battery; 5.5 Power Control and Distribution Unit; 5.6 Power Subsystem Control; Abstract; 6.1 TTC Subsystem Overview; 6.2 Signal Acquisition Procedure; 6.3 TTC Subsystem Control; Abstract; 7.1 Subsystem Overview; 7.2 Mission Objectives and ACS Subsystem Modes; 7.3 Magnetometers
7.4 Sun Sensor Unit7.5 GPS Receiver System; 7.6 Fiberoptic Gyroscopes; 7.7 Star Tracker; 7.8 Reaction Wheels; 7.9 Magnetotorquers; 7.10 Extensions for FLP Generation 2; 7.11 ACS Subsystem Control; Abstract; 8.1 Thermal Subsystem Overview; 8.2 Sensors, Calibration, Limits; 8.3 TCS Subsystem Control; Abstract; 9.1 Aspects of Payload Control and Data Handling; 9.2 Payload Control on the First FLP Based Satellite; 9.3 Payload Control in Network-Centric Architectures; Abstract; 10.1 General Principles; 10.2 Core DHS FDIR; 10.3 Power FDIR; 10.4 Equipment FDIR; 10.5 TTC FDIR; 10.6 ACS FDIR
10.7 TCS FDIR

Sommario/riassunto

This book represents the Flight Operations Manual for a reusable microsatellite platform – the “Future Low-cost Platform” (FLP), developed at the University of Stuttgart, Germany. It provides a basic insight on the onboard software functions, the core data handling system and on the power, communications, attitude control and thermal subsystem of the platform. Onboard failure detection, isolation and recovery functions are treated in detail. The platform is suited for satellites in the 50-150 kg class and is baseline of the microsatellite “Flying Laptop” from the University. The book covers the essential information for ground operators to controls an FLP-based satellite applying international command and control standards (CCSDS and ECSS PUS). Furthermore it provides an overview on the Flight Control Center in Stuttgart and on the link to the German Space Agency DLR Ground Station which is used for early mission phases. Flight procedure and mission planning chapters complement the book. .