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Nota di contenuto	Space Science in the Twenty-First Century: Imperatives for the Decades 1995 to 2015 Copyright Foreword Contents 1 Introduction 2 Scientific Goals and Recommendations GOALS OF PLANETARY EXPLORATION To understand the origin of the solar system To understand the evolution of the planets To learn what conditions lead to the origin of life To learn how physical laws work in large systems A BALANCED PLANETARY PROGRAM A MARS FOCUS SUMMARY OF RECOMMENDATIONS Scientific Investigations Technical Developments International Collaboration 3 Status of Planetary Science in 1995 OVERVIEW State of Planetary Exploration as of 1995 Scientific Questions as of 1995

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PLANETARY GEOSCIENCES -- Scientific Objectives for Planetary Geosciences -- Formation -- Interior Structure, Dynamics, and Physical State -- Crustal Evolution -- Planet Morphology and Surface Processes -- Measurement Objectives -- The Inner Solar System -- The Moon --Mercury -- Venus -- Mars -- Internal Characteristics of the Inner Planets -- Magnetic Fields of the Inner Planets -- Atmospheric-Climatic Connections of the Inner Planets -- Rocky Satellites -- Satellites of Jupiter -- Satellites of Saturn -- Satellites of Uranus and Neptune --ATMOSPHERES -- Earth, Mars, and Venus -- Titan -- Io and the Plasma Torus -- Jovian Planets -- RINGS -- INTERIORS OF THE GIANT PLANETS -- PLANETARY MAGNETISM -- Generation of Planetary Magnetic Fields -- Earth's Magnetic Field -- Studying Planetary Magnetic Fields --PRIMITIVE BODIES AND THE ORIGIN OF THE SOLAR SYSTEM -- The Origin of the Sun and Planets -- Search for and Study of Other Planetary Systems -- Asteroids, Small Satellites, and Meteorites --General Characteristics -- Anticipated State of Knowledge in 1995 --COMETS -- General Characteristics -- State of Knowledge in 1995. **Questions in Cometary Science -- Comet Measurements and Technical** Requirements -- 4 Future Programs -- PROPOSED MISSIONS --Programs for Planetary Geosciences -- Types of Missions -- Planned Missions -- Programs for the Outer Solar System -- Types of Missions -- Planned Missions -- Future Missions and Programs for Primitive Bodies and the Origin of the Solar System -- A PROGRAM FOR INTENSIVE EXPLORATION OF MARS -- Why Mars? -- Scientific Objectives for a Mars Focus -- Role of Humans in Intensive Mars Exploration -- A Phased Approach -- RECOMMENDATIONS --Exploration of the Solar System -- Exploration of Mars.