C. Space Studies of the Upper Atmospheres of the Earth and Planets Including Reference Atmospheres

Sub-Commission C1 on the Earth's Upper Atmosphere and Ionosphere

Sub-Commission C2 on the Earth's Middle Atmosphere and Lower Ionosphere

Sub-Commission C3 on Planetary Atmospheres and Aeronomy

Task Group on Reference Atmospheres of Planets and Satellites (RAPS)

URSI/COSPAR Task Group on the International Reference Ionosphere (IRI)

COSPAR/URSI Task Group on Reference Atmospheres, including ISO WG4 (CIRA)

Sub-Commission C5/D4 on Theory and Observations of Active Experiments

The Commission stimulates planning of cooperative research program; investigates specified aspects of the properties and structure of the upper atmospheres of the Earth and planets; plans symposia and topical meetings in which new results are presented and discussed, and develops comprehensive reference atmospheres and ionospheres for the Earth and planets.

- International Standards on Space Environment from ISO
- Advances in Remote Sensing of the Middle and Upper Atmosphere and Ionosphere from the Ground and from Space, including Sounding Rockets and Multi-Instrument Studies
- Variabilities of Radio Wave Propagation Characteristics in Lower Ionosphere
- Recent Advances in Equatorial, Low- and Mid-Latitude Mesosphere, Thermosphere and Ionosphere Studies
- The Coupled Solar Wind-Magnetosphere-Ionosphere-Thermosphere System and the Impact of Solar and Geomagnetic Storms on Geospace
- Conditions for Enhanced Risk in Ionospheric Weather
- CSES and Swarm Data Analysis of the Ionosphere Dynamics at Different Temporal and Spatial Scales
- The Physics and Dynamics of the Middle Atmosphere from Mid to High Latitudes
- Wave Coupling Processes and Consequences in the Whole Atmosphere and Ionosphere
- · Advances in External Forcing Studies for the Middle Atmosphere and Lower Ionosphere
- Small Satellite Missions for Aeronomy and Ionosphere Studies
- Planetary Atmospheres
- Planetary Upper Atmospheres, Ionospheres and Magnetospheres
- Imaging the Planets in X-rays
- Improving the Description of Hemispheric Differences in Ionospheric Models
- Development of Models Related to the COSPAR International Reference Atmosphere and to ISO Standards for the Atmosphere
- Venus International Reference Atmosphere, VIRA Update
- Active Space Experiments
- Dust Detection and Observation in Space and Laboratory Experiments