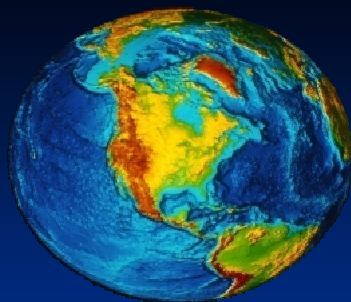




GMES

in National Space Research Program of Bulgaria

Dr. Lachezar Filipov



BULGARIAN ACADEMY OF SCIENCES
SPACE RESEARCH INSTITUTE



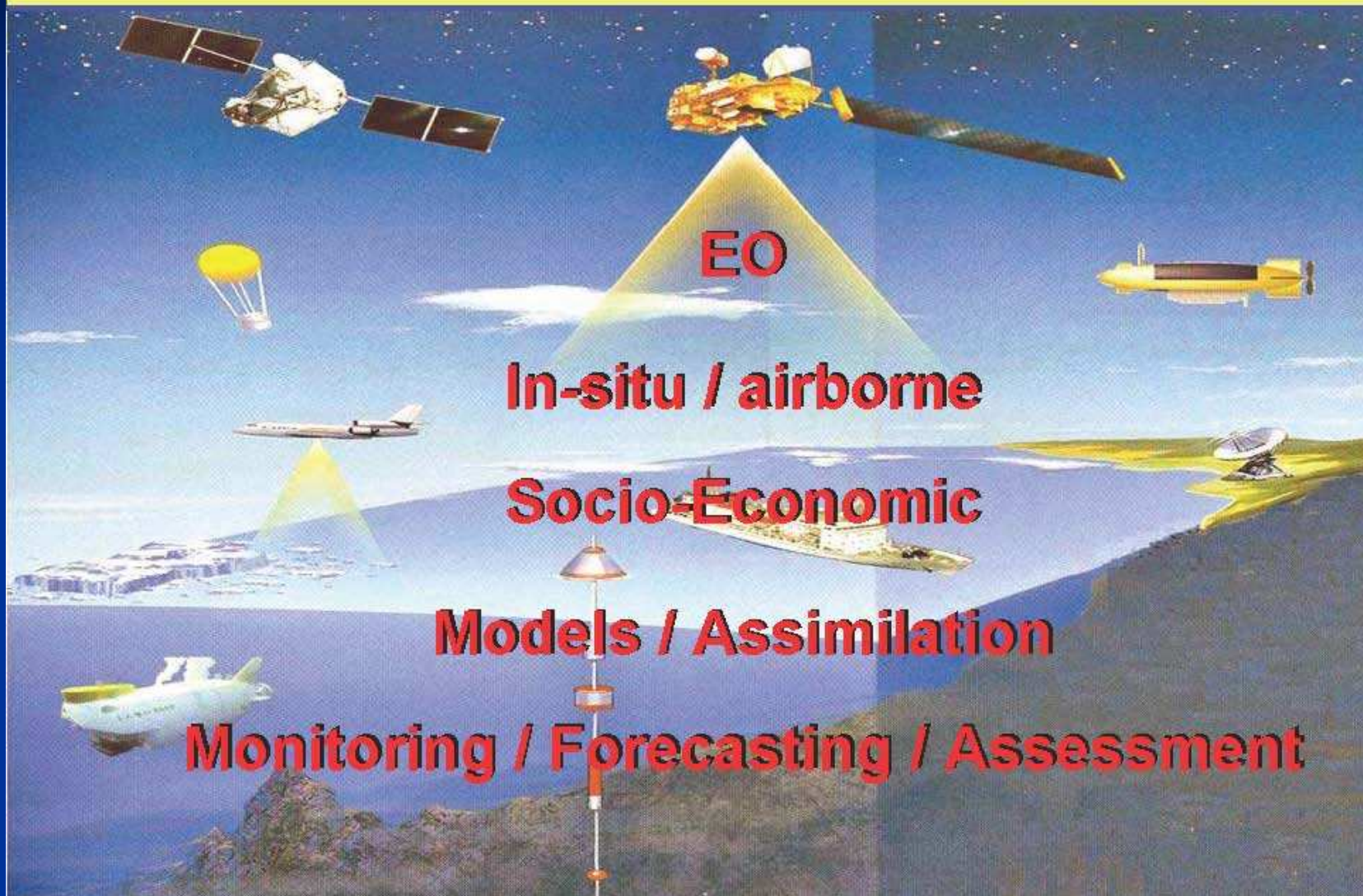
This is a summary gives a brief description of the national program for Space research with its two project. Described the main algorithm for resolving the tasks in the GMES (project “Establishing the national space segment by microsatellites platforms and the ground infrastructure under the program GMES of the EU and ESA”) with national space segment.



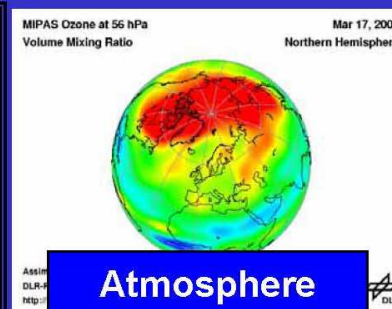
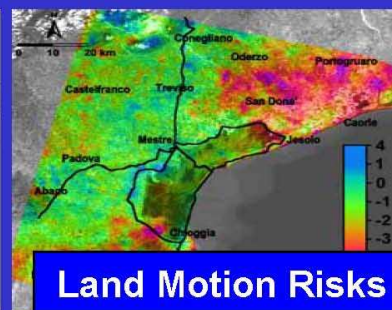
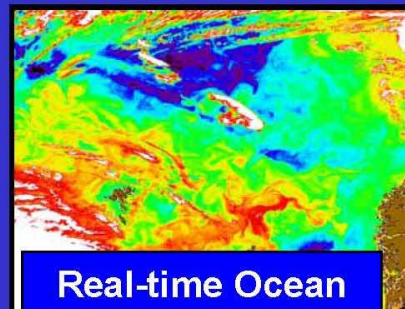
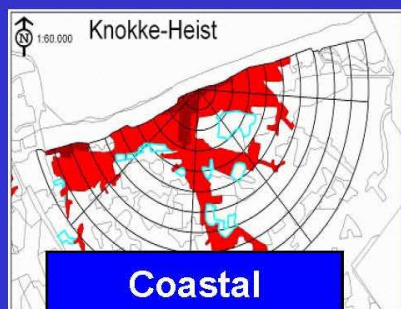
National Space Research Programme of Bulgaria

- Associate the Republic Bulgaria of the program PECS (Plan for European Cooperation State) of the European Space Agency and participation in its scientific and research projects.
- Establishing the national space segment by microsatellites platforms and the ground infrastructure under the program GMES of the EU and ESA.

GMES Data & Methods



12 GMES Service Portfolios





1988 - the spacecraft SOYUS TM-5 was launched with the second Bulgarian cosmonaut **Aleksandar Aleksandrov** on board

Project **PRIRODA** - 1996

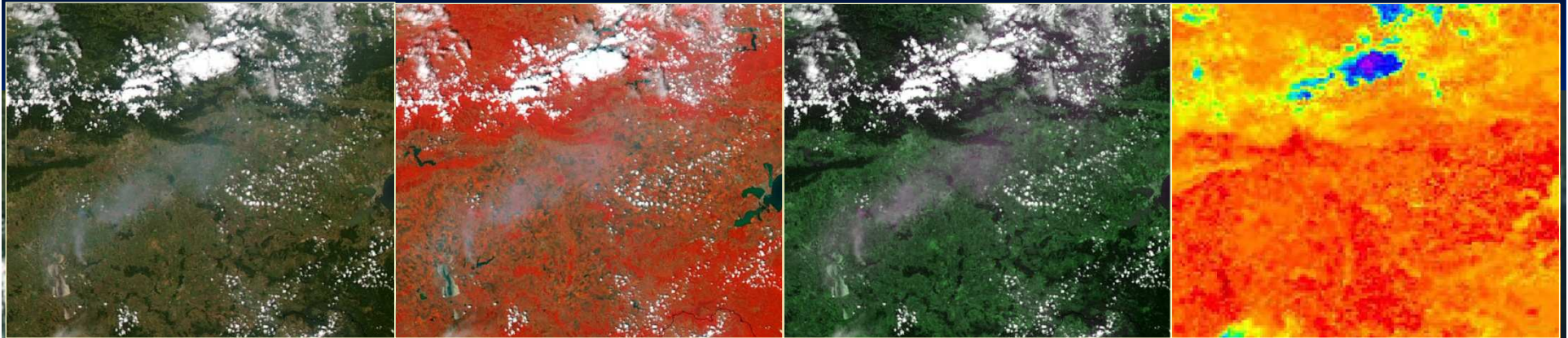


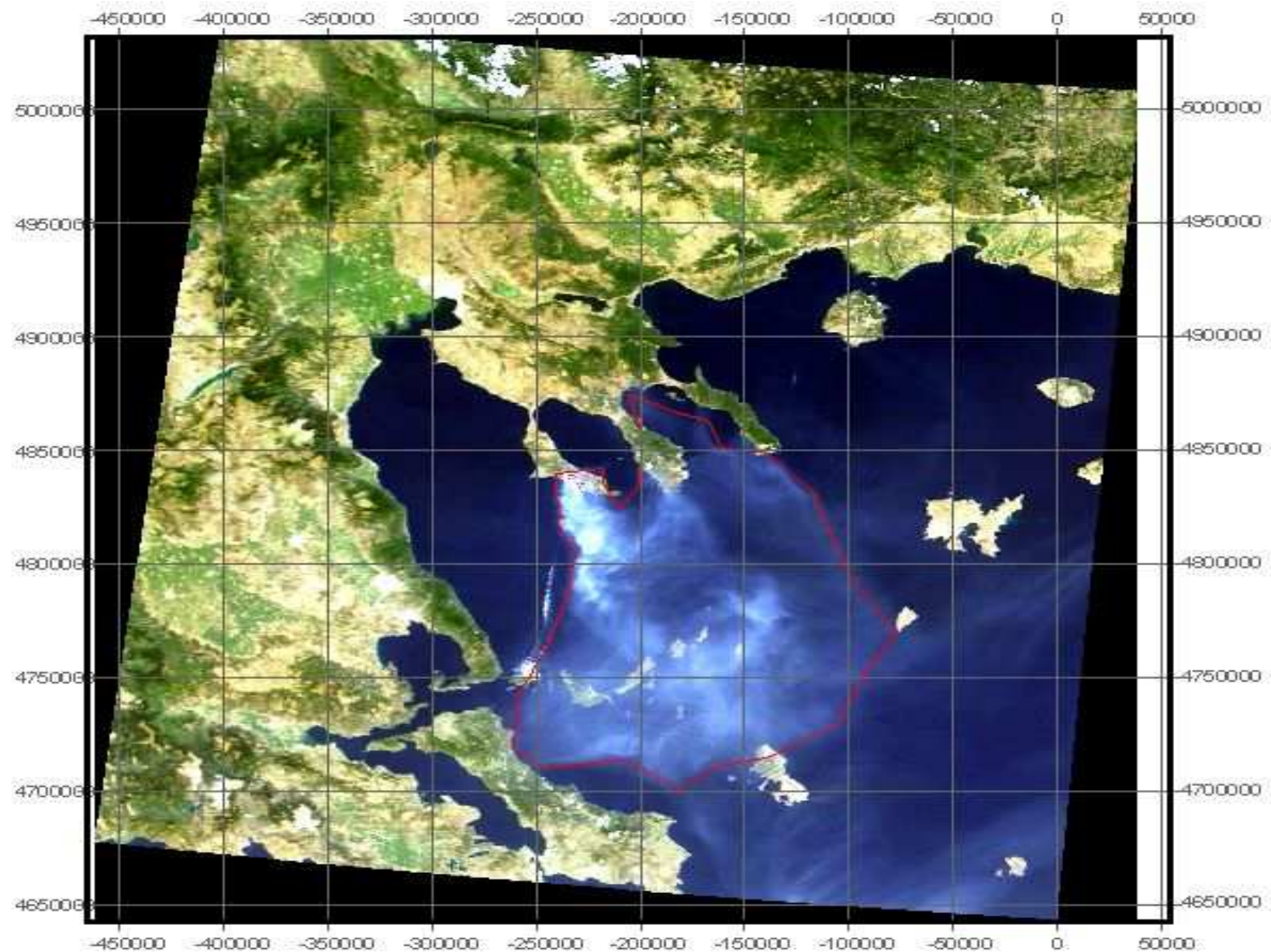
R-400 – 2000 Russia, Bulgaria



Spectrophotometer **"SPEKTAR-256"** on board of MIR space station 1988-1990

WEB-BASED SPACE MONITORING ON THE TERRITORY OF STARA ZAGORA





SCIENTIFIC RESEARCH AND APPLICATION PROGRAMME "BALKANSAT-1"



SPACE SEGMENT

PROJECT MICROSATELLITE
PLATFORM "BALKANSAT-1"



AIR SEGMENT

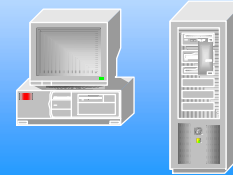


The microsatellite platform "BALKANSAT-1" is a highly technological instrument for environment monitoring and security, related to anthropogenic processes that create risks for environment – fires, floods; dust and gas air pollution; electromagnetic smog. The scientific investigation program stipulates advanced researches on phenomena critical for urban infrastructure sustainability in solar-terrestrial interactions – spontaneous discharge of high level quasioelectrostatical charged volume.

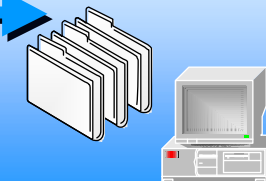
TELEMETRY AND
CONTROL
STATIONS



SYSTEM FOR
PREPROCESSING



SATELLITE AND
AIR DATA SERVER



INTERNET

PARTICIPANTS
IN "BALKANSAT-1"



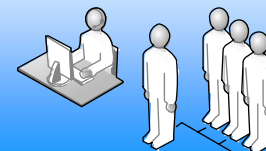
SCIENTIFIC
ORGANIZATIONS



GOVERNMENT

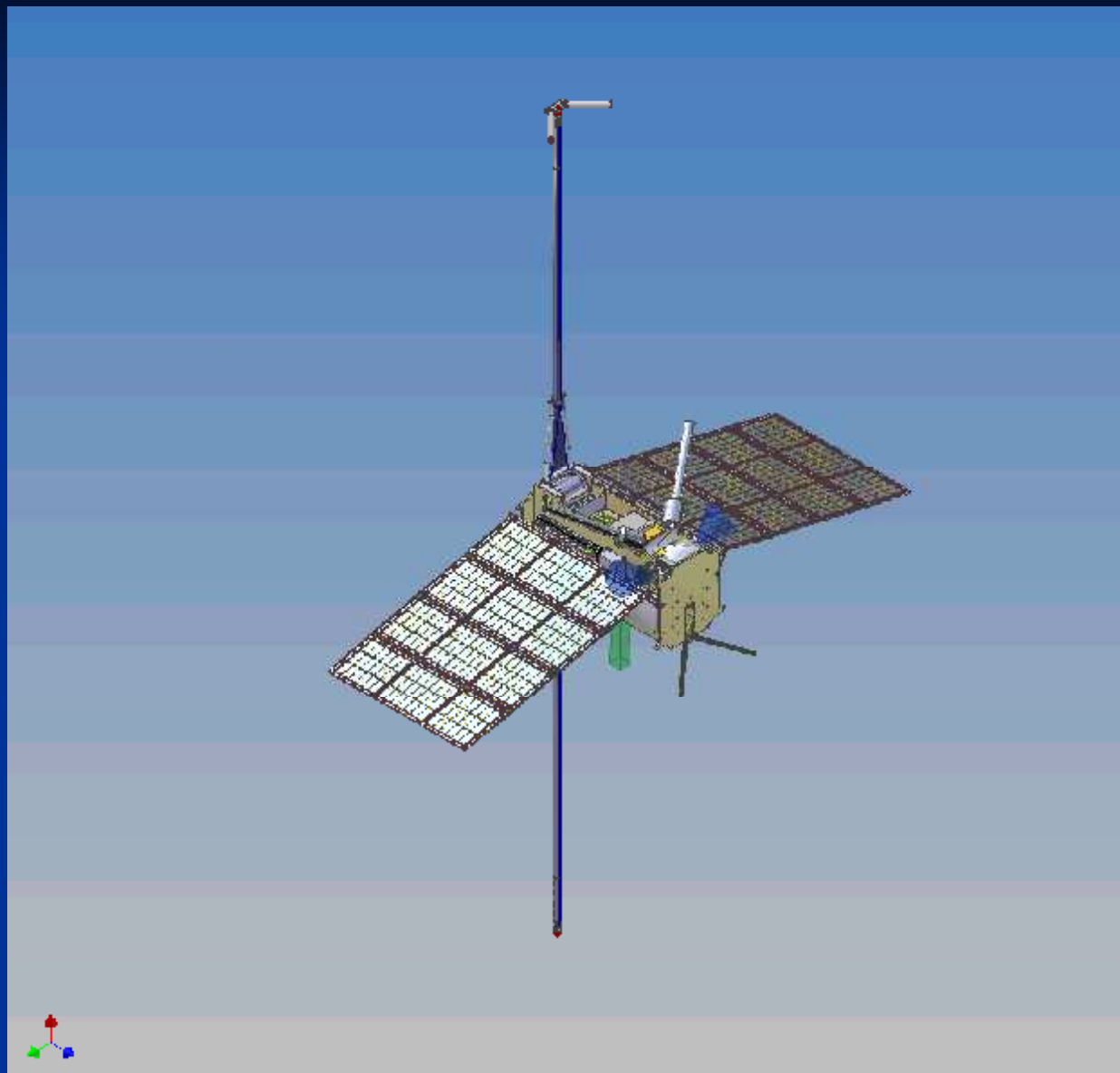


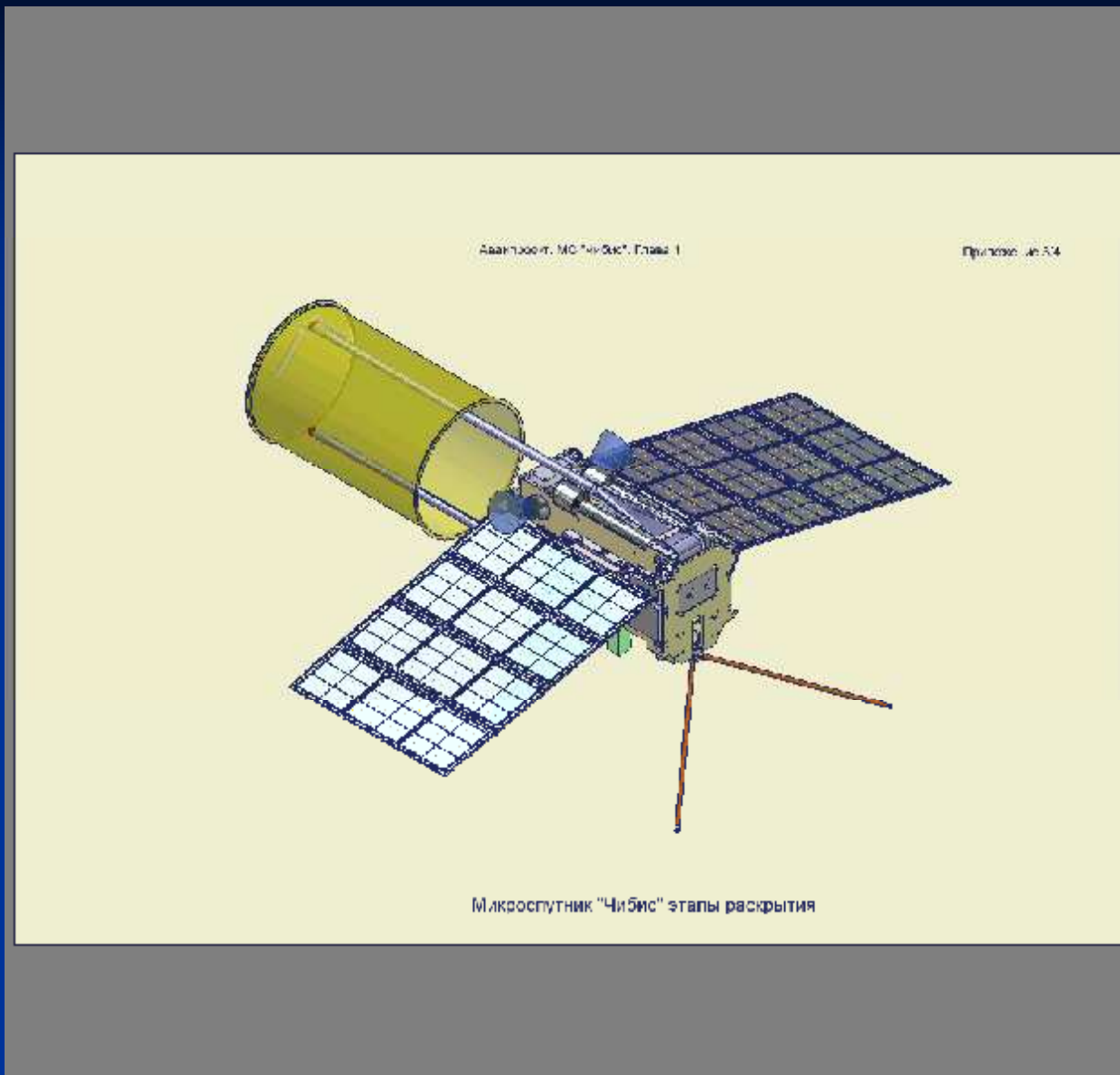
BUSINESS AND
NGO PARTICIPANTS



INTERNATIONAL
PARTICIPANTS



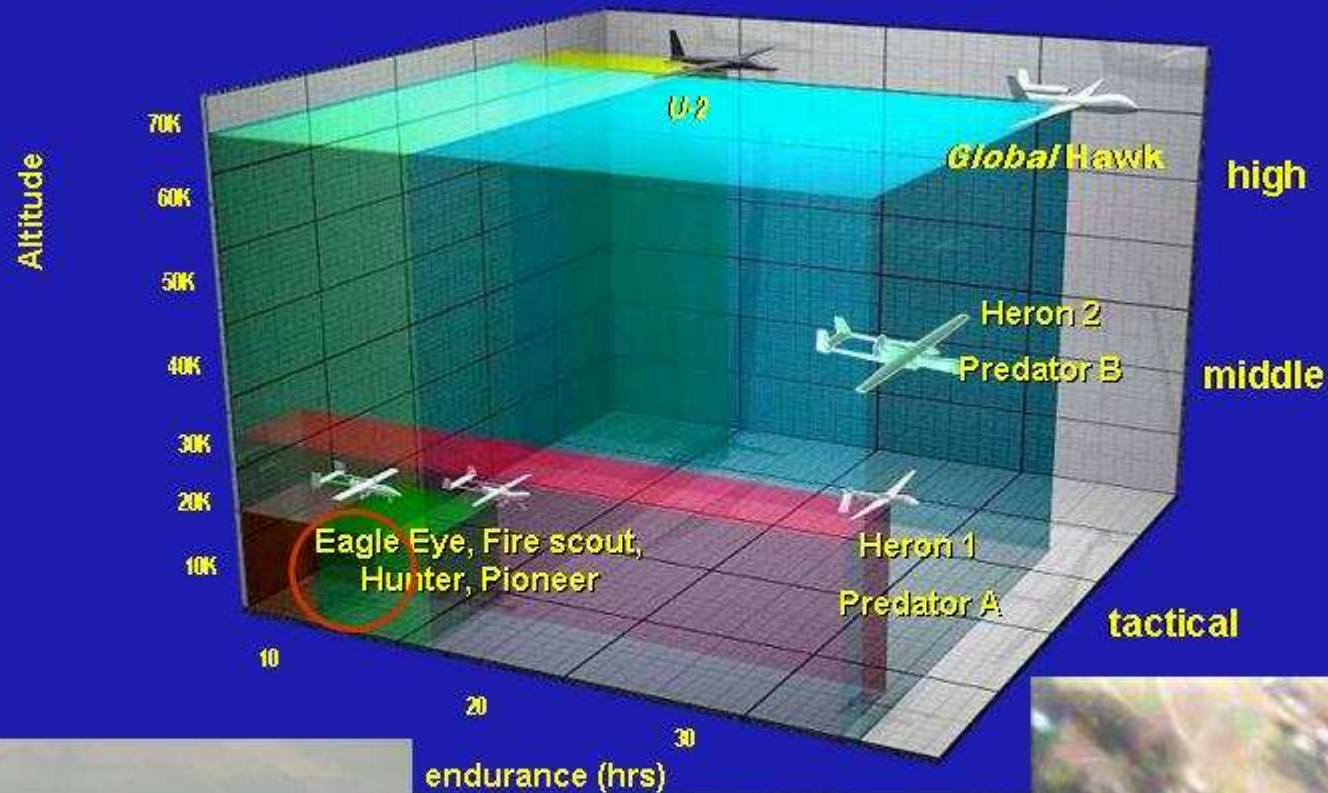




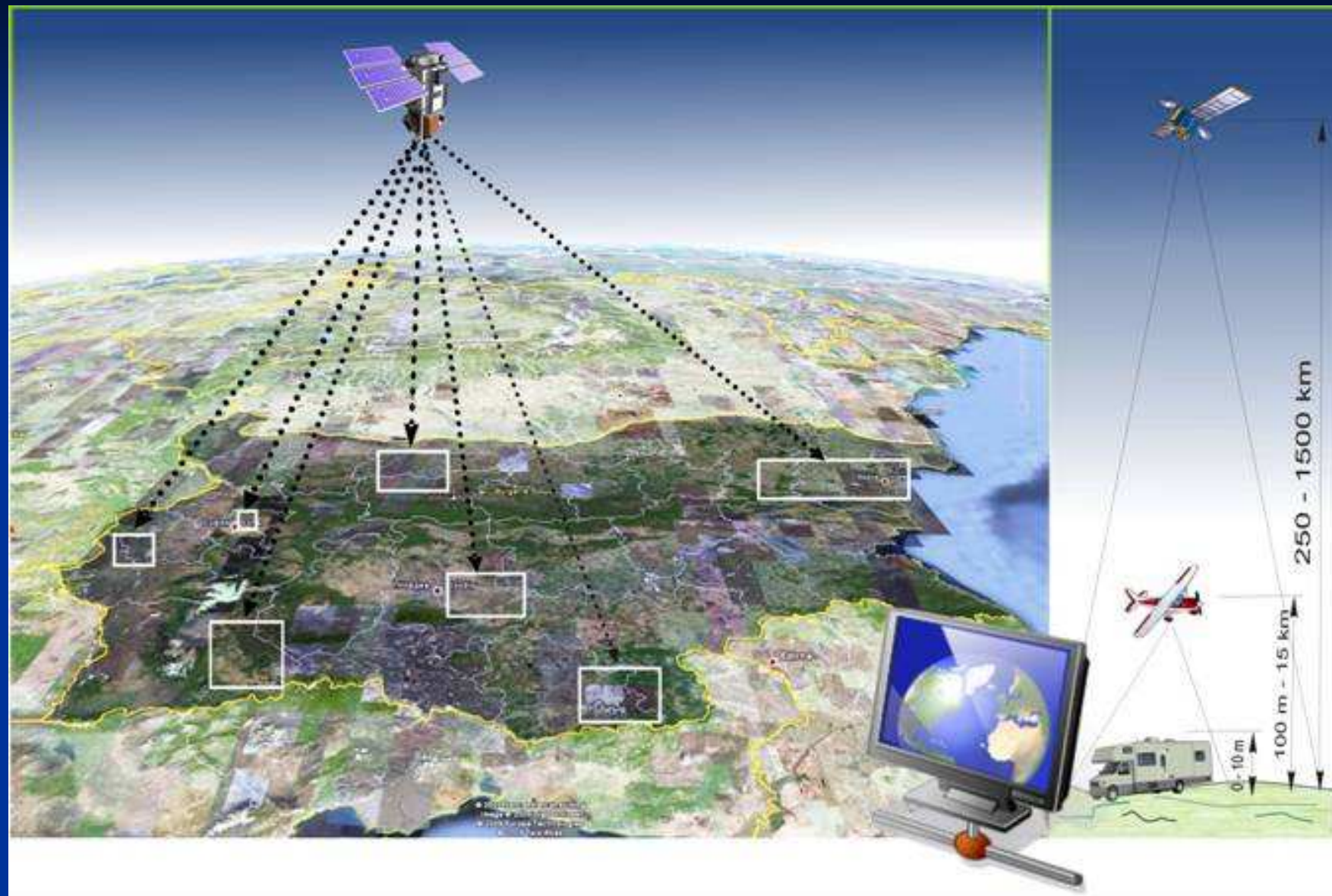
System for early warning, detecting and localization of field and forest fires

Collaboration - SRI-BAS, AVIOTECHNIKA and CIVIL PROTECTION State Agency

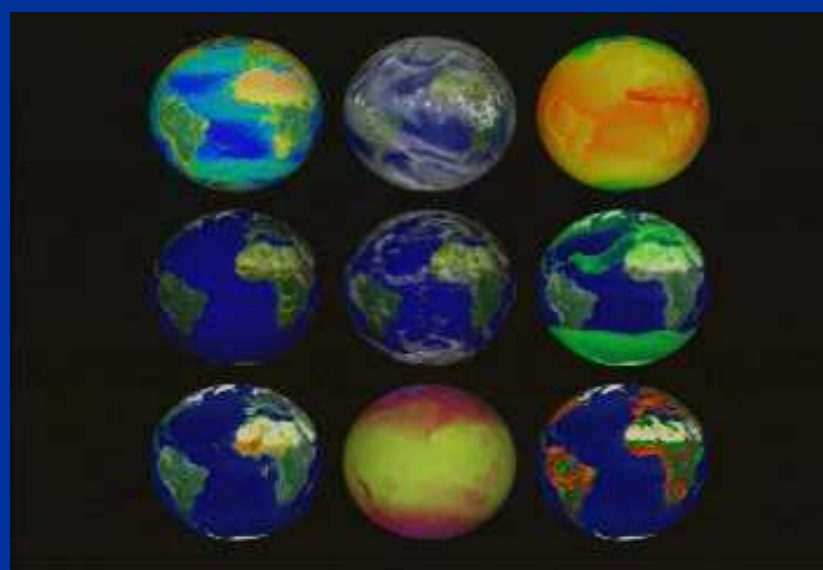
UAV'S CLASSIFICATION



THE AEROSPACE TEST SITES IN BULGARIA



Conclusion must be emphasized that our country has real opportunities to build National Space segment and it to become a inseparable part of European GMES Space sector. After this exclusive meeting dedicated to the GMES and manifest great interest of many organizations we consider that the government of the Republic Bulgaria will speed up adoption of the National program for Space research.



Thank You for Your Attention!