

Proposal for Forming an IAA Study Group SG 1.9

Title of Study:

Satellite remote sensing of aerosols in the Earth atmosphere

Proposer(s):

Yatskiv Yaroslav S.

Primary IAA Commission Preference: Commission 1

Secondary IAA Commission Interests: Commissions 3, 4, 5, 6

Members of Study Team**Chair(s):**

Co-Chair: Yatskiv Yaroslav S.

Secretary: TBD

Other Members:

Degtyarev Olexandr V.
Makarov Olexandr L.
Rozenbush Vera K.
Ventskovsky Oleg M.
Mishchenko Michael I.
Shakhovskoy Dmitriy N.
Milinevsky Gennadiy P.
Sinyavsky Ivan I.

other members TBD

Short Description of Scope of Study**Overall Goal:**

Analysis of the role of polarimetric satellite observations in determination of spatial and time distribution of physical characteristics of tropospheric and stratospheric aerosol and cloud particles in the Earth atmosphere as well as assessment of its influence on climate, environment and weather.

Intermediate Goals:

1. Long-term global satellite monitoring and creation of the data-base of optical, micro-, macrophysical and chemical properties of aerosols and clouds in the Earth atmosphere, their spatial and time distribution.
2. Accurate quantitative determination of aerosols contribution into energy balance of the Earth's climatic system.
3. Determination of anthropogenic aerosols impact on the climate and environment of the Earth.

Methodology:

Forming an international study group, draft a detailed schedule of the study.

Coordination of a study report outline.

Assigning individual responsibility for preparation of sections of the study report.

Assigning editor to coordinate individual sections and prepare an integral and coherent final study report.

Work to be conducted through on-line collaboration of the study group members and study group meetings to be held in the course of annual Congresses and the IAA Conferences.

Time Line:

2 to 3 Years

Final Product (Report, Publication, etc.):

Report

Target Community:

Scientists, engineers, Governments at large, local authorities, Space Agencies, UN, European Commission

Support Needed:

TBD

Potential Sponsors:

National Academy of Sciences of Ukraine
State Space Agency of Ukraine (SSAU)
NASA
CNES
DLR
UN COPUOS
European Commission

To be returned to the IAA Secretary General Paris

by fax: 33 1 47 23 82 16 or
by email: sgeneral@iaamail.org

Date: 21.02.2013

Yatskiv Yaroslav

Follow-up Section for IAA use only

Initial Phase

Application received:

22 February 2013

Commission Approved:

SAC Approved:

Web Site Section opened:

Members Formally Appointed by IAA:

Final Phase

Peer Review by Commission Completed:

Recommended by the Commission:

Final Report Received:

SAC Approved:

BOT Accepted:

Publisher Selected:

Study Published: