

July 5, 2013

Dear Sir/Madam,

I am pleased to announce that the twentieth session of the Asia-Pacific Regional Space Agency Forum (APRSAF-20) will be held from 3 to 6 December 2013 in Hanoi, Vietnam, under the theme entitled “Values From Space : 20 Years of Asia-Pacific Experiences”.

While APRSAF serves as an active forum to promote concrete cooperative space-related activities at the regional level, it aims to contribute to solving problems not only in the Asia-Pacific region but also the rest of the world. APRSAF also aims to expand the peaceful uses of space science and technology and their applications for sustainable development in the region, as an open and flexible framework for regional cooperation in space activities.

We hope that you would participate in APRSAF-20 to share your profound experiences as well as your valuable thoughts and insights. We trust that we can count on your support by ensuring the good representation of your organization at APRSAF-20 with as many experts and managers as possible to contribute to its work.

We sincerely hope that you will join us at APRSAF-20, and we look forward to seeing you and your colleagues from your organization in Hanoi, Vietnam, in December this year.

With best regards,



Masanobu Tsuji
Executive Secretary
Asia-Pacific Regional Space Agency Forum (APRSAF)

The 20th session of the Asia-Pacific Regional Space Agency Forum (APRSAF-20)

“Values From Space : 20 Years of Asia-Pacific Experiences”

3-6 December 2013, Hanoi, Vietnam

Background

The Asia-Pacific Regional Space Agency Forum (APRSAF) was established in 1993 following the declaration adopted at the Asia-Pacific International Space Year Conference (APIC) in 1992 to enhance the development of space programs of countries in the Asia-Pacific region and to exchange information and views to explore possibilities for cooperation in space activities. APRSAF has held nineteen annual meetings, organized jointly by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan, Japan Aerospace Exploration Agency (JAXA) and the local organizations of the host countries, to discuss current space-related issues and possible cooperation mainly in the Asia Pacific region. To date, Australia, India, Indonesia, Japan, Vietnam, Mongolia, the Republic of Korea, Singapore, Thailand and Vietnam have hosted the APRSAF sessions. Through open and voluntary participation, APRSAF promotes concrete regional cooperation on space-related matters. To reflect a broad range of views and voices, APRSAF encourages the participation of a wide range of entities including space agencies, government entities, regional and international organizations and institutions that have activities relevant to space applications.

Under the theme entitled “Enriching the quality of life through innovative space programs”, the last session, i.e. the nineteenth session of APRSAF (APRSAF-19), was convened in Malaysia and organized jointly by National Space Agency of Malaysia (ANGKASA), MEXT and JAXA. Approximately 380 participants from 33 countries and regions, and 14 international organizations. As a result of the discussions in the plenary sessions and those of the four working groups, i.e. Earth Observation Working Group (EO WG), Communication Satellite Applications Working Group (CSA WG), Space Environment Utilization Working Group (SEU WG) and Space Education and Awareness Working Group (SEA WG), APRSAF-19 adopted the recommendations as contained in Appendix-A of the present document.

Dates and Venue

Dates: 3-6 December 2013

Venue: Melia Hanoi

44B Ly Thuong Kiet Street 01235, Hanoi, Vietnam

<http://www.meliahanoi.com/en/index.html>

Organizers

APRSAF-20 will be co-organized by the following:

Vietnam: The Vietnam Academy of Science and Technology (VAST)

Japan: Ministry of Education, Culture, Sports, Science and Technology (MEXT)
Japan Aerospace Exploration Agency (JAXA)

Objectives

While serving as an active forum to promote concrete cooperation to address issues of importance at the regional level, APRSAF aims to contribute to solving problems of not only the Asia-Pacific region but also the entire world by further expanding the use of space technologies and their applications toward sustainable development particularly in the region. With this in mind, the twentieth session of APRSAF (APRSAF-20) will be held under the theme entitled “Values From Space : 20 Years of Asia-Pacific Experiences”.

Expected Participants

Space agencies, governmental bodies and international organizations, as well as universities, research institutes and private sectors, are expected to participate in APRSAF-20.

Overall Schedule of APRSAF-20

Dates		Event	Venue
30 1	November- December 2013	Water Rocket Event	VAST, Hanoi University of Education
2	December 2013	SAFE Workshop	Melia Hanoi
2	December 2013	Kibo-ABC Workshop	VAST
3-6	December 2013	APRSAF-20	Melia Hanoi
3-6	December 2013	Poster Contest	Melia Hanoi
3-6	December 2013	Exhibition	Melia Hanoi

Plenary and Working Groups

The plenary sessions will take place on the third and fourth days of APRSAF-20, i.e. on 5-6 December. It will feature reports by APRSAF participating countries as well as by the APRSAF initiatives, i.e. Sentinel Asia (disaster management support system in the Asia-Pacific region), SAFE (Space Applications For Environment), Climate R3 (Regional Readiness Review For Key Climate Missions) and Kibo-ABC (Asian Beneficial Collaboration Through “Kibo” Utilization). UNIFORM (University International Formation Mission), one of the APRSAF related projects, will also report its activities at the plenary sessions. The first and second days of APRSAF-20, i.e. 3-4 December, will be devoted to the sessions of the four working groups, i.e. EO WG, CSA WG, SEU WG and SEA WG, which will meet in parallel.

APRSAF Activities

On December 2, workshops will be held by two APRSAF Initiatives, i.e. SAFE and Kibo-ABC. Water Rocket Event, Poster Contest and Exhibition will also be held prior to or in parallel with APRSAF-20.

Side Event

If you would be interested in holding events and meetings in conjunction with the APRSAF annual session, the relevant information including the Guideline of APRSAF-20 Side Event is available on the APRSAF website: http://www.aprsaf.org/annual_meetings/aprsaf20/meeting_details.php

Points of Contact for APRSAF-20

Participants from Vietnam should contact the local point of contact mentioned below to obtain more information concerning their participation.

For Participants from Vietnam:

If you have any inquiries concerning the APRSAF-20, please contact:

Prof. Doan Minh Chung (cc: Ms. Vo Thi Lan Anh)
Space Technology Institute/Vietnam Academy of Science and Technology (VAST)
18 Hoang Quoc Viet, Cau Giay, Hanoi, Vietnam
Phone : +84-3-7917331 Website URL : <http://www.vast.ac.vn/en/>
E-mail: dmchung@sti.vast.vn; vtlanh@sti.vast.vn

For Participants from other countries:

If you have any inquiries concerning the APRSAF-20, please contact:

Ms. Mami Sasamura, APRSAF-20 Secretariat
c/o Japan Aerospace Exploration Agency (JAXA)
ochanomizu sola city, 4-6 Kandasurugadai, Chiyoda-ku, Tokyo, 101-8008, Japan
E-mail: aprsaf20@aprsaf.org or FAX:+81-3-5209-3208



APRSF Activities

■ SAFE Initiative Workshop

Date: 2 December 2013
Venue: Melia Hanoi
Reference: <http://www.eorc.jaxa.jp/SAFE/>

Contact for further information:

Mr. Tomoyuki Nukui
TEL: +81-50-3362-4116 **FAX:** +81-29-868-2961
E-mail: nukui.tomoyuki@jaxa.jp

■ Kibo-ABC Initiative Workshop

Date: 2 December 2013
Venue: VAST
Reference: http://www.aprsaf.org/initiatives/kibo_abc/

Contact for further information:

Mr. Daisaku Ozawa
TEL: +81-50-3362-6369 **FAX:** +81-29-868-3957
E-mail: ozawa.daisaku@jaxa.jp

■ Water Rocket Event

Co-organizers: VAST and JAXA
Date: 30 November -1 December 2013
Venue: VAST
18 Hoang Quoc Viet, Cau Giay, Hanoi, Vietnam
Website: <http://www.vast.ac.vn/en/>

◇ Water Rocket Event Launch Site:

Hanoi University of Education
Xuân Thủy, Dịch Vọng Hậu, Cầu Giấy, Hà Nội, Vietnam
TEL: +84-4-3754-7823 **FAX:** +84-4-3754-7971
Website: <http://webold.hnue.edu.vn/Default.aspx?alias=webold.hnue.edu.vn/eng>

Reference:

Outline: TBA

Rules for Launch Competition: TBA

■ **Poster Contest**

Theme: “Space and Me ”
Co-organizers: VAST and JAXA
Date: 3-6 December 2013
Venue: Melia Hanoi
Reference: TBA

Contact for further information on the Poster Contest and the Water Rocket Event:

Ms. Yayoi Miyagawa, JAXA Space Education Center
TEL: +81-50-3362-7590 FAX: +81-42-759-8612
E-mail: z-kokusai@edu.jaxa.jp

More information on the Water Rocket Event and Poster Contest will be made available in due course. Please check the APRSAF website (<http://www.aprsaf.org>) for any updates.

APRSAF Related Project

■ **5th Asia Oceania Regional Workshop on GNSS**

Date: 1-3 December 2013 (TBD)
Venue: (TBD)
Reference: <http://www.multignss.asia/>

Contact for further information:

Ms. Yaka Wakabayashi
TEL : +81-50-3362-3558 FAX : +81-29-868-5987
E-mail: wakabayashi.yaka@jaxa.jp

Other matters

Further details of APRSAF-20, including arrangements for logistics, updates of the program and online registration will be made available in due course. Please check the latest information on APRSAF website at: <http://www.aprsaf.org>.

The information on APRSAF can also be provided via APRSAF News Mail and APRSAF News Letter. Please visit https://www.aprsaf.org/newsmails_newsletters/form/ to subscribe them.

Participation in the APRSAF-20 is free of charge while participants are responsible for covering their travel and accommodation costs.

Recommendations of the Nineteenth Session of
the Asia-Pacific Regional Space Agency Forum (APRSAF-19)
11-14 December 2012
in Kuala Lumpur, Malaysia

Recognizing “enriching the quality of life through innovative space programs” as the overall theme of APRSAF-19,

Recognizing the importance of regional cooperation to cope with disaster management, environmental issues, capacity building, quality of human life, health, and other regional issues on the basis of utilization needs,

We, the participants of APRSAF-19;

<APRSAF Initiatives>

[Sentinel Asia]

1. Declare the successful completion of the Sentinel Asia Step 2 having achieving its goal by new participation of satellites such as KOMPSAT-1 (KARI), THEOS (GISTDA), FORMOSAT-2 (NARL), XSAT (CRISP) in addition to ALOS (JAXA) and IRS (ISRO) in Step 1; utilizing WINDS satellite communications to improve accessibility to information; organizing a new framework “Data Analysis Node (DAN)” to provide value-added products; initiating new working group of Glacial Lake Outburst Flood (GLOF) and Tsunami in addition to Wildfire and Flood in Step 1; and collaboration with the International Charter starting from October 2010;
2. Declare the launch of the final phase of Sentinel Asia starting from 2013 with the goal to expand activities to cover all the disaster management cycle-mitigation/preparedness phase, response phase and recovery phase-utilizing various and many satellites such as earth observation, communication and navigation satellites, under further collaboration for operation and human networking by the Joint Project Team;

[SAFE (Space Applications For Environment)]

3. Welcome the new Indonesian prototyping for assessment of Mangrove Forest

Carbon Stock Monitoring, and recognize good progress of SAFE ongoing prototyping and completion of SAFE prototyping, especially Pakistan Meteorological Department (PMD) prototyping completion and interest of donor agencies to move forward to implement operational use of SAFE prototyping;

4. Accept EOWG's proposal to continue and promote SAFE prototyping and to promote results for practical use at stakeholders meetings and international conferences such as Asian Conference on Remote Sensing (ACRS), International Symposium on Space Technology and Science (ISTS), etc. to encourage donor agency interest;
5. Understand the necessity of EO data continuity in moving forward in the practical use of satellite data in support of EO WG participants' earth observation satellite missions;

[Climate R³ (Regional Readiness Review for Key Climate Missions)]

6. Welcome the progress achieved through Climate R³ in promoting practical data coordination in an important climate change domain of priority interest to APRSAF participating countries;
7. Agree to explore the establishment of practical relationships in support of organizations such as the APEC Climate Center;
8. Recognize the potential of Australian proposed Continuity of Earth Observation Data for Asia-Pacific (CEOD-AP) study activity to: identify EO data requirements and priorities at the regional and national level; increase the understanding of regional EO data needs; support engagement of key regional and national stakeholder user agencies and frameworks; serve as a focus for EOWG coordination efforts;
9. Facilitate cooperation between Australia and the EOWG co-chairs in 2013 to progress the CEOD-AP activity, with a progress report to be provided to the annual mid-year EOWG meeting in preparation for APRSAF-20;

[Kibo-ABC (Asian Beneficial Collaboration through Kibo utilization)]

10. Encourage the Kibo-ABC members to actively contribute to the building of concrete plans of its three activities; the Try Zero G program, the Mini Drop Tower program and the Demonstration Missions for Kibo utilization (Space Seeds for Asian Future 2013);
11. Recommend the initiative to have its own website for information sharing and interactive works among members in order to promote its activities, and the Kibo-ABC secretariat to make a contribution to the establishment;

12. Recommend the initiative to hold its web based meetings, as appropriate, approximately once a month, when requests from members are made;
13. Recommend the initiative to hold the Kibo-ABC Workshops, at least once a year, on the occasion of annual session of APRSAF and to hold additional face to face meetings as needed;
14. Note that APRSAF congratulated the Malaysian students who won the first prize in the Malaysian Space Seeds program, which is a part of the Space Seeds for Asian Future program of the Kibo-ABC initiative, with recognition of the significance in this kind of collaborative program in Asia; the students expressed, at the plenary session, their appreciation to the APRSAF and their hope for the continuation of this program;

<APRSaf Working Groups>

[Earth Observation (EO)]

(General)

15. Agree to explore an annual mid-year meeting of the EOWG which will serve as an umbrella for regional space data coordination across a range of relevant initiatives and activities: SAFE, Climate R³, Sentinel Asia, the Global Forest Observation Initiative (GFOI), the intergovernmental Group on Earth Observation Global Agriculture Monitoring initiative (GEO-GLAM) (Asia RiCE), AWCI (Asia Water cycle Initiative), etc;

16. Recognize the necessity to promote the study and knowledge sharing to improve forecast activities for water related disaster and crop yield estimation;
(Integrated water resource management)

17. Agree to support knowledge sharing through promotion of information exchange of SAFE prototyping results such as the outcomes for the Cambodia and Pakistan projects;

(Agriculture and food security session)

18. Support to promote: results & knowledge sharing at APRSAF EOWG; practical application for agriculture and food security of knowledge to national/regional systems; outreach of successful results;

(Asia rice crop monitoring in GEO-GLAM working plan)

19. Welcome to encourage participation and support for the GEOGLAM Asia-RiCE initiative to improve coordination and regional identity of rice crop monitoring from space activities. Agree on EOWG's activity to serve as the institutional home for Asia-RiCE initially to enhance a linkage of APRSAF participating countries' rice crop monitoring with Asia-RiCE initiative in GEO GLAM;

[Space Education and Awareness (SEA)]

20. Encourage to enhance space education for youth development through continuous activities, such as workshops for teachers and children, implementing poster contest and water rocket events, and, introducing advanced programs;
21. Encourage to promote awareness of space education by sharing and applying information on space education materials and tools, through all means including internet and social network services with all groups and organizations involved in space education activities;

[Space Environment Utilization (SEU)]

22. Congratulate the establishment of the Kibo-ABC initiative, welcome the launch of its activities, and encourage the new participation from SEUWG in the initiative;
23. Encourage SEUWG participants to promote the awareness of Kibo-ABC and encourage more participation in the initiative to enhance its effectiveness and benefit;
24. Recommend SEUWG to consider the ways to share the outcomes and know-how which have been obtained and will be obtained through the SEUWG activities, such as the parabolic flight experiments for students;
25. Recommend SEUWG to communicate and cooperate with SEAWG to contribute to the improvement of the existing educational materials by reflecting the accumulated experiences on microgravity utilization;
26. Encourage the SEUWG participants to utilize the framework of the Zero-gravity Instrument Project of Human Space Technology Initiative(HSTI) of the United Nations for the Space Seeds for Asian Future (SSAF) 2013 program of Kibo-ABC;
27. Recommend SEUWG to hold a Workshop specialized in Asian space environment utilization, which is to share the results and outcomes achieved, organized by Kibo-ABC initiative, in 2014;

[Communication Satellite Applications (CSA)]

28. Encourage more active interactions with the aim of expansion of the space-based Automatic Identification System (AIS) for ship monitoring;
29. Welcome the feasibility study on the idea of “Multidisciplinary Space-based Services” activity;
30. Encourage to share information and experience in order to enhance the new applications of communications and navigation satellites in the Asia-Pacific



region;

31. Look forward to the sustainable deployment of the Multi-GNSS (Global Navigation Satellite Systems) Demonstration Campaign and the Multi-GNSS Joint Experiments in the Asia Pacific region;

<APRSAF Supporting Programs and Activities>

[Asia Oceania Multi-GNSS Demonstration Campaign]

32. Welcome the active progress such as the endorsement of additional Multi-GNSS Joint Experiments by Multi-GNSS Asia (MGA) which is an international organization to promote the Multi-GNSS Demonstration Campaign and encourage organizations in Asia and the Pacific region to participate in the MGA;

[UNIFORM (University International Formation Mission)]

33. Confirm that the Satellite Technology for the Asia-Pacific Region Program (STAR program) was successfully completed and succeeded to the UNIFORM project. This year, the UNIFORM project accepted 6 engineers and researchers from 3 organizations in Vietnam and Brazil;
34. Recognize that one of the main missions of the UNIFORM is wild fire detection; the 1st UNIFORM satellite will be launched in 2013, and development of the 2nd UNIFORM satellite will be started in 2014;
35. Encourage young engineers and researchers in the Asia and the Pacific region who are interested in developing micro satellites to join the UNIFORM;
36. Encourage new participants to contribute to the UNIFORM activities to develop the satellites and the ground station network;

[Panel Discussion: “Enriching the quality of life through innovative space programs”]

37. Note with satisfaction that a panel discussion with the participation of heads of space agencies in Asia and the Pacific was held as part of the plenary to address the theme of APRSAF-19, “Enriching the quality of life through innovative space programs”;
38. Recognize the need to make further efforts to yield more benefits of space science and technology and their applications to address the needs of ordinary people and to make such benefits more visible for the general public by, among other things, increasing the engagement of the public and more involving industry in such application development;
39. Encourage space agencies and space-related entities in the region to collect,

compile and share successful stories giving societal benefits resulting from space programs, especially those contributing towards enriching the quality of life of the people;

[Towards enhanced operation of APRSAF]

40. Note with satisfaction that the Task Force, established following the recommendation by APRSAF-18, to consider the continuous success of APRSAF and ways and means to make APRSAF more dynamic, had presented its report including its recommendations;
41. Endorse the recommendation of the Task Force for implementation immediately following APRSAF-19 to establish an Executive Committee to uphold principles, shape the agenda and help achieve objectives and implement decisions of APRSAF; the Executive Committee shall consist of two categories of members: (a) up to five members from the immediate past, present and confirmed future co-organizers of APRSAF; and (b) a representative of each working group, who would serve a maximum term of 4 years; the membership of the Executive Committee shall be confirmed at the APRSAF annual plenary; and
42. Agree in principle with the proposals of the Task Force for implementation immediately following APRSAF-19 to introduce a set of guidelines for initiatives, including the process to submit, review and endorse proposals for new initiatives, to determine the venues of APRSAF annual sessions two sessions in advance, and to invite eminent researchers or high-skilled experts to deliver lectures at APRSAF annual sessions.

End