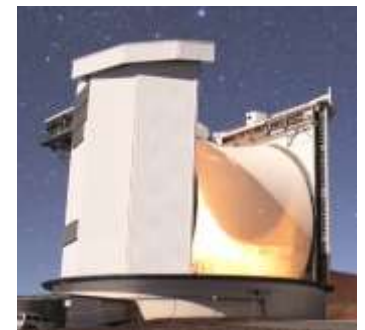


Discussion with EAO (and India)

Nagayoshi Ohashi
(Subaru Telescope)

East Asian Observatory (EAO): Background

- In order to promote more collaboration within the East Asian region, East Asian Core Observatories Association (EACOA) was established in September 2005.
 - Core observatories are NAOC (China), NAOJ (Japan), KASI (Korea), and ASIAA (Taiwan)
- In 2014 East Asian Observatory (EAO) was formed by EACOA for the purpose of pursuing joint project in astronomy within the East Asian region.
 - EAO took over the JCMT operation in March 2015 as the first project of EAO.
 - Collaboration with Subaru Telescope was already in the scope of EAO future plan.



Collaboration within EA on astronomy

- ASIAA (Taiwan)-NAOJ
 - ALMA, HSC, PFS, MOIRCS upgrade, Software development
- KASI (Korea)-NAOJ
 - ALMA, KaVA
- SAO (China)-KASI (Korea)-NAOJ
 - East Asian VLBI Network

Good collaborations have been made within EA,
naturally expanding to the collaboration with Subaru

Discussion with EAO

April 2016:

- Arimoto-san, the former Subaru Director, was invited to the EAO board meeting
 - Arimoto-san expressed Subaru's interests in collaborating with EAO for the joint operation of Subaru Telescope
 - EAO board also expressed a strong interests to join the Subaru Operation, and decided to have further discussions.

October 2016:

- Arimoto-san proposed EAO to have "EAO time"
 - Subaru allocated 6 nights as EAO time in 2017 (17A and 17B)

April 2017:

- EAO board and Yoshida-san discussed to have "letter of Intent (LoI)" to have further and more concrete discussions on possible partnership between EAO and Subaru
 - LoI was signed in June 2016

November 2017:

- Yoshida-san proposed EAO to establish "working group" to discuss details of the partnership. He also proposed to resume "EAO time" with actual contribution.

EAO Board of Directors

- China
 - Yan Jun (NAOC) → will step down
 - Suijian Xue (NAOC), Ji Yang (PMO), Zhiqiang Shen (SAO)
- Japan
 - Masa Hayashi (NAOJ) → will step down
- Korea
 - Inwoo Han (KASI) → will step down
- Taiwan
 - You-Hua Chu (ASIAA)

Hopefully new members of the Board of Directors can continue to support possible collaboration with Subaru

LETTER of INTENT

Concerning the Planning of Collaboration on the

SUBARU TELESCOPE

Between

the East Asian Observatory

And

the National Astronomical Observatory of Japan, National Institutes of Natural Sciences

NOW, THEREFORE,

1. The Parties agree to a long-term collaboration between the EAO and NAOJ on the Subaru Telescope.
2. The Parties agree that the purpose of this LOI is to establish a basis for future scientific collaborations, the particulars thereof to be mutually discussed and agreed upon in other separate written agreements.
3. The Parties agree to an initial five-year development period, with the goals of (1) raising operation funds for Subaru Telescope, (2) posting staff to Subaru Telescope, (3) joint instrument development efforts.
4. The Parties agree that the EAO will have the initial goal of a \$3M annual contribution, which can be cash, or a combination of cash and in-kind contributions.

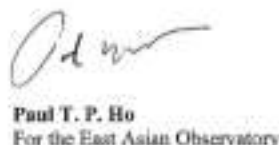
5. The Parties agree that the EAO will post engineers, scientists, graduate students, and support staff in order to help operate the Subaru Telescope. An in-kind value will be given for the contributions to operations, by mutual agreement.
6. The Parties agree that the EAO will join in the development and construction of next generation instruments for the Subaru Telescope. An in-kind value will be given for the contributions to instrument development, by mutual agreement.
7. Subaru Telescope is accessed through the competitive observing proposal basis, and scientists from the EAO regions will have access in the same manner as the existing Subaru Telescope users community.
8. In order to promote scientific collaborations among scientists in the EAO regions, the Parties agree to develop joint scientific programs, which are jointly proposed by scientists in the EAO regions, including Japan.
9. The Parties agree that this LOI may be terminated at any time upon mutual consent of the Parties. In the event the Parties consent to terminate this LOI, the Parties shall consult each other prior to the date of termination, and such intention shall be reduced to writing, to be executed by the duly authorized representatives of the Parties.
10. The Parties agree that this LOI does not establish legally binding obligations on the part of any of the Parties, including without limitation any financial obligations.

This LOI shall be effective as of the date of the last-executed signature below and shall stay in effect for a period of five years unless terminated, extended, modified, or superseded by mutual written agreement between the Parties.

Date of Signature: 6/5/2017

Date of Signature: 6/29/2017


Masahiko Hayashi
For the National Astronomical
Observatory of Japan,
National Institutes of Natural Sciences


Paul T. P. Ho
For the East Asian Observatory

Working Group

- China
 - Zhao Gang (NAOC)
 - Cai Zheng (UCSC → NTU)
- Taiwan
 - Shiang-Yu Wang (ASIAA)
 - Wen-Ping Chen (NCU)
- Japan
 - Taddy Kodama (Tohoku Univ.)
 - Nagayoshi Ohashi (NAOJ)
- Korea
 - Still waiting for the new KASI president to be appointed.



Time Line (including my personal wish)

- As soon as the new president for KASI is going to be appointed, two names from Korea for the WG will be decided.
- Kick-off discussions will be held as soon as Korean members for the WG are decided.
 - Might be able to hold a face-to-face meeting before the next EAO board (April 2018), making a report at the Board meeting.
- By the time of the Board meeting in the fall 2018, further practical discussions are done by the WG.
- At the Board meeting in the fall 2018, decision to resume EAO time could be made at least?

Discussion with India

- Former Director Arimoto sent a letter to prof. Ojha (TIFR) for discussion of possible collaborations in December 2016.
- Dr. M. Puravankara (TIFR) and Ohashi/Pyo-san had personal informal discussions in December 2017 to follow up what happened after the letter was received.
 - India TMT SAC has been discussing a possibility to collaborate with Subaru.
- Prof. A. Pandey (ARIOS) and Yoshida-san had a discussion in January 2018.

They are preparing a letter to submit to Chair of India-TMT SAC to start official discussions with Subaru on international Partnership.