

付 録 C 合意書

本計画の進行に当たって現在までに以下の合意書を交わしている。また、これらに基づいた活動について産業科学省 (CONICYT) からの許可も得ている。それらの概要を述べると共に、写しを掲載する。


- 図 C.1 衛星によるチリ北部の気象データの解析についての MoU
AOC (AURA Observatory in Chile) と。(その後、ESO も含めての 3 者の MoU とした)
- 図 C.2 TAO 望遠鏡の建設及び運用の際の協力関係についての MoU
チリ大学と。
- 図 C.3, C.4 気象データ取得をチャナントール山付近に設置運用するための許可申請書
産業科学省 (CONICYT) へ提出。
- 図 C.5 気象データ取得をチャナントール山付近に設置運用するための許可書
図 C.3 の申請書を受けて、産業科学省 (CONICYT) より発行。

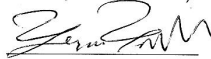
MEMORANDUM OF UNDERSTANDING
BETWEEN
THE AURA OBSERVATORY IN CHILE,
THE INSTITUTE OF ASTRONOMY OF THE UNIVERSITY OF TOKYO,
AND
THE EUROPEAN SOUTHERN OBSERVATORY

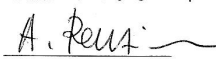
In order to pursue their mutual interests in the characterization and monitoring of astronomical sites in Northern Chile, The AURA Observatory in Chile (hereafter AOC), The European Southern Observatory (hereafter ESO), and The Institute of Astronomy of The University of Tokyo (hereafter IoA-UT) agree to the exchange of satellite cloud cover digital data, as follows:

- 1 AOC will provide Meteosat-3 and GOES-8 data covering 1.7.93 - 29.2.96, covering channels 1 (visible), 3 (water-vapor) and 4 (IR) from the National Climatic Data Center (NCDC). The ownership of this dataset will reside with AOC. Distribution to other parties will require the express permission of AOC.
- 2 IoA-UT will provide GOES-8 data covering 1.6.97 - 30.9.99, covering channels 1 (visible), 3 (water-vapor) and 4 (IR) from the NCDC. The ownership of this dataset will reside with IoA-UT, distribution to other parties will require the express permission of IoA-UT.
- 3 ESO will provide GOES-8 data consisting of 6.7 micron data covering 1.1.98 - 30.4.00 and at least one year of 10 micron data. The ownership of this dataset will reside with ESO, distribution to other parties will require the express permission of ESO.
- 4 AOC, ESO, and IoA-UT undertake to share the above datasets. Each will receive a copy of the raw data, plus a pre-processed data set so as to facilitate possible future analyses.
- 5 This memorandum of understanding replaces the memorandum of understanding between Cerro Tololo Inter-American Observatory, National Optical Astronomy Observatories and the European Southern Observatory that was signed by Malcolm Smith on September 17, 1999 and Alvio Renzini on September 28, 1999.

Signed:

Date: 17 Sept. 2001

Malcolm Smith (AOC)

Date: 9 Oct. 2001

Yuzuru Yoshii (IoA-UT)

Date: 21.08.01

Alvio Renzini (ESO)

☒ C.1: 衛星によるチリ北部の気象データの解析についての MoU

MEMORANDUM OF UNDERSTANDING
for Scientific Cooperation in the
University of Tokyo Atacama Observatory
between
The Astronomy Department of the University of Chile
and
Institute of Astronomy of the University of Tokyo

In consideration of the mutual interest of the Astronomy Department of the University of Chile and Institute of Astronomy of the University of Tokyo (hereafter IoA-UT) in the "University of Tokyo Atacama Observatory" (TAO) project, that is currently planned at IoA-UT, to install a 6.5m infrared-optimized telescope in the territory of the Republic of Chile, both parties agree to the following terms:

The Astronomy Department of the University of Chile and IoA-UT will collaborate in scientific projects of mutual interest.

In particular, joint measurements of the atmospheric transparency and stability in the optical and infrared wavelength regions will be conducted in north Chile as part of the site testing necessary for the installation of the TAO 6.5m telescope.

The Astronomy Department of the University of Chile will obtain the necessary permits to place equipments in the aforementioned place.

When the funding for the TAO project is granted, the Astronomy Department of the University of Chile and IoA-UT will make their best efforts toward the signature of an agreement between the University of Chile and the University of Tokyo, to allow the importation, installation, and operation of the TAO and related instrumentation in Chile.

Date: *May 10, 2001*

M. Teresa Ruiz

Professor María Teresa Ruiz
Director
Departamento de Astronomía
Universidad de Chile

Date: *10/5/01*

Yuzuru Yoshii

Professor Yuzuru Yoshii
Director
Institute of Astronomy
University of Tokyo

図 C.2: TAO 望遠鏡の建設及び運用の際の協力関係についての MoU



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21 March 2001

Dr. Eric Goles Chacc,
Presidente de CONICYT,
Canada 308, Providencia,
Casilla 297-V, Santiago 21,
Chile

Dear Dr. Goles,

The Institute of Astronomy of the University of Tokyo, hereafter IoA-UT, represented by its director, Yuzuru Yoshii, in collaboration with Departamento de Astronomia, Universidad de Chile, wishes to execute studies and work in the area near Cerro Chajnantor, inside the Scientific Preserve administered by CONICYT, to the South-East of San Pedro de Atacama in the second administrative region of the Chilean territory.

The studies and work in question consist of the installation and operation of a meteorological station. We wish to install the station at an altitude of 4900 meters at the coordinates of $23^{\circ}00'01''\text{S}$ and $67^{\circ}43'09''\text{W}$. The meteorological station consists of a 3m high pole on top of a tripod stand with 1m long legs, and the data recording equipment contained within a 0.5m cube at the ground level. Instruments for measuring wind, temperature, humidity, infrared radiation, etc. will be attached to this pole. The equipment will be used to investigate and characterize the atmospheric conditions affecting astronomical research in the optical and infrared wavelength regions of the electromagnetic spectrum.

We hereby request permission so that we can carry out the studies and work as above.

In connection with the above studies and work to investigate and characterize the atmospheric conditions affecting astronomical research in the optical and infrared wavelength regions of the electromagnetic spectrum at the Scientific Preserve of Chajnantor in the second administrative region of Chile, we are pleased to make a commitment to the following conditions:

図 C.3: CONICYT への許可申請書

a) Places of historical interest, archeological, anthropological or paleontological interest:

If we encounter remains, ruins, utensils, places of worship, etc. we will suspend work and advise the authorities.

b) Environment:

We will adopt all the safeguards necessary to avoid a negative environmental impact. We will carry out our work according to the norms and procedures that are administered by the respective national environmental commission of the second administrative region of Chile.

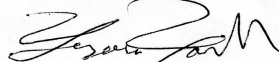
c) Antipersonnel mines:

We note that there is a possibility of existence of antipersonnel mines in the region, although the Ministry of Defense claims that the site area is free of them. We will be alert to the possibility, and we understand that our work in this area is our exclusive responsibility.

d) Non-interference with other projects:

We note that CalTech operates the “Cosmic Background Imager” in Chajnantor, and that atmospheric studies are being carried on there for the ALMA project as well. We undertake that we will inform of our exploration and coordinate the effort with the other groups working in the area so as not to perturb their operation.

Sincerely yours,



Yuzuru Yoshii
Director of IoA-UT
Professor of Astronomy

Institute of Astronomy,
The University of Tokyo,
Osawa 2-21-1, Mitaka
Tokyo 181-0015
Japan

☒ C.4: CONICYT への許可申請書 (つづき)



GOBIERNO DE CHILE
CONICYT

SANTIAGO, July 19, 2001.

Professor
Yuzuru Yoshii
Director Institute of Astronomy
University of Tokyo
Osawa 2-21-1, Mitaka
Tokyo 181-0015
Japan

Dear professor Yoshii:

With regards to the installation and operation of a meteorological station near Cerro Chajnantor, with the goals of characterizing the atmospheric conditions for astronomical research, we are pleased to acknowledge your commitment to the conditions established in your letter of 21 March 2001, regarding (a) Places of historical interest, (b) Environmental Impact, (c) Antipersonal Mines, and (d) Non interference with other projects.

Under such conditions we grant permission for the described activities to be carried out within the Scientific Reserve under the administration of CONICYT.

Sincerely Yours,

ERIC GOLES CHACC
President
National Commission for
Scientific and Technological Research

● COMISION NACIONAL DE INVESTIGACION CIENTIFICA Y TECNOLOGICA

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図 C.5: CONICYT から出された許可書