アーカイブ室新聞　（2012 年 1 月 26 日　第 563 号）

国立天文台・天文情報センター・アーカイブ室　中桐正夫

＊KECK Ⅰ Ⅱ Dedication & Groundblessing Ceremony 案内書　収蔵

アーカイブ室に表記の書類一式が入った紙包みが届けられた。これはアーカイブの対象であろうと思う。筆者は大型光学赤外線望遠鏡「すばる」を進めた構想段階以前からのメンバーである。1992 年 7 月の「すばる」の山頂工事着工の儀式があった時は、まだ三鷹の大型光学赤外線望遠鏡推進室にいた。その時、その儀式への招待状を出す作業をやったことが思い出される。おそらくそういった時の資料は筆者のところにも残っているが、すばるの資料室に保存されていることであろう。

今回の案内状は 1991 年 11 月 7 日、8 日の儀式への案内状である。こういったものにはいろんな工夫が凝らされるものだが、まず紙包みに使ってあるものが凸凹の表面を表にした段ボール紙状のものが使われている（写真 1）。

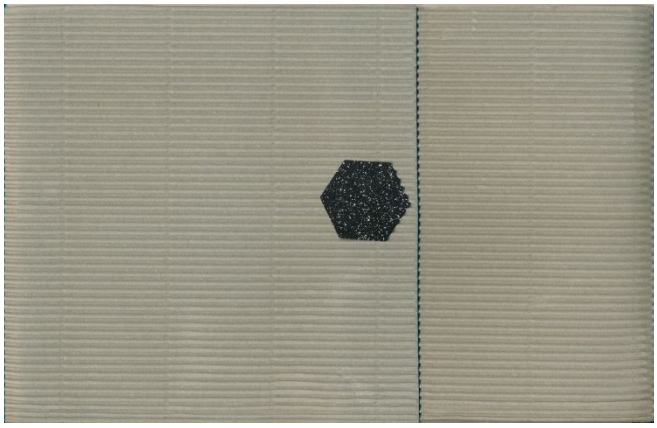


写真 1　案内状の包み紙

この包み紙に貼られたシールは 6 角形であり、KECK 望遠鏡の鏡を意識したものであろう。ちなみに KECK 望遠鏡は対角線が 1.8m の 6 角形の鏡 36 枚で有効口径 10m を実現している。

この案内状には、KECK Ⅰの写真が載せられている（写真 2　、3）。

写真 2

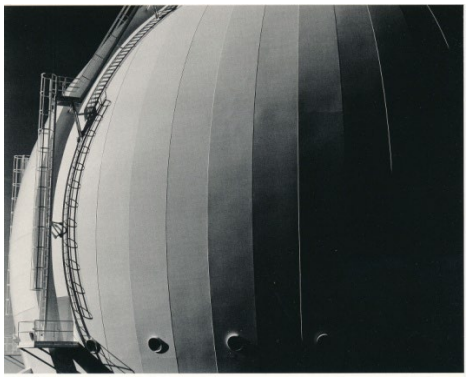


写真 3

この案内状に入っているものは、１）Program of Events（写真４）、２）High Altitude Information(写真５)、３）About Tfe W.M.Keck Observatory and Telescopes(写真６)、４）W.M.Keck Observatory & Telescope のサイン入り写真シート(写真７)、５）儀式のプログラム（写真８、９）である。

Program of Events

The morning of November 7, the dedication and groundblessing ceremony will take place atop Mauna Kea at an elevation of 13,600 feet. Some visitors occasionally experience.discomfort because of the high altitude. Guests will be able to remain at or return to Hale Pohaku (9000 feet) if necessary, at any time during this visit. *We would be pleased to have you join us, but encourage you to read the enclosed information on high altitude before making final plans to attend the ceremony at the summit.*

As part of this special day, a reception will be held at the W. M. Keck Observatory Headquarters in the town of Waimea. Transportation will be provided for the entire day's activities.

A reception and dinner on Friday, November 8 will be held at the Mauna Kea Beach Hotel, Kohala Coast, Hawaii. Mr. Walter Cronkite will emcee the evening program.

Although we hope you will be able to attend the ceremony and the festivities, we will be honored by your presence on either day.

November 7	*morning*	Transportation to Hale Pohaku Stop at Hale Pohaku for refreshments Trip to summit for dedication and groundblessing
	afternoon	Lunch at Hale Pohaku Reception at W. M. Keck Observatory Headquarters Return transportation
November 8	*evening*	Reception and dinner Mauna Kea Beach Hotel Kohala Coast, Hawaii

For information: (818) 356-3936
Office of Institute Relations
California Institute of Technology

Hotel Accommodations and Airport Shuttle Services

Caltech has made arrangements with the Mauna Kea Beach Hotel, The Mauna Lani Bay Hotel and Bungalows, and The Ritz-Carlton, Mauna Lani for special guest rates. We also have information regarding airport shuttle services.

Transportation on November 7

Comfortable vehicles will depart in the morning to transport guests to Hale Pohaku and to the summit. The same vehicles will be used to take guests to the reception at the Observatory headquarters in Waimea as well as for the return trip in late afternoon.

Detailed information about hotels, how to make reservations, airport shuttle services, and transportation on November 7 will be provided on request to those planning to attend this event.

写真４　Program of Events

High Altitude Information

A visit to the W. M. Keck Observatory is awe-inspiring. Travel at high altitude, however, can be uncomfortable or unwise for some guests. In preparing for the trip to the summit, we advise visitors to take note of the following guidelines, to select clothing appropriate for the trip to the summit, and to consult their own physicians with any specific health concerns.

Guidelines

- Rest on the day before the journey.
- Avoid alcohol for at least ten hours prior to the ascent.
- Avoid smoking before and during the trip.
- Drink plenty of fluids during the trip.

Clothing

- Casual clothes and comfortable walking shoes are most appropriate.
- Jackets and sweaters will be needed, as the temperature inside the dome may be 32 degrees F.
- Sunglasses and sunscreen are highly recommended, given the glare and bright sunlight on the mountain.

Medical Advice and Assistance

- A high-altitude doctor and medical assistants will meet our group at Hale Pohaku and will accompany us on this trip.
- The doctor will be available to discuss medical problems and high-altitude medications.
- Oxygen tanks will be available for use if needed.
- A rest stop at Hale Pohaku (elevation 9000 feet) will help guests to adjust to the altitude. Liquid refreshments will be provided. This is also the place for guests experiencing discomfort to stay while the others proceed to the summit.
- Return trips to lower altitude will be available at all times.

Every effort will be taken to make the trip as comfortable and pleasant as possible. We hope you can join us.

写真 5　High Altitude Information

About The W. M. Keck Observatory and Telescopes

The University of California and the California Institute of Technology have made significant contributions over the last 100 years to the development of the modern ground-based telescope.

The concept for the instrument that would become the Keck telescope emerged in the late 1970s, when a committee of scientists from several different University of California campuses was planning new directions for the UC astronomy effort. Aiming to maintain the University's preeminence in the field, the committee proposed building an instrument more powerful than the 200-inch Hale Telescope. At the same time, Caltech was considering the future of its own program in optical and infrared astronomy. Several Caltech scientists contributed to the UC study, and eventually the two institutions joined in an effort to build the world's first computer-controlled, segmented-mirror telescope. Keck I, which saw first light in 1990, combines 36 hexagonal segments into a mirror array with four times the light-gathering power of the 200-inch Hale.

Upon completion of Keck II in 1996, together the telescopes will peer deeply into the past, observing galaxies as they formed in the first one to two billion years of the universe. When operated as an interferometer, they will have the angular resolution of an 85-meter telescope, making possible the search for planets around nearby stars. With a unique combination of sensitivity and resolution, the W. M. Keck Observatory will provide unequaled views of the universe for many decades to come.

These telescopes will not only help provide answers to scientific questions, but will also assist us with the insatiable need to know, to turn back and face our origins. Professor Willy Fowler, Caltech physicist and Nobel Laureate, captured this concept with these words:

The millions of stars in our Milky Way were formed some ten billion years ago from primordial hydrogen.

These stars produced new elements and ejected them into space.

Later, new stars were formed, and the whole process repeated itself.

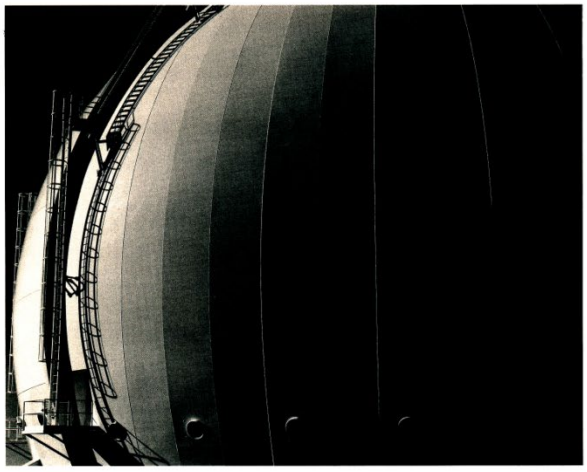
Five billion years ago, our sun and the earth and the other planets were formed.

Our sun is at least a second generation star. It inherited from previous stars a rich treasure-house of elements which makes our world the complex and wonderful environment we find it to be.

All of us are part of that world. We, too, are star dust.

写真６　About Tfe W.M.Keck Observatory and Telescopes

W. M. Keck Observatory & Telescope



Since Galileo first peered at the heavens through his simple refractor spyglass in 1609, astronomers have sought to build bigger and better instruments.

写真７　W.M.Keck Observatory & Telescope のサイン入り写真シート

HAWAII'S lofty Mauna Kea is the best place on earth to observe the stars. The 13,600-foot summit lifts telescopes above much of the water vapor in the atmosphere into steady, clear skies. This Mars-like terrain of red volcanic cinders is home to the W. M. Keck Observatory, ultimately consisting of two 10-meter telescopes.

Keck I, which gathered first light in 1990, is the largest and most powerful such instrument on earth. The first of its kind, it has an enormous primary mirror made of 36 precisely-fitted, computer-controlled, hexagonal segments, a departure from the more familiar single massive disk of glass. The resulting optical surface is the largest ever created. Keck II, identical in size and design, will be built next to and used in conjunction with Keck I, doubling the light-gathering power and greatly increasing spatial resolution.

As the next century dawns, the twin W. M. Keck Telescopes will provide two giant eyes—a renewed vision—to explore the mysteries of the universe.

The California Institute of Technology
University of California
and
California Association for Research in Astronomy

cordially invite you to attend the
W. M. Keck I Telescope Dedication
and the
W. M. Keck II Telescope Groundblessing

the morning of
Thursday, November 7, 1991
W. M. Keck Observatory
atop Mauna Kea

Reception following 3:00–5:00 p.m.
W. M. Keck Observatory Headquarters
Waimea, Hawaii

We would be pleased if you would also join us for
a reception and dinner celebrating the
W. M. Keck Observatory and Telescopes

Friday, November 8, 1991
6:00 p.m.
Mauna Kea Beach Hotel
Kohala Coast, Hawaii

For further information, please see accompanying packet.

写真８、９　儀式のプログラム

こういった資料は、「すばる」の儀式の際にも参考にされたと思う。また国立天文台が国際協力で海外に大きなプロジェクトを展開する場合には参考になるのだと思った次第である。

これらアーカイブ室新聞の記事にお気づきのことがあれば、編集者中桐にご連絡いただければ幸いです。中桐のメールアドレスは、arcnaoj@pub.mtk.nao.ac.jp