

2004

"MEGASTAR-II" with 5 million stars, the most in the world will come to the Dome Theater GAIA!

-The development of the planetarium's new system and it becoming one of the permanent exhibits.-

TO PRESS
April, 2004

The National Museum of Emerging Science and Innovation (2-41 Aomi, Koto-ku, Tokyo. Director Mamoru Mohri) and the planetarium developer Takayuki Ohira has newly developed a new planetarium "MEGASTAR-II cosmos" which shows 5 million stars, the most in the world. It will become the permanent exhibition of the All-sky dome projector, Dome Theater GAIA and will be open to the public starting July 11th this year.

The developer of the "MEGASTAR-II," Takayuki Ohira and the staff team of Miraikan, organized a joint project to newly develop the planetary projector and the sun projector etc. that was not installed in the existing "MEGASTAR-II." The world's first "MEGASTAR-II" equipped with the real total system will be installed at the Miraikan as one of the permanent exhibits.

In general planetariums, the number of stars which could be projected was from couple of thousand to couple ten thousands, and even with the existing MEGASTAR-II, the limit use is 4.1 million at the most. However, the reproduction of the starry sky containing the largest number of stars in the world became possible with the success of the development of this system named "MEGASTAR-II cosmos," reaching the number of 5 million stars.

Furthermore, this planetarium formed by 5 million fixed stars is currently applying to the Guinness World Records.

<Starry sky formed by 5 million fixed stars>

5 million fixed stars over the 12th magnitude that cannot be seen by the naked eye will be reproduced at "MEGASTAR-II cosmos." The reproduction of the solidity and shading of the Milky Way and fine details of the dark nebula that was thought to be impossible with the former planetariums became possible with the development of technology. It is a large-scale experiment to reproduce a more realistic starry sky by inputting stars, which cannot be sensed by human's 5 senses. The 5 million fixed stars were conscientiously reproduced, using the observatory data of the European Space Agency's (ESA)

Hipparcos Satellite and was organized based on the latest astronomical information.

1. Opening	July 11th (Sun.), 2004 - permanent show -	
2. Running Time	16:00 - (Approx. 30 minutes) }regular opening day	
3. Venue	6F Dome Theater GAIA, Miraikan	
4. Press Preview	Planned in early July	

<For Information on this release>

The National Museum of Emerging Science and Innovation
2-41 Aomi, Koto-ku, Tokyo, 135-0064

Public Relation Office: Masuda (press@miraikan.jst.go.jp)
Arai (press@miraikan.jst.go.jp)
Sato (press@miraikan.jst.go.jp)

TEL: 03-3570-9192 / FAX: 03-3570-9160 URL: <http://www.miraikan.jst.go.jp>

Reference:

1.Major Spec of the "MEGASTAR-II cosmos"

1)Fixed star projecter (body)

Size: height 70cm ~width 58cm ~depth 42cm

The date range of reproduction: AD2000 }100 years

Weight: approx. 50kg

Method of projection: projection of lens cut into 32

Projecting Number of fixed stars:5 million

Fixed star data: Star charts etc. based on the observatory data of Hipparcos Satellite (ESA)

2)Supporting Projector

Planetary projector (Mercury, Venus, Mars, Jupiter etc.): Newly developed

Sun Projector (Newly developed):Newly developed

2.Dome Theater GAIA

All sky image Dome Theater

Diameter: 15.24m

Capacity: 112 seats

Venue: 6th floor, Miraikan

3.The National Museum of Emerging Science and Innovation

Established: July 10th, 2001

Director: Mamoru Mohri

Address: 2-41 Aomi, Koto-ku, Tokyo 135-0064

Tel: 03-3570-9151 (Main)

URL: <http://www.miraikan.jst.go.jp>

Access: From Shimbashi, Yurikamome (Shimbashi Ariake)
5 minutes walk from "Funeno-Kagakukan station"
4 minutes walk from "Telecom Center station"

4.Takayuki Ohira Background history

Born at Kawasaki in Kanagawa prefecture in 1970.

Begins creating planetarium in elementary school. In his years in college completes the lens type planetarium "Astroliner" in 1991, and it was shown in various regions and well received in various places. Continues creating planetariums while working at an electronics manufacturing company he joined in 1996. In 1998, he introduces a portable planetarium which projects 1.7 million stars, the "Megastar" only weighing 30 kg. In 2003, completes the new type "MEGASTAR-II" an upgrade version that projects 4.1 million stars. After he leaves the same electronics manufacturing company that same year, he becomes a freelancer of a planetarium developer. In 2002 December, as a Christmas event, the "Megastar" was shown and received good reputation at the tent dome specially prepared for the event.

In December 2003, "The MEGASTAR-II" is shown at the all-sky image Dome Theater GAIA and becomes the news. Also starting that same year, works on the development of "MEGASTAR-II cosmos" along with the staff team of Miraikan.