

Robot Astronaut Kirobo Awarded Two Guinness World Records™ Titles

Two Guinness World Records titles have been awarded to Kirobo, the robot astronaut developed as part of a joint research project between Dentsu Inc., the University of Tokyo's Research Center for Advanced Science and Technology, Robo Garage Co., Ltd., Toyota Motor Corporation, and the Japan Aerospace Exploration Agency (JAXA).

Kirobo arrived at the International Space Station (ISS) on August 10, 2013 and spent a total of eighteen months there, holding the world's first conversation experiment in outer space between a robot and a human (JAXA astronaut Koichi Wakata) and conducting research for a future in which humans and robots coexist.

On February 10, Kirobo came safely back to Earth aboard SpaceX's CRS-5 Dragon cargo supply spacecraft which splashed down in the Pacific Ocean off California, and then arrived back in Japan on March 12. Kirobo's first words after returning home were: "From up above, the Earth glowed like a blue LED."

At the debriefing session held today at the National Museum of Emerging Science and Innovation in Tokyo, the project members gave a summary report and showed a video of the highlights of Kirobo's activities aboard the ISS. The session was chaired by Fuminori Kataoka, project general manager in the Product Planning Group of Toyota Motor Corporation, and the two speakers were Tomotaka Takahashi, the president of ROBO GARAGE Co., Ltd. who is also a visiting research fellow at the University of Tokyo's Research Center for Advanced Science and Technology, and Yorichika Nishijima, a copywriter in Dentsu Inc.'s Business Creation Center as well as head of the Dentsu Robot Center. Kirobo also appeared on stage to chat with the project team members.

Erika Ogawa, Vice President Japan, Guinness World Records Ltd, then presented Kirobo with two Guinness World Records certificates:

- (1) "The first companion robot in space is Kirobo (Japan), which arrived at the International Space Station on 9 August¹ 2013."
- (2) "The highest altitude for a robot to have a conversation is 414.2 km above mean sea level and was achieved by Kirobo (Japan) on the International Space Station on 7 December 2013."

Reference Material

■ Kirobo's basic specifications

- Dimensions: Height: 34 cm, Width: 18 cm,
Depth: 15 cm (approx.)
- Weight: 1000 g (approx.)
- Language: Japanese
- Main features: Voice recognition, natural language processing, voice (speech) synthesis, telecommunications functions, gestures, facial recognition camera, recording camera



■ Key project developments to date

- Nov 29, 2012 The project is announced; the public begins proposing robot names.
- Jun 26, 2013 Kirobo and backup (ground) crew member Mirata are completed and introduced at a press conference.
- Aug 4, 2013 Kirobo leaves Japan for the ISS aboard the



- Kounotori 4 transfer vehicle from the Tanegashima Space Center.
- Aug 10, 2013 Kirobo arrives at the ISS.
- Aug 21, 2013 Kirobo speaks his first words in outer space:
“On August 21, 2013, a robot took one small step toward a brighter future for all.”
- Nov 7, 2013 JAXA astronaut Koichi Wakata boards the Russian spacecraft Soyuz and arrives at the ISS the same day.
- Dec 6, 2013 Kirobo and JAXA astronaut Koichi Wakata hold the world’s first conversation experiment between a robot and a human in outer space.
- May 14, 2014 JAXA astronaut Koichi Wakata returns to Earth.
- Feb 11, 2015 Kirobo returns to Earth.
- Mar 12, 2015 Kirobo returns to Japan.
- Mar 27, 2015 Kirobo takes part in a debriefing session.



KIBO ROBOT PROJECT Official Site: <http://kibo-robot.jp/>