

For Immediate Release

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## Results from Asia's first ever Space Elevator Competition

As the Japan Space Elevator Association continues to work toward the realization of a Space Elevator (SE), they held the first Japan Space Elevator Technical & Engineering Competition (JSETEC) just outside of Tokyo on the 8<sup>th</sup> and 9<sup>th</sup> of August 2009. At this event Climbers developed by each team were evaluated on their merits, and important data has been accumulated which will be used to further the development of components of a future Space Elevator.

### 【Technical Competition Results】

**Host :** Japan Space Elevator Association and Nihon University Department of Science and Engineering

**In Cooperation with :** Kanagawa University

**Details :** Participants competed to see whose battery-powered Climber would be the fastest to ascend a 50mm wide 150m long tether elevated by a helium-filled balloon.

**Date and Time :** 2 August 8<sup>th</sup> and 9<sup>th</sup> 2009 from 6:00am to 5:00pm

**Place :** Nihon University's Futawa-nishi field

**Competition Details :**

- Each team will produce a climber that will ascend and descend a 50mm wide tether autonomously
- Compete to be the fastest to ascend to 150m
- Climbers should be built to withstand gradients and vibrations caused by wind
- Use 12V batteries, and be less than 10kg with no dimension exceeding 1m
- After ascending, the climber must descend safely
- Safety is of utmost concern
- Data is measured and logged using a data logger and camera prepared by the organizers. This data will be used to evaluate each climber.



**Comments and Impressions :** Despite the somewhat uncooperative weather and some strong wind, teams were able to test their respective climbers once on each day of the competition. Sporting a variety of styles and unique engineering, hopefully the climbers brought out some insight into what a real Space Elevator Climber may be.



**Competition Results :**

All-around Winner Speed Climber Additional Features	<b>Munchen University</b> World-record for a Climber using an internal battery. Amazed and Startled the Crowd and Competition!	<b>Munchen Univ.</b>	<b>Test only</b>	<b>52 sec</b>
All-around Runner-up Circuit Design	<b>Nihon University</b> Using their specialized knowledge in precision mechanics, they created an internal mechanism to revise any distortion or strain which appears in the tether.	<b>Hatano R&amp;D</b>	<b>SAKURANA</b>	<b>Test only 3min 3sec</b>
3rd place	<b>Kanagawa University</b> Developed the Climber over a period of 6 months which turned out to be an advantage over other teams.	<b>Egami R&amp;D</b>	<b>KSC-I</b>	<b>Test only 3min 16sec</b>
Climbing Mechanism	<b>Nihon University</b> Consists of University and Graduate students, 8 in all. The team studied the mechanism required to climb a rope as well as a tether (belt) which was used in the competition.	<b>Aoki R&amp;D</b>	<b>NichidaiAokiKen</b>	<b>6min 52sec 4min 38sec</b>
Best Design	<b>Kanagawa University</b> 2 members decided to participate in April and started developing the Climber in May. Everything seemed a bit hurried.	<b>Egami R&amp;D</b>	<b>KSC-II</b>	<b>Test only 3min 27sec</b>
	<b>Team Okazawa</b> Built on sweat and hard work in a 4.5 Tatami room. All for the sake of the Climber, he gave up his morning coffee and his evening brew.	<b>Team Okazawa</b>	<b>45 meters</b>	<b>5min 56sec</b>
	<b>Nagoya University</b> Consists of 10 Undergrad. Students who decided to participate when they heard their professor had an interest in the Space Elevator.	<b>MeiDai SE</b>	<b>N/A</b>	<b>N/A</b>
	<b>Shizuoka University</b> They worked into the night, the night before the competition and the night of the competition. In the end it wasn't to be, but be on the lookout for next year's revenge.	<b>Sangoku R&amp;D</b>	<b>Eel-climber</b>	<b>N/A N/A</b>

**Looking Forward :** Each year we will look toward increasing the height 2-fold and refining the regulations and categories which will be evaluated. JSEA looks forward to participating in other areas related with Space Elevator development. Please see our Home Page for details.

**【For related inquiries】**

For additional details please visit <http://jsea.jp/ja/media> or email [info@jsea.jp](mailto:info@jsea.jp)



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