



Space cooperation through Kibo utilization

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For SDG's



KiboCUBE Program



UNITED NATIONS
Office for Outer Space Affairs



No.1



Deployed on May 11th 2018

No.2



Quetzal-1 will be deployed
in April 2020.



No.3



No.4



Indonesia, Mauritius and Moldova are coming soon.



JAXA LIVE 放出まで | Sending the Command

KiboCUBE Program

*Kenya's first satellite "1KUNS-PF"
deployed from ISS Kibo on May 11th, 2018*

- 1** Irazu
1KUNS-PF
- 2** UBAKUSAT

3

For SDG's



Capacity Building, International Cooperation



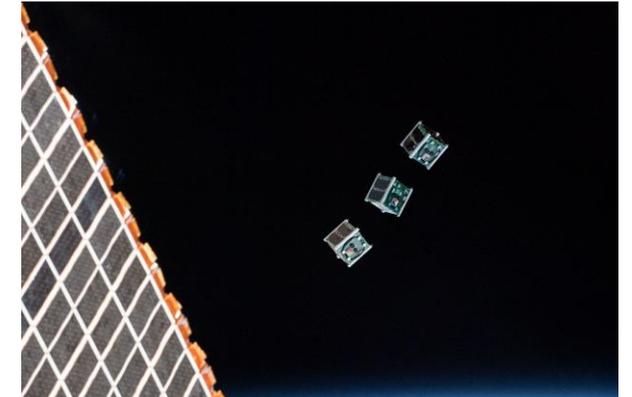
BIRDS1 (Ghana, Mongolia, Bangladesh, Nigeria)



Deployed on July 7th 2017

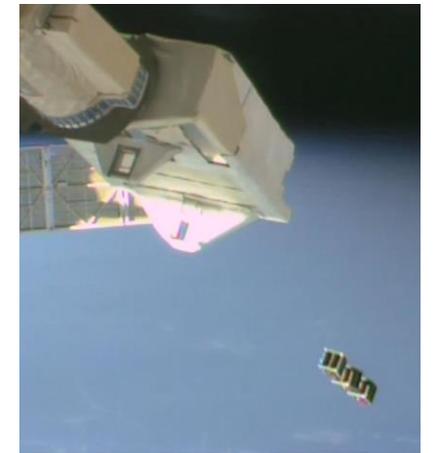


BIRDS2 (Malaysia, Philippines, Bhutan)



Deployed on Aug 10th 2018

BIRDS3 (Nepal, Sri Lanka)



Deployed on June 17th 2019

For SDG's



Capacity Building, International Cooperation



Rwanda (RWASAT-1)



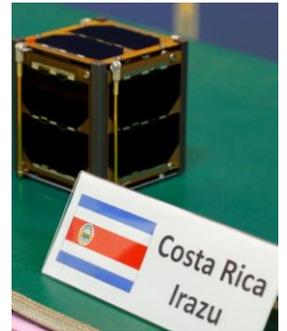
Deployed on Nov 20th 2019

Egypt (NARSSCube-1)



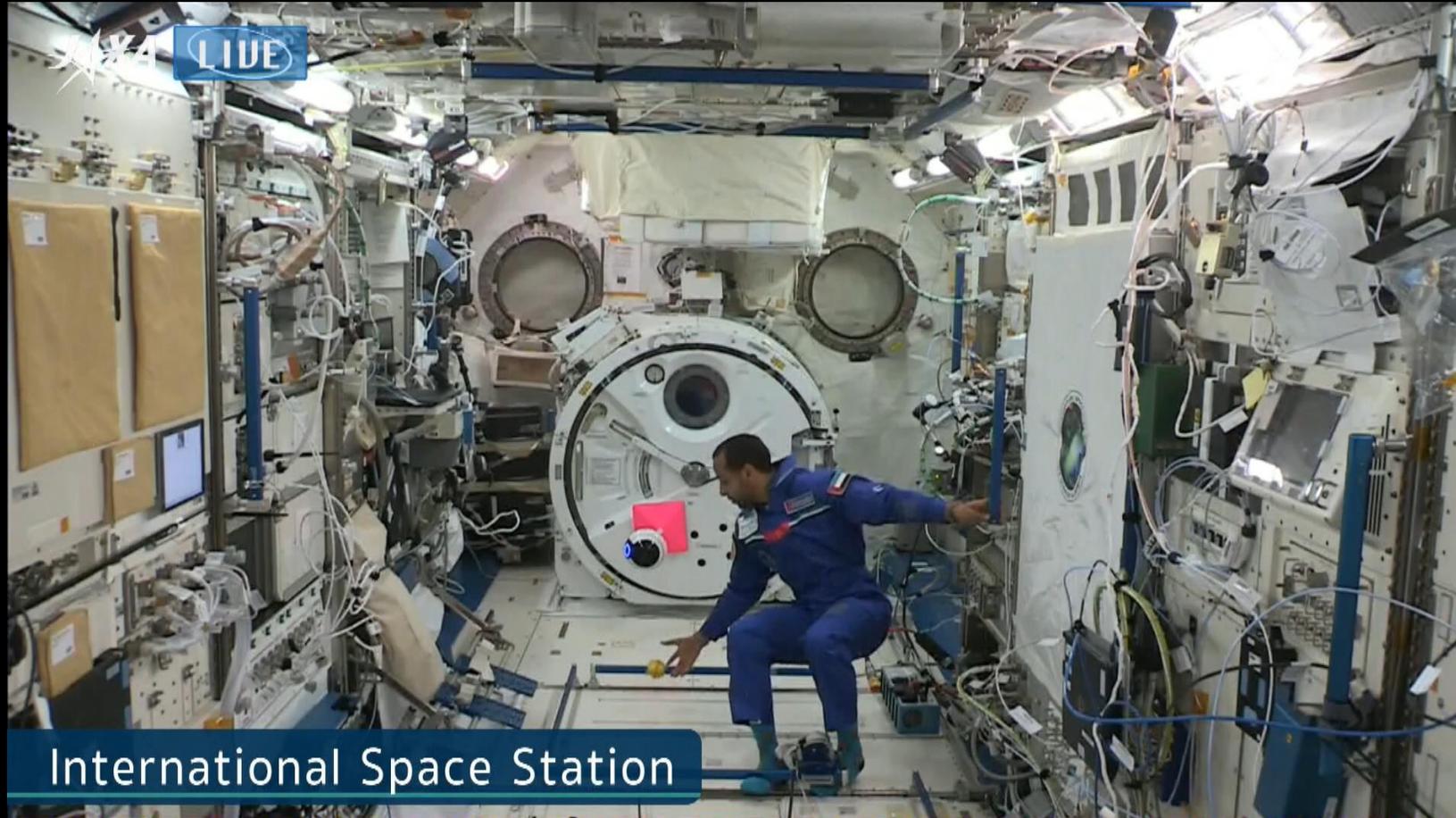
Deployed on Nov 20th 2019

Costa Rica (Irazu)



Deployed on May 11th 2018

● JAPAN-UAE educational project with a flying robot “Int-Ball“ by the 1st UAE Astronaut



International Space Station

Hazzaa with Int-Ball onboard Japanese Kibo Module for the lecture.



JAXA Tsukuba Space Center



Public Viewing in UAE

Kibo Robot Programming Challenge (Kibo RPC)



“Kibo RPC” is an educational competition to solve various problems by using real robots in the International Space Station (ISS).

Save ISS with Robots !!

Emergency alert is activated!!

A meteor crashed to the ISS and the air is leaking somewhere in the ISS.

Create program to operate the Astrobee / Int-Ball and stop the air leakage in the ISS.

Get your program uplinked immediately!

* This is a fiction and is not happening in real time.



Kibo-ABC
countries;



Kibo Robot Programming Challenge (Kibo RPC)



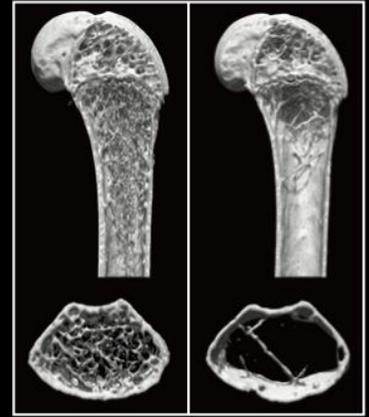
- Students of Kibo-ABC member countries in Asia Pacific Region are encouraged to participate.
- **Preliminary Round** will be held in April to June 2020 in each country.
- **Final Round** will be held in September 2020 (Planned).

Kibo-ABC
countries;

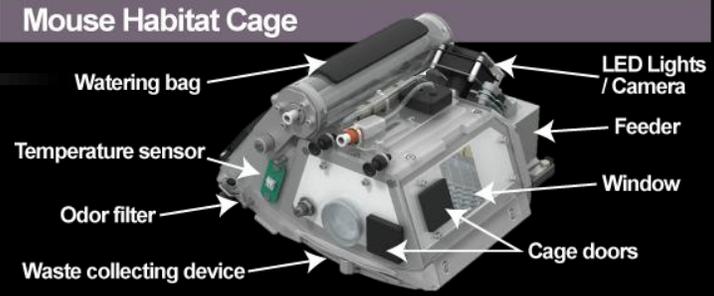
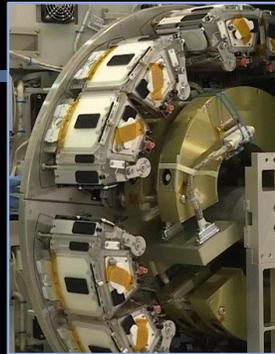


For SDG's by Kibo Utilization leading to innovation and new business creation

MHU Mouse Habitat Unit

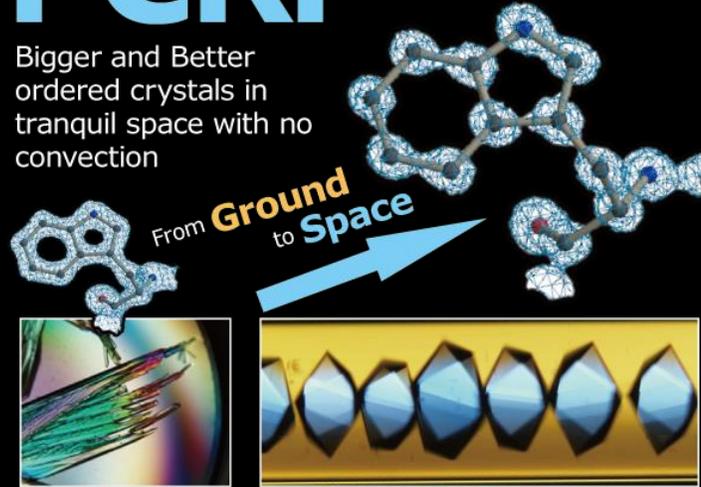


AG* μG
*Artificial Gravity (1G) in space



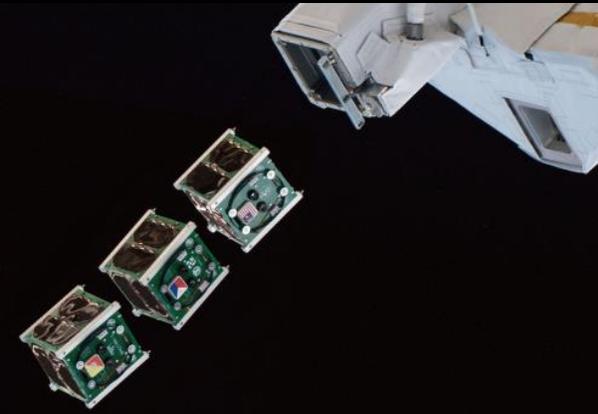
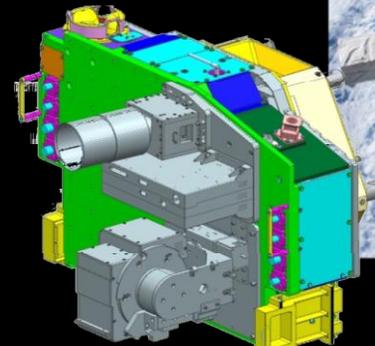
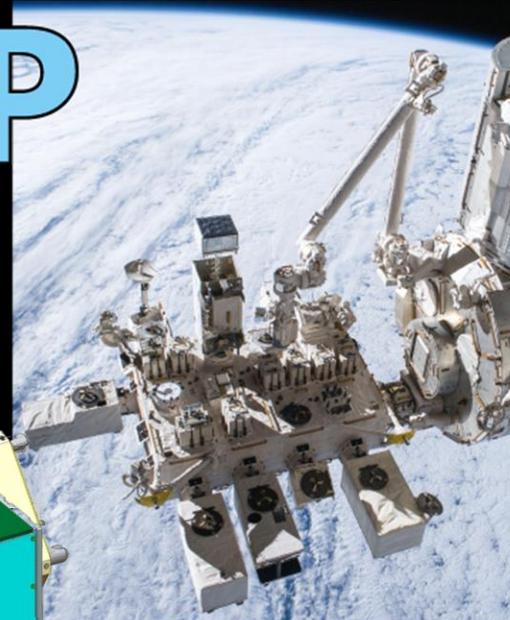
PCRFR Protein Crystallization Research Facility

Bigger and Better ordered crystals in tranquil space with no convection



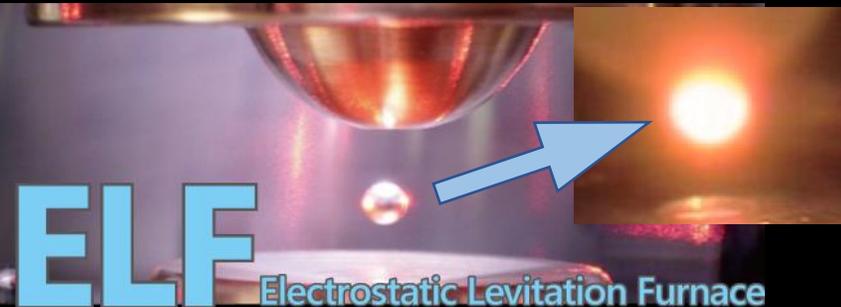
i-SEEP

IVA-replaceable Small Exposed Experiment Platform



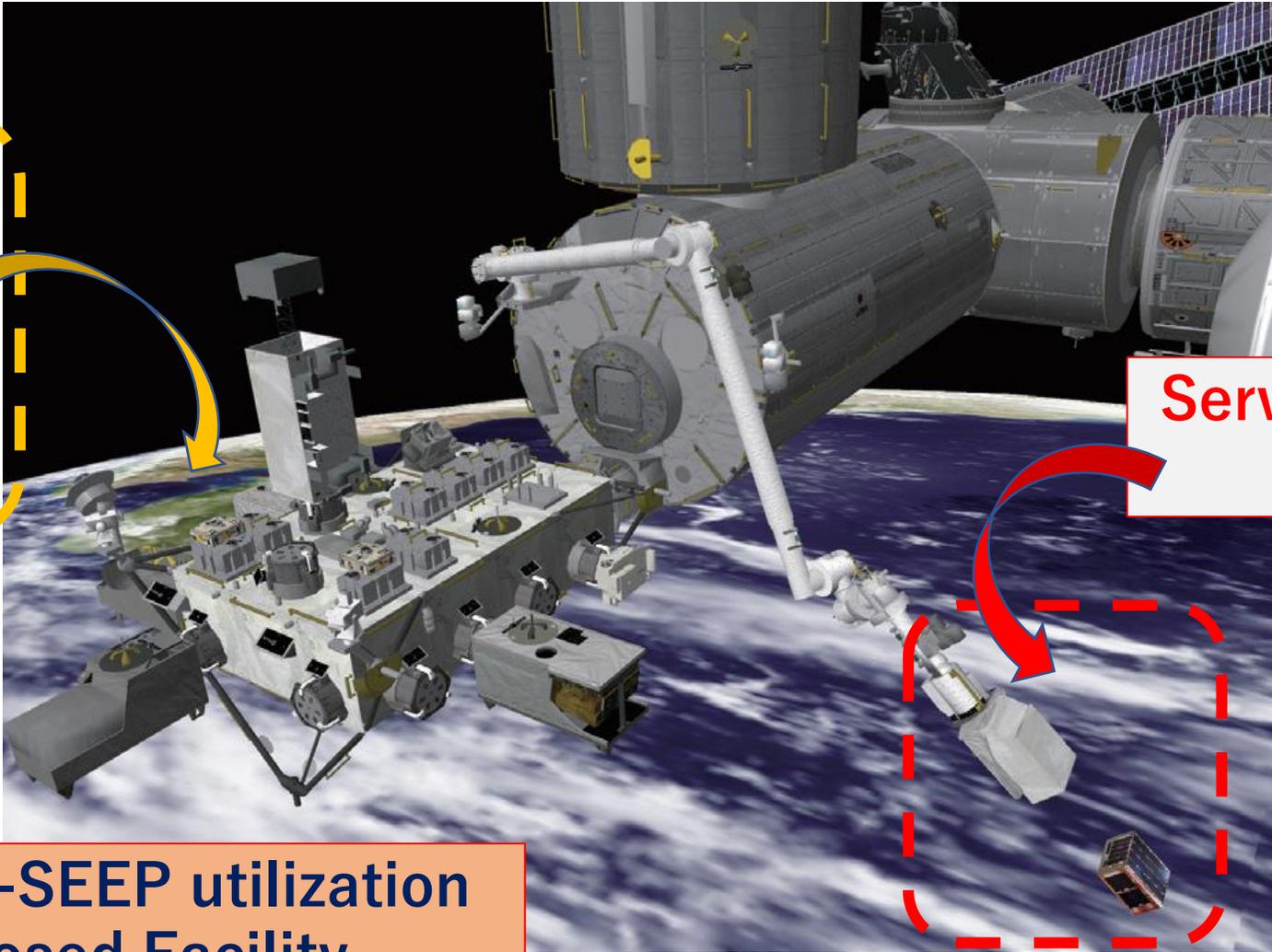
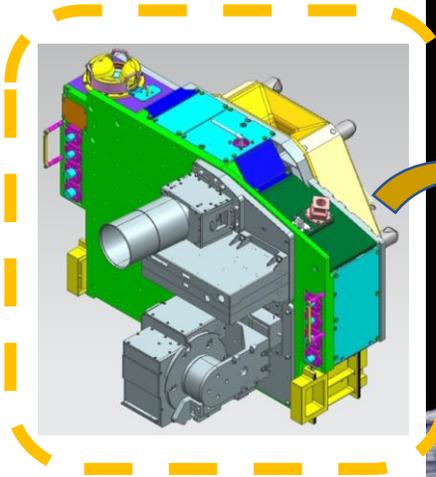
J-SSOD

JEM Small Satellite Orbital Deployer
Service Provider :
Space BD Inc. and MITSUI & CO., LTD.



ELF Electrostatic Levitation Furnace

For SDG's by commercialization of Kibo Utilization leading to new business creation



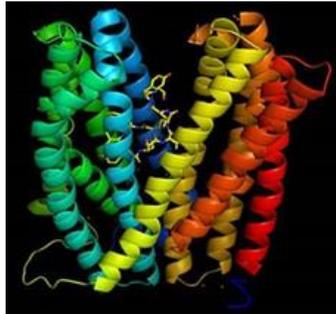
Service of Deployment of Small satellites



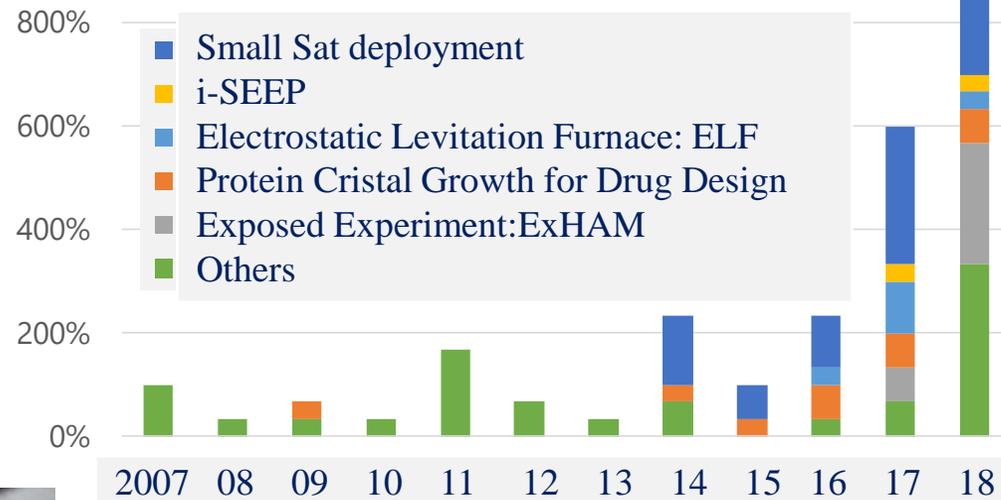
Service of i-SEEP utilization on Exposed Facility



Utilization Expansion in LEO by Private Enterprise leading to SDG's ~ "new value" and "new business" creation ~



Growth rate of Fee based Contract on ISS Kibo



Junkosha



SoftBank



SATLANTIS



TOYOTA dentsu



Yakult



LOTTE





Thank you for your attention.