

Project Endorsement Form

1. PROJECT TITLE

Full title	KIOST Indian Ocean Study: Korea-US Joint Observation Study of the Indian Ocean)
Acronym	KIOS
Website	N/A
Keywords (up to 10, describing the project research)	Indian Ocean, Seychelles Chagos Thermocline Ridge, Oceanographic Observation, Time-series Observation
New initiative or continuing programme?	Continuing but different funding source

2. APPLICANTS

Lead applicant / Project Leader / key research contact person:

First name	Dong-Jin
Last name	Kang
Affiliation	Korea Institute of Ocean Science & Technology (KIOST)
Postal address	385 Haeyang-ro Young-do gu, Busan 49111, Korea
Country	Republic of Korea
Telephone	+82-10-9360-6742
Email address	djocean@kiost.ac.kr
Institutional or personal website	https://www.kiost.ac.kr

Other key participants / research team leaders: (repeat as needed)

First name	TaeKeun
Last name	Rho
Role in the project	Nutrient Dynamics
Affiliation	Korea Institute of Ocean Science & Technology (KIOST)
Country	Republic of Korea
Email address	tkrho@kiost.ac.kr
Institutional or personal website	https://www.kiost.ac.kr

First name	Intae
Last name	Kim
Role in the project	Trace Elements and Isotopes
Affiliation	Korea Institute of Ocean Science & Technology (KIOST)
Country	Republic of Korea
Email address	ikim@kiost.ac.kr
Institutional or personal website	https://www.kiost.ac.kr

First name	Doshik
Last name	Hahm
Role in the project	Noble gas
Affiliation	Pusan National University
Country	Republic of Korea

IIOE-2 Joint Project Office (JPO)

Perth Australia Node
IOC Perth Programme Office
c/o Commonwealth Bureau of Meteorology
3rd Floor, 1 Ord Street
West Perth, Western Australia, 6005, Australia.
Phone: +61-8-92262899
Email: iioe-2@bom.gov.au

<https://iioe-2.incois.gov.in/>

Hyderabad India Node
Indian National Centre for Ocean Information Services (INCOIS)
Pragathi Nagar
Hyderabad, Telangana 500 090, India.
Phone: +91-40-2388 6142
Email: iioe-2@incois.gov.in

Email address	hahm@pusan.ac.kr
Institutional or personal website	

First name	SungHyun
Last name	Nam
Role in the project	Physical Oceanography/Time-series Observation
Affiliation	Seoul National University
Country	Republic of Korea
Email address	namsh@snu.ac.kr
Institutional or personal website	

N.B.: Please note that all these names and contact details will be added to the IIOE-2 membership database.

3. ABSTRACT– Brief description of the project: (1/4 page maximum)

This will be placed on the IIOE-2 Website after endorsement.

Through various methods such as ship observation, satellites, autonomous observation, and time series observation, the characteristics and changes in the marine environment of the Seychelles-Chagos Thermocline Ridge (SCTR) of the Indian Ocean are investigated and understood. A SCTR seasonal prediction system is also developed.

- Observation using research vessels in the SCTR region (Physical, Biogeochemical, and pelagic ecosystem characteristics)
- Observation of changes in the marine environment using autonomous instruments
- Satellite data analysis
- Time-series observation by Mooring
- Development of SCTR seasonal prediction system
- Reproduction of past fluctuations of SCTR

4. LINKS TO IIOE-2 SCIENCE PLAN: (1/2 page maximum)

How do you anticipate your project to contribute to the IIOE-2 strategy and science delivery, with reference to which (either one or more) of the six IIOE-2 Science Plan themes that your project responds. Please state the specific issues and questions addressed by your project in the context of the IIOE-2 Science Plan themes and key issues.

ST-2 Boundary Current Dynamics, Upwelling Variability and Ecosystem Impacts

1. How are marine biogeochemical cycles, ecosystem processes and fisheries in the Indian Ocean influenced by upwelling?
2. How does the interaction between local and remote forcing influence upwelling variability in the Indian Ocean?
3. How have these processes and their influence on climate changed in the past and how will they change in the future?

5. INTERNATIONAL COLLABORATION(S):

IIOE-2 Joint Project Office (JPO)

Perth Australia Node
IOC Perth Programme Office
c/o Commonwealth Bureau of Meteorology
3rd Floor, 1 Ord Street
West Perth, Western Australia, 6005, Australia.
Phone: +61-8-92262899
Email: iioe-2@bom.gov.au

<https://iioe-2.incois.gov.in/>

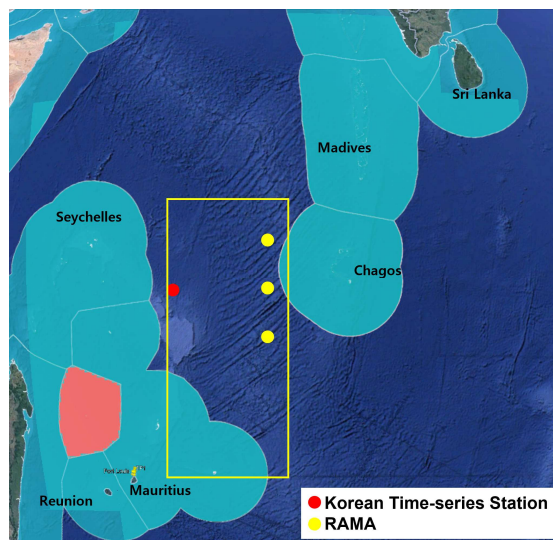
Hyderabad India Node
Indian National Centre for Ocean Information Services
(INCOIS)
Pragathi Nagar
Hyderabad, Telangana 500 090, India.
Phone: +91-40-2388 6142
Email: iioe-2@incois.gov.in

Is the project part of a related multi-national activity? **YES**
If No, would you welcome international collaboration in your project?

6. REGION(S) OF STUDY

Provide a description of 'where' the research is to be conducted (for field based activities) and/or the region or regions to which the research pertains (you are encouraged to consider providing either the coordinates of the area of studies or the coordinates of the planned cruise tracks, as well as a figure as an addendum to your proposal).

Tropical Western Indian Ocean, Seychelles-Chagos Thermocline Ridge (SCTR) region



6. TIMETABLE OF THE PROJECT

Start date: 2022. Apr. 1	End date: 2026. Dec. 31
--------------------------	-------------------------

7. LINKAGES WITH OTHER PROJECTS / PROGRAMMES / INITIATIVES

Is the project part of a related national or multi-national activity?
If yes, provide the related activity title and website for reference, if available:

KUDOS (IIOE2-EP31: <https://iioe-2.incois.gov.in/IIOE-2/EP31.jsp>)

Is your project part of, or affiliated to, another SCOR, IOC or IOGOOS activity or project?
If "yes", please indicate which activity or project:

No

IIOE-2 Joint Project Office (JPO)

Perth Australia Node
IOC Perth Programme Office
c/o Commonwealth Bureau of Meteorology
3rd Floor, 1 Ord Street
West Perth, Western Australia, 6005, Australia.
Phone: +61-8-92262899
Email: iioe-2@bom.gov.au

<https://iioe-2.incois.gov.in/>

Hyderabad India Node
Indian National Centre for Ocean Information Services (INCOIS)
Pragathi Nagar
Hyderabad, Telangana 500 090, India.
Phone: +91-40-2388 6142
Email: iioe-2@incois.gov.in

8. DATA MANAGEMENT AND SHARING

1. Will new data be collected as part of this project?

Yes

2. Contact information if any, of the person in charge of the data management from whom the metadata can be accessed by interested IIOE-2 stakeholders.

Please note that for all IIOE-2-endorsed projects, IIOE-2 will have developed its own metadata portal. Once the project is endorsed, the project leader will be asked to provide the metadata information of the project.

Dr. Dong-Jin Kang (djocean@kiost.ac.kr)

3. Recognizing the need for an initial period of exclusive data use, would you be willing to provide timely access to all data generated under this project and associated metadata in accordance with relevant national and funding agency data sharing policies? **YES**

9. FUNDING

Please note that IIOE-2 strongly encourages funded/resourced projects. However, IIOE-2 may endorse projects yet to receive funding/resourcing if IIOE-2 endorsement can be clearly shown to significantly aid in prospects for funding/resourcing.

Has funding and resources to successfully achieve and undertake the project been obtained? Indicate the sources of funding and resources that have been approached and/or secured.

Yes. Ministry of Oceans and Fisheries, Republic of Korea

10. BENEFITS FROM IIOE-2 ENDORSEMENT (1/4 page maximum)

Specify why you are seeking endorsement and how the activity would benefit from endorsement, and how the IIOE-2 SC could assist in the implementation of your project.

We are seeking endorsement to increase the impact of our research by sharing it with the IIOE2 community. We also hope to create collaborations to oceanographers in foreign countries to extent the impact of our work.

IIOE-2 Joint Project Office (JPO)



11. OPTIONAL: OTHER COMMENTS/INFORMATION/MATERIAL (*length and detail may be at the discretion of and as deemed necessary by the applicant*)

Please feel free to provide any other comments, information or materials that you feel relevant to your proposal for the IIOE-2 Steering Committee's information and benefit. You may provide this as general information or provide the additional comments/information/materials as relevant to any of the specific Sections above.

Dong-Jin Kay

(Signature of the PI)