

## Project Endorsement Form

### 1. PROJECT TITLE

Full title	Eastern Indian Ocean Upwelling Research Initiative
Acronym	EIOURI
Website	<a href="http://www.masu.s2.weblife.me/EIOURI/">http://www.masu.s2.weblife.me/EIOURI/</a>
Keywords (up to 10, describing the project research)	Eastern Indian Ocean, Upwelling system, ocean dynamics, air-sea interactions, biogeochemical/ecological variations, Indonesian throughflow, meso/submeso-scale phenomena, biophysical interaction
New initiative or continuing programme?	New initiative, starting from Dec.2015

### 2. APPLICANTS

#### Lead applicant / Project Leader / key research contact person:

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Last name	Yu
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Last name	Masumoto
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Institutional or personal website	<a href="http://www.eps.s.u-tokyo.ac.jp/index-en.html">http://www.eps.s.u-tokyo.ac.jp/index-en.html</a>

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

First name	Nick
Last name	D'Adamo
Role in the project	Liaison with IIOE-2 and other IOC related activities

### IIOE-2 Joint Project Office (JPO)

Perth Australia Node  
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Country	Australia
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Institutional or personal website	

First name	Mike
Last name	McPhaden
Role in the project	Ocean dynamics, Upwelling dynamics
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First name	Iwao
Last name	Ueki
Role in the project	Ocean dynamics, Upwelling dynamics
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First name	Michael
Last name	Landry
Role in the project	Biogeochemical aspects of upwelling system
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First name	Cabell
Last name	Davis
Role in the project	Biological aspects of upwelling system
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First name	Lynnath
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Last name	Beckley
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First name	Ming
Last name	Feng
Role in the project	Ocean dynamics, Upwelling dynamics, Biophysical interaction
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First name	Zainal
Last name	Arifin
Role in the project	Local coordinator in Indonesia, biophysical interaction
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Institutional or personal website	<a href="http://lipi.go.id/">http://lipi.go.id/</a>

*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.*

Eastern Indian Ocean Upwelling Research Initiative (EIOURI) is an international research collaboration under a main purpose of better understanding of physical and biogeochemical aspects of upwelling systems in the eastern Indian Ocean (EIO) and their impacts on local oceanographic characteristics, ecological systems and economies and their vulnerabilities to climate change. EIOURI is proposed for a period of five years, beginning in December 2015. EIOURI mainly focuses on upwelling processes along the coast of Sumatra and Java, which is a largest upwelling system in the EIO, but also includes research interests in other coastal and open-ocean upwelling systems in the EIO. EIOURI covers i) physical processes, ii) biogeochemistry and ecology, iii) biophysical relations, and iv) societal impacts of the upwelling systems, with research activities involving in situ and remote observations, analyses of existing datasets, and numerical and analytical modelling. EIOURI will also contribute to the International Indian Ocean Expedition-2 (IIOE-2), as a regional program with comprehensive approach including intensive observations and numerical modelling. EIOURI will advance our knowledge of the biophysical dynamics of upwelling systems and their response to climate variability and change and their socio-economic impacts. In addition, EIOURI will increase scientific capacity in the EIO, and enhance international collaboration in the region.

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

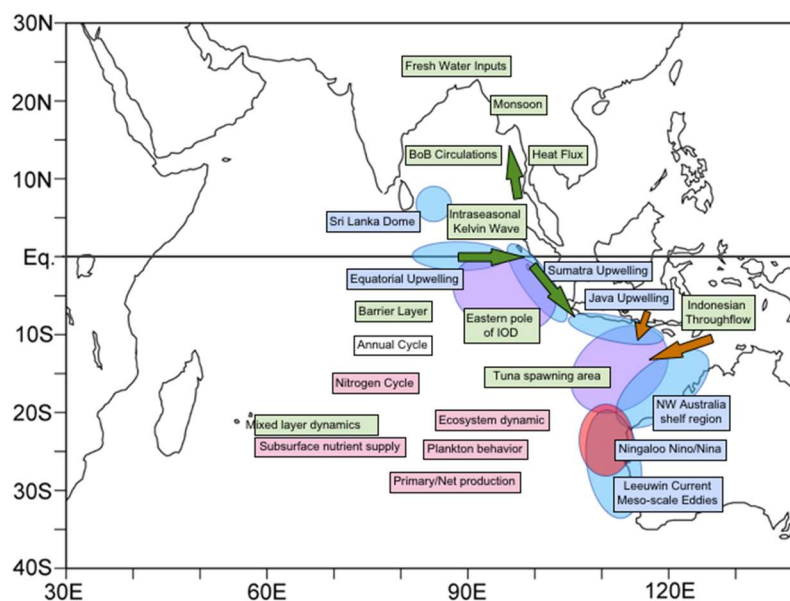
How do you anticipate your project to contribute to the IIOE-2 strategy and science delivery, with reference to which (either one or more) of the six IIOE-2 Science Plan themes that your project responds. Please state the specific issues and questions addressed by your project in the context of the IIOE-2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

EIOURI will contribute to IIOE-2 mainly through its science theme 2 (boundary current dynamics, upwelling variability and ecosystem impacts), theme 3 (monsoon variability and ecosystem response), theme 4 (circulation, climate variability and change), and theme 6 (unique geological, physical, biogeochemical, and ecological features of the IO), since understanding of physical and biogeochemical/ecological aspects of upwelling systems is cross-cutting issue relevant to many important topics raised by the IIOE-2 Science Plan. We will participate as much as possible in conferences/symposiums/workshops of IIOE-2. One of the project leaders will attend the IIOE-2 SC to report progresses of and scientific highlights obtained by EIOURI.

#### 5. 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 a figure as an addendum to your proposal).

The target area of EIOURI is the eastern Indian Ocean, mainly focusing on upwelling processes along the coast of Sumatra and Java, but including other coastal and open ocean upwelling systems and surrounding areas.



EIOURI region and keywords

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## 6. TIMETABLE OF THE PROJECT

Start date: December, 2015	End date: November, 2020
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## 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:

EIOURI consists of several national activities in Australia, China, Indonesia, Japan, USA, and their interactions. Each activity tries to secure ship-time for intensive observations and research fund to conduct observations and modelling activities.

EIOURI has a strong linkage with Western Indian Ocean Upwelling Research Initiative (WIOURI), a sister initiative of EIOURI under IIOE-2, and comparison study between western and eastern Indian Ocean upwelling systems will be conducted. Also EIOURI is collaborating with Year of Maritime Continent (YMC), which is a research program focusing on atmospheric intraseasonal disturbances called as Madden-Julian Oscillation, on air-sea interactions and influences of atmospheric variability on upwelling systems.

Is your project part of, or affiliated to, another SCOR, IOC or IOGOOS activity or project?

If “yes”, please indicate which activity or project:

EIOURI is trying to make a link with IOC/WESTPAC, and will contribute to IndOOS (an IOGOOS activity) through maintaining a part of surface buoys and deploying Argo floats.

## 8. DATA MANAGEMENT

1. Will new data be collected as part of this project (yes or no?)

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.*

Yukio Masumoto will manage data information, which will be collected during EIOURI.

Yukio Masumoto

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## 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.

EIOURI relies on national research funding of each participating scientists.

- Japanese scientists have already secured ship-time of two cruises and applying to additional research funding provided by Japanese government.
- Chinese scientists have already secured ship-time of cruise in DJF in 2017/2018, the research funding and are trying to apply for additional cruises.
- Scientists in several other countries are trying to apply for their national funding.

## 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.

The IIOE-2 endorsement would be very useful and effective to appeal to a selection committee of research funding and to a planning committee of research ship schedules.

## 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.

The EIOURI Science Plan is attached for your reference.

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