NOAA Form 77-65 U. (Rev 5-04) National Ocea	J.S. DEPARTMENT OF COMMERCE canic and Atmospheric Administration			1. Orię	1. Originating Office				2. Date	
REQUEST FOR SH	HP TIME (FY	<u> </u>								
Mail or fax completed form to: NOAA Marine and Aviation Operations, Program Services and Outsourcing Division, 8403 Colesville Road, Suite 500, Silver Spring, MD 20910. Fax: 301-713-1541, Phone 301-713-1045										
3 Project/Cruise Title Mission/Purpose										
3. Project/Cruise Title, Mission/Purp	OSE									
4. Ship Preferences (In order of preference)					5. Possible foreign research or Port Clearances:					
6. Project Area: (Include Chartlet)										
7. NOAA Mission goals supported by the Project (Check all that apply and show percentages if more than one) Unknown Climate % Weather / Water % Ecosystem % Commerce / Transportation %										
8. PPBES Program(s) supported by the project/mission:										
9. Impact Statement (Impact of project not being funded)										
10. Sea time required (including transit time): 11. Cruise Period (Months) 12. Th				This project will be	
13. Field of Science Category (See	Form Instructions)				14. NSF R&D Category (See Form Instru				ctions)	
15a.	NOAA Program			m Perso	Personnel			au dina al	Ship's company only	
Scientists	Max/Min		Onic	e		В	enning Re	equirea		
Technicians										
Total										
15b. Non-NOAA Participants and their Affiliation										
Personnel (Names) Affiliations										
15c. Non-NOAA Berths Required [15d. Total Berths Required										
16. Suggested piggyback projects and time requirements (or restrictions) which can be accommodated:										
17.		Ship	Capal	oilities F	Requi	rements				
durance: Days Lab Space: sq.ft. Wet:					sq.ft. Dry:			ry:	sq.ft.	
Minimum position accuracy required	1 <u>+</u>		On st	ation tim	on time:				Speed: Knots	
Electronics Requirements Oceanographic Requir					ments Gear Handling Requirements			equirements		
Ship Support Required: Yes No Ship Support Required: Yes No Ship Support Required: Yes No										
Item Description		FIOL	jiani r	Wt (lbs)	u ⊑qu	Power R	h'na	Space Reg	Location Preference	
).	TOWERN	vey u.	Space Req		
2										
3										
4										
19. If a NOAA Ship is unavailable or not economical, do you want to charter a ship to Continuation page used? Yes No										
20. Has your lab or science center director approved this request? Ves No										
21 Principal Investigator/Chief Scientist (Include complete address 22 NOAA PPRES Program Manager approval of ship time r								roval of ship time request		
phone, fax, Email)							rogram			
Signature/Date				Sion	ature	/Date				
orginaturo/Date				Jugi	aue	Juic				

CINDY2011/DYNAMO



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Sea

SRI

SRI

LANKA

Male
Hulhule
Gan

MIRAL/Ron Brown

British Indian Ocean Territory (U.K.)

> Diego Garcia

Sounding sites
 RAMA moorings

Cooperative Indian Ocean Experiment on Intraseasonal Variability in Year 2011 (CINDY2011) and its US participation - Dynamics of the MJO (DYNAMO)

Other participating countries: Australia, India, China, French *Other US components*: DOE AMIE, ONR air-sea interaction experiment *Time window*: November 2011 – February 2012

Objective: Collect in situ observations needed to advance our understanding of MJO initiation mechanisms and to improve our simulations and prediction of MJO initiation

Scientific Hypothesis: Moistening and diabatic heating in the lower troposphere by shallow convection play key roles in MJO initiation and maintenance.

Planned major observational instruments: ship-borne (MIRAI, Ron Brown) Doppler radars and radiation/surface flux package (AMF2), sounding array, surface and subsurface mooring array (RAMA), wind profiler array (HARIMAU), cloud radar and ARM Manus site (AMIE)

Modeling component: regional and global cloud-resolving and meso-scale models, global climate models

ARM contributions: Combine DYNAMO-ARM observing, data analysis, and modeling efforts to cover the entire MJO life cycle from its initiation in the Indian Ocean to eastward propagation into the western Pacific

