

Ocean Session – Summary

- * Making a list of instruments

 - Surface & Sub-surface sensors sampling interval/frequency were confirmed

 - But, a list for mooring/float will be added later.

- * Minimum requirement for uniform observational data

 - Ocean mixing experiment requires a more frequent sampling

 - Need to confirm the details of biogeochemical sampling

 - SK and Mirai will sample water at 6 hourly interval

 - RR will collect water sample once per day (at noon)

- * Data Management/Open Policy

 - All participants agree with CINDY data policy

 - Data exchange among participants will be done through PIs upon request

Ocean Session – Summary

* Ship Rotation Plan

Ocean group requests Roger Revel cruise Plan-2

SK will find a way to fill the gap during the port call of RR
(SK occupies 0, 80E and 0, 77/83E)

Mirai will call at Colombo during Oct 23-24 (Break is 21-26)

* Recovery plan of moorings and sea gliders

Sea gliders will be recovered by either of RR, SK, and MD
(we will decide after all ship time allocation and Sea glider
funding were confirmed in January. Back up plan is also needed.)
DYNAMO moorings will be recovered by RR

* Intercomparison

Sea gliders vs CTD

Ship vs ship (for CTD, flux, etc.) at least 1 day ?

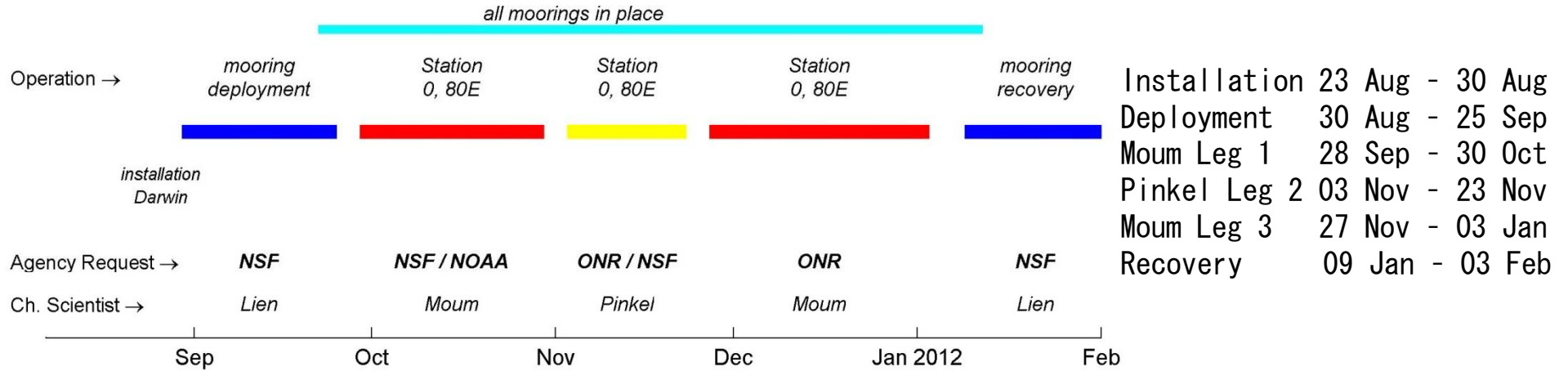
Instrument List

SURFACE			
UAV SST imaging	20 km radius of ship, 2/day		
Infrared Surface temperature Autonomous Radiometer (skin SST)		10 min	
Sea-snake Floating Thermistor		1 min	
surface met/bulk flux	10 min	10 min	1 min
turbulent flux	10 min	10 min	
water vapor radiometer	20 sec		
Solar/IR radiometer	10 min	10 min	
Microwave radiometer	20 sec		
Ozone UV absorbance	1 min		
OS2, Pulsed fluorescence	1 min		
radon	13 min		
Aerosol chemistry, Q-AMS	5 min		
Aerosol chemistry, Impactors	4-12 hrs		
Aerosol light absorption, TSI 3563 nephelometers	1 min		
Aerosol light absorption Radiance Research PSAP	1 min		
Total particle number CNC	1 sec		
Aerosol number size distribution, DMA and APS	5 min		
DMT CCN counter	30 min		
Stable water isotope		10 min	
GPS water vapor	10 min	10 min	
Surface wave properties WAMOS radar	10 min directional spectra		
Scanning surface lidar	continuous		
Video imaging of sea surface	continuous		

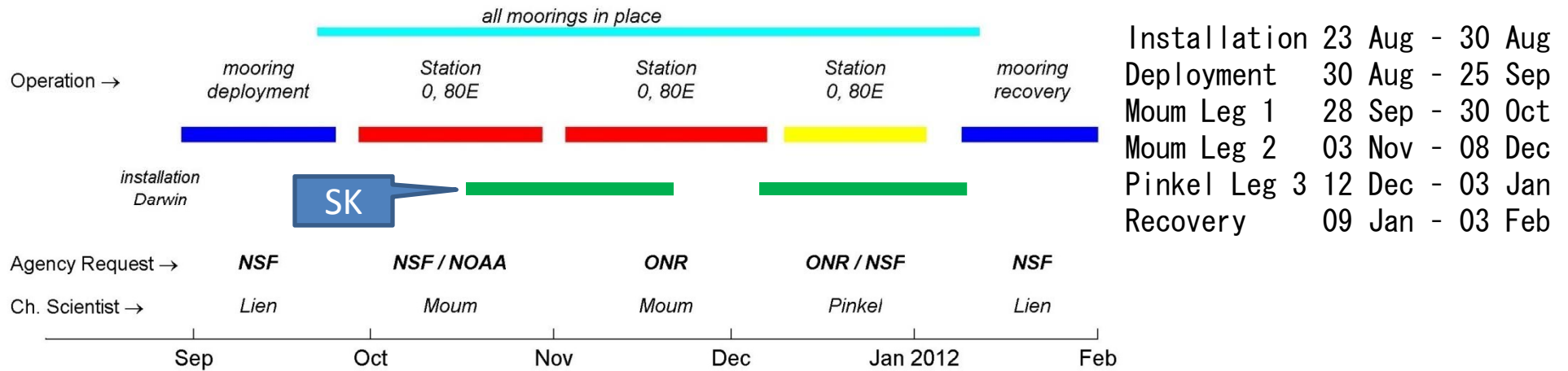
SUBSURFACE			
CT chain upper 5 m	1 sec		
120 kHz echosounder (150m)	1 sec		
Chameleon turbulence profiler (200m)	8-10 per hour		
Microstructure Profiler		3 hr or finer	
Radiant heating, I(z)	1 / day, noon		
CTD	1 / day, noon	3 / 6 hr (500m)	6 hr
ADCP	5 sec (500m)	5 min (16 m bin / 40 layers)	5 min (300m)
TSG		1 min	1 min
SST	1 min	1 min	1 min
Sea-Soar			
water sampling (biogeochemical analysis)	1 / day, noon	3 / 6 hr	6 hr
MPN (Multiple Plankton Net)			Mid-day & mid-night

R/V Roger Revelle Schedule

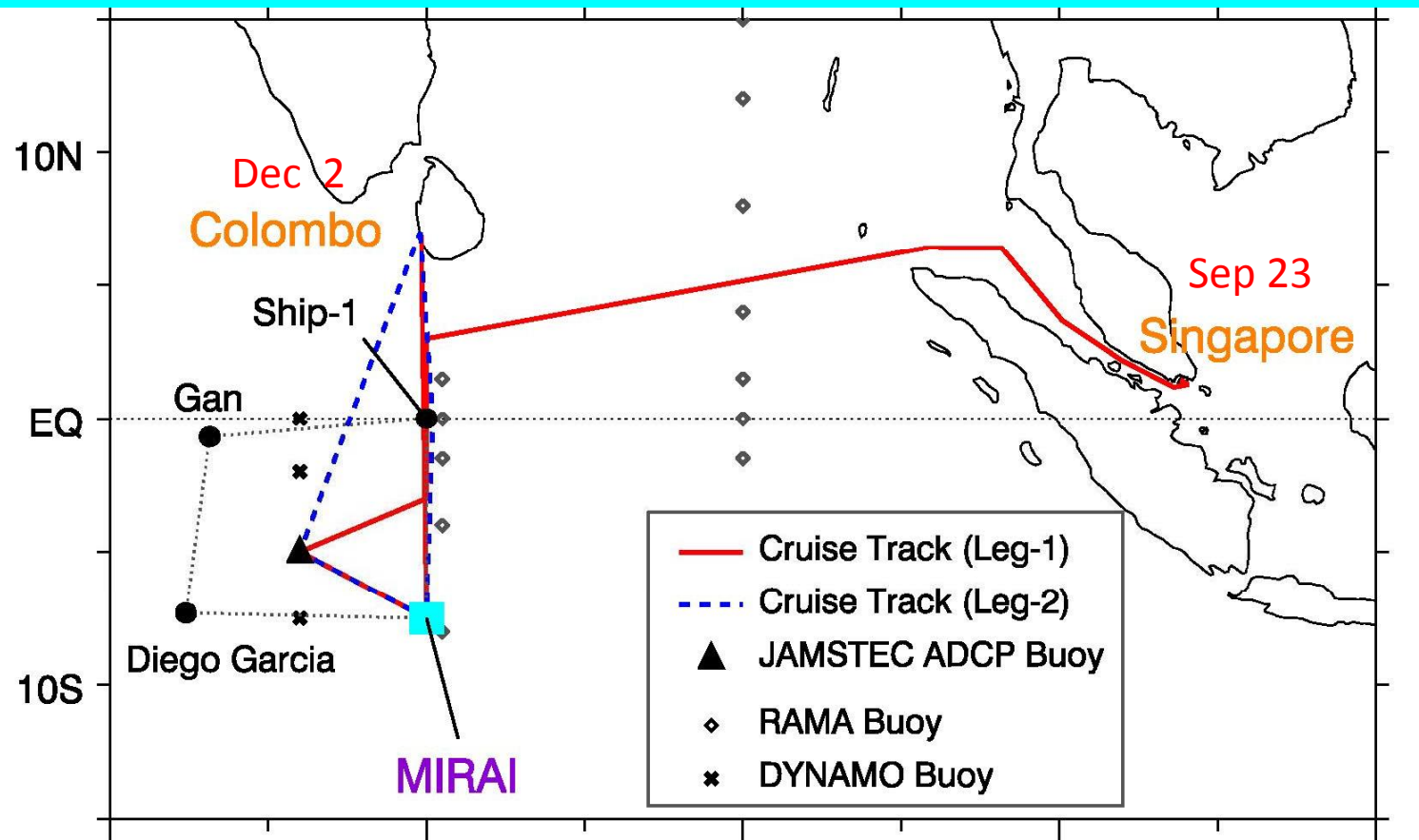
R/V Revelle Timeline ver.1



R/V Revelle Timeline ver.2



R/V MIRAI Cruise Plan



	70E	80E	90E	100E	110E
Sep. 23	Lv Singapore	Start of Mirai CINDY Cruise			
Sep. 27	Ar (0, 80E)	Start to deploy Sea-gliders			
Sep. 29	Ar (5S, 76E)	Deploy ADCP/PAL buoy			
Oct. 1	Ar (8S, 80E)	Start Stationary Observation			
Call at Colombo (6 days break in October) -> Oct. 21-26					
Nov. 28	Lv (8S, 80E)	End of Stationary Observation			
Nov. 29	Ar (5S, 76E)	Recover ADCP/PAL buoy			
Dec. 2	Ar Colombo	End of Mirai CINDY Cruise			

Ship time
71 days in total
On station;
53 days in Leg – 1 & 2