## July 24, 2018 Tuesday- Registration and Dinner (7 pm onward)

Timing	Topic	Instructor
8:45-9:30 am	Introduction of participants	
9:30-10:30 am	Plate tectonics and	Supriyo Mitra
	geomorphology of land-	
	ocean boundary	
10:30-11am	Tea Break	
11-12 pm	River Delta formation	Supriyo Mitra
12-1:30 pm	Lunch	
2:00- 3:30 pm	Introduction to atmospheric	Prabir Patra
	gases and aerosols	
3:30- 4 pm	Tea Break	
4-4:30 pm	Presentation by sponsors	
4:30-6:30 pm	Hands on session	Prabir Patra
	(Fortran/Python)	
8 pm onward	Dinner	

### Day 1: July 25, 2018 Wednesday

## Day 2: July 26, 2018 Thursday

Timing	Торіс	Instructor
9:00-10:30 am	Nitrogen in oceans	Wajih Naqvi
10:30-11am	Tea Break	
11-12 pm	Ocean deoxygenation	Wajih Naqvi
12-1 pm	Lunch	
1-2:30 pm	Stable isotopes	Prasanta Sanyal
2:30- 3:30 pm	Methane emissions in coastal	Sandip Mukhopadhyay
	ocean	
3:30- 4 pm	Tea break	
4-5 pm	Coastal sediment	Sandip Mukhopadhyay
	biogeochemistry	
5-6 pm	Indian GHG	Yogesh Tiwari
8 pm onward	Dinner	

#### Day 3: July 27, 2018 Friday

Timing	Topic	Instructor
9:00-10:30 am	Halogen species and air-sea	Susann Tegtmeier
	exchange	
10:30-11am	Tea Break	
11-12 pm	Sulphur and Clouds	Susann Tegtmeier
12-2 pm	Lunch	
2-3 pm	Carbon in oceans	VVSS Sarma
3- 3:30 pm	Tea Break	
3:30- 430 pm	Primary productivity in	VVSS Sarma
	coastal ocean	

5 pm- 7 pm	Hands on session (GHG)	Yogesh Tiwari and Prabir Patra
9 pm	Dinner	

## Day 4: July 28, 2018 Saturday

Timing	Торіс	Instructor
8:30-10:30 am	Hands on session	Susann Tegtmeier and Prabir
	(Ocean/atmosphere	Patra
	exchange)	
10:30-11am	Tea Break	
11-12 pm	GHG emission from inland	Kazuyuki Inubushi
	and coastal water bodies	
12-1 pm	Lunch	
1-2 pm	Atmospheric halocarbon	Sayantan Sarkar
2-3 pm	Static modelling for coastal	Santanu Ray
	ocean	
3- 3:30 pm	Tea Break	
3:30-430 pm	Dynamic modelling for	Santanu Ray
	coastal ocean	
5- 7 pm	Hands on session	Santanu Ray
	(Static/dynamic modelling)	
8 pm	Dinner	

## Day 5: July 29, 2018 Sunday

Timing	Topic	Instructor
9-10 am	Global carbon budget	Prabir Patra
10-11	Presentation by workshop	
	participants	
11-1130 am	Tea Break	
1130 am-1 pm	Presentation by workshop	
	participants	
1-2 pm	Lunch	
2-3 pm	Nutrient cycling in land	Punyasloke Bhadury
	ocean boundary- biological	
	perspective	
3-330 pm	Tea Break	
4-430 pm	Presentation by sponsors	
430-630 pm	Presentation by workshop	
	participants	
8 pm	Dinner	

## Day 6: July 30, 2018 Monday

Timing Topic Instructor			
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9:00-10:30 am	Open ocean carbon fluxes	Vinu Valsala
10:30-11am	Tea Break	
11-1 pm	Hands on session (ocean	Vinu Valsala
	modelling)	
1-2 pm	Lunch	
2-3 pm	Hands on session (ocean	Vinu Valsala
	modelling)	
3:00-3:15 pm	Tea Break	
3:15- 4: 15 pm	Regional carbon budget	Prabir Patra
4:15-4:30 pm	Tea Break	
4:30-7 pm	Hands on session: Coastal	KGMT Ansari and Anwesha
	processes	Ghosh
8 pm	Dinner	

# Day 7: July 31, 2018 Tuesday

Timing	Торіс	Instructor
9:00-10:30 am	Global atmosphere	Paul Palmer
10:30-11am	Tea Break	
11-12 pm	Atmospheric modelling of	Paul Palmer
	GHGs	
12-1 pm	Lunch	
1-230 pm	Tower based observations of	Supriyo Chakraborty
	greenhouse gases at natural	
	ecosystems	
230-3 pm	Tea Break	
3-4 pm	Isotopic investigations of	Supriyo Chakraborty
	greenhouse gases	
4-5 pm	Nutrient in surface ocean:	Prabir Patra
	upwelling vs. atmospheric	
	deposition	
5-7 pm	Hands on session (Modelling	Paul Palmer
	atmospheric GHGs)	
8 pm	Dinner	

# Day 8: August 1, 2018 Wednesday

Timing	Topic	Instructor
9-11 pm	Hands on session (Modelling	Paul Palmer
	atmospheric GHGs)	
11-1130 am	Tea Break	
1130-1 pm	Workshop participants	
	presentation	
1-2 pm	Lunch	
3-6 pm	Hands on session and query	Prabir Patra and Paul Palmer
	solving	
8 pm	Dinner	

## Day 9: August 2, 2018 Thursday

Timing	Торіс	Instructor
9:00-1130 am	Hands on session and queries	
	solving	
1130-12 noon	Tea Break	
12-1 pm	Panel discussion	Moderated by Punyasloke
		Bhadury
1-2 pm	Lunch	
2-5 pm	Discussion related to Hands	
	on sessions	
8 pm	Dinner	

### Day 10 and 11: August 3 and 4, 2018 Friday and Saturday- Field visit to Sundarbans

Day 12: August 5, 2018 Sunday (Departure)