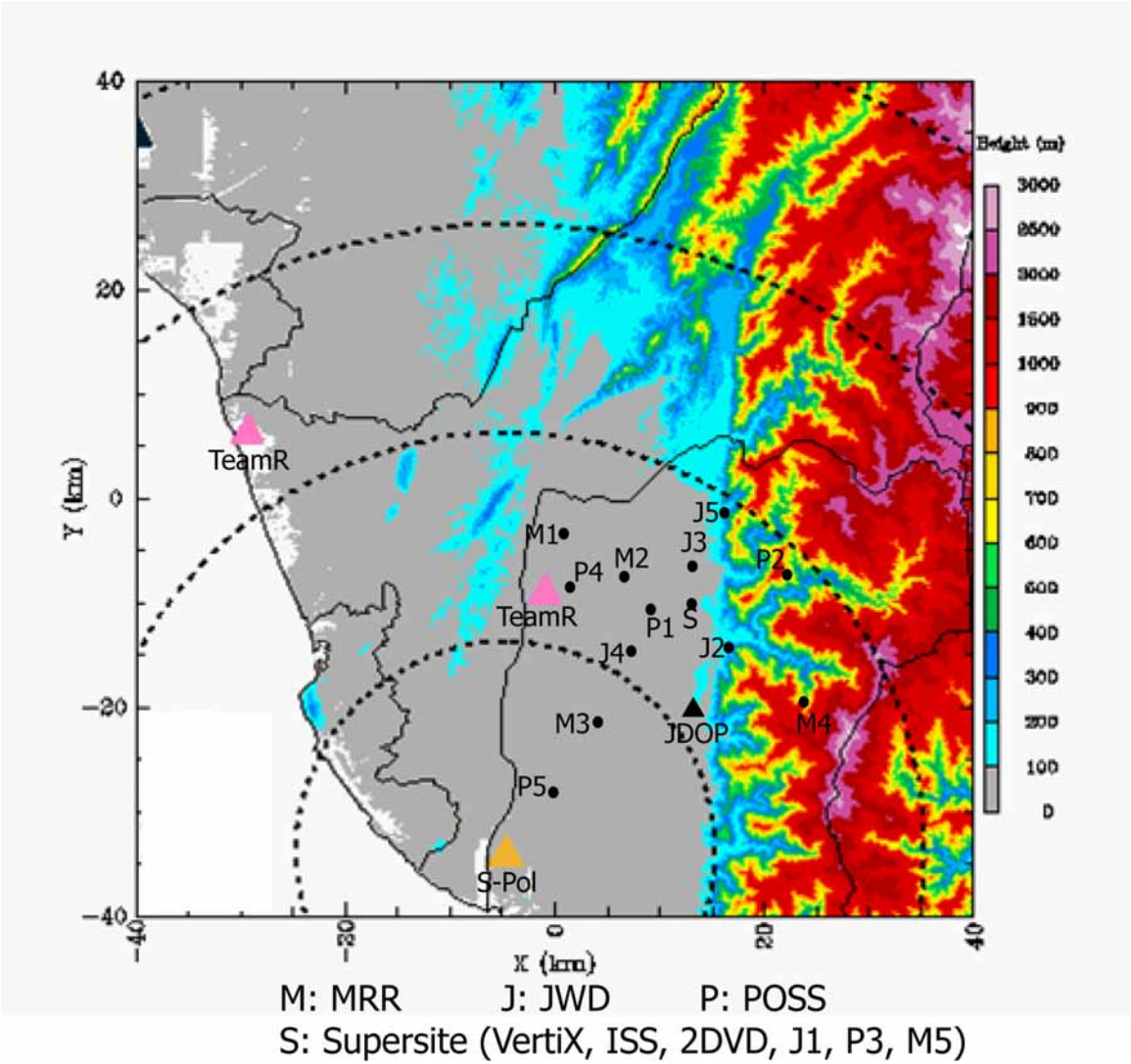

Deployment of surface instrumentations during the stage 2.

1. Desired scanning from S-POL

1) Sector scan to cover overall sfc. sites: 8˚ ~ 60˚

OR

2) RHI over sites (from high priority to low priority)

- Supersite: 39˚
- MRR (M1, M2, M3, M4): 11˚, 26.5˚, 39.5˚, 57.5˚
- Disdrometers (P1, P2, P4, P5, J2, J3, J4, J5): 32˚, 45.5˚, 15˚, 37˚, 43˚, 35.5˚, 36˚, 33.5˚
- **Total 15 RHIs (11˚, 15˚, 26.5˚, 32˚, 33.5˚, 35˚, 36˚, 37˚, 38˚, 39˚, 40˚, 41˚, 43˚, 45.5˚, 57.5˚)**

OR

3) RHI with same azimuth angle increment

- 9˚ ~ 61˚ with 2˚ increment (total 27 RHI and 39˚ RHI should be included)

2. Desired scanning from Team-R

a. Golden beach

1) Sector scan to cover overall sfc. sites: 102˚ ~ 140˚

OR

2) RHI over sites (from high priority to low priority)

- Supersite: 114.5˚
- MRR (M1, M2, M4, M3): 112˚, 115.5˚, 118˚, 130.5˚
- Disdrometers (J5, P2, J3, P1, J2, P4, J4, P5): 104˚, 108˚, 112˚, 117˚, 119˚, 120˚, 121.5˚, 139˚
- **Total 13 RHIs (104˚, 108˚, 112˚, 113.5˚, 114.5˚, 115.5˚, 117˚, 118˚, 119˚, 120˚, 121.5˚, 130.5˚, 139˚)**

OR

3) RHI with same azimuth angle increment

- 100.5˚ ~ 140.5˚ with 2˚ increment (total 21 RHI and 114.5˚ RHI should be included)

b. Jiou-Ru levee

1) Sector scan to cover overall sfc. sites: 20˚ ~ 175˚

OR

2) RHI over sites (from high priority to low priority)

- Supersite: 95.5˚
- MRR (M1, M2, M4, M3): 21˚, 86˚, 111˚, 151˚
- Disdrometers (J5, P2, J3, P1, J2, P4, J4, P5): 68˚, 84˚, 85˚, 86˚, 100˚, 115.5˚, 118˚, 173˚
- **Total 14 RHIs (21˚, 68˚, 84˚, 85˚, 86˚, 94.5˚, 95.5˚, 96.5˚, 100˚, 111˚, 115.5˚, 118˚, 151˚, 173˚)**

OR

3) RHI with same azimuth angle increment

- 65.5˚ ~ 121.5˚ with 2˚ increment (total 29 RHI and 95.5˚ RHI should be included)
- 65.5˚ ~ 152.5˚ with 3˚ increment (total 30 RHIs and 95.5 RHI should be included)

(Material provide by Gyuwon Lee of NCAR)

Table 1: Abbreviation, absolute and relative locations of the surface sites

Abbreviation	Full name	Location name	Latitude (˚)	Longitude (˚)	Altitude (˚)	From S-POL		From Team-R (Golden beach)		From Team-R (Jou-Ru)		From JDOP	
						Range (km)	Az (˚)	Range (km)	Az (˚)	Range (km)	Az (˚)	Range (km)	Az (˚)
S-POL	S-band dual-pol.		22.5268	120.4335	24	0	0						
TEAM-R	X-band dual-pol.	Golden beach	22.9265	120.1760				0	0				
		Jou-Ru Levee	22.7527	120.4687						0	0		
JDOP	Japan Doppler	Ping-Tung Univ.	22.6451	120.6086	117							0	0
S	Supersite	Quan-Xin	22.7394	120.6206	90	30.46	39.05	50.09	114.46	15.65	95.39	10.56	6.69
P1	POSS1 (McGill)	Gau-Lan	22.7356	120.5769	96	27.49	32.34	46.24	117.25	11.26	99.70	10.58	342.09
P2	POSS2 (PKNU)	Te-Wen	22.7706	120.7024	789	38.68	45.46	56.66	107.71	24.05	85.21	16.95	34.57
P4	POSS4 (EC2)	Ho-Juan	22.7553	120.5008	18	26.33	15.20	38.34	119.70	3.31	84.98	16.51	317.96
P5	POSS5 (EC3)	Si-Wei	22.5951	120.4895	23	9.53	37.12	48.90	138.84	17.65	173.05	13.43	245.57
M1	MRR1 (CCU)	Tu-Ku	22.8075	120.4919	74	31.78	10.86	34.97	112.18	6.54	21.33	21.66	326.49
M3	MRR3 (CCU)	Lin-Luo	22.6412	120.5360	50	16.51	39.58	48.67	130.61	14.19	150.88	7.46	266.68
M2	MRR2 (CCU)	Shi-Rong	22.7586	120.5586	54	28.80	26.45	43.42	115.39	9.24	85.91	13.62	337.89
M4	MRR4 (CCU)	Ma-Jia Village	22.6758	120.6867	739	30.82	57.44	59.31	117.94	23.94	110.89	8.71	66.91
J2	JWD2 (CCU)	Ma-Jia	22.7014	120.6103	140	26.58	43.03	51.07	119.27	15.60	111.42	6.26	1.59
J3	JWD3 (NCU)	Quan-Fu	22.7639	120.6175	66	32.43	35.57	48.72	111.70	15.31	85.31	13.24	3.95
J4	JWD4 (NCU)	Fan-Hua	22.7023	120.5720	64	24.14	36.05	47.63	121.48	11.99	117.86	7.39	329.45
J5	JWD5 (NCU)	Chin-San	22.8169	120.6411	152	38.66	33.40	49.18	104.26	19.06	67.97	19.39	9.89