

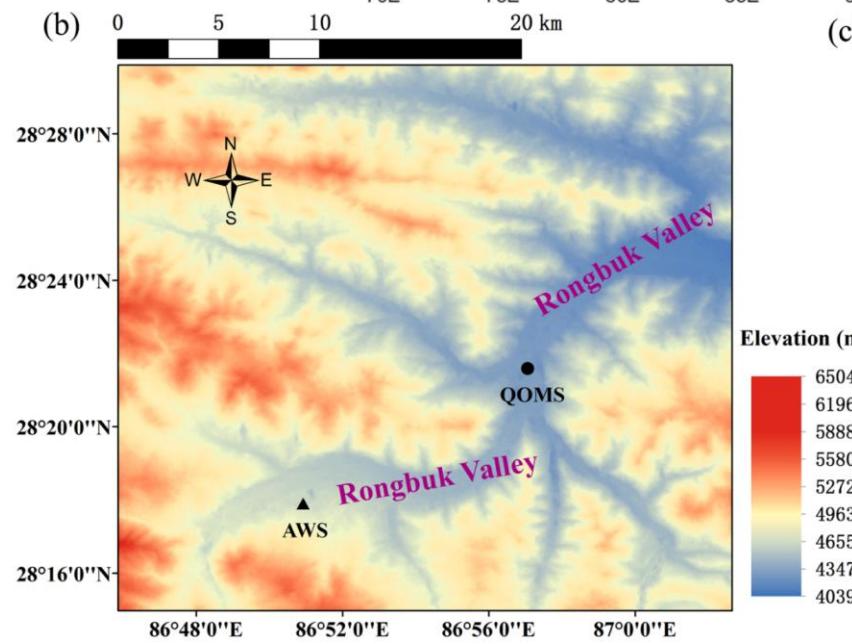
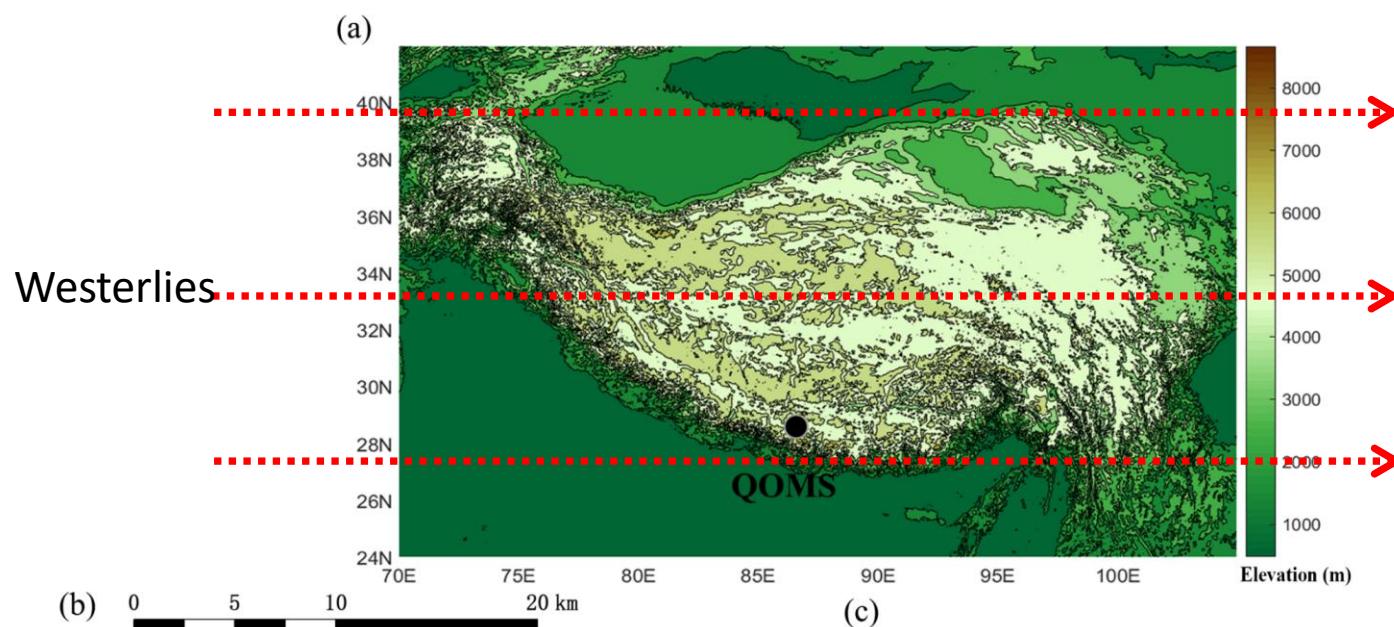


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# The impact of the Westerlies on the PBL growth and land surface energy balance on the north of the central Himalaya

Xuelong Chen, Yue Lai, Yaoming Ma,





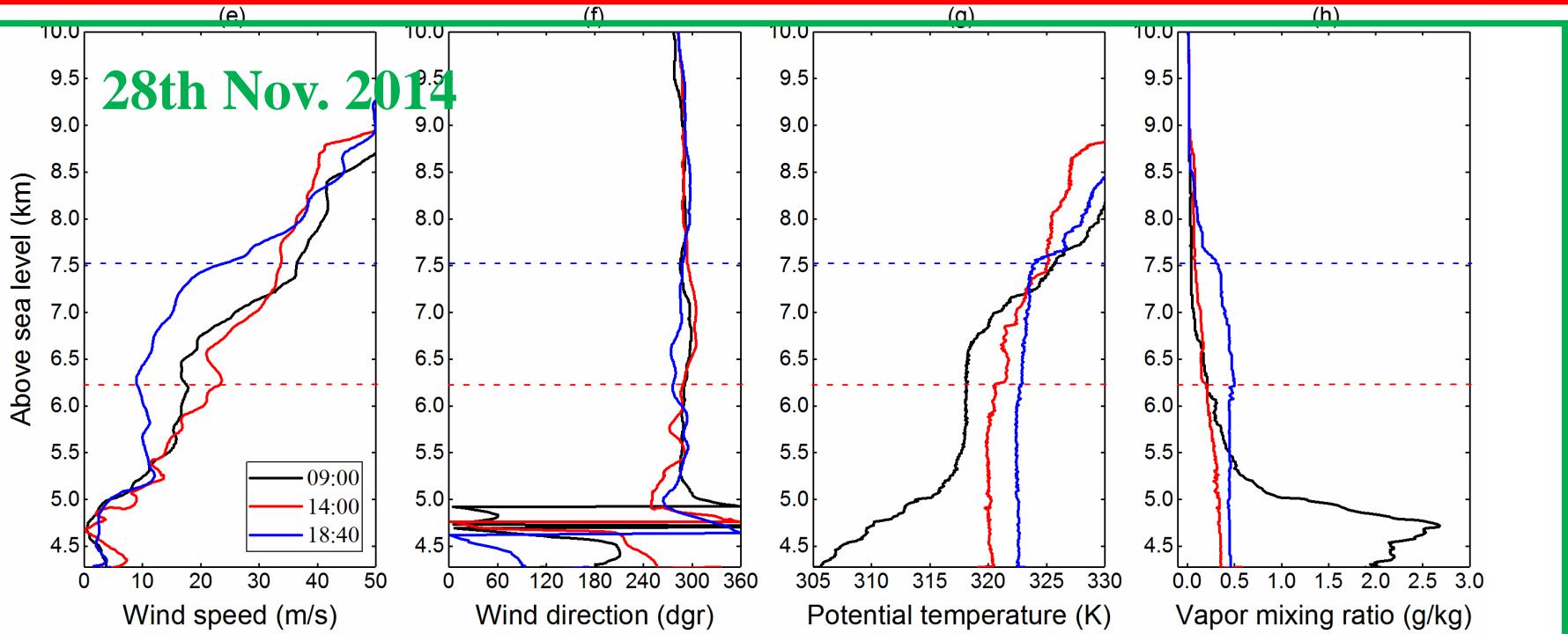
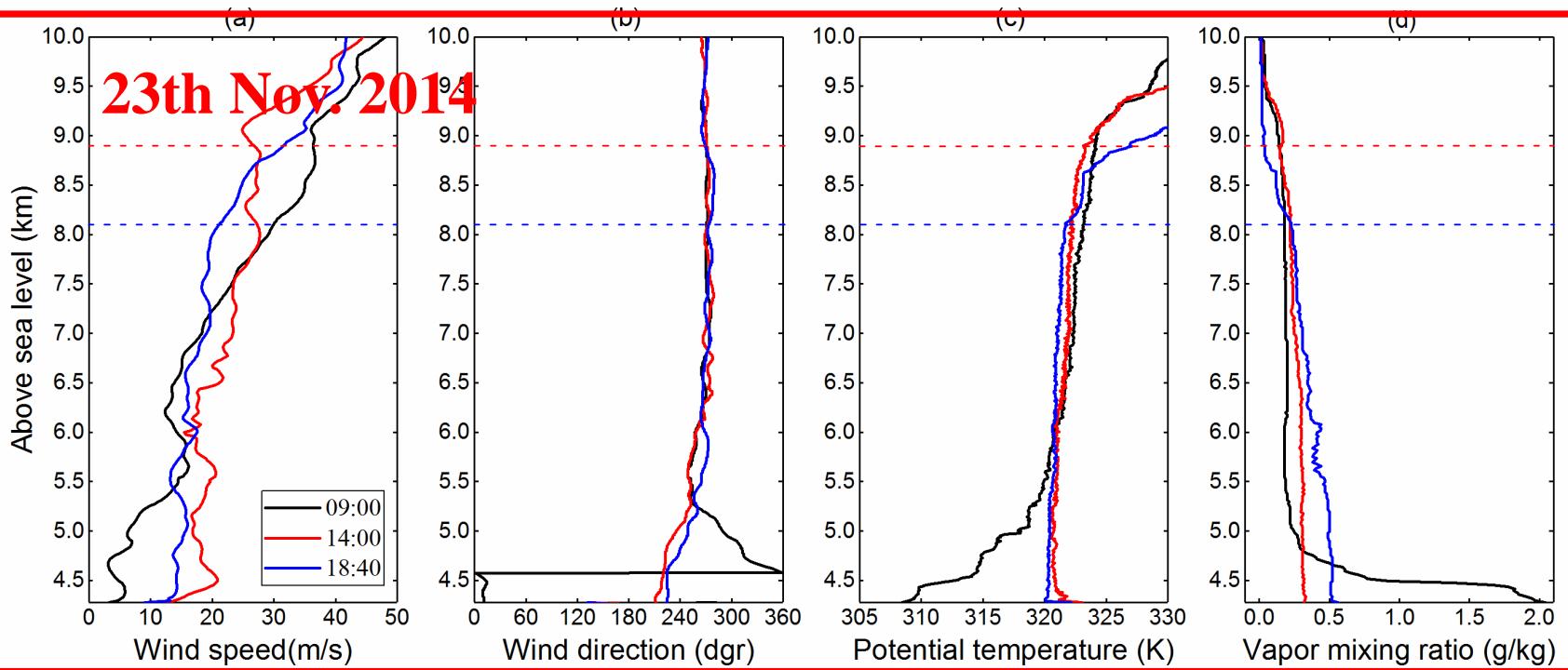
What's the impact of the Westerlies on PBL in the Rongbuk valley?

Table1 IOP of Radiosonde

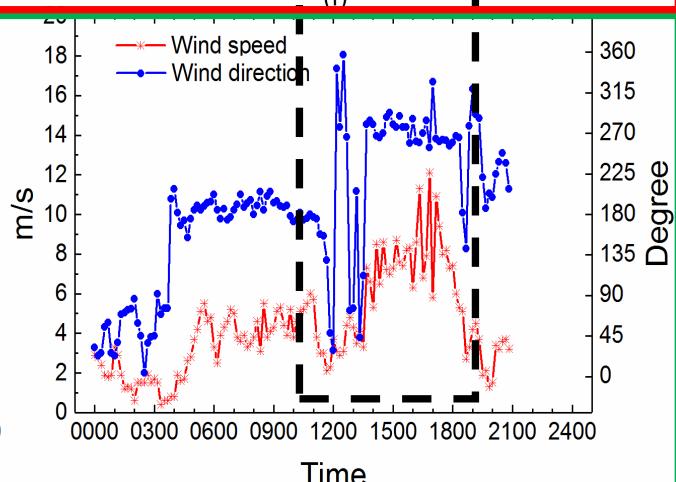
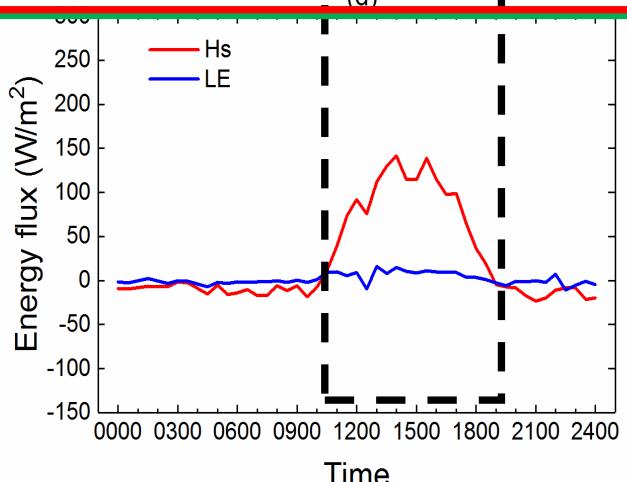
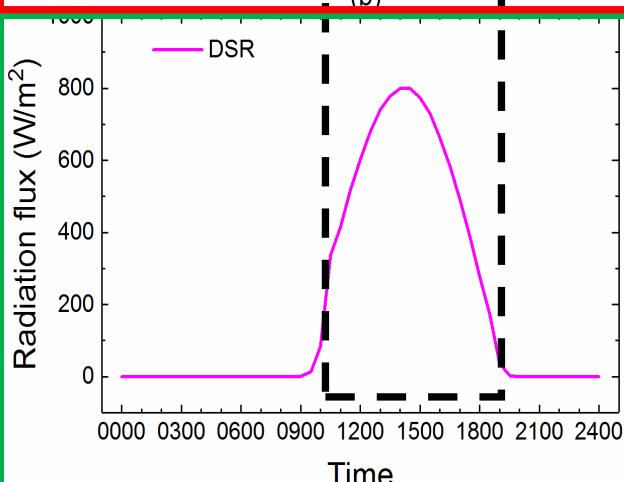
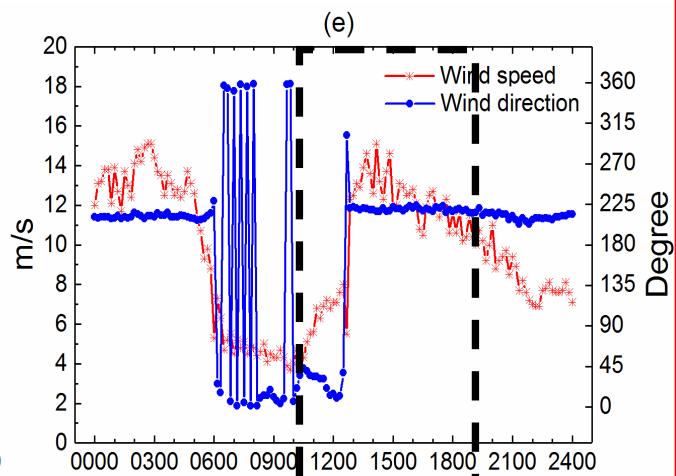
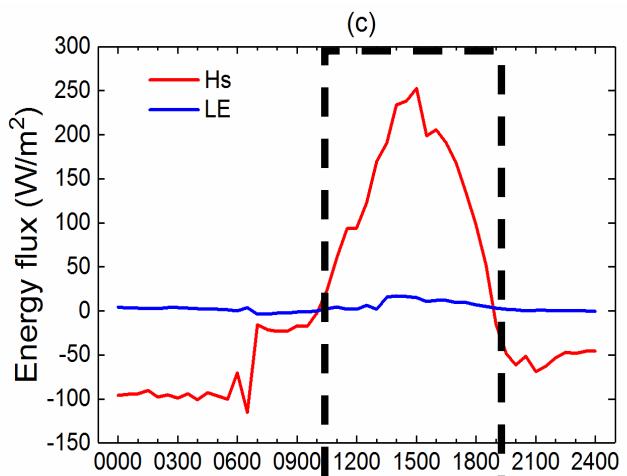
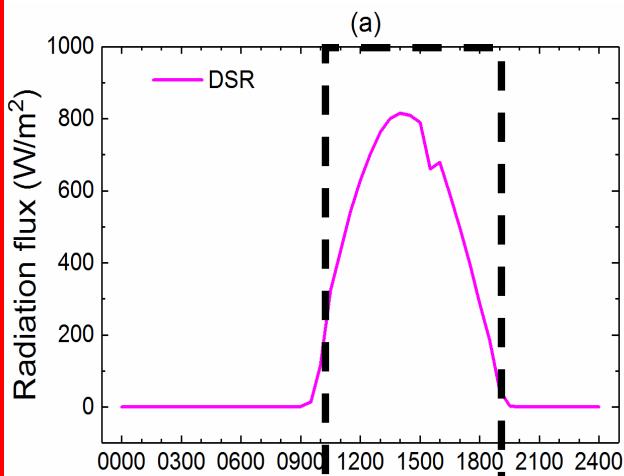
	IOP1	IOP2	IOP3
Observation date	4-10 Jun 2014	20-26 Aug 2014	22-28 Nov 2014
Observation time	8:00, 14:00, 20:00	8:00, 14:00, 20:00	9:20, 14:00, 18:40
Season	Monsoon-onset	Monsoon	Winter
GPS Radiosonde system	Vaisala DigiCORA III, Vaisala RS92-SGP	Vaisala DigiCORA III, Vaisala RS92-SGP	Vaisala DigiCORA III, Vaisala RS92-SGP

Table 2 PBL depth

	Hour	4 Jun	5 Jun	6 Jun	7 Jun	8 Jun	9 Jun	10 Jun
IOP1	14:00	2.63	0.59	2.23	2.25	1.11	1.41	
	20:00	0.19	0.40	0.38	1.07	0.16	0.10	0.21
	Hour	20 Aug	21 Aug	22 Aug	23 Aug	24 Aug	25 Aug	26 Aug
IOP2	14:00	0.61	1.14	1.12	1.34	1.35	0.89	0.71
	20:00	0.40	1.10	0.91	0.76	1.28	0.38	1.75
	Hour	22 Nov	23 Nov	24 Nov	25 Nov	26 Nov	27 Nov	28 Nov
IOP3	14:00	3.00	4.63	1.69	0.47	2.22	1.65	1.96
	18:40	2.91	3.84	3.11	3.19	3.53	2.24	3.28



**23th Nov. 2014**

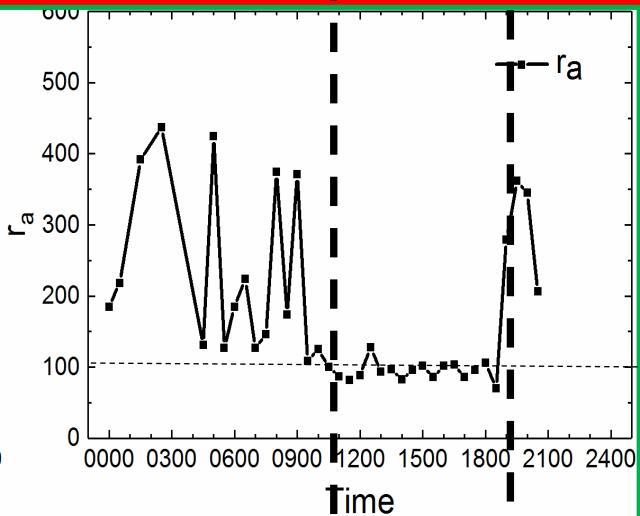
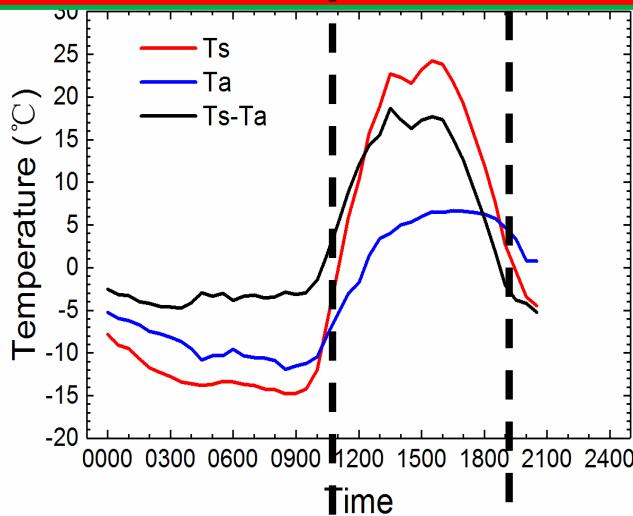
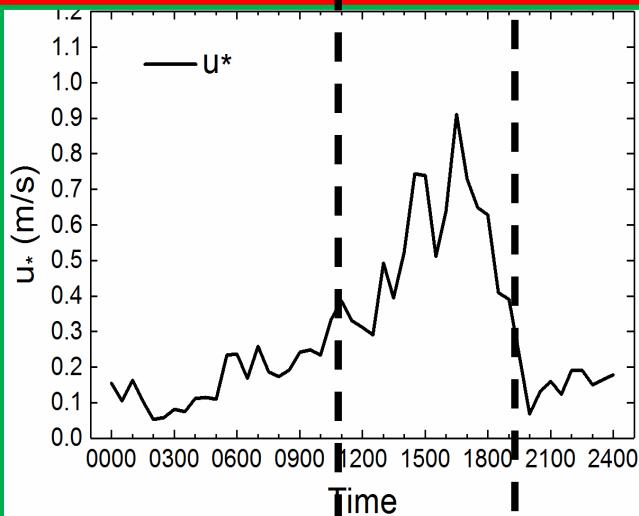
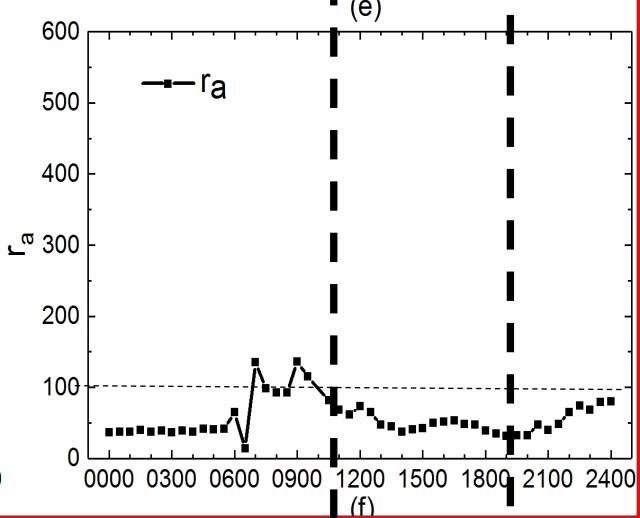
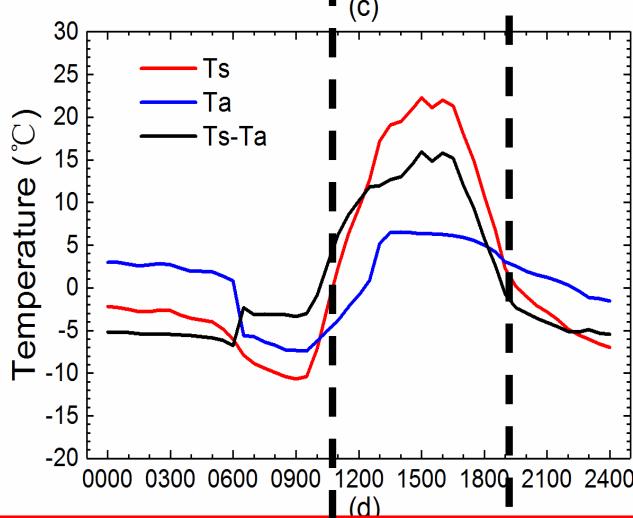
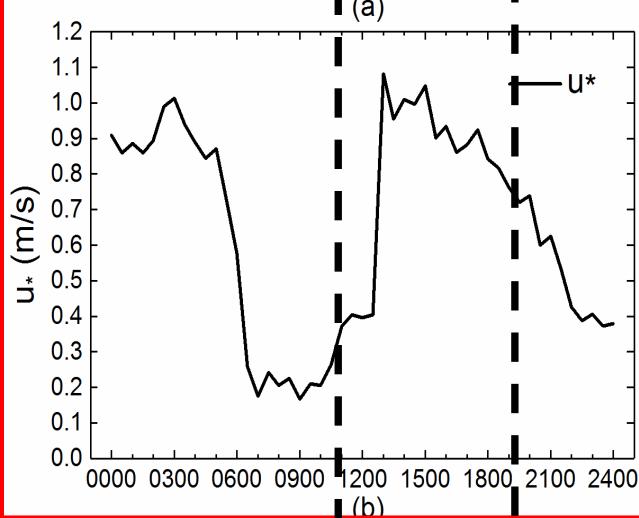


**28th Nov. 2014**

DSR: downward shortwave; Hs: sensible heat; LE: latent heat;

$$H_s = \rho C_p (T_s - T_a) / r_a$$

**23th Nov. 2014**



**28th Nov. 2014**

Daytime

Nighttime

