

程式與科學計算 HW9

(a) Please enter the time of data in [xx:xx]:

00:00

Please enter the wind direction of data in [degree]:

207.2

Please enter the wind speed of data in [m/s]:

2.433

At 00:00 (LST), the u-component of wind is 1.11211908 m/s, and the v-component of wind is 2.16395020 m/s, SW wind.

Please enter the time of data in [xx:xx]:

06:00

Please enter the wind direction of data in [degree]:

215.3

Please enter the wind speed of data in [m/s]:

1.817

At 06:00 (LST), the u-component of wind is 1.04996741 m/s, and the v-component of wind is 1.48292196 m/s, SW wind.

Please enter the time of data in [xx:xx]:

12:00

Please enter the wind direction of data in [degree]:

259.3

Please enter the wind speed of data in [m/s]:

2.033

At 12:00 (LST), the u-component of wind is 1.99765170 m/s, and the v-component of wind is 0.377460688 m/s, SW wind.

Please enter the time of data in [xx:xx]:

18:00

Please enter the wind direction of data in [degree]:

79.0

Please enter the wind speed of data in [m/s]:

1.517

At 18:00 (LST), the u-component of wind is -1.48912835 m/s, and the v-component of wind is -0.289457172 m/s, NE wind.

(b)

Time	WS[m/s]	WD[deg]	u[m/s]	v[m/s]
00:00	2.43300009	207.199997	1.11211908	2.16395020
01:00	2.04999995	231.300003	1.59988236	1.28174746
02:00	3.20000005	227.199997	2.34793544	2.17421222
03:00	1.45000005	216.199997	0.856378198	1.17009258
04:00	2.15000010	250.000000	2.02033925	0.735343337
05:00	2.40000010	222.300003	1.61523020	1.77511466
06:00	1.81700003	215.300003	1.04996741	1.48292196
07:00	2.53299999	260.299988	2.49678683	0.426784128
08:00	3.23300004	257.000000	3.15013838	0.727266788
09:00	1.79999995	234.500000	1.46540785	1.04526532
10:00	2.11700010	229.500000	1.60977948	1.37488151
11:00	3.68300009	241.000000	3.22122455	1.78555381
12:00	2.03299999	259.299988	1.99765170	0.377460688
13:00	1.71700001	261.799988	1.69944572	0.244894251
14:00	1.98300004	272.200012	1.98153841	-7.61234462E-
02				
15:00	2.66700006	271.200012	2.66641498	-5.58540076E-
02				
16:00	2.36700010	251.699997	2.24729013	0.743220329
17:00	2.34999990	265.799988	2.34368896	0.172110260
18:00	1.51699996	79.0000000	-1.48912835	-0.289457172
19:00	1.29999995	197.699997	0.395242870	1.23845994
20:00	2.15000010	208.199997	1.01598406	1.89480257
21:00	2.38299990	246.199997	2.18034863	0.961648524
22:00	2.33299994	234.199997	1.89221168	1.36470652
23:00	2.38299990	255.199997	2.30394006	0.608727396