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