

Hi,

I have messy monthly climate data in several excel files. I need help with cleaning it as follows:

- 1) Extract data from column **F** of each excel file
- 2) The extracted data should be a string of 5 numbers. Therefore, if there are less or more than 5, or if they contain text, delete those cells
- 3) The 5 figures in each cell are coded as follows
 - The first number represents total cloud amount
 - The second and third number represent wind direction
 - The fourth and fifth number represent wind speed
- 4) Based on the point in 3 above, please separate the string of numbers into individual columns i.e., the first number should have its own column named “Clouds”, the second and third number should have their own column named “Wind Speed”, the third and fourth numbers should also have their own column called “Wind direction”
- 5) Our main interest is wind speed. The wind speed is in knots, and we need to convert it to meters/second. $1 \text{ knot} = 0.514 \text{ m/s}$. Therefore, please multiply all wind speed values by 0.514
- 6) Calculate the mean wind speed for each month so that the final output table will contain columns named January to December and rows named 2006 to 2021
- 7) Please add comments to every part of the code so that I easily know what each part does

If this sounds like something you can do, please let me know and I will send you the contract.

Thank you.