

```
"""Script to store sting data in a more convenient .mat format."""
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```
from scipy.io import savemat
```

```
ANGLES = ["-5", "00", "05", "10", "12", "14", "15", "18", "20"]
```

```
PREFIXES = {  
    "force": "force_mes"  
}
```

```
FOLDER = "Force Measurements"
```

```
src_fns = [f"./{FOLDER}/{PREFIXES['force']}_a_{angle}.dat" for angle in ANGLES]
```

```
dest_fns = [f"./{FOLDER}/{PREFIXES['force']}_a_{angle}.mat" for angle in ANGLES]
```

```
KEYS = {  
    "Static Pressure": "P",  
    "Density": "rho",  
    "Fixed Pitot Probe Speed": "v",  
    "Normal Force": "Fn",  
    "Axial Force": "Fa",  
    "Angle of Attack": "a",  
}
```

```
for i, fn in enumerate(src_fns):  
    with open(fn, "r") as f:  
        lines = f.readlines()  
        data = {}  
        for j, line in enumerate(lines):  
            key = line.split("=")[0].strip()  
            if key in KEYS.keys():  
                try:  
                    val = line.split("=")[1].strip()  
                    val = val.split("\t")[0] # Remove tabs if present  
                except Exception:  
                    # print(f"Error: Couldn't parse val of line {j}, setting as 'None'")  
                    val = None  
            data[KEYS[key]] = float(val) # Create dict with symbols  
print(data)  
savemat(dest_fns[i], data)
```