

31119

Wednesday, October 2, 2019

Course #10

- Using a loop to open a set of files.

Reminder:

startup.m - matlab by default will read this when it opens

Matlab functions we discussed today:

reshape.m

permute.m (very briefly)

Details

reshape.m

This function allows you to re-arrange your data.

For example, if you have monthly data for 2 years, for all lat, lons, on a 2 X 2.5 degree grid, you would have a matrix with size:

24 X 90 X 144

Using the syntax:

```
>> newmat = reshape(oldmat,[12, 2, 90, 144]);
```

Would take the data from old mat and re-arrange it into a new 4-D matrix with size:

[12 X 2 X 90 X 144];

This would then make it easier to calculate the average over all years for each month, you would simply type:

```
>> year_avg = squeeze(nanmean(newmat,2));
```