

Output from the DMFT calculations are saved into files with three extension types

1. *.dat: These files are text files, and are meant for human readability.
2. *.npy: These files are numpy saved files which contain one array.
3. *.npz: These files are numpy groups which contain many arrays.

Reading .npy and .npz files

First the *.npz

write following python script

```
from numpy import load
SE = load('SE_iter20.npy')
SE[0,:,0] # <-- This is \Sigma_{i=0,upup}(\omega)(For real space)
```

Now for the .npz the python script will be

```
data = load('everything_iter20.npz')
print(data.files)
```

the output will be

```
['GT', 'old_SE', 'G', 'weiss', 'WT', 'SE', 'test_mat']
```

```
data['SE'][0,:,0] # <-- This is \Sigma_{i=0,upup}(\omega)(For real space)
```

GT is Green's function in imaginary time $G(\tau)$.

old_SE is self-energy from previous iteration

G Green's function in matsubara frequency $G(i\omega_n)$

weiss is weiss mean-field in imaginary frequency

WT weiss mean field imaginary time

SE spatially resolved self-energy in matsubara frequency

test_mat is matrix containing the frequency dependent Green's function in site and spin basis

info.dat contains the information about parameters and the convergence for different quantities.

We keep the file containing the observable (Nup_Ndown.dat) for all iteration while other quantities only for a few last iterations