things-to-do

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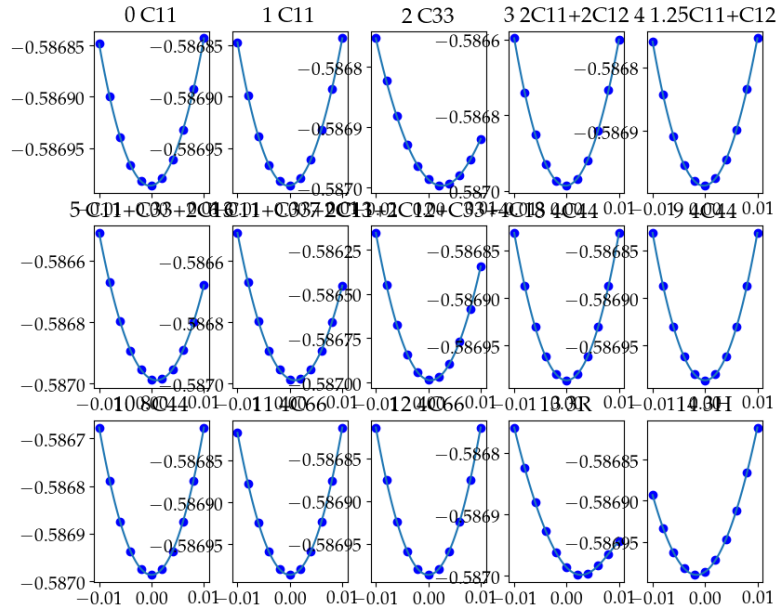
Contents

1   Unrelaxed 09/01/19

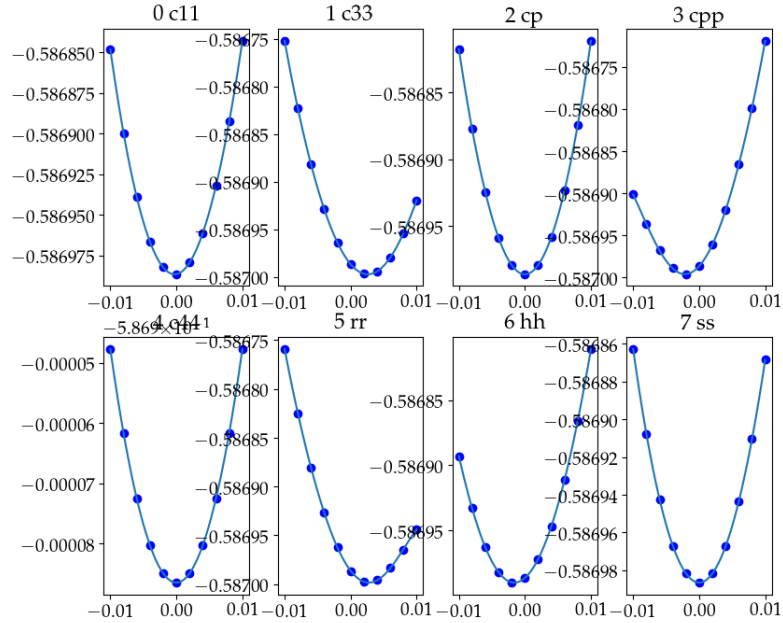From Girshick

Girshick tbe Strains

```
C11 =  179.4105487815,   C11_exp =  176.1000000000
C33 =  199.7411232511,   C33_exp =  190.5000000000
C44 =  49.2452549871,   C44_exp =  50.8000000000
C66 =  55.1996755007,   C66_exp =  44.6000000000
C12 = -12062.1968073992,   C12_exp =  86.9000000000
C13 = -11773.0959208918,   C13_exp =  68.3000000000
K =  103.7213715237,   K_FR =  109.9666666667
R =  67.3715578360,   R_FR =  61.8000000000
H =  58.5592139578,   H_FR =  45.9650000000
```
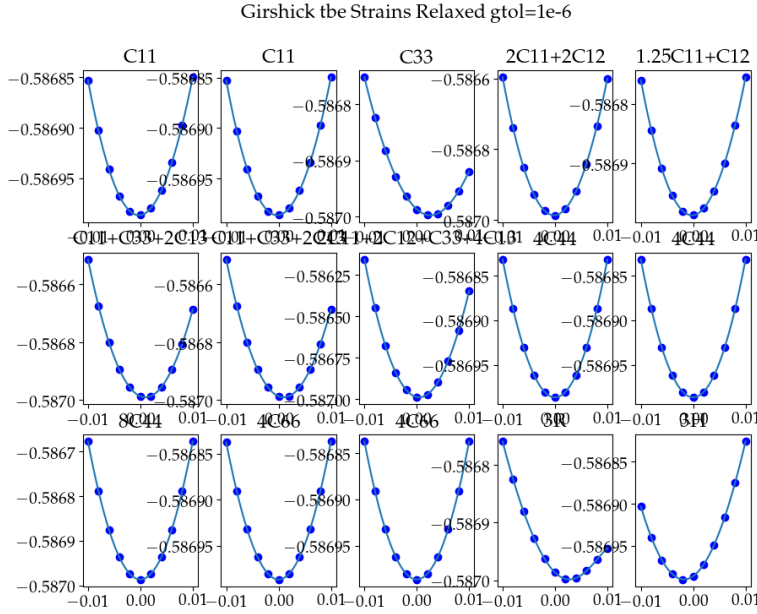
Tony tbe Strains

From Tony

```
C11 =  179.4144752885,   C11_exp =  176.1000000000
C33 =  199.7411232511,   C33_exp =  190.5000000000
C44 =  49.2723940787,    C44_exp =  50.8000000000
C66 =  220.7854442689,   C66_exp =  44.6000000000
C12 = -262.1564132494,   C12_exp =  86.9000000000
C13 = -324.7738952427,   C13_exp =  68.3000000000
K = -1264.8383336416,    K_FR =  109.9666666667
R =  807.9179447561,     R_FR =  61.8000000000
H =  698.7467357942,     H_FR =  45.9650000000
```

2 Relaxed 09/01/19

2.1 gtol = 1e-6

Girshick tbe Strains Relaxed gtol=1e-6

Girshick

```
C11 =  172.9087030436,   C11_exp =  176.1000000000
C33 =  198.5744121594,   C33_exp =  190.5000000000
C44 =   49.2523330247,   C44_exp =   50.8000000000
C66 =   48.0100583268,   C66_exp =   44.6000000000
C12 = -11615.4942407936,   C12_exp =   86.9000000000
C13 = -11535.5170624530,   C13_exp =   68.3000000000
K  =  103.1312742638,   K_FR =   109.9666666667
R  =   65.5404379802,   R_FR =   61.8000000000
H  =   54.3174856150,   H_FR =   45.9650000000
```

```
Girshick CURVATURES GPa
 [0.0, 172.9004311080267, 172.9169749790961, 198.57441215940486, 497.48462721215066, 29
```

```
Polynomial coeffs 0
 [ 2.403846172680e+03 -6.920163181274e+01 -6.273310025869e+00  1.357572843835e+00   7.5
```

4

```
Polynomial coeffs 1
 [ 1.903044861896e+03 -4.334207465834e+01 -6.200648309028e+00  1.357754953393e+00   7.54

Polynomial coeffs 2
 [-4.917868589163e+04 -6.796328672108e+02  3.263585371778e+00  1.574863053623e+00  -8.19

Polynomial coeffs 3
 [ 3.205128206180e+04 -3.898965618549e+02 -1.980113636524e+01  3.916451777404e+00   1.49

Polynomial coeffs 4
 [ 9.465144240806e+03 -1.305725525278e+02 -9.881173515241e+00  2.297486159688e+00   1.12

Polynomial coeffs 5
 [-5.809294876445e+03 -9.852127061358e+01 -1.135453088524e+01  3.868858537321e+00  -7.46

Polynomial coeffs 6
 [-6.310096153941e+03 -8.322406783073e+01 -1.124981789038e+01  3.868797348514e+00  -7.46

Polynomial coeffs 7
 [-4.006410093002e+02  6.337412569028e+01 -2.770032051469e+01  7.360139860159e+00  -6.71

Polynomial coeffs 8
 [ 6.558740582196e-07 -6.337412596426e+01 -1.619448271167e-10  1.554425990689e+00   7.58

Polynomial coeffs 9
 [ 1.332430917251e-05 -5.463286706175e+01 -1.964485796358e-09  1.554023892774e+00   5.65

Polynomial coeffs 10
 [ 6.892467635713e-07 -1.700903263886e+02 -1.655851650898e-10  3.104864510502e+00   7.63

Polynomial coeffs 11
 [ 1.036658653955e+04 -2.354676574146e+02 -5.373142481023e-01  1.515364947563e+00  -4.06

Polynomial coeffs 12
 [-7.785735317634e-06 -2.225378791006e+02  1.384014746019e-09  1.513116258773e+00  -5.40

Polynomial coeffs 13
 [-1.664162660344e+05 -2.467038170221e+03  1.228884396969e+01  1.593577360145e+00  -8.81
```
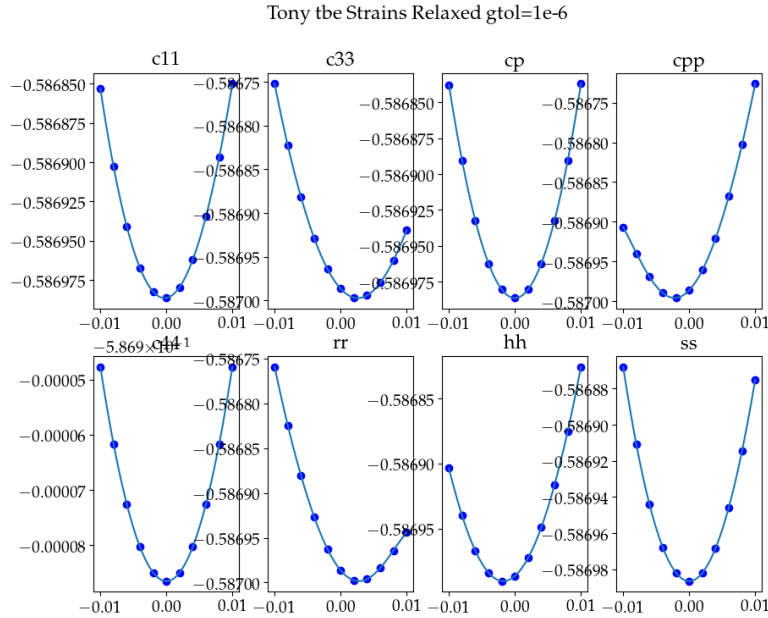
```
Polynomial coeffs 14
 [ 1.096754809783e+04 -3.547494172056e+02 -7.043360288293e+00  1.255349650346e+00  4.4
```

Tony

Tony tbe Strains Relaxed gtol=1e-6


```
 C11 =   173.0346579154,   C11_exp =   176.1000000000
 C33 =   198.5744121594,   C33_exp =   190.5000000000
 C44 =    49.2568530334,   C44_exp =    50.8000000000
 C66 =   191.9023467596,   C66_exp =    44.6000000000
 C12 =  -210.7700356038,   C12_exp =    86.9000000000
 C13 =  -317.8089744286,   C13_exp =    68.3000000000
 K =  -1148.1322409320,   K_FR =   109.9666666667
 R =    815.3246721725,   R_FR =    61.8000000000
 H =    635.6114482523,   H_FR =    45.9650000000
```

```
Tony CURVATURES GPa
[0.0, 173.03465791544974, 198.57441215940486, 191.9023467596449, 251.80675473303774, 49
```

```
Polynomial coeffs 0
 [ 4.507211527019e+03 -8.449883471457e+01 -6.437754951847e+00  1.358490676015e+00  7.54
```

```
Polynomial coeffs 1
 [-4.917868589163e+04 -6.796328672108e+02  3.263585371778e+00  1.574863053623e+00 -8.19

Polynomial coeffs 2
 [ 8.463541680370e+03 -2.123397437739e+02 -3.994573151874e-01  1.513192016341e+00 -1.15

Polynomial coeffs 3
 [ 1.832431891172e+05 -2.767883158595e+03 -1.595434513613e+01  1.976062791391e+00  8.80

Polynomial coeffs 4
 [ 1.810477061546e-05 -2.549533859606e+00 -2.196695165670e-09  3.883668415017e-01  4.32

Polynomial coeffs 5
 [-1.664162660344e+05 -2.467038170221e+03  1.228884396969e+01  1.593577360145e+00 -8.81

Polynomial coeffs 6
 [ 2.328725961840e+04 -3.853438230453e+02 -8.112889714681e+00  1.257934149210e+00  4.48

Polynomial coeffs 7
 [-9.014423067864e+02 -5.754662013020e+01 -3.494500291531e+00  1.155801282067e+00  4.60
```