```
(Pdb)     sigma,J1,dJ1=one_s_value(n,s1,p,debug=debug)
s=-0.0350927734375
Abs sums:    L         M         R
             1.182E-30 1.875E-30 1.805E-30
Total: 4.862004620890772e-30

(Pdb)     sigma,J2,dJ2=one_s_value(n,s2,p,debug=debug)
s=-0.035093994140625
Abs sums:    L         M         R
             2.433E-30 3.860E-30 3.715E-30
Total: 1.0007396757382064e-29

(Pdb)     sigma,J3,dJ3=one_s_value(n,s3,p,debug=debug)
s=-0.03509521484375
Abs sums:    L         M         R
             4.399E-30 6.979E-30 6.717E-30
Total: 1.8094634244356119e-29

(Pdb)     sl=0.5*(s1+s2)
(Pdb)     sigma,Jl,dJl=one_s_value(n,sl,p)
(Pdb)     fl = np.sum(np.abs(Jl))
(Pdb)     sr=0.5*(s2+s3)
(Pdb)     sigma,Jr,dJr=one_s_value(n,sr,p)
(Pdb)     fr = np.sum(np.abs(Jr))
(Pdb)     f1 = np.sum(np.abs(J1))
(Pdb)     f2 = np.sum(np.abs(J2))
(Pdb)     f3 = np.sum(np.abs(J3))

(Pdb) [f1, fl, f2, fr, f3]
[4.862004620890772e-30, 6.5444507466043e-30, 1.0007396757382064e-29, 2.1253456197881538e-29,
1.8094634244356119e-29]

(Pdb) print(s1, sl, s2, sr, s3)
-0.0350927734375 -0.0350933837890625 -0.035093994140625 -0.0350946044921875 -0.03509521484375

(Pdb) s1_test=s2

(Pdb) s2_test=sr

(Pdb) s3_test=s3

(Pdb) print(s1_test, s2_test, s3_test)
-0.035093994140625 -0.0350946044921875 -0.03509521484375

(Pdb) print(f2, fr, f3)
1.0007396757382064e-29 2.1253456197881538e-29 1.8094634244356119e-29

(Pdb)     sigma,J1,dJ1=one_s_value(n,s1_test,p,debug=debug)
s=-0.035093994140625
Abs sums:    L         M         R
             2.433E-30 3.860E-30 3.715E-30
Total: 1.0007396757382064e-29

(Pdb)     sigma,J2,dJ2=one_s_value(n,s2_test,p,debug=debug)
s=-0.0350946044921875
Abs sums:    L         M         R
             5.168E-30 8.197E-30 7.889E-30
Total: 2.1253456197881538e-29

(Pdb)     sigma,J3,dJ3=one_s_value(n,s3_test,p,debug=debug)
s=-0.03509521484375
Abs sums:    L         M         R
             9.836E-30 1.560E-29 1.502E-29
Total: 4.0453180390639686e-29
```