

! ...Water surface characteristics

Water_Coverage = 1.0_fp

Water_Temperature = 275.0_fp

Wind_Speed = 5.0_fp

Salinity = 33.0_fp

Wind_speed2 = Wind_Speed * (1.0+0.01) in Finite Difference calculation:

Wind_Speed_TL = Wind_Speed * (0.01)

Ratio = ABS (Emiss Finite-Differ - Emiss_TL) / Emiss_TL

Running CRTM for amsua_metop-a sensor...

Initializing the CRTM...

```
ACCoeff_ReadFile(Binary)(INFORMATION) : FILE: ./testinput/amsua_metop-a.SpcCoeff.bin;
ACCoeff RELEASE.VERSION: 1.04
  N_FOVS=30  N_CHANNELS=15
SpcCoeff_ReadFile(Binary)(INFORMATION) : FILE: ./testinput/amsua_metop-a.SpcCoeff.bin;
SpcCoeff RELEASE.VERSION: 8.01
  N_CHANNELS=15
CloudCoeff_ReadFile(Binary)(INFORMATION) : FILE: ./testinput/CloudCoeff.bin;
CloudCoeff RELEASE.VERSION: 3.004  N_FREQUENCIES(MW)= 31  N_FREQUENCIES(IR)= 61  N_RADII(MW)=1
0  N_RADII(IR)=10  N_TEMPERATURES= 5  N_MW_DENSITIES= 3  N_IR_DENSITIES= 4  N_LEGENDRE_TERMS=38  N_
PHASE_ELEMENTS= 1
AerosolCoeff_ReadFile(Binary)(INFORMATION) : FILE: ./testinput/AerosolCoeff.bin;
AerosolCoeff RELEASE.VERSION: 4.005  N_WAVELENGTHS= 61  N_RADII= 36  N_SIGMA= 1  N_TYPES= 8  N
RH= 1  N_RH_Radii= 36  N_LEGENDRE_TERMS=37  N_PHASE_ELEMENTS= 1
FitCoeff_ReadFile(INFORMATION) : FILE: ./testinput/FASTEM6.MWwater.EmisCoeff.bin;
FitCoeff RELEASE.VERSION : 1.6; DIMENSIONS= 2
FitCoeff_ReadFile(INFORMATION) : FILE: ./testinput/FASTEM6.MWwater.EmisCoeff.bin;
FitCoeff RELEASE.VERSION : 1.6; DIMENSIONS= 6
FitCoeff_ReadFile(INFORMATION) : FILE: ./testinput/FASTEM6.MWwater.EmisCoeff.bin;
FitCoeff RELEASE.VERSION : 1.6; DIMENSIONS= 3, 7, 2
FitCoeff_ReadFile(INFORMATION) : FILE: ./testinput/FASTEM6.MWwater.EmisCoeff.bin;
FitCoeff RELEASE.VERSION : 1.6; DIMENSIONS= 6, 6, 2
FitCoeff_ReadFile(INFORMATION) : FILE: ./testinput/FASTEM6.MWwater.EmisCoeff.bin;
FitCoeff RELEASE.VERSION : 1.6; DIMENSIONS= 8
FitCoeff_ReadFile(INFORMATION) : FILE: ./testinput/FASTEM6.MWwater.EmisCoeff.bin;
FitCoeff RELEASE.VERSION : 1.6; DIMENSIONS= 3, 6, 2
MWwaterCoeff_ReadFile(INFORMATION) : FILE: ./testinput/FASTEM6.MWwater.EmisCoeff.bin;
MWwaterCoeff RELEASE.VERSION: 1.6
```

CH	Emiss_TL	Emiss Finite-Differ	Ratio
1	0.443326010041810E-04	0.445762060065635E-04	1.00549
2	0.442525815086388E-04	0.445024295625540E-04	1.00565
3	0.426963779390633E-04	0.429547167388744E-04	1.00605
4	0.424319024062113E-04	0.426911217586978E-04	1.00611
5	0.948608570363439E-04	0.951077752412433E-04	1.00260
6	0.951686516890101E-04	0.954158288422047E-04	1.00260
7	0.421970993045838E-04	0.424570505512811E-04	1.00616
8	0.955803018050545E-04	0.958278268669011E-04	1.00259
9	0.962289052575027E-04	0.964769833059487E-04	1.00258
10	0.962289052575027E-04	0.964769833059487E-04	1.00258
11	0.962289052575027E-04	0.964769833059487E-04	1.00258
12	0.962289052575027E-04	0.964769833059487E-04	1.00258
13	0.962289052575027E-04	0.964769833059487E-04	1.00258
14	0.962289052575027E-04	0.964769833059487E-04	1.00258
15	0.370864680937350E-04	0.373551907901781E-04	1.00725

Wind_Speed_TL = 1.0

CH	Rad_TL * Rad_TL	Emiss_TL *Emiss_AD
1	0.319599745545779E-11	0.319599745545779E-11
2	0.919669881365673E-11	0.919669881365672E-11
3	0.562644634890191E-10	0.562644634890192E-10
4	0.335873663699689E-11	0.335873663699689E-11
5	0.857954165376644E-13	0.857954165376644E-13
6	0.623753499746649E-17	0.623753499746650E-17
7	0.172607947281254E-22	0.172607947281277E-22
8	0.171637804396904E-23	0.171637804396905E-23
9	0.149467512458044E-22	0.149467512458043E-22
10	0.157193733227983E-22	0.157193733227984E-22
11	0.386339257119294E-22	0.386339257119294E-22
12	0.266064865152855E-22	0.266064865152855E-22
13	0.109242530829656E-22	0.109242530829656E-22
14	0.461273735773292E-23	0.461273735773293E-23
15	0.497566945559794E-09	0.497566945559794E-09