Tuesday, 24 September 2019 12:41:53

FortranAnalyser

Quality report

/home/miki/analizar/caaba_3.0

messy_cmn_gasaq.f90

Number of lines: 469
Implicit none: true
Number of functions: 1
Number of subroutines calls: 64
Ratio of number of lines with comments against commentable elements: 19.64%
Number of declared variables: 47
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 8
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE CMN_GASAQ_INITIALIZE(STATUS): 3
SUBROUTINE DEF_ALL_SPECIES(STATUS): 4
SUBROUTINE ADD_ALL_HENRY(STATUS): 4
SUBROUTINE ADD_ALL_ALPHA(STATUS): 4
SUBROUTINE FINAL_CHECK(STATUS): 3
INTEGER FUNCTION GET_GASAQ(NAME, &: 7

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.393
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000

Metric	Score
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	4.167

File score: 2.793

caaba_mem.f90

Number of lines: 117
Implicit none: true
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 48.03%
Number of declared variables: 71
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.961
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 4.561

messy_cmn_photol_mem.f90

Number of lines: 77
Implicit none: true
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 48.46%
Number of declared variables: 3
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.969
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	0.000

File score: 8.569

messy_mecca_kpp_jacobian.f90

Number of lines: 870
Implicit none: true
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 51.39%
Number of declared variables: 11
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: true
--> subroutines declaration: false
--> control structures: true
Number of subroutines: 3
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

CYCLOMATIC COMPLEXITY

SUBROUTINE JAC_SP (V, F, RCT, JVS): 1
SUBROUTINE JAC_SP_VEC (JVS, UV, JUV): 1
SUBROUTINE JACTR_SP_VEC (JVS, UV, JTUV): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	1.028
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.400
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	1.000

File score: 8.628

messy_main_control_cb.f90

Number of lines: 202
Implicit none: true
Number of functions: 0
Number of subroutines calls: 24
Ratio of number of lines with comments against commentable elements: 49.01%
Number of declared variables: 3
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 4
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

CYCLOMATIC COMPLEXITY

SUBROUTINE MESSY_INIT: 12
SUBROUTINE MESSY_PHYSC: 9
SUBROUTINE MESSY_RESULT: 8
SUBROUTINE MESSY_FINISH: 8

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.980
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	9.250

File score: 7.780

messy_mecca_khet.f90

Number of lines: 131
Implicit none: true
Number of functions: 1
Number of subroutines calls: 3
Ratio of number of lines with comments against commentable elements: 49.12%
Number of declared variables: 18
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 1
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

CYCLOMATIC COMPLEXITY

SUBROUTINE MECCA_KHET_READ_NML_CTRL(STATUS, IOU): 5
ELEMENTAL REAL(DP) FUNCTION K_MT(M, T, A, GAMMA): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.982
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	3.000

File score: 7.382

messy_mecca_kpp_rates.f90

Number of lines: 411
Implicit none: true
Number of functions: 10
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 51.58%
Number of declared variables: 37
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 3
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

REAL(KIND=DP) FUNCTION ARR(A0,B0,C0): 1
REAL(KIND=DP) FUNCTION ARR2(A0,B0): 1
REAL(KIND=DP) FUNCTION EP2(A0,C0,A2,C2,A3,C3): 1
REAL(KIND=DP) FUNCTION EP3(A1,C1,A2,C2) : 1
REAL(KIND=DP) FUNCTION FALL (A0,B0,C0,A1,B1,C1,CF): 1
ELEMENTAL REAL(KIND=DP) FUNCTION K_3RD(TEMP,CAIR,K0_300K,N,KINF_300K,M,FC): 1
ELEMENTAL REAL(KIND=DP) FUNCTION K_ARR (K_298,TDEP,TEMP): 1
ELEMENTAL REAL(DP) FUNCTION K_SIV_H2O2 (K_298,TDEP,CHP,TEMP): 1
ELEMENTAL REAL(DP) FUNCTION K_3RD_IUPAC(TEMP,CAIR,K0_300K,N,KINF_300K,M,FC): 1
ELEMENTAL REAL(DP) FUNCTION K_LIMITED (K3RD,CHP): 2
SUBROUTINE UPDATE_SUN(): 5
SUBROUTINE UPDATE_RCONST ( ): 26
SUBROUTINE UPDATE_PHOTO ( ): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	1.032
number of nested loops	0.000

Metric	Score
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	3.308

File score: 3.432

/home/miki/analizar/caaba_3.0/mecca

template_messy_mecca_kpp.f90

Number of lines: 474
Implicit none: true
Number of functions: 0
Number of subroutines calls: 9
Ratio of number of lines with comments against commentable elements: 44.31%
Number of declared variables: 93
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 20
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INITIALIZE_KPP_CTRL(STATUS, IOU, MODSTR): 5
SUBROUTINE ERROR_OUTPUT(C,IERR,PE): 5
SUBROUTINE KPP_INTEGRATE (TIME_STEP,CONC,IERRF,XNACC,XNREJ,ISTATUS,&: 10
SUBROUTINE FILL_TEMP(STATUS,ARRAY): 1
SUBROUTINE FILL_CAIR(STATUS,ARRAY): 1
SUBROUTINE FILL_PRESS(STATUS,ARRAY): 1
SUBROUTINE FILL_MCEXP(STATUS,ARRAY): 1
SUBROUTINE FILL_XAER(STATUS,ARRAY): 1
SUBROUTINE FILL_CVFAC(STATUS,ARRAY): 1
SUBROUTINE FILL_LWC(STATUS,ARRAY): 1
SUBROUTINE FILL_K_EXF(STATUS,ARRAY): 1
SUBROUTINE FILL_K_EXB(STATUS,ARRAY): 1
SUBROUTINE FILL_K_EXF_N2O5(STATUS,ARRAY): 1
SUBROUTINE FILL_K_EXF_CLNO3(STATUS,ARRAY): 1
SUBROUTINE FILL_K_EXF_BRNO3(STATUS,ARRAY): 1
SUBROUTINE FILL_JX(STATUS,ARRAY): 1
SUBROUTINE FILL_KHET_TR(STATUS,ARRAY): 1
SUBROUTINE FILL_KHET_ST(STATUS,ARRAY): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.886
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	1.944

File score: 3.686

/home/miki/analizar/caaba_3.0/mecca/smcl

messy_mecca_kpp_jacobian.f90

Number of lines: 870
Implicit none: true
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 45.69%
Number of declared variables: 11
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: true
--> subroutines declaration: false
--> control structures: true
Number of subroutines: 3
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

CYCLOMATIC COMPLEXITY

SUBROUTINE JAC_SP (V, F, RCT, JVS): 1
SUBROUTINE JAC_SP_VEC (JVS, UV, JUV): 1
SUBROUTINE JACTR_SP_VEC (JVS, UV, JTUV): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.914
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.400
use of the EXIT statement	1.000
use of the CYCLE statement	1.000

Metric	Score
cyclomatic complexity	1.000

File score: 8.514

messy_mecca_khet.f90

Number of lines: 131
Implicit none: true
Number of functions: 1
Number of subroutines calls: 3
Ratio of number of lines with comments against commentable elements: 45.92%
Number of declared variables: 18
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 1
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

CYCLOMATIC COMPLEXITY

SUBROUTINE MECCA_KHET_READ_NML_CTRL(STATUS, IOU): 5
ELEMENTAL REAL(DP) FUNCTION K_MT(M, T, A, GAMMA): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.918
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	3.000

File score: 7.318

messy_mecca_kpp_rates.f90

Number of lines: 411
Implicit none: true
Number of functions: 10
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 47.61%
Number of declared variables: 37
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 3
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

REAL(KIND=DP) FUNCTION ARR(A0,B0,C0): 1
REAL(KIND=DP) FUNCTION ARR2(A0,B0): 1
REAL(KIND=DP) FUNCTION EP2(A0,C0,A2,C2,A3,C3): 1
REAL(KIND=DP) FUNCTION EP3(A1,C1,A2,C2) : 1
REAL(KIND=DP) FUNCTION FALL (A0,B0,C0,A1,B1,C1,CF): 1
ELEMENTAL REAL(KIND=DP) FUNCTION K_3RD(TEMP,CAIR,K0_300K,N,KINF_300K,M,FC): 1
ELEMENTAL REAL(KIND=DP) FUNCTION K_ARR (K_298,TDEP,TEMP): 1
ELEMENTAL REAL(DP) FUNCTION K_SIV_H2O2 (K_298,TDEP,CHP,TEMP): 1
ELEMENTAL REAL(DP) FUNCTION K_3RD_IUPAC(TEMP,CAIR,K0_300K,N,KINF_300K,M,FC): 1
ELEMENTAL REAL(DP) FUNCTION K_LIMITED (K3RD,CHP): 2
SUBROUTINE UPDATE_SUN(): 5
SUBROUTINE UPDATE_RCONST ( ): 26
SUBROUTINE UPDATE_PHOTO ( ): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.952
number of nested loops	0.000

Metric	Score
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	3.308

File score: 3.352

messy_mecca_kpp_parameters.f90

Number of lines: 404
Implicit none: false
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 27.89%
Number of declared variables: 342
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.558
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 2.158

messy_mecca_kpp_precision.f90

Number of lines: 17
Implicit none: false
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 28.18%
Number of declared variables: 3
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.564
number of nested loops	2.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	0.000

File score: 6.164

messy_mecca_kpp_function.f90

Number of lines: 171
Implicit none: true
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 28.61%
Number of declared variables: 5
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: true
--> subroutines declaration: false
--> control structures: true
Number of subroutines: 1
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE FUN (V, F, RCT, VDOT): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.572
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	1.000

File score: 3.772

messy_mecca_kpp_integrator.f90

Number of lines: 1274
Implicit none: true
Number of functions: 1
Number of subroutines calls: 55
Ratio of number of lines with comments against commentable elements: 29.80%
Number of declared variables: 111
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 15
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INTEGRATE(TIN, TOUT, &: 8
SUBROUTINE ROSENBROCK(N,Y,TSTART,TEND, &: 38
SUBROUTINE ROS_INTEGRATOR (Y, TSTART, TEND, T, &: 20
REAL(KIND=DP) FUNCTION ROS_ERRORNORM (Y, YNEW, YERR, &: 3
SUBROUTINE ROS_FUNTIMEDERIVATIVE (T, ROUNDOFF, Y, &: 1
SUBROUTINE ROS_PREPAREMATRIX (H, DIRECTION, GAM, &: 6
SUBROUTINE ROS_DECOMP(A, PIVOT, ISING): 2
SUBROUTINE ROS_SOLVE(A, PIVOT, B): 2
SUBROUTINE ROS2: 1
SUBROUTINE ROS3: 1
SUBROUTINE ROS4: 1
SUBROUTINE RODAS3: 1
SUBROUTINE RODAS4: 1
SUBROUTINE FUNTEMPLATE(T, Y, YDOT): 1
SUBROUTINE JACTEMPLATE(T, Y, JCB): 4

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.596

Metric	Score
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	6.000

File score: 2.996

messy_mecca_kpp_util.f90

Number of lines: 314
Implicit none: true
Number of functions: 1
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 30.04%
Number of declared variables: 7
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 8
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INITIALIZE_INDEXARRAYS: 1
SUBROUTINE INITSAVEDATA (): 1
SUBROUTINE SAVEDATA (): 1
SUBROUTINE CLOSESAVEDATA (): 1
SUBROUTINE GENERATEMATLAB (PREFIX): 1
ELEMENTAL INTEGER FUNCTION TAG2NUM (ID): 2
SUBROUTINE SHUFFLE_USER2KPP (V_USER, V): 1
SUBROUTINE SHUFFLE_KPP2USER (V, V_USER): 1
SUBROUTINE GETMASS (CL, MASS): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.601
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000

Metric	Score
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	1.111

File score: 5.001

messy_mecca_kpp_jacobiansp.f90

Number of lines: 88
Implicit none: false
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 29.91%
Number of declared variables: 4
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.598
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	0.000

File score: 6.198

messy_mecca_kpp_initialize.f90

Number of lines: 83
Implicit none: true
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 29.82%
Number of declared variables: 2
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: true
Number of subroutines: 1
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INITIALIZE ( ): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.596
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	1.000

File score: 5.796

messy_mecca_kpp_monitor.f90

Number of lines: 147
Implicit none: false
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 29.53%
Number of declared variables: 9
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.591
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	0.000

File score: 6.191

messy_mecca_kpp_global.f90

Number of lines: 313
Implicit none: false
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 28.34%
Number of declared variables: 166
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.567
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	0.000

File score: 6.167

messy_mecca_kpp_linearalgebra.f90

Number of lines: 1264
Implicit none: true
Number of functions: 2
Number of subroutines calls: 5
Ratio of number of lines with comments against commentable elements: 28.28%
Number of declared variables: 126
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 19
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE KPPDECOMP(JVS, IER): 3
SUBROUTINE KPPDECOMPCMPLX(JVS, IER): 3
SUBROUTINE KPPDECOMPCMPLXR(JVSR, JVSI, IER): 3
SUBROUTINE KPPSOLVEINDIRECT(JVS, X): 1
SUBROUTINE KPPSOLVETRINDIRECT(JVS, X): 1
SUBROUTINE KPPSOLVECMPLX(JVS, X): 1
SUBROUTINE KPPSOLVECMPLXR(JVSR, JVSI, XR, XI): 1
SUBROUTINE KPPSOLVETRCMPLX(JVS, X): 1
SUBROUTINE KPPSOLVETRCMPLXR(JVSR, JVSI, XR, XI): 1
SUBROUTINE KPPSOLVE (JVS, X): 1
SUBROUTINE KPPSOLVETR (JVS, X, XX): 1
SUBROUTINE WCOPY(N,X,INCX,Y,INCY): 5
SUBROUTINE WAXPY(N,ALPHA,X,INCX,Y,INCY): 6
SUBROUTINE WSCAL(N,ALPHA,X,INCX): 12
REAL(KIND=DP) FUNCTION WLAMCH(C): 4
SUBROUTINE WLAMCH_ADD(A, B, SUMA): 1
SUBROUTINE SET2ZERO(N,Y): 5
REAL(KIND=DP) FUNCTION WDOT (N, DX, INCX, DY, INCY) : 7
SUBROUTINE WADD(N,X,Y,Z): 5
SUBROUTINE WGEFA(N,A,IPVT,INFO): 12

SUBROUTINE WGESL(TRANS,N,A,IPVT,B): 10

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.566
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	4.000

File score: 3.366

messy_mecca_aero.f90

Number of lines: 275
Implicit none: true
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 27.20%
Number of declared variables: 48
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 5
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE MECCA_AERO_INIT_GASAQ(L_PRINT): 7
SUBROUTINE MECCA_AERO_CALC_K_EX(&: 7
SUBROUTINE MECCA_AERO_CALC_K_EX_OCEAN(XAER, RADIUS, TEMP, ZMIX, &: 1
SUBROUTINE MECCA_AERO_DIAG(ZMR_BRSALT, ZMR_BRORG, ZMR_BRSSCAP, &: 6

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.544
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	5.250

File score: 3.344

messy_mecca.f90

Number of lines: 202
Implicit none: true
Number of functions: 1
Number of subroutines calls: 7
Ratio of number of lines with comments against commentable elements: 27.58%
Number of declared variables: 29
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 3
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

CYCLOMATIC COMPLEXITY

SUBROUTINE MECCA_READ_NML_CTRL(STATUS, IOU): 8
SUBROUTINE INITIALIZE_KPP_VARIABLES: 6
LOGICAL FUNCTION STEADY_STATE_REACHED(C,TIMESTEPLEN): 2
SUBROUTINE DEFINE_MCEXP(STATUS, MCEXP): 2

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.552
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	4.500

File score: 6.952

messy_mecca_kpp.f90

Number of lines: 474
Implicit none: true
Number of functions: 0
Number of subroutines calls: 9
Ratio of number of lines with comments against commentable elements: 27.78%
Number of declared variables: 93
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 20
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INITIALIZE_KPP_CTRL(STATUS, IOU, MODSTR): 5
SUBROUTINE ERROR_OUTPUT(C,IERR,PE): 5
SUBROUTINE KPP_INTEGRATE (TIME_STEP,CONC,IERRF,XNACC,XNREJ,ISTATUS,&: 10
SUBROUTINE FILL_TEMP(STATUS,ARRAY): 1
SUBROUTINE FILL_CAIR(STATUS,ARRAY): 1
SUBROUTINE FILL_PRESS(STATUS,ARRAY): 1
SUBROUTINE FILL_MCEXP(STATUS,ARRAY): 1
SUBROUTINE FILL_XAER(STATUS,ARRAY): 1
SUBROUTINE FILL_CVFAC(STATUS,ARRAY): 1
SUBROUTINE FILL_LWC(STATUS,ARRAY): 1
SUBROUTINE FILL_K_EXF(STATUS,ARRAY): 1
SUBROUTINE FILL_K_EXB(STATUS,ARRAY): 1
SUBROUTINE FILL_K_EXF_N2O5(STATUS,ARRAY): 1
SUBROUTINE FILL_K_EXF_CLNO3(STATUS,ARRAY): 1
SUBROUTINE FILL_K_EXF_BRNO3(STATUS,ARRAY): 1
SUBROUTINE FILL_JX(STATUS,ARRAY): 1
SUBROUTINE FILL_KHET_TR(STATUS,ARRAY): 1
SUBROUTINE FILL_KHET_ST(STATUS,ARRAY): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.556
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	1.944

File score: 3.356

/home/miki/analizar/caaba_3.0/mecca/tag

imtag_tag_box.f90

Number of lines: 163
Implicit none: true
Number of functions: 0
Number of subroutines calls: 2
Ratio of number of lines with comments against commentable elements: 27.69%
Number of declared variables: 6
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: true
Number of subroutines: 6
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

CYCLOMATIC COMPLEXITY

SUBROUTINE MECCA_TAG_X0: 2
SUBROUTINE MECCA_TAG_EMIS: 2
SUBROUTINE MECCA_TAG_PROCESS(TSL, C, PRESS, CAIR, TEMP): 2
SUBROUTINE MECCA_TAG_INIT: 2
SUBROUTINE MECCA_TAG_RESULT(MODEL_TIME): 2
SUBROUTINE MECCA_TAG_FINISH: 2

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.554
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.400

Metric	Score
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	2.000

File score: 7.754

imtag_iso_box.f90

Number of lines: 655
Implicit none: true
Number of functions: 0
Number of subroutines calls: 10
Ratio of number of lines with comments against commentable elements: 28.00%
Number of declared variables: 31
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 10
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE {%TAG}_X0: 10
SUBROUTINE {%TAG}_EMIS(IND_T, AMOUNT, DELTAS): 2
SUBROUTINE {%TAG}_DEPOS(IND_T, FACTOR): 2
SUBROUTINE {%TAG}_PMIX(TSL, DILF, IND_T, MIX_AMOUNT, MIX_DELTAS): 2
SUBROUTINE {%TAG}_CALCDELTAS: 3
SUBROUTINE {%TAG}_FUDGE: 1
SUBROUTINE {%TAG}_RESETPTS: 2
SUBROUTINE {%TAG}_INIT: 2
SUBROUTINE {%TAG}_RESULT(MODEL_TIME): 3
SUBROUTINE {%TAG}_FINISH: 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.560
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400

Metric	Score
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	2.800

File score: 3.360

imtag_tag.f90

Number of lines: 85
Implicit none: true
Number of functions: 0
Number of subroutines calls: 3
Ratio of number of lines with comments against commentable elements: 28.02%
Number of declared variables: 5
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 1
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

CYCLOMATIC COMPLEXITY

SUBROUTINE TAG_INTEGRATE(TSL, C, PRESS, CAIR, TEMP): 5

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.560
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	5.000

File score: 7.360

/home/miki/analizar/caaba_3.0/mecca/tag/int

imtag-i_linmax.inc.f90

Number of lines: 78
Implicit none: false
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 28.02%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: true
--> subroutines declaration: true
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.560
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 2.160

imtag-i_bulsto.inc.f90

Number of lines: 266
Implicit none: false
Number of functions: 0
Number of subroutines calls: 1
Ratio of number of lines with comments against commentable elements: 27.65%
Number of declared variables: 18
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 2
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE PZEXTR(IEST, XEST, YEST, YZ, DY, NV): 1
SUBROUTINE RZEXTR(IEST,XEST,YEST,YZ,DY,NV): 21

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.553
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	11.000

File score: 0.953

imtag-i_cashkarp.inc.f90

Number of lines: 247
Implicit none: true
Number of functions: 0
Number of subroutines calls: 2
Ratio of number of lines with comments against commentable elements: 27.30%
Number of declared variables: 35
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 3
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE CASHKARP(IVI,IDI,T,H,IVO,IER) : 1
SUBROUTINE RKCKINTEGRATE(IVIO,T1,T2,EPS,H1,HMIN,NOK,NBAD): 4

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.546
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	2.500

File score: 2.946

imtag-i_linealg.inc.f90

Number of lines: 162
Implicit none: true
Number of functions: 0
Number of subroutines calls: 1
Ratio of number of lines with comments against commentable elements: 26.96%
Number of declared variables: 20
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 3
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INVERSE(M,N): 1
SUBROUTINE LUDCMP(A,INDX,D,N): 3
SUBROUTINE LUBKSB(A,INDX,B,N): 3

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.539
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	2.333

File score: 2.939

imtag-i_cashkarp-call.inc.f90

Number of lines: 13
Implicit none: false
Number of functions: 0
Number of subroutines calls: 1
Ratio of number of lines with comments against commentable elements: 26.96%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: true
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.539
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	0.000

File score: 6.539

imtag-i_simeuler.inc.f90

Number of lines: 88
Implicit none: false
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 26.96%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: true
--> subroutines declaration: true
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.539
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 2.139

imtag-i_cg1.inc.f90

Number of lines: 187
Implicit none: false
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 26.96%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: true
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.539
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 1.739

/home/miki/analizar/caaba_3.0/mecca/tag

imtag_tag_common.f90

Number of lines: 321
Implicit none: true
Number of functions: 13
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 27.37%
Number of declared variables: 41
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 3
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

CYCLOMATIC COMPLEXITY

ELEMENTAL REAL(DP) FUNCTION MAJ2ISO(MAJOR, MINOR, ATOMS): 1
ELEMENTAL REAL(DP) FUNCTION MAJ3ISO(MAJOR, MINOR_CUR, MINOR_OTH, ATOMS): 1
ELEMENTAL REAL(DP) FUNCTION ISOR2M(MAJOR, MINOR, ATOMS): 1
ELEMENTAL REAL(DP) FUNCTION ISOR3M(MAJOR, MINOR_CUR, MINOR_OTH, ATOMS): 1
ELEMENTAL REAL(DP) FUNCTION ISORD(DELTA, RST): 1
ELEMENTAL REAL(DP) FUNCTION DELTA2(MAJOR, MINOR, RST, ATOMS): 2
ELEMENTAL REAL(DP) FUNCTION DELTA3(MAJOR, MINOR_CUR, MINOR_OTH, RST_CUR, ATOMS): 2
ELEMENTAL REAL(DP) FUNCTION ISOFRAC2F(DELTA, RST, ATOMS): 1
ELEMENTAL REAL(DP) FUNCTION ISOFRAC2R(DELTA, RST, ATOMS): 1
ELEMENTAL REAL(DP) FUNCTION ISOFRAC3F(DELTA1, R1, DELTA2, R2, ATOMS): 1
ELEMENTAL REAL(DP) FUNCTION ISOFRAC3R(DELTA1, R1, DELTA2, R2, ATOMS): 1
ELEMENTAL REAL(DP) FUNCTION KIERATE(EPS): 1
ELEMENTAL REAL(DP) FUNCTION SAFEDIV(WHAT,BY): 2
SUBROUTINE TAG_FLOW_CALC(C, TSL): 4
SUBROUTINE TAG_CONVERTPTS_LRATES(C, TSL): 2
SUBROUTINE TAG_RESETPTS(C): 2

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.547
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	1.500

File score: 6.947

imtag_iso.f90

Number of lines: 1100
Implicit none: true
Number of functions: 0
Number of subroutines calls: 11
Ratio of number of lines with comments against commentable elements: 28.04%
Number of declared variables: 125
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 14
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE {%TAG}_INITIALIZE: 3
SUBROUTINE {%TAG}_UPDATE_KIE(C, PRESS, CAIR, TEMP): 1
SUBROUTINE {%TAG}_FLOW_CALC(C, TSL): 4
SUBROUTINE {%TAG}_INTEGRATE(TSL, C, PRESS, CAIR, TEMP): 27
SUBROUTINE IDERIVS_ATOM(C,D,F): 6
SUBROUTINE IRATIOS_ATOM(AC,AF): 4
SUBROUTINE IDERIVS_RATIO(C,D,F): 1
SUBROUTINE STEP_CG1(U0,DELTA,UN): 4
SUBROUTINE PREPARE_Z(Z,AKIND,STEPPING): 7
SUBROUTINE PREPARE_J(J,PRE_INV): 3
SUBROUTINE {%TAG}_CALCTOTALS(C): 2
SUBROUTINE {%TAG}_CORRECT2REG(C): 9
SUBROUTINE {%TAG}_CORRECT2TAG(C): 4

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.561
number of nested loops	0.000
comments at the beginning of the document	0.400

Metric	Score
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	5.769

File score: 3.361

/home/miki/analizar/caaba_3.0/mecca/dbl

imdouble_cfg_si.f90

Number of lines: 429
Implicit none: true
Number of functions: 2
Number of subroutines calls: 8
Ratio of number of lines with comments against commentable elements: 28.17%
Number of declared variables: 33
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 3
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE {%DBL}_SCAN_TRACS: 7
SUBROUTINE {%DBL}_X1(C): 11
SUBROUTINE {%DBL}_CALC_XTTE4SCAV(XTTE_SCAV, MAX_LEV_SCAV, PXTP1, KPROMA): 8
LOGICAL FUNCTION {%DBL}_SUB_REGTRACNAME(TRINDEX, REG_TRNAME): 12
LOGICAL FUNCTION {%DBL}_SUB_REGTRACNO(TRINDEX, REG_TRINDEX): 13

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.563
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000

Metric	Score
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	10.200

File score: 2.963

imdouble_dbl_box.f90

Number of lines: 187
Implicit none: true
Number of functions: 0
Number of subroutines calls: 4
Ratio of number of lines with comments against commentable elements: 27.95%
Number of declared variables: 7
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: true
Number of subroutines: 7
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

CYCLOMATIC COMPLEXITY

SUBROUTINE MECCA_DBL_X0: 2
SUBROUTINE MECCA_DBL_POSTPROCESS: 2
SUBROUTINE MECCA_DBL_EMIS(IND_R, AMOUNT, DELTAS): 2
SUBROUTINE MECCA_DBL_DEPOS(IND_R, FACTOR): 2
SUBROUTINE MECCA_DBL_INIT: 2
SUBROUTINE MECCA_DBL_RESULT(MODEL_TIME): 2
SUBROUTINE MECCA_DBL_FINISH: 2

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.559
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.400

Metric	Score
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	2.000

File score: 7.759

imdouble_dbl_si.f90

Number of lines: 347
Implicit none: true
Number of functions: 0
Number of subroutines calls: 7
Ratio of number of lines with comments against commentable elements: 28.08%
Number of declared variables: 23
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 8
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE MECCA_DBL_INIT_COUPLING: 7
SUBROUTINE MECCA_DBL_PREPROCESS(CONC): 9
SUBROUTINE MECCA_DBL_POSTPROCESS(CONC): 2
SUBROUTINE MECCA_DBL_CALC_XTTE4SCAV(XTTE_SCAV, MAX_LEV_SCAV, PXTP1, KPROMA): 1
SUBROUTINE MECCA_DBL_SUB_REGTRACNAME(TRINDEX, REG_TRNAME): 1
SUBROUTINE MECCA_DBL_SUB_REGTRACNO(TRINDEX, REG_TRINDEX): 1
SUBROUTINE MECCA_DBL_INIT(CONC): 1
SUBROUTINE MECCA_DBL_RESULT(MODEL_TIME): 2

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.562
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000

Metric	Score
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	3.000

File score: 3.362

imdouble_frac_box.f90

Number of lines: 457
Implicit none: true
Number of functions: 0
Number of subroutines calls: 8
Ratio of number of lines with comments against commentable elements: 28.01%
Number of declared variables: 31
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 13
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE {%DBL}_X0: 3
SUBROUTINE {%DBL}_EMIS(IND_D, AMOUNT, FRACS): 2
SUBROUTINE {%DBL}_DEPOS(IND_D, FACTOR): 2
SUBROUTINE {%DBL}_PMIX(TSL, DILF, IND_D, MIX_AMOUNT, MIX_FRACS): 2
SUBROUTINE {%DBL}_PROCESS: 2
SUBROUTINE {%DBL}_CALCTOTALS: 1
SUBROUTINE {%DBL}_CALCFRACTIONS: 3
SUBROUTINE {%DBL}_CORRECT2REG: 4
SUBROUTINE {%DBL}_CORRECT2DBL: 3
SUBROUTINE {%DBL}_RESETPTS: 2
SUBROUTINE {%DBL}_INIT: 1
SUBROUTINE {%DBL}_RESULT(MODEL_TIME): 1
SUBROUTINE {%DBL}_FINISH: 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.560
number of nested loops	0.000
comments at the beginning of the document	0.400

Metric	Score
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	2.077

File score: 3.360

imdouble_cfg_box.f90

Number of lines: 689
Implicit none: true
Number of functions: 0
Number of subroutines calls: 12
Ratio of number of lines with comments against commentable elements: 28.13%
Number of declared variables: 43
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 9
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE {%DBL}_X0: 11
SUBROUTINE {%DBL}_EMIS(IND_R, AMOUNT, DELTAS): 2
SUBROUTINE {%DBL}_DEPOS(IND_R, FACTOR): 2
SUBROUTINE {%DBL}_PMIX(TSL, DILF, IND_R, MIX_AMOUNT, MIX_DELTAS): 3
SUBROUTINE {%DBL}_POSTPROCESS: 2
SUBROUTINE {%DBL}_CALCDELTAS: 6
SUBROUTINE {%DBL}_INIT: 1
SUBROUTINE {%DBL}_RESULT(MODEL_TIME): 1
SUBROUTINE {%DBL}_FINISH: 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.563
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000

Metric	Score
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	3.222

File score: 3.363

imdouble_cfg.f90

Number of lines: 316
Implicit none: true
Number of functions: 0
Number of subroutines calls: 2
Ratio of number of lines with comments against commentable elements: 28.12%
Number of declared variables: 16
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 6
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE {%DBL}_IND_D(IND_R, IND_D): 2
SUBROUTINE {%DBL}_CALCTOTALS(C): 3
SUBROUTINE {%DBL}_CORRECT(C): 5
SUBROUTINE {%DBL}_CORRECT2REG(C): 8
SUBROUTINE {%DBL}_CORRECT2DBL(C): 5
SUBROUTINE {%DBL}_RESETPTS(C): 3

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.562
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000

Metric	Score
use of the CYCLE statement	0.000
cyclomatic complexity	4.333

File score: 3.362

imdouble_dbl_common.f90

Number of lines: 318
Implicit none: true
Number of functions: 12
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 28.43%
Number of declared variables: 41
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 3
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

ELEMENTAL REAL(DP) FUNCTION MAJ2ISO(MAJOR, MINOR, ATOMS): 1
ELEMENTAL REAL(DP) FUNCTION MAJ3ISO(MAJOR, MINOR_CUR, MINOR_OTH, ATOMS): 1
ELEMENTAL REAL(DP) FUNCTION ISOR2M(MAJOR, MINOR, ATOMS): 1
ELEMENTAL REAL(DP) FUNCTION ISOR3M(MAJOR, MINOR_CUR, MINOR_OTH, ATOMS): 1
ELEMENTAL REAL(DP) FUNCTION ISORD(DELTA, RST): 1
ELEMENTAL REAL(DP) FUNCTION DELTA2(MAJOR, MINOR, RST, ATOMS): 2
ELEMENTAL REAL(DP) FUNCTION DELTA3(MAJOR, MINOR_CUR, MINOR_OTH, RST_CUR, ATOMS): 2
ELEMENTAL REAL(DP) FUNCTION ISOFRAC2F(DELTA, RST, ATOMS): 1
ELEMENTAL REAL(DP) FUNCTION ISOFRAC2R(DELTA, RST, ATOMS): 1
ELEMENTAL REAL(DP) FUNCTION ISOFRAC3F(DELTA1, R1, DELTA2, R2, ATOMS): 1
ELEMENTAL REAL(DP) FUNCTION ISOFRAC3R(DELTA1, R1, DELTA2, R2, ATOMS): 1
ELEMENTAL REAL(DP) FUNCTION KIERATE(EPS): 1
SUBROUTINE MECCA_DBL_SCANPTS(INFO): 5
SUBROUTINE MECCA_DBL_RESETPTS(C): 2
SUBROUTINE MECCA_DBL_INTPTS2ARR(C, TIME_STEP_LEN): 2

Metric	Score
the use of IMPLICIT NONE	2.000

Metric	Score
ratio	0.569
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	1.533

File score: 3.369

messy_mecca_exp.f90

Number of lines: 612
Implicit none: true
Number of functions: 2
Number of subroutines calls: 13
Ratio of number of lines with comments against commentable elements: 28.33%
Number of declared variables: 47
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 8
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE PMIX(TSL, DILF, IND, MIX2_AMOUNT): 1
SUBROUTINE NUDGE_CLOSE: 1
SUBROUTINE NUDGE_SPEC(MODEL_TIME, REL2NC_START, MODEL2NC_SCALE, SPEC_LIST_IND, NUDC_LIST): 4
SUBROUTINE OFFLEMB_INIT(FILEDATA_NC): 1
SUBROUTINE OFFLEMB_CLOSE: 1
SUBROUTINE OFFLEMB_PERFORM(MODEL_TIME, REL2NC_START, MODEL2NC_SCALE, FCT): 25

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.567
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000

Metric	Score
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	5.500

File score: 2.967

/home/miki/analizar/caaba_3.0/mecca/kpp/int

kpp_odessa_ddm.f

Number of lines: 4427
Implicit none: false
Number of functions: 19
Number of subroutines calls: 273
Ratio of number of lines with comments against commentable elements: 28.07%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.561
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 0.961

sdirk.f90

Number of lines: 1270
Implicit none: true
Number of functions: 0
Number of subroutines calls: 53
Ratio of number of lines with comments against commentable elements: 27.97%
Number of declared variables: 83
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 14
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INTEGRATE(TIN, TOUT, &: 8
SUBROUTINE SDIRK(N, TINITIAL, TFINAL, Y, RELTOL, ABSTOL, &: 90
SUBROUTINE SDIRK_ERRORSCALE(N, ITOL, ABSTOL, RELTOL, Y, SCAL): 3
SUBROUTINE SDIRK_ERRORNORM(N, Y, SCAL, ERR): 1
SUBROUTINE SDIRK_ERRORMSG(CODE,T,H,IERR): 11
SUBROUTINE SDIRK_PREPAREMATRIX (H, T, Y, FJAC, &: 8
SUBROUTINE SDIRK_SOLVE (H, N, E, IP, ISING, RHS): 3
SUBROUTINE SDIRK4A: 1
SUBROUTINE SDIRK4B: 1
SUBROUTINE SDIRK2A: 1
SUBROUTINE SDIRK2B: 1
SUBROUTINE SDIRK3A: 1
SUBROUTINE FUN_CHEM(T, Y, P): 1
SUBROUTINE JAC_CHEM(T, Y, JV): 3

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.559
number of nested loops	0.000

Metric	Score
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	9.500

File score: 2.959

sdirk.f

Number of lines: 705
Implicit none: false
Number of functions: 0
Number of subroutines calls: 18
Ratio of number of lines with comments against commentable elements: 27.97%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.559
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 1.359

runge_kutta_adj.f90

Number of lines: 2687
Implicit none: true
Number of functions: 1
Number of subroutines calls: 115
Ratio of number of lines with comments against commentable elements: 27.17%
Number of declared variables: 259
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 29
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INTEGRATE_ADJ(NADJ, Y, LAMBDA, TIN, TOUT, &: 9
SUBROUTINE RUNGEKUTTAADJ(N, Y, NADJ, LAMBDA,TSTART,TEND, &: 103
SUBROUTINE RK_FREEDBUFFERS(): 17
SUBROUTINE RK_ALLOCATECBUFFERS(): 11
SUBROUTINE RK_FREECBUFFERS(): 11
SUBROUTINE RK_CPUSH(T, H, Y, DY, D2Y): 3
SUBROUTINE RK_CPOP(T, H, Y, DY, D2Y): 3
SUBROUTINE RK_FWDINTEGRATOR(N,TSTART,TEND,Y,ADJOINTTYPE,IERR): 75
SUBROUTINE RK_DADJINT(NADJ,LAMBDA,TSTART,TEND,T,IERR): 32
SUBROUTINE RK_CADJINT (&: 1
SUBROUTINE RK_SIMPLECADJINT (&: 1
SUBROUTINE RK_ERRORMSG(CODE,T,H,IERR): 16
SUBROUTINE RK_ERRORSCALE(N,ITOL,ABSTOL,RELTOL,Y,SCAL): 3
SUBROUTINE RK_INTERPOLATE(ACTION,N,H,HOLD,Z1,Z2,Z3,CONT): 4
SUBROUTINE RK_PREPARERHS(N,T,H,Y,Z1,Z2,Z3,R1,R2,R3): 1
SUBROUTINE RK_PREPARERHS_ADJ(N,H,JAC1,JAC2,JAC3,LAMBDA, &: 5
SUBROUTINE RK_PREPARERHS_G(N,H,JAC1,JAC2,JAC3,LAMBDA, &: 5
SUBROUTINE RK_DECOMP(N,H,FJAC,E1,IP1,E2,IP2,ISING): 6
SUBROUTINE RK_SOLVE(N,H,E1,IP1,E2,IP2,R1,R2,R3,ISING): 4
SUBROUTINE RK_SOLVETR(N,H,E1,IP1,E2,IP2,R1,R2,R3,ISING): 4

SUBROUTINE RK_ERRORESTIMATE(N,H,Y,T, &: 13
KPP_REAL FUNCTION RK_ERRORNORM(N,SCAL,DY): 1
SUBROUTINE RADAU2A_COEFFICIENTS: 5
SUBROUTINE LOBATTO3C_COEFFICIENTS: 5
SUBROUTINE GAUSS_COEFFICIENTS: 1
SUBROUTINE RADAU1A_COEFFICIENTS: 1
SUBROUTINE FUN_CHEM(T, V, FCT): 1
SUBROUTINE JAC_CHEM (T, V, JF): 3

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.543
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	12.286

File score: 2.943

ros3_old.f90

Number of lines: 383
Implicit none: true
Number of functions: 0
Number of subroutines calls: 17
Ratio of number of lines with comments against commentable elements: 27.09%
Number of declared variables: 10
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 5
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INTEGRATE(TIN, TOUT, &: 1
SUBROUTINE ROS3(N,T,TNEXT,HMIN,HMAX,HSTART, &: 29
SUBROUTINE FUNTEMPLATE(N, T, Y, P): 1
SUBROUTINE JACTEMPLATE(N, T, Y, J): 1
SUBROUTINE DECOMP(N,V,IER): 3

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.542
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000

Metric	Score
cyclomatic complexity	7.000

File score: 2.542

kpp_dvode.f

Number of lines: 3850
Implicit none: false
Number of functions: 37
Number of subroutines calls: 306
Ratio of number of lines with comments against commentable elements: 26.70%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.534
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 0.934

gillespie.f90

Number of lines: 86
Implicit none: true
Number of functions: 0
Number of subroutines calls: 7
Ratio of number of lines with comments against commentable elements: 26.56%
Number of declared variables: 15
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 2
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE GILLESPIE(NEVENTS, T, SCT, NMLCV, NMLCF): 3

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.531
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	3.000

File score: 2.931

rosenbrock_tlm.f90

Number of lines: 1357
Implicit none: true
Number of functions: 2
Number of subroutines calls: 77
Ratio of number of lines with comments against commentable elements: 27.47%
Number of declared variables: 122
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: false
Number of subroutines: 17
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INTEGRATE_TLM(NTLM, Y, Y_TLM, TIN, TOUT, ATOL_TLM, RTOL_TLM,&: 7
SUBROUTINE ROSENBROCKTLM(N,Y,NTLM,Y_TLM, &: 49
SUBROUTINE ROS_TLM_INT (Y, NTLM, Y_TLM, &: 22
KPP_REAL FUNCTION ROS_ERRORNORM (Y, YNEW, YERR, & : 3
KPP_REAL FUNCTION ROS_ERRORNORM_TLM (Y_TLM, YNEW_TLM, YERR_TLM, & : 1
SUBROUTINE ROS_FUNTIMEDERIVATIVE (T, ROUNDOFF, Y, &: 1
SUBROUTINE ROS_JACTIMEDERIVATIVE (T, ROUNDOFF, Y, &: 1
SUBROUTINE ROS_PREPAREMATRIX (H, DIRECTION, GAM, &: 3
SUBROUTINE ROS_DECOMP(A, PIVOT, ISING): 1
SUBROUTINE ROS_SOLVE(A, PIVOT, B): 1
SUBROUTINE ROS2 : 1
SUBROUTINE ROS3: 1
SUBROUTINE ROS4: 1
SUBROUTINE RODAS3: 1
SUBROUTINE RODAS4: 1
SUBROUTINE FUNTEMPLATE(T, Y, YDOT): 1
SUBROUTINE JACTEMPLATE(T, Y, JCB): 1
SUBROUTINE HESSTEMPLATE(T, Y, HES): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.549
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.400
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	5.389

File score: 3.349

kpp_seulex.f

Number of lines: 1174
Implicit none: false
Number of functions: 1
Number of subroutines calls: 36
Ratio of number of lines with comments against commentable elements: 27.46%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.549
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 0.949

atm_odessa_ddm.f

Number of lines: 4398
Implicit none: false
Number of functions: 19
Number of subroutines calls: 269
Ratio of number of lines with comments against commentable elements: 27.27%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.545
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 0.945

atm_radau5.f

Number of lines: 4572
Implicit none: true
Number of functions: 5
Number of subroutines calls: 131
Ratio of number of lines with comments against commentable elements: 27.19%
Number of declared variables: 3
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.544
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 2.544

/home/miki/analizar/caaba_3.0/mecca/kpp/int/oldies

exqssa.f

Number of lines: 136
Implicit none: false
Number of functions: 0
Number of subroutines calls: 6
Ratio of number of lines with comments against commentable elements: 27.19%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.544
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 1.344

ros3.f

Number of lines: 304
Implicit none: true
Number of functions: 0
Number of subroutines calls: 21
Ratio of number of lines with comments against commentable elements: 27.19%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.544
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 3.344

ros1_ddm.f

Number of lines: 300
Implicit none: true
Number of functions: 1
Number of subroutines calls: 30
Ratio of number of lines with comments against commentable elements: 27.18%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.544
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 2.944

ros4_ddm.f

Number of lines: 615
Implicit none: true
Number of functions: 1
Number of subroutines calls: 54
Ratio of number of lines with comments against commentable elements: 27.17%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.543
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 2.943

qssa.f

Number of lines: 136
Implicit none: false
Number of functions: 0
Number of subroutines calls: 6
Ratio of number of lines with comments against commentable elements: 27.17%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.543
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 1.343

rodas3_ddm.f

Number of lines: 592
Implicit none: true
Number of functions: 1
Number of subroutines calls: 56
Ratio of number of lines with comments against commentable elements: 27.16%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.543
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 2.943

ros2.f

Number of lines: 314
Implicit none: true
Number of functions: 0
Number of subroutines calls: 17
Ratio of number of lines with comments against commentable elements: 27.16%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.543
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 3.343

ros2_cts_adj.f

Number of lines: 312
Implicit none: false
Number of functions: 1
Number of subroutines calls: 23
Ratio of number of lines with comments against commentable elements: 27.15%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.543
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 0.943

qssa1.f

Number of lines: 136
Implicit none: false
Number of functions: 0
Number of subroutines calls: 6
Ratio of number of lines with comments against commentable elements: 27.15%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.543
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 1.343

twostepj.f

Number of lines: 244
Implicit none: false
Number of functions: 1
Number of subroutines calls: 10
Ratio of number of lines with comments against commentable elements: 27.14%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.543
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 0.943

qssafix.f

Number of lines: 56
Implicit none: false
Number of functions: 0
Number of subroutines calls: 1
Ratio of number of lines with comments against commentable elements: 27.14%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.543
number of nested loops	2.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 3.343

ros1.f

Number of lines: 166
Implicit none: false
Number of functions: 1
Number of subroutines calls: 13
Ratio of number of lines with comments against commentable elements: 27.13%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.543
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 0.943

ros4.f

Number of lines: 334
Implicit none: true
Number of functions: 2
Number of subroutines calls: 19
Ratio of number of lines with comments against commentable elements: 27.11%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.542
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 2.942

ros2.f90

Number of lines: 294
Implicit none: true
Number of functions: 0
Number of subroutines calls: 15
Ratio of number of lines with comments against commentable elements: 27.07%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 4
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INTEGRATE(TIN, TOUT): 1
SUBROUTINE ROS2(N,T,TNEXT,HMIN,HMAX,HSTART, &: 22
SUBROUTINE FUNC_CHEM(N, T, Y, P) : 1
SUBROUTINE JAC_CHEM(N, T, Y, J) : 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.541
number of nested loops	2.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	6.250

File score: 5.341

rodas3.f

Number of lines: 271
Implicit none: true
Number of functions: 0
Number of subroutines calls: 21
Ratio of number of lines with comments against commentable elements: 27.07%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.541
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 3.341

ros3_ddm.f

Number of lines: 503
Implicit none: true
Number of functions: 0
Number of subroutines calls: 46
Ratio of number of lines with comments against commentable elements: 27.07%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.541
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 2.941

kpp_rodas.f

Number of lines: 647
Implicit none: false
Number of functions: 0
Number of subroutines calls: 32
Ratio of number of lines with comments against commentable elements: 27.07%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.541
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 1.341

kpp_ros4.f

Number of lines: 1052
Implicit none: false
Number of functions: 0
Number of subroutines calls: 46
Ratio of number of lines with comments against commentable elements: 27.07%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.541
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 1.341

ros2_ddm.f

Number of lines: 480
Implicit none: true
Number of functions: 0
Number of subroutines calls: 43
Ratio of number of lines with comments against commentable elements: 27.07%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.541
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 2.941

/home/miki/analizar/caaba_3.0/mecca/kpp/int

runge_kutta.f90

Number of lines: 1902
Implicit none: true
Number of functions: 1
Number of subroutines calls: 81
Ratio of number of lines with comments against commentable elements: 26.69%
Number of declared variables: 138
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 16
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INTEGRATE(TIN, TOUT, &: 8
SUBROUTINE RUNGEKUTTA(N,T,TEND,Y,RELTOL,ABSTOL, &: 132
SUBROUTINE RK_ERRORMSG(CODE,T,H,IERR): 16
SUBROUTINE RK_ERRORSCALE(N,ITOL,ABSTOL,RELTOL,Y,SCAL): 3
SUBROUTINE RK_INTERPOLATE(ACTION,N,H,HOLD,Z1,Z2,Z3,CONT): 4
SUBROUTINE RK_PREPARERHS(N,T,H,Y,F0,Z1,Z2,Z3,R1,R2,R3): 3
SUBROUTINE RK_DECOMP(N,H,FJAC,E1,IP1,E2,IP2,ISING): 6
SUBROUTINE RK_SOLVE(N,H,E1,IP1,E2,IP2,R1,R2,R3,ISING): 4
SUBROUTINE RK_ERRORESTIMATE(N,H,T,Y,F0, &: 11
KPP_REAL FUNCTION RK_ERRORNORM(N,SCAL,DY): 1
SUBROUTINE RADAU2A_COEFFICIENTS: 5
SUBROUTINE LOBATTO3C_COEFFICIENTS: 5
SUBROUTINE GAUSS_COEFFICIENTS: 1
SUBROUTINE RADAU1A_COEFFICIENTS: 1
SUBROUTINE LOBATTO3A_COEFFICIENTS: 1
SUBROUTINE FUN_CHEM(T, V, FCT): 1
SUBROUTINE JAC_CHEM (T, V, JF): 3

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.534
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	12.059

File score: 2.934

kpp_sdirk4.f

Number of lines: 705
Implicit none: false
Number of functions: 0
Number of subroutines calls: 18
Ratio of number of lines with comments against commentable elements: 26.69%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.534
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 1.334

kpp_radau5.f90

Number of lines: 1201
Implicit none: true
Number of functions: 0
Number of subroutines calls: 53
Ratio of number of lines with comments against commentable elements: 26.17%
Number of declared variables: 137
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 12
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INTEGRATE(TIN, TOUT, &: 6
SUBROUTINE RADAU5(N,T,TEND,Y,H,RELTOL,ABSTOL, &: 97
SUBROUTINE RAD_ERRORMSG(CODE,T,H,IERR): 2
SUBROUTINE RAD_ERRORSCALE(N,ITOL,ABSTOL,RELTOL,Y,SCAL): 3
SUBROUTINE RAD_TRANSFORM(N,TR,Z1,Z2,Z3,F1,F2,F3): 1
SUBROUTINE RAD_COEFFICIENTS: 1
SUBROUTINE RAD_DECOMPREAL(N,FJAC,GAMMA,E1,IP1,ISING): 3
SUBROUTINE RAD_DECOMPCMPLX(N,FJAC,ALPHA,BETA,E2,IP2,ISING): 3
SUBROUTINE RAD_SOLVE(N,FJAC,GAMMA,ALPHA,BETA,E1,E2,&: 4
SUBROUTINE RAD_ERRORESTIMATE(N,FJAC,H,Y0,Y,T,&: 7
SUBROUTINE FUN_CHEM(T, V, FCT): 1
SUBROUTINE JAC_CHEM (T, V, JF): 3

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.523
number of nested loops	0.000
comments at the beginning of the document	0.400

Metric	Score
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	10.917

File score: 2.923

rosenbrock_mz.f90

Number of lines: 1306
Implicit none: true
Number of functions: 1
Number of subroutines calls: 36
Ratio of number of lines with comments against commentable elements: 26.30%
Number of declared variables: 155
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 15
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INTEGRATE(TIN, TOUT, &: 8
SUBROUTINE ROSENBROCK(Y,TSTART,TEND, &: 43
SUBROUTINE ROS_INTEGRATOR (Y, TSTART, TEND, T, &: 21
KPP_REAL FUNCTION ROS_ERRORNORM (Y, YNEW, YERR, &: 3
SUBROUTINE ROS_FUNTIMEDERIVATIVE (T, ROUNDOFF, Y, &: 1
SUBROUTINE ROS_PREPAREMATRIX (H, DIRECTION, GAM, &: 6
SUBROUTINE ROS_DECOMP(A, PIVOT, ISING): 2
SUBROUTINE ROS_SOLVE(A, PIVOT, B): 2
SUBROUTINE ROS2 (ROS_S,ROS_A,ROS_C,ROS_M,ROS_E,ROS_ALPHA,&: 1
SUBROUTINE ROS3 (ROS_S,ROS_A,ROS_C,ROS_M,ROS_E,ROS_ALPHA,&: 1
SUBROUTINE ROS4 (ROS_S,ROS_A,ROS_C,ROS_M,ROS_E,ROS_ALPHA,&: 1
SUBROUTINE RODAS3 (ROS_S,ROS_A,ROS_C,ROS_M,ROS_E,ROS_ALPHA,&: 1
SUBROUTINE RODAS4 (ROS_S,ROS_A,ROS_C,ROS_M,ROS_E,ROS_ALPHA,&: 1
SUBROUTINE FUNTEMPLATE(T, Y, YDOT): 1
SUBROUTINE JACTEMPLATE(T, Y, JCB): 4

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.526

Metric	Score
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	6.400

File score: 2.526

atm_lsodes.f

Number of lines: 5474
Implicit none: true
Number of functions: 12
Number of subroutines calls: 279
Ratio of number of lines with comments against commentable elements: 26.21%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.524
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 2.924

runge_kutta_tlm.f90

Number of lines: 2218
Implicit none: true
Number of functions: 1
Number of subroutines calls: 96
Ratio of number of lines with comments against commentable elements: 25.88%
Number of declared variables: 180
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: false
Number of subroutines: 18
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INTEGRATE_TLM(NTLM, Y, Y_TLM, TIN, TOUT, ATOL_TLM, RTOL_TLM, &: 9
SUBROUTINE RUNGEKUTTATLM(N, NTLM, Y, Y_TLM, T, TEND,RELTOL,ABSTOL,   &: 162
SUBROUTINE RK_ERRORMSG(CODE,T,H,IERR): 16
SUBROUTINE RK_ERRORSCALE(N,ITOL,ABSTOL,RELTOL,Y,SCAL): 3
SUBROUTINE RK_INTERPOLATE(ACTION,N,H,HOLD,Z1,Z2,Z3,CONT): 4
SUBROUTINE RK_PREPARERHS(N,T,H,Y,Z1,Z2,Z3,R1,R2,R3): 1
SUBROUTINE RK_PREPARERHS_TLM(N,H,JAC1,JAC2,JAC3,Y_TLM, &: 5
SUBROUTINE RK_PREPARERHS_TLMDIRECT(N,H,JAC1,JAC2,JAC3,Y_TLM,ZBIG): 5
SUBROUTINE RK_DECOMP(N,H,FJAC,E1,IP1,E2,IP2,ISING): 6
SUBROUTINE RK_SOLVE(N,H,E1,IP1,E2,IP2,R1,R2,R3,ISING): 4
SUBROUTINE RK_ERRORESTIMATE(N,H,Y,T,   &: 11
SUBROUTINE RK_ERRORESTIMATE_TLM(N,NTLM,T,H,FJAC,Y,Y_TLM, &: 3
KPP_REAL FUNCTION RK_ERRORNORM(N,SCAL,DY): 1
SUBROUTINE RADAU2A_COEFFICIENTS: 5
SUBROUTINE LOBATTO3C_COEFFICIENTS: 5
SUBROUTINE GAUSS_COEFFICIENTS: 1
SUBROUTINE RADAU1A_COEFFICIENTS: 1
SUBROUTINE FUN_CHEM(T, V, FCT): 1
SUBROUTINE JAC_CHEM (T, V, JF): 3

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.518
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.400
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	12.947

File score: 3.318

tau_leap.f90

Number of lines: 1688
Implicit none: true
Number of functions: 18
Number of subroutines calls: 33
Ratio of number of lines with comments against commentable elements: 25.13%
Number of declared variables: 154
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 6
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

FUNCTION RANDOM_NORMAL() RESULT(FN_VAL): 4
FUNCTION RANDOM_GAMMA(S, FIRST) RESULT(FN_VAL): 6
FUNCTION RANDOM_GAMMA1(S, FIRST) RESULT(FN_VAL): 7
FUNCTION RANDOM_GAMMA2(S, FIRST) RESULT(FN_VAL): 14
FUNCTION RANDOM_CHISQ(NDF, FIRST) RESULT(FN_VAL): 1
FUNCTION RANDOM_EXPONENTIAL() RESULT(FN_VAL): 2
FUNCTION RANDOM_WEIBULL(A) RESULT(FN_VAL): 1
FUNCTION RANDOM_BETA(AA, BB, FIRST) RESULT(FN_VAL): 17
FUNCTION RANDOM_T(M) RESULT(FN_VAL): 11
SUBROUTINE RANDOM_MVNORM(N, H, D, F, FIRST, X, IER): 8
FUNCTION RANDOM_INV_GAUSS(H, B, FIRST) RESULT(FN_VAL): 13
FUNCTION RANDOM_POISSON(MU, FIRST) RESULT(IVAL): 37
FUNCTION RANDOM_BINOMIAL1(N, P, FIRST) RESULT(IVAL): 13
FUNCTION BIN_PROB(N, P, R) RESULT(FN_VAL): 1
FUNCTION LNGAMMA(X) RESULT(FN_VAL): 10
FUNCTION RANDOM_BINOMIAL2(N, PP, FIRST) RESULT(IVAL): 39
FUNCTION RANDOM_NEG_BINOMIAL(SK, P) RESULT(IVAL): 9
FUNCTION RANDOM_VON_MISES(K, FIRST) RESULT(FN_VAL): 10
SUBROUTINE INTEGRAL(A, B, RESULT, DK): 1
FUNCTION RANDOM_CAUCHY() RESULT(FN_VAL): 2

SUBROUTINE RANDOM_ORDER(ORDER, N): 3
SUBROUTINE SEED_RANDOM_NUMBER(IOUNIT): 1
SUBROUTINE TAULEAP(NSTEPS, TAU, T, SCT, NMLCV, NMLCF): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.503
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	9.174

File score: 2.903

ros2_manual.f90

Number of lines: 119
Implicit none: true
Number of functions: 0
Number of subroutines calls: 7
Ratio of number of lines with comments against commentable elements: 25.14%
Number of declared variables: 12
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 2
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INTEGRATE(TIN, TOUT, &: 3
SUBROUTINE ROS2(TSTART,TEND): 3

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.503
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	3.000

File score: 4.903

kpp_sdirk4.f90

Number of lines: 972
Implicit none: true
Number of functions: 0
Number of subroutines calls: 45
Ratio of number of lines with comments against commentable elements: 25.14%
Number of declared variables: 71
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 9
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INTEGRATE(TIN, TOUT, &: 9
SUBROUTINE SDIRK(N, TINITIAL, TFINAL, Y, RELTOL, ABSTOL, &: 85
SUBROUTINE SDIRK_ERRORSCALE(ITOL, ABSTOL, RELTOL, Y, SCAL): 3
SUBROUTINE SDIRK_ERRORNORM(N, Y, SCAL, ERR): 1
SUBROUTINE SDIRK_ERRORMSG(CODE,T,H,IERR): 2
SUBROUTINE SDIRK_PREPAREMATRIX (H, T, Y, FJAC, &: 11
SUBROUTINE SDIRK_COEFFICIENTS: 1
SUBROUTINE FUN_CHEM(T, Y, P): 1
SUBROUTINE JAC_CHEM(T, Y, JV): 3

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.503
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000

Metric	Score
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	12.889

File score: 2.903

rosenbrock_adj.f90

Number of lines: 2569
Implicit none: true
Number of functions: 1
Number of subroutines calls: 204
Ratio of number of lines with comments against commentable elements: 26.15%
Number of declared variables: 236
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: false
Number of subroutines: 30
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INTEGRATE_ADJ(NADJ, Y, LAMBDA, TIN, TOUT, &: 9
SUBROUTINE ROSENBROCKADJ(Y, NADJ, LAMBDA, &: 76
SUBROUTINE ROS_FREEDBUFFERS: 13
SUBROUTINE ROS_ALLOCATECBUFFERS: 11
SUBROUTINE ROS_FREECBUFFERS: 11
SUBROUTINE ROS_DPUSH(S, T, H, YSTAGE, K, E, P): 7
SUBROUTINE ROS_DPOP(S, T, H, YSTAGE, K, E, P): 7
SUBROUTINE ROS_CPUSH(T, H, Y, DY, D2Y): 3
SUBROUTINE ROS_CPOP(T, H, Y, DY, D2Y): 3
SUBROUTINE ROS_ERRORMSG(CODE,T,H,IERR): 12
SUBROUTINE ROS_FWDINT (Y, &: 41
SUBROUTINE ROS_DADJINT (&: 13
SUBROUTINE ROS_CADJINT (&: 26
SUBROUTINE ROS_SIMPLECADJINT (&: 18
KPP_REAL FUNCTION ROS_ERRORNORM (Y, YNEW, YERR, & : 3
SUBROUTINE ROS_FUNTIMEDERIVATIVE (T, ROUNDOFF, Y, FCN0, DFDT): 1
SUBROUTINE ROS_JACTIMEDERIVATIVE (T, ROUNDOFF, Y, &: 3
SUBROUTINE ROS_PREPAREMATRIX (H, DIRECTION, GAM, &: 6
SUBROUTINE ROS_DECOMP(A, PIVOT, ISING): 3
SUBROUTINE ROS_SOLVE(HOW, A, PIVOT, B): 8

SUBROUTINE ROS_CADJ_Y(T, Y): 4
SUBROUTINE ROS_HERMITE3(A, B, T, YA, YB, JA, JB, Y): 1
SUBROUTINE ROS_HERMITE5(A, B, T, YA, YB, JA, JB, HA, HB, Y): 1
SUBROUTINE ROS2: 1
SUBROUTINE ROS3: 1
SUBROUTINE ROS4: 1
SUBROUTINE RODAS3: 1
SUBROUTINE RODAS4: 1
SUBROUTINE FUNTEMPLATE(T, Y, YDOT): 1
SUBROUTINE JACTEMPLATE(T, Y, JCB): 4
SUBROUTINE HESSTEMPLATE(T, Y, HES): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.523
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.400
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	9.387

File score: 3.323

kpp_lsode.f90

Number of lines: 3421
Implicit none: true
Number of functions: 4
Number of subroutines calls: 76
Ratio of number of lines with comments against commentable elements: 26.33%
Number of declared variables: 39
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 16
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INTEGRATE(TIN, TOUT, &: 9
SUBROUTINE KPPLSODE(TIN,TOUT,Y,RELTOL,ABSTOL, &: 3
SUBROUTINE DLSODE (F, NEQ, Y, T, TOUT, ITOL, RELTOL, ABSTOL, ITASK, &: 151
SUBROUTINE DUMSUM(A,B,C) : 1
SUBROUTINE DCFODE (METH, ELCO, TESCO) : 5
SUBROUTINE DINTDY (T, K, YH, NYH, DKY, IFLAG) : 13
SUBROUTINE DPREPJ (NEQ, Y, YH, NYH, EWT, FTEM, SAVF, WM, IWM, F, JAC)
: 3
SUBROUTINE DSOLSY (WM, IWM, X, TEM) : 2
SUBROUTINE DSRCOM (RSAV, ISAV, JOB) : 3
SUBROUTINE DSTODE (NEQ, Y, YH, NYH, YH1, EWT, SAVF, ACOR, &: 70
SUBROUTINE DEWSET (N, ITOL, RELTOL, ABSTOL, YCUR, EWT) : 6
KPP_REAL FUNCTION DVNORM (N, V, W) : 1
SUBROUTINE XERRWD (MSG, NMES, NERR, LEVEL, NI, I1, I2, NR, R1, R2) : 7
SUBROUTINE XSETF (MFLAG) : 2
SUBROUTINE XSETUN (LUN) : 2
INTEGER FUNCTION IXSAV (IPAR, IVALUE, ISET) : 6
INTEGER FUNCTION IUMACH() : 1
SUBROUTINE FUN_CHEM(N, T, V, FCT): 1
SUBROUTINE JAC_CHEM (N, T, V, JF): 3

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.527
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	15.211

File score: 2.927

rosenbrock.f

Number of lines: 1286
Implicit none: true
Number of functions: 1
Number of subroutines calls: 52
Ratio of number of lines with comments against commentable elements: 26.70%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.534
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 3.334

/home/miki/analizar/caaba_3.0/mecca/kpp/int/user_contributed

ros2_manual.f90

Number of lines: 119
Implicit none: true
Number of functions: 0
Number of subroutines calls: 7
Ratio of number of lines with comments against commentable elements: 26.71%
Number of declared variables: 12
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 2
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INTEGRATE(TIN, TOUT, &: 3
SUBROUTINE ROS2(TSTART,TEND): 3

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.534
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	3.000

File score: 4.934

/home/miki/analizar/caaba_3.0/mecca/kpp/int

rosenbrock.f90

Number of lines: 1245
Implicit none: true
Number of functions: 1
Number of subroutines calls: 56
Ratio of number of lines with comments against commentable elements: 27.02%
Number of declared variables: 111
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 15
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INTEGRATE(TIN, TOUT, &: 8
SUBROUTINE ROSENBROCK(N,Y,TSTART,TEND, &: 47
SUBROUTINE ROS_INTEGRATOR (Y, TSTART, TEND, T, &: 20
KPP_REAL FUNCTION ROS_ERRORNORM (Y, YNEW, YERR, &: 3
SUBROUTINE ROS_FUNTIMEDERIVATIVE (T, ROUNDOFF, Y, &: 1
SUBROUTINE ROS_PREPAREMATRIX (H, DIRECTION, GAM, &: 6
SUBROUTINE ROS_DECOMP(A, PIVOT, ISING): 2
SUBROUTINE ROS_SOLVE(A, PIVOT, B): 2
SUBROUTINE ROS2: 1
SUBROUTINE ROS3: 1
SUBROUTINE ROS4: 1
SUBROUTINE RODAS3: 1
SUBROUTINE RODAS4: 1
SUBROUTINE FUNTEMPLATE(T, Y, YDOT): 1
SUBROUTINE JACTEMPLATE(T, Y, JCB): 4

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.540
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	6.600

File score: 2.940

kpp_seulex.f90

Number of lines: 1168
Implicit none: true
Number of functions: 0
Number of subroutines calls: 37
Ratio of number of lines with comments against commentable elements: 26.77%
Number of declared variables: 76
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: false
Number of subroutines: 7
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INTEGRATE(TIN, TOUT, &: 6
SUBROUTINE ATMSEULEX(N,TINITIAL,TFINAL,Y,H,RELTOL,ABSTOL, &: 70
SUBROUTINE SEULEX_ERRORMSG(CODE,T,H,IERR): 15
SUBROUTINE
SEULEX_INTEGRATOR(N,T,TEND,Y,HMAX,H,NCOLUMNS,RELTOL,ABSTOL,ITOL,&: 67
SUBROUTINE SEUL(JJ,N,T,Y,DY,FX,FJAC,LFJAC,E,LE,IP,&: 25
SUBROUTINE FUN_CHEM(T, V, FCT): 1
SUBROUTINE JAC_CHEM (T, V, JCB): 3

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.535
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.400

Metric	Score
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	26.714

File score: 3.335

sdirk_adj.f90

Number of lines: 1669
Implicit none: true
Number of functions: 0
Number of subroutines calls: 78
Ratio of number of lines with comments against commentable elements: 26.79%
Number of declared variables: 124
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 19
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INTEGRATE_ADJ(NADJ, Y, LAMBDA, TIN, TOUT, &: 9
SUBROUTINE SDIRKADJ(N, NADJ, TINITIAL, TFINAL, Y, LAMBDA, &: 88
SUBROUTINE SDIRK_DADJINT(N, NADJ, LAMBDA, IERR): 29
SUBROUTINE SDIRK_ALLOCBUFFERS: 16
SUBROUTINE SDIRK_FREEBUFFERS: 15
SUBROUTINE SDIRK_PUSH(T, H, Y, Z, E, P): 7
SUBROUTINE SDIRK_POP(T, H, Y, Z, E, P): 7
SUBROUTINE SDIRK_ERRORSCALE(ITOL, ABSTOL, RELTOL, Y, SCAL): 3
SUBROUTINE SDIRK_ERRORNORM(N, Y, SCAL, ERR): 1
SUBROUTINE SDIRK_ERRORMSG(CODE,T,H,IERR): 11
SUBROUTINE SDIRK_PREPAREMATRIX (H, T, Y, FJAC, &: 8
SUBROUTINE SDIRK_SOLVE (TRANSP, H, N, E, IP, ISING, RHS): 8
SUBROUTINE SDIRK4A: 1
SUBROUTINE SDIRK4B: 1
SUBROUTINE SDIRK2A: 1
SUBROUTINE SDIRK2B: 1
SUBROUTINE SDIRK3A: 1
SUBROUTINE FUN_CHEM(T, Y, P): 1
SUBROUTINE JAC_CHEM(T, Y, JV): 3

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.536
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	11.105

File score: 2.936

sdirk_tlm.f90

Number of lines: 1461
Implicit none: true
Number of functions: 0
Number of subroutines calls: 72
Ratio of number of lines with comments against commentable elements: 26.74%
Number of declared variables: 98
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: false
Number of subroutines: 15
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INTEGRATE_TLM(NTLM, Y, Y_TLM, TIN, TOUT, ATOL_TLM,RTOL_TLM, &: 9
SUBROUTINE SDIRKTLM(N, NTLM, TINITIAL, TFINAL, Y, Y_TLM, RELTOL, ABSTOL, &: 123
SUBROUTINE SDIRK_ERRORSCALE(N, ITOL, ABSTOL, RELTOL, Y, SCAL): 3
SUBROUTINE SDIRK_ERRORNORM(N, Y, SCAL, ERR): 1
SUBROUTINE SDIRK_ERRORNORM_TLM(N,NTLM, Y_TLM, FWD_ERR): 1
SUBROUTINE SDIRK_ERRORMSG(CODE,T,H,IERR): 11
SUBROUTINE SDIRK_PREPAREMATRIX (H, T, Y, FJAC, &: 8
SUBROUTINE SDIRK_SOLVE (H, N, E, IP, ISING, RHS): 3
SUBROUTINE SDIRK4A: 1
SUBROUTINE SDIRK4B: 1
SUBROUTINE SDIRK2A: 1
SUBROUTINE SDIRK2B: 1
SUBROUTINE SDIRK3A: 1
SUBROUTINE FUN_CHEM(T, Y, P): 1
SUBROUTINE JAC_CHEM(T, Y, JV): 3

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.535

Metric	Score
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.400
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	11.200

File score: 3.335

rosenbrock_posdef.f90

Number of lines: 1237
Implicit none: true
Number of functions: 1
Number of subroutines calls: 55
Ratio of number of lines with comments against commentable elements: 27.02%
Number of declared variables: 111
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 15
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INTEGRATE(TIN, TOUT, &: 8
SUBROUTINE ROSENBROCK(N,Y,TSTART,TEND, &: 38
SUBROUTINE ROS_INTEGRATOR (Y, TSTART, TEND, T, &: 20
KPP_REAL FUNCTION ROS_ERRORNORM (Y, YNEW, YERR, &: 3
SUBROUTINE ROS_FUNTIMEDERIVATIVE (T, ROUNDOFF, Y, &: 1
SUBROUTINE ROS_PREPAREMATRIX (H, DIRECTION, GAM, &: 6
SUBROUTINE ROS_DECOMP(A, PIVOT, ISING): 2
SUBROUTINE ROS_SOLVE(A, PIVOT, B): 2
SUBROUTINE ROS2: 1
SUBROUTINE ROS3: 1
SUBROUTINE ROS4: 1
SUBROUTINE RODAS3: 1
SUBROUTINE RODAS4: 1
SUBROUTINE FUNTEMPLATE(T, Y, YDOT): 1
SUBROUTINE JACTEMPLATE(T, Y, JCB): 4

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.540

Metric	Score
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	6.000

File score: 2.940

/home/miki/analizar/caaba_3.0/mecca/kpp/util

dFun_dRcoeff.f

Number of lines: 48
Implicit none: true
Number of functions: 0
Number of subroutines calls: 2
Ratio of number of lines with comments against commentable elements: 27.02%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.540
number of nested loops	2.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 5.740

UserRateLaws_FcnHeader.f

Number of lines: 6
Implicit none: false
Number of functions: 0
Number of subroutines calls: 1
Ratio of number of lines with comments against commentable elements: 27.02%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.540
number of nested loops	2.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	0.000

File score: 5.740

mex.f

Number of lines: 377
Implicit none: false
Number of functions: 3
Number of subroutines calls: 8
Ratio of number of lines with comments against commentable elements: 27.00%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.540
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 1.740

Makefile.f

Number of lines: 109
Implicit none: false
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 27.00%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.540
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 1.740

dJac_dRcoeff.f90

Number of lines: 56
Implicit none: true
Number of functions: 0
Number of subroutines calls: 1
Ratio of number of lines with comments against commentable elements: 27.00%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: true
--> subroutines declaration: false
--> control structures: true
Number of subroutines: 1
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE DJAC_DRCOEFF(V, F, U, NCOEFF, JCOEFF, DJDR): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.540
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	1.000

File score: 6.140

UserRateLaws.f

Number of lines: 76
Implicit none: false
Number of functions: 5
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 26.97%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.539
number of nested loops	2.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	0.000

File score: 5.739

dFun_dRcoeff.f90

Number of lines: 47
Implicit none: true
Number of functions: 0
Number of subroutines calls: 1
Ratio of number of lines with comments against commentable elements: 26.96%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: true
--> subroutines declaration: false
--> control structures: true
Number of subroutines: 1
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE DFUN_DRCOEFF(V, F, NCOEFF, JCOEFF, DFDR): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.539
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	1.000

File score: 6.139

Mex_Fun.f

Number of lines: 44
Implicit none: false
Number of functions: 1
Number of subroutines calls: 7
Ratio of number of lines with comments against commentable elements: 26.96%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.539
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 0.939

blas.f

Number of lines: 319
Implicit none: true
Number of functions: 2
Number of subroutines calls: 1
Ratio of number of lines with comments against commentable elements: 27.09%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 2
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE WCOPY(N,X,INCX,Y,INCY): 28
KPP_REAL FUNCTION WDOT (N, DX, INCX, DY, INCY) : 7
SUBROUTINE WADD(N,X,Y,Z): 5

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.542
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	13.333

File score: 3.742

Mex_Jac_SP.f90

Number of lines: 44
Implicit none: false
Number of functions: 0
Number of subroutines calls: 7
Ratio of number of lines with comments against commentable elements: 27.12%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: true
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 1
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE MEXFUNCTION(NLHS, PLHS, NRHS, PRHS): 5

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.542
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	5.000

File score: 2.142

Mex_Hessian.f

Number of lines: 43
Implicit none: false
Number of functions: 0
Number of subroutines calls: 7
Ratio of number of lines with comments against commentable elements: 27.12%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.542
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 0.942

Mex_Hessian.f90

Number of lines: 45
Implicit none: false
Number of functions: 0
Number of subroutines calls: 7
Ratio of number of lines with comments against commentable elements: 27.16%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 1
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE MEXFUNCTION(NLHS, PLHS, NRHS, PRHS): 5

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.543
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	5.000

File score: 1.743

Mex_Jac_SP.f

Number of lines: 43
Implicit none: false
Number of functions: 1
Number of subroutines calls: 7
Ratio of number of lines with comments against commentable elements: 27.15%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.543
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 0.943

sutil.f90

Number of lines: 587
Implicit none: false
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 27.25%
Number of declared variables: 70
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: false
--> subroutines declaration: true
--> control structures: false
Number of subroutines: 9
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE KPPDECOMP(JVS, IER): 3
SUBROUTINE KPPDECOMPCMPLX(JVS, IER): 3
SUBROUTINE KPPDECOMPCMPLXR(JVSR, JVSI, IER): 3
SUBROUTINE KPPSOLVEINDIRECT(JVS, X): 1
SUBROUTINE KPPSOLVETRINDIRECT(JVS, X): 1
SUBROUTINE KPPSOLVECMPLX(JVS, X): 1
SUBROUTINE KPPSOLVECMPLXR(JVSR, JVSI, XR, XI): 1
SUBROUTINE KPPSOLVETRCMPLX(JVS, X): 1
SUBROUTINE KPPSOLVETRCMPLXR(JVSR, JVSI, XR, XI): 1

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.545
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400

Metric	Score
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	1.667

File score: 1.345

Mex_Fun.f90

Number of lines: 45
Implicit none: false
Number of functions: 0
Number of subroutines calls: 7
Ratio of number of lines with comments against commentable elements: 27.29%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 1
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE MEXFUNCTION(NLHS, PLHS, NRHS, PRHS): 5

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.546
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	5.000

File score: 1.746

UpdateSun.f

Number of lines: 30
Implicit none: true
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 27.29%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.546
number of nested loops	2.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	0.000

File score: 7.346

sutil.f

Number of lines: 131
Implicit none: false
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 27.29%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.546
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 1.346

UpdateSun.f90

Number of lines: 30
Implicit none: true
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 27.27%
Number of declared variables: 5
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 1
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

CYCLOMATIC COMPLEXITY

SUBROUTINE UPDATE_SUN(): 5

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.545
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	5.000

File score: 7.345

Makefile.f90

Number of lines: 164
Implicit none: false
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 27.27%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.545
number of nested loops	2.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	0.000

File score: 5.745

util.f90

Number of lines: 101
Implicit none: false
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 27.25%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: true
--> subroutines declaration: false
--> control structures: true
Number of subroutines: 4
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INITSAVEDATA (): 1
SUBROUTINE SAVEDATA (): 1
SUBROUTINE CLOSESAVEDATA (): 1
SUBROUTINE GENERATEMATLAB (PREFIX): 1

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.545
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	1.000

File score: 4.145

tag2num.f90

Number of lines: 28
Implicit none: false
Number of functions: 1
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 27.24%
Number of declared variables: 1
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: false
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

ELEMENTAL INTEGER FUNCTION TAG2NUM (ID): 2

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.545
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.400
comments in control structures	0.000
use of the EXIT statement	1.000
use of the CYCLE statement	0.000
cyclomatic complexity	2.000

File score: 4.345

dJac_dRcoeff.f

Number of lines: 57
Implicit none: true
Number of functions: 0
Number of subroutines calls: 2
Ratio of number of lines with comments against commentable elements: 27.24%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.545
number of nested loops	2.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 5.745

util.f

Number of lines: 102
Implicit none: false
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 27.24%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: false
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.545
number of nested loops	2.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 3.345

UserRateLaws.f90

Number of lines: 89
Implicit none: false
Number of functions: 7
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 27.36%
Number of declared variables: 12
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

CYCLOMATIC COMPLEXITY

KPP_REAL FUNCTION ARR(A0,B0,C0): 1
KPP_REAL FUNCTION ARR2(A0,B0): 1
KPP_REAL FUNCTION EP2(A0,C0,A2,C2,A3,C3): 1
KPP_REAL FUNCTION EP3(A1,C1,A2,C2) : 1
KPP_REAL FUNCTION FALL (A0,B0,C0,A1,B1,C1,CF): 1
ELEMENTAL REAL(KIND=DP) FUNCTION K_3RD(TEMP,CAIR,K0_300K,N,KINF_300K,M,FC): 1
ELEMENTAL REAL(KIND=DP) FUNCTION K_ARR (K_298,TDEP,TEMP): 1

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.547
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.400
comments in control structures	0.400

Metric	Score
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	1.000

File score: 5.747

blas.f90

Number of lines: 447
Implicit none: true
Number of functions: 2
Number of subroutines calls: 5
Ratio of number of lines with comments against commentable elements: 27.22%
Number of declared variables: 51
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 8
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE WCOPY(N,X,INCX,Y,INCY): 5
SUBROUTINE WAXPY(N,ALPHA,X,INCX,Y,INCY): 6
SUBROUTINE WSCAL(N,ALPHA,X,INCX): 12
KPP_REAL FUNCTION WLAMCH(C): 4
SUBROUTINE WLAMCH_ADD(A, B, SUMA): 1
SUBROUTINE SET2ZERO(N,Y): 5
KPP_REAL FUNCTION WDOT (N, DX, INCX, DY, INCY) : 7
SUBROUTINE WADD(N,X,Y,Z): 5
SUBROUTINE WGEFA(N,A,IPVT,INFO): 12
SUBROUTINE WGESL(TRANS,N,A,IPVT,B): 10

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.544
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400

Metric	Score
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	6.700

File score: 3.344

/home/miki/analizar/caaba_3.0/mecca/kpp/drv

general.f

Number of lines: 72
Implicit none: false
Number of functions: 0
Number of subroutines calls: 10
Ratio of number of lines with comments against commentable elements: 27.22%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.544
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 2.144

general_complete.f90

Number of lines: 114
Implicit none: false
Number of functions: 0
Number of subroutines calls: 11
Ratio of number of lines with comments against commentable elements: 27.20%
Number of declared variables: 4
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.544
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 2.144

general_soa.f90

Number of lines: 115
Implicit none: false
Number of functions: 0
Number of subroutines calls: 10
Ratio of number of lines with comments against commentable elements: 27.13%
Number of declared variables: 12
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.543
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 4.143

exact.f

Number of lines: 67
Implicit none: false
Number of functions: 0
Number of subroutines calls: 11
Ratio of number of lines with comments against commentable elements: 27.13%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.543
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 2.143

main.f

Number of lines: 53
Implicit none: false
Number of functions: 0
Number of subroutines calls: 4
Ratio of number of lines with comments against commentable elements: 27.13%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.543
number of nested loops	2.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 4.143

general.f90

Number of lines: 56
Implicit none: false
Number of functions: 0
Number of subroutines calls: 10
Ratio of number of lines with comments against commentable elements: 27.11%
Number of declared variables: 4
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: false
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.542
number of nested loops	2.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 3.742

general_adj.f90

Number of lines: 122
Implicit none: false
Number of functions: 0
Number of subroutines calls: 8
Ratio of number of lines with comments against commentable elements: 27.09%
Number of declared variables: 10
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.542
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 4.142

general_stochastic.f90

Number of lines: 63
Implicit none: true
Number of functions: 0
Number of subroutines calls: 4
Ratio of number of lines with comments against commentable elements: 27.15%
Number of declared variables: 9
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: false
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.543
number of nested loops	2.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 5.743

general_tlm.f90

Number of lines: 132
Implicit none: false
Number of functions: 0
Number of subroutines calls: 10
Ratio of number of lines with comments against commentable elements: 27.13%
Number of declared variables: 10
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.543
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 4.143

general_ddm_ic.f

Number of lines: 117
Implicit none: false
Number of functions: 0
Number of subroutines calls: 10
Ratio of number of lines with comments against commentable elements: 27.13%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.543
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 2.143

/home/miki/analizar/caaba_3.0

messy_mecca_kpp_parameters.f90

Number of lines: 404
Implicit none: false
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 25.60%
Number of declared variables: 342
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.512
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	0.000

File score: 2.112

messy_mecca_kpp_precision.f90

Number of lines: 17
Implicit none: false
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 25.65%
Number of declared variables: 3
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.513
number of nested loops	2.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	0.000

File score: 6.113

messy_traject_box.f90

Number of lines: 843
Implicit none: true
Number of functions: 0
Number of subroutines calls: 51
Ratio of number of lines with comments against commentable elements: 25.86%
Number of declared variables: 39
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 6
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE GET_MODEL_START_END: 22
SUBROUTINE GET_PHYSC_DATA: 16
SUBROUTINE TRAJECT_INIT: 6
SUBROUTINE TRAJECT_RESULT: 8
SUBROUTINE TRAJECT_FINISH: 1
SUBROUTINE TRAJECT_PHYSC: 3

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.517
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000

Metric	Score
use of the CYCLE statement	0.000
cyclomatic complexity	9.333

File score: 3.317

messy_main_blather.f90

Number of lines: 128
Implicit none: true
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 25.96%
Number of declared variables: 22
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: false
Number of subroutines: 4
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

CYCLOMATIC COMPLEXITY

SUBROUTINE START_MESSAGE(MODSTR, STR, SUBSTR, L_PRINT): 4
SUBROUTINE END_MESSAGE(MODSTR, STR, SUBSTR, L_PRINT): 4
SUBROUTINE INFO(STRING, SUBSTR, L_PRINT): 5
SUBROUTINE WARNING(STRING, SUBSTR, L_PRINT): 4

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.519
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.000
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	4.250

File score: 7.719

messy_main_rnd_mtw.f90

Number of lines: 368
Implicit none: true
Number of functions: 9
Number of subroutines calls: 4
Ratio of number of lines with comments against commentable elements: 25.79%
Number of declared variables: 83
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: false
--> variables declaration: false
--> subroutines declaration: true
--> control structures: false
Number of subroutines: 2
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

ELEMENTAL FUNCTION UIADD(A, B) RESULT(C): 1
ELEMENTAL FUNCTION UISUB(A, B) RESULT(C): 1
ELEMENTAL FUNCTION UIMLT(A, B) RESULT(C): 1
SUBROUTINE INIT_GENRAND(S): 1
SUBROUTINE INIT_BY_ARRAY(INIT_KEY): 6
FUNCTION GENRAND_INT32( ) RESULT(Y): 8
FUNCTION GENRAND_INT31( ) RESULT(I): 1
FUNCTION GENRAND_REAL1( ) RESULT(R): 1
FUNCTION GENRAND_REAL2( ) RESULT(R): 1
FUNCTION GENRAND_REAL3( ) RESULT(R): 1
FUNCTION GENRAND_RES53( ) RESULT(R): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.516
number of nested loops	0.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.000

Metric	Score
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.400
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	2.091

File score: 2.916

messy_jval_box.f90

Number of lines: 427
Implicit none: true
Number of functions: 0
Number of subroutines calls: 12
Ratio of number of lines with comments against commentable elements: 25.72%
Number of declared variables: 27
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 7
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE JVAL_INIT: 6
SUBROUTINE PHOTO_MBL: 1
SUBROUTINE PHOTO_STRATO: 1
SUBROUTINE JVAL_PHYSC: 6
SUBROUTINE JVAL_FINISH: 5
SUBROUTINE JVAL_RESULT: 2

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.514
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000

Metric	Score
use of the CYCLE statement	0.000
cyclomatic complexity	3.500

File score: 3.314

messy_readj_box.f90

Number of lines: 103
Implicit none: true
Number of functions: 0
Number of subroutines calls: 4
Ratio of number of lines with comments against commentable elements: 25.68%
Number of declared variables: 7
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 1
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE READJ_INIT: 4

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.514
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	4.000

File score: 3.314

messy_main_timer.f90

Number of lines: 1619
Implicit none: true
Number of functions: 8
Number of subroutines calls: 35
Ratio of number of lines with comments against commentable elements: 26.21%
Number of declared variables: 257
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 33
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE DATE_SET(DAY, SECOND, TIME): 1
SUBROUTINE DATE_SET_COMPONENTS(NYR,NMO,NDY,NHR,NMIN,NSEC,I_TIME): 18
SUBROUTINE DATE_GET(TIME, DAY, SECOND, IERR): 7
SUBROUTINE DATE_GET_COMPONENTS(TIME, YEAR, MONTH, DAY, HOUR&: 18
SUBROUTINE ADD_DATE (DAYS, SECONDS, MY_DAY, IERR): 8
SUBROUTINE COPY_DATE(DATE1,DATE2, IERR): 4
SUBROUTINE PRINT_DATE (DAY,IERR, MESS): 8
SUBROUTINE PRINT_DATE_COMPONENTS (DAY, IERR, MESS): 4
SUBROUTINE IF_LESS (DATE1, DATE2, LLESS, IERR): 9
SUBROUTINE IF_EQUAL (DATE1, DATE2, LEQ, IERR): 8
SUBROUTINE IS_INIT(DATE,LINIT): 1
INTEGER FUNCTION MONTHLENGTH(KY, KM): 5
INTEGER FUNCTION JULIANMONTHLENGTH(KY, KM): 8
INTEGER FUNCTION YEARLENGTH(YR): 5
INTEGER FUNCTION JULIANYEARLENGTH(YR): 4
FUNCTION YEARDAY (DATE) RESULT (DAYNO) : 7
FUNCTION JULIAN_DAY(DD, MM, YY): 3
SUBROUTINE TIME_SPAN_S(DTS &: 1
SUBROUTINE TIME_SPAN_D(DTD &: 1
FUNCTION GREGOR2JULIAN(YY, MM, DD, HR, MI, SE) RESULT(JULIAN_DATE): 3

SUBROUTINE JULIAN2GREGOR(JDATE, YEAR, MONTH, DAY, HRS, MINS, SECS): 14
FUNCTION UTC2LT(STATUS, MODEL_TIME, DEGREE_LON): 4
SUBROUTINE TIMER_SET_DATE_STR(STATUS, STRFLAG, YR, MO, DY, HR, MI, SE): 9
SUBROUTINE TIMER_SET_DATE_MYD(STATUS, MY_DATE, YR, MO, DY, HR, MI, SE): 1
SUBROUTINE TIMER_SET_DATE_STR_DS(STATUS, STRFLAG, DAY, SECOND): 9
SUBROUTINE TIMER_SET_DATE_MYD_DS(STATUS, MY_DATE, DAY, SECOND): 1
SUBROUTINE TIMER_GET_DATE_STR(STATUS, STRFLAG, YR, MO, DY, HR, MI, SE): 10
SUBROUTINE TIMER_GET_DATE_MYD(STATUS, MY_DATE, YR, MO, DY, HR, MI, SE): 1
SUBROUTINE TIMER_SET_CALENDAR(STATUS, STRCAL): 5
SUBROUTINE TIMER_GET_CALENDAR(STATUS, ICAL): 1
SUBROUTINE TIMER_SET_DELTA_TIME(STATUS, DT): 1
SUBROUTINE TIMER_GET_DELTA_TIME(STATUS, DT): 1
SUBROUTINE TIMER_ADD_DATE(STATUS, ADD_SECONDS, IYR, IMO, IDY, IHR, IMI, ISE &: 2
SUBROUTINE TIMER_SET_LRESUME: 1
SUBROUTINE TIMER_GET_LRESUME(LR): 1
SUBROUTINE TIMER_SET_TIME_STEP_LEN(L2TLS): 4
SUBROUTINE TIMER_SET_NO_CYCLES(NCYC): 1
SUBROUTINE TIMER_GET_NO_CYCLES(NCYC): 1
SUBROUTINE TIMER_SET_LABORT(LA): 1
SUBROUTINE TIMER_GET_LABORT(LA): 1
SUBROUTINE EVAL_TIME_STR(STATUS, Z_TIME_STRING, Z_TUF, Z_YEAR, Z_MONTH, &: 48

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.524
number of nested loops	2.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	1.000
use of the CYCLE statement	0.000
cyclomatic complexity	5.854

File score: 5.924

messy_mecca_kpp_function.f90

Number of lines: 171
Implicit none: true
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 26.27%
Number of declared variables: 5
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: true
--> subroutines declaration: false
--> control structures: true
Number of subroutines: 1
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE FUN (V, F, RCT, VDOT): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.525
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	1.000

File score: 3.725

messy_mecca_kpp_integrator.f90

Number of lines: 1274
Implicit none: true
Number of functions: 1
Number of subroutines calls: 55
Ratio of number of lines with comments against commentable elements: 26.51%
Number of declared variables: 111
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 15
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INTEGRATE(TIN, TOUT, &: 8
SUBROUTINE ROSENBROCK(N,Y,TSTART,TEND, &: 38
SUBROUTINE ROS_INTEGRATOR (Y, TSTART, TEND, T, &: 20
REAL(KIND=DP) FUNCTION ROS_ERRORNORM (Y, YNEW, YERR, &: 3
SUBROUTINE ROS_FUNTIMEDERIVATIVE (T, ROUNDOFF, Y, &: 1
SUBROUTINE ROS_PREPAREMATRIX (H, DIRECTION, GAM, &: 6
SUBROUTINE ROS_DECOMP(A, PIVOT, ISING): 2
SUBROUTINE ROS_SOLVE(A, PIVOT, B): 2
SUBROUTINE ROS2: 1
SUBROUTINE ROS3: 1
SUBROUTINE ROS4: 1
SUBROUTINE RODAS3: 1
SUBROUTINE RODAS4: 1
SUBROUTINE FUNTEMPLATE(T, Y, YDOT): 1
SUBROUTINE JACTEMPLATE(T, Y, JCB): 4

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.530

Metric	Score
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	6.000

File score: 2.930

messy_readj.f90

Number of lines: 39
Implicit none: true
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 26.52%
Number of declared variables: 1
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: true
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.530
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	0.000

File score: 8.530

messy_mecca_kpp_util.f90

Number of lines: 314
Implicit none: true
Number of functions: 1
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 26.57%
Number of declared variables: 7
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 8
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INITIALIZE_INDEXARRAYS: 1
SUBROUTINE INITSAVEDATA (): 1
SUBROUTINE SAVEDATA (): 1
SUBROUTINE CLOSESAVEDATA (): 1
SUBROUTINE GENERATEMATLAB (PREFIX): 1
ELEMENTAL INTEGER FUNCTION TAG2NUM (ID): 2
SUBROUTINE SHUFFLE_USER2KPP (V_USER, V): 1
SUBROUTINE SHUFFLE_KPP2USER (V, V_USER): 1
SUBROUTINE GETMASS (CL, MASS): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.531
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000

Metric	Score
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	1.111

File score: 4.931

messy_mecca_kpp_jacobiansp.f90

Number of lines: 88
Implicit none: false
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 26.55%
Number of declared variables: 4
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.531
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	0.000

File score: 6.131

messy_main_tools_kp4_compress.f90

Number of lines: 204
Implicit none: true
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 26.51%
Number of declared variables: 27
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: true
Number of subroutines: 3
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE KCO_INITIALIZE (NPOINTS_INITIAL, F, IERR, KACC, KREJ): 1
SUBROUTINE KCO_COMPRESS (N_POINTS, T, H, HNEW, IERR, F, RCONST, FIX, &: 10
SUBROUTINE KCO_FINALIZE (F, IERR, KACC, KREJ): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.530
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	4.000

File score: 3.730

messy_mecca_kpp_initialize.f90

Number of lines: 83
Implicit none: true
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 26.50%
Number of declared variables: 2
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: true
Number of subroutines: 1
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INITIALIZE ( ): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.530
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.400
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	1.000

File score: 5.730

messy_mecca_box.f90

Number of lines: 1597
Implicit none: true
Number of functions: 0
Number of subroutines calls: 59
Ratio of number of lines with comments against commentable elements: 26.40%
Number of declared variables: 64
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 20
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE MECCA_INIT: 13
SUBROUTINE DEFINE_AEROSOL: 28
SUBROUTINE X0: 24
SUBROUTINE X0_FF_ANTARCTIC: 19
SUBROUTINE X0_FF_ARCTIC: 17
SUBROUTINE X0_HOOVER: 6
SUBROUTINE X0_FREE_TROP: 114
SUBROUTINE X0_LAB: 4
SUBROUTINE X0_MBL: 20
SUBROUTINE X0_MIM2: 23
SUBROUTINE X0_OOMPH: 4
SUBROUTINE X0_STRATO20: 40
SUBROUTINE X0_STRATO10: 40
SUBROUTINE X0_MESO: 39
SUBROUTINE MECCA_PHYSC: 31
SUBROUTINE CHECK_RANGE(INFOSTRING,CONC): 2
SUBROUTINE MECCA_RESULT: 5
SUBROUTINE MECCA_FINISH: 5

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.528
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	24.111

File score: 3.328

messy_jval.f90

Number of lines: 2651
Implicit none: true
Number of functions: 3
Number of subroutines calls: 9
Ratio of number of lines with comments against commentable elements: 26.15%
Number of declared variables: 244
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 12
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE AEROSOL_DATA: 1
SUBROUTINE COMBINE_O3_FIELDS(INPUT_O3, PRESS_2D, &: 5
SUBROUTINE JVALUES(JROW,   &: 25
SUBROUTINE FLUX_CAL: 3
SUBROUTINE SLINGO: 1
SUBROUTINE AERO_2D: 11
SUBROUTINE PIFM: 15
SUBROUTINE PIFMINI: 9
SUBROUTINE JVAL_CAL_UV(JROW): 1
FUNCTION P1(C0,C1,X): 1
FUNCTION P2(C0,C1,C2,X): 1
FUNCTION P3(C0,C1,C2,C3,X): 1
SUBROUTINE JVAL_READ_NML_CTRL(STATUS, IOU): 3
SUBROUTINE JVAL_SOLAR_TIME_CONTROL(STATUS, CDISSE, VAL): 6

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.523
number of nested loops	0.000

Metric	Score
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	5.929

File score: 2.923

messy_sappho.f90

Number of lines: 217
Implicit none: true
Number of functions: 0
Number of subroutines calls: 3
Ratio of number of lines with comments against commentable elements: 26.14%
Number of declared variables: 10
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 4
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

CYCLOMATIC COMPLEXITY

SUBROUTINE JVALUES(COSSZA, PHOTO_SCENARIO, RAD_LAT, PHOTON): 7
SUBROUTINE PHOTO_LAB: 1
SUBROUTINE PHOTO_MBL: 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.523
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	3.000

File score: 7.323

messy_mecca_kpp_monitor.f90

Number of lines: 147
Implicit none: false
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 26.10%
Number of declared variables: 9
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.522
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	0.000

File score: 6.122

messy_sappho_box.f90

Number of lines: 132
Implicit none: true
Number of functions: 0
Number of subroutines calls: 4
Ratio of number of lines with comments against commentable elements: 26.09%
Number of declared variables: 6
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: true
Number of subroutines: 4
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

CYCLOMATIC COMPLEXITY

SUBROUTINE SAPPHO_INIT: 1
SUBROUTINE SAPPHO_PHYSC: 1
SUBROUTINE SAPPHO_FINISH: 1
SUBROUTINE SAPPHO_RESULT: 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.522
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.400
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	1.000

File score: 7.722

messy_main_rnd.f90

Number of lines: 249
Implicit none: true
Number of functions: 0
Number of subroutines calls: 10
Ratio of number of lines with comments against commentable elements: 26.04%
Number of declared variables: 29
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 4
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE RND_INIT(STATUS, ID, METHOD, PSEED): 10
SUBROUTINE RND_SEED(ID, SIZE, PUT, GET): 4
SUBROUTINE RND_NUMBER(ID, HARVEST, GET): 11
SUBROUTINE RND_FINISH(ID): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.521
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	6.500

File score: 3.321

messy_mecca_kpp_global.f90

Number of lines: 313
Implicit none: false
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 25.92%
Number of declared variables: 166
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.518
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	0.000

File score: 6.118

messy_mecca_kpp_linearalgebra.f90

Number of lines: 1264
Implicit none: true
Number of functions: 2
Number of subroutines calls: 5
Ratio of number of lines with comments against commentable elements: 25.97%
Number of declared variables: 126
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 19
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE KPPDECOMP(JVS, IER): 3
SUBROUTINE KPPDECOMPCMPLX(JVS, IER): 3
SUBROUTINE KPPDECOMPCMPLXR(JVSR, JVSI, IER): 3
SUBROUTINE KPPSOLVEINDIRECT(JVS, X): 1
SUBROUTINE KPPSOLVETRINDIRECT(JVS, X): 1
SUBROUTINE KPPSOLVECMPLX(JVS, X): 1
SUBROUTINE KPPSOLVECMPLXR(JVSR, JVSI, XR, XI): 1
SUBROUTINE KPPSOLVETRCMPLX(JVS, X): 1
SUBROUTINE KPPSOLVETRCMPLXR(JVSR, JVSI, XR, XI): 1
SUBROUTINE KPPSOLVE (JVS, X): 1
SUBROUTINE KPPSOLVETR (JVS, X, XX): 1
SUBROUTINE WCOPY(N,X,INCX,Y,INCY): 5
SUBROUTINE WAXPY(N,ALPHA,X,INCX,Y,INCY): 6
SUBROUTINE WSCAL(N,ALPHA,X,INCX): 12
REAL(KIND=DP) FUNCTION WLAMCH(C): 4
SUBROUTINE WLAMCH_ADD(A, B, SUMA): 1
SUBROUTINE SET2ZERO(N,Y): 5
REAL(KIND=DP) FUNCTION WDOT (N, DX, INCX, DY, INCY) : 7
SUBROUTINE WADD(N,X,Y,Z): 5
SUBROUTINE WGEFA(N,A,IPVT,INFO): 12

SUBROUTINE WGESL(TRANS,N,A,IPVT,B): 10

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.519
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	4.000

File score: 3.319

messy_mecca_aero.f90

Number of lines: 275
Implicit none: true
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 25.78%
Number of declared variables: 48
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 5
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE MECCA_AERO_INIT_GASAQ(L_PRINT): 7
SUBROUTINE MECCA_AERO_CALC_K_EX(&: 7
SUBROUTINE MECCA_AERO_CALC_K_EX_OCEAN(XAER, RADIUS, TEMP, ZMIX, &: 1
SUBROUTINE MECCA_AERO_DIAG(ZMR_BRSALT, ZMR_BRORG, ZMR_BRSSCAP, &: 6

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.516
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	5.250

File score: 3.316

caaba.f90

Number of lines: 689
Implicit none: true
Number of functions: 0
Number of subroutines calls: 25
Ratio of number of lines with comments against commentable elements: 25.79%
Number of declared variables: 36
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 6
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE CAABA_READ_NML(STATUS, IOU): 65
SUBROUTINE CALC_SZA: 4
SUBROUTINE CAABA_RESULT: 4
SUBROUTINE CAABA_INIT: 9
SUBROUTINE CAABA_PHYSC: 1
SUBROUTINE CAABA_FINISH: 2

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.516
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000

Metric	Score
use of the CYCLE statement	0.000
cyclomatic complexity	14.167

File score: 3.316

messy_main_rnd_lux.f90

Number of lines: 376
Implicit none: true
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 25.74%
Number of declared variables: 26
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 5
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE RANLUX(RVEC, LENV): 18
SUBROUTINE RLUXIN: 7
SUBROUTINE RLUXUT: 2
SUBROUTINE RLUXAT(LOUT, INOUT, K1, K2): 1
SUBROUTINE RLUXGO(LUX, INS, K1, K2): 24

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.515
number of nested loops	2.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000

Metric	Score
cyclomatic complexity	10.400

File score: 4.915

messy_semidep_box.f90

Number of lines: 291
Implicit none: true
Number of functions: 0
Number of subroutines calls: 11
Ratio of number of lines with comments against commentable elements: 25.67%
Number of declared variables: 4
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 14
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

CYCLOMATIC COMPLEXITY

SUBROUTINE SEMIDEP_PHYSC: 1
SUBROUTINE EMISSION: 15
SUBROUTINE EMISSION_MBL: 4
SUBROUTINE EMISSION_LAB: 2
SUBROUTINE EMISSION_MIM2: 2
SUBROUTINE EMISSION_FF: 2
SUBROUTINE EMISSION_OOMPH: 4
SUBROUTINE DRYDEP: 9
SUBROUTINE DRYDEP_MBL: 25
SUBROUTINE DRYDEP_LAB: 2
SUBROUTINE DRYDEP_MIM2: 12
SUBROUTINE DRYDEP_DEFAULT: 3

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.513
number of nested loops	2.000
comments at the beginning of the document	0.400

Metric	Score
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	6.750

File score: 7.313

messy_mecca.f90

Number of lines: 202
Implicit none: true
Number of functions: 1
Number of subroutines calls: 7
Ratio of number of lines with comments against commentable elements: 25.75%
Number of declared variables: 29
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 3
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

CYCLOMATIC COMPLEXITY

SUBROUTINE MECCA_READ_NML_CTRL(STATUS, IOU): 8
SUBROUTINE INITIALIZE_KPP_VARIABLES: 6
LOGICAL FUNCTION STEADY_STATE_REACHED(C,TIMESTEPLEN): 2
SUBROUTINE DEFINE_MCEXP(STATUS, MCEXP): 2

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.515
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	4.500

File score: 6.915

messy_main_constants_mem.f90

Number of lines: 157
Implicit none: true
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 26.15%
Number of declared variables: 76
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.523
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	0.000

File score: 8.123

messy_main_tools.f90

Number of lines: 2188
Implicit none: true
Number of functions: 23
Number of subroutines calls: 2
Ratio of number of lines with comments against commentable elements: 27.48%
Number of declared variables: 361
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: false
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: true
--> control structures: false
Number of subroutines: 18
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE READ_NML_OPEN(LEX, SUBSTR, IOU, NMLSTR, MODSTR): 3
SUBROUTINE READ_NML_CHECK(FSTAT, SUBSTR, IOU, NMLSTR, MODSTR): 3
SUBROUTINE READ_NML_CLOSE(SUBSTR, IOU, MODSTR): 1
SUBROUTINE ISO2IND_1D(FIELD, ISO, K, F, LREV): 16
SUBROUTINE ISO2IND_2D(KPROMA, FIELD, ISO, K, F, LREV): 18
SUBROUTINE IND2VAL_1D(VAL, FIELD, K, F): 9
SUBROUTINE IND2VAL_2D(KPROMA, VAL, FIELD, K, F): 9
SUBROUTINE INT2STR(STR, II, CPAD, CERR): 9
CHARACTER(LEN=5) FUNCTION STR_LOGICAL(ZLOGICAL, FMT): 3
CHARACTER(LEN=STRLEN_LONG) FUNCTION STR_INTEGER(ZINTEGER, FMT): 2
CHARACTER(LEN=STRLEN_LONG) FUNCTION STR_REAL_SP(ZREAL_SP, FMT): 2
CHARACTER(LEN=STRLEN_LONG) FUNCTION STR_REAL_DP(ZREAL_DP, FMT): 2
SUBROUTINE STRCRACK(STR, CH, EL, N): 12
SUBROUTINE NS_INDEX(LIST, VALUE, IDX, IDX2, L_PERIODIC): 15
SUBROUTINE NN_INDEX(LIST, VALUE, IDX, IDX2): 11
FUNCTION FLIPARRAY(LIST) RESULT(BUFFER): 1
SUBROUTINE INIT_CONVECT_TABLES: 3
LOGICAL FUNCTION MATCH_WILD(PATTERN, STRING): 17
SUBROUTINE STR2CHOB(STATUS, STR, N, C, O): 14
SUBROUTINE BILIN_WEIGHT(VN, V, W): 1

REAL(DP) FUNCTION PSAT_MK(P_TEMP, P_L_LIQUID): 6
SUBROUTINE UCASE(STRING): 4
REAL(DP) FUNCTION SPEC2RELHUMWMO(STATUS, Z_SPECHUM, Z_TEMP, Z_PRESS, &: 9
REAL(DP) FUNCTION SPEC2RELHUM(STATUS, Z_SPECHUM, Z_TEMP, Z_PRESS, &: 7
REAL(DP) FUNCTION REL2SPECHUMWMO(STATUS, Z_RELHUM, Z_TEMP, Z_PRESS, &: 3
REAL(DP) FUNCTION REL2SPECHUM(STATUS, Z_RELHUM, Z_TEMP, Z_PRESS, &: 3
REAL(DP) FUNCTION RH2MR(STATUS, P_RELHUM, P_TEMP, P_PRESS, &: 4
REAL(DP) FUNCTION RELHUM2MR(STATUS, Z_RELHUM, Z_TEMP, Z_PRESS, &: 6
REAL(DP) FUNCTION RELHUMWMO2MR(STATUS, Z_RELHUM, Z_TEMP, Z_PRESS, &: 7
REAL(DP) FUNCTION CAIR_TRAD(STATUS, Z_RELHUM, Z_TEMP, Z_PRESS,
Z_L_PSAT_EMAC): 4
REAL(DP) FUNCTION CAIR_WMO(STATUS, Z_RELHUM, Z_TEMP, Z_PRESS,
Z_L_PSAT_EMAC): 4
FUNCTION REMAP_BOUNDS1(LB1,ARRAY) RESULT(PTR): 1
FUNCTION REMAP_BOUNDS2(LB1,LB2,ARRAY) RESULT(PTR): 1
FUNCTION REMAP_BOUNDS3(LB1,LB2,LB3,ARRAY) RESULT(PTR): 1
FUNCTION REMAP_BOUNDS4(LB1,LB2,LB3,LB4,ARRAY) RESULT(PTR): 1
SUBROUTINE FULL2HALF(FULL,HALF,PRESS,PRESSI): 1
SUBROUTINE SPLINE1D(X,Y,N,YP1,YPN,Y2,NATSPLINE): 4
SUBROUTINE SPLINT1D(XA,YA,Y2A,N,X,Y,STATUS): 4
FUNCTION FIND_NEXT_FREE_UNIT(ISTART,ISTOP) RESULT(UNIT): 5
ELEMENTAL REAL(DP) FUNCTION DENSITY(PRESS, TEMP, SPHUM): 1
ELEMENTAL REAL(DP) FUNCTION LAYERTHICKNESS(GEOPOT_U, GEOPOT_L): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.550
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.000
comments in the declaration of a subroutine	0.400
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	5.561

File score: 3.350

messy_mecca_kpp.f90

Number of lines: 474
Implicit none: true
Number of functions: 0
Number of subroutines calls: 9
Ratio of number of lines with comments against commentable elements: 27.52%
Number of declared variables: 93
Complies with maximum nesting complexity of loops and comments format: false
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: false
Number of subroutines: 20
Use of the sentence EXIT to exit in the repetitive structures: false
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: false

CYCLOMATIC COMPLEXITY

SUBROUTINE INITIALIZE_KPP_CTRL(STATUS, IOU, MODSTR): 5
SUBROUTINE ERROR_OUTPUT(C,IERR,PE): 5
SUBROUTINE KPP_INTEGRATE (TIME_STEP,CONC,IERRF,XNACC,XNREJ,ISTATUS,&: 10
SUBROUTINE FILL_TEMP(STATUS,ARRAY): 1
SUBROUTINE FILL_CAIR(STATUS,ARRAY): 1
SUBROUTINE FILL_PRESS(STATUS,ARRAY): 1
SUBROUTINE FILL_MCEXP(STATUS,ARRAY): 1
SUBROUTINE FILL_XAER(STATUS,ARRAY): 1
SUBROUTINE FILL_CVFAC(STATUS,ARRAY): 1
SUBROUTINE FILL_LWC(STATUS,ARRAY): 1
SUBROUTINE FILL_K_EXF(STATUS,ARRAY): 1
SUBROUTINE FILL_K_EXB(STATUS,ARRAY): 1
SUBROUTINE FILL_K_EXF_N2O5(STATUS,ARRAY): 1
SUBROUTINE FILL_K_EXF_CLNO3(STATUS,ARRAY): 1
SUBROUTINE FILL_K_EXF_BRNO3(STATUS,ARRAY): 1
SUBROUTINE FILL_JX(STATUS,ARRAY): 1
SUBROUTINE FILL_KHET_TR(STATUS,ARRAY): 1
SUBROUTINE FILL_KHET_ST(STATUS,ARRAY): 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.550
number of nested loops	0.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.000
use of the EXIT statement	0.000
use of the CYCLE statement	0.000
cyclomatic complexity	1.944

File score: 3.350

messy_mecca_dbl_box.f90

Number of lines: 104
Implicit none: true
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 27.49%
Number of declared variables: 1
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: true
Number of subroutines: 6
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

CYCLOMATIC COMPLEXITY

SUBROUTINE MECCA_DBL_X0: 1
SUBROUTINE MECCA_DBL_EMIS: 1
SUBROUTINE MECCA_DBL_POSTPROCESS: 1
SUBROUTINE MECCA_DBL_INIT: 1
SUBROUTINE MECCA_DBL_RESULT(MODEL_TIME): 1
SUBROUTINE MECCA_DBL_FINISH: 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.550
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.400
use of the EXIT statement	1.000

Metric	Score
use of the CYCLE statement	1.000
cyclomatic complexity	1.000

File score: 7.750

caaba_io.f90

Number of lines: 13
Implicit none: false
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 27.49%
Number of declared variables: 0
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: false
--> variables declaration: true
--> subroutines declaration: true
--> control structures: true
Number of subroutines: 0
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

Metric	Score
the use of IMPLICIT NONE	0.000
ratio	0.550
number of nested loops	2.000
comments at the beginning of the document	0.000
comments in the declaration of a variable	0.400
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.400
comments in control structures	0.400
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	0.000

File score: 6.150

messy_mecca_tag_box.f90

Number of lines: 93
Implicit none: true
Number of functions: 0
Number of subroutines calls: 0
Ratio of number of lines with comments against commentable elements: 27.45%
Number of declared variables: 7
Complies with maximum nesting complexity of loops and comments format: true
Good comments at:
--> declared functions: true
--> at the beginning of the file: true
--> variables declaration: false
--> subroutines declaration: false
--> control structures: true
Number of subroutines: 7
Use of the sentence EXIT to exit in the repetitive structures: true
Use of the sentence CYCLE to avoid making certain statements, iterating to the following element: true

CYCLOMATIC COMPLEXITY

SUBROUTINE MECCA_TAG_EMIS: 1
SUBROUTINE MECCA_TAG_PREPARE(C): 1
SUBROUTINE MECCA_TAG_PROCESS(TSL, C, PRESS, CAIR, TEMP): 1
SUBROUTINE MECCA_TAG_RESETPTS: 1
SUBROUTINE MECCA_TAG_INIT: 1
SUBROUTINE MECCA_TAG_RESULT(MODEL_TIME): 1
SUBROUTINE MECCA_TAG_FINISH: 1

Metric	Score
the use of IMPLICIT NONE	2.000
ratio	0.549
number of nested loops	2.000
comments at the beginning of the document	0.400
comments in the declaration of a variable	0.000
comments in the declaration of a function	0.400
comments in the declaration of a subroutine	0.000
comments in control structures	0.400

Metric	Score
use of the EXIT statement	1.000
use of the CYCLE statement	1.000
cyclomatic complexity	1.000

File score: 7.749

Summary

File name	Score
messy_cmn_gasaq.f90	2.793
caaba_mem.f90	4.561
messy_cmn_photol_mem.f90	8.569
messy_mecca_kpp_jacobian.f90	8.628
messy_main_control_cb.f90	7.780
messy_mecca_khet.f90	7.382
messy_mecca_kpp_rates.f90	3.432
template_messy_mecca_kpp.f90	3.686
messy_mecca_kpp_jacobian.f90	8.514
messy_mecca_khet.f90	7.318
messy_mecca_kpp_rates.f90	3.352
messy_mecca_kpp_parameters.f90	2.158
messy_mecca_kpp_precision.f90	6.164
messy_mecca_kpp_function.f90	3.772
messy_mecca_kpp_integrator.f90	2.996
messy_mecca_kpp_util.f90	5.001
messy_mecca_kpp_jacobiansp.f90	6.198
messy_mecca_kpp_initialize.f90	5.796
messy_mecca_kpp_monitor.f90	6.191
messy_mecca_kpp_global.f90	6.167
messy_mecca_kpp_linearalgebra.f90	3.366
messy_mecca_aero.f90	3.344
messy_mecca.f90	6.952
messy_mecca_kpp.f90	3.356
imtag_tag_box.f90	7.754
imtag_iso_box.f90	3.360
imtag_tag.f90	7.360
imtag-i_linmax.inc.f90	2.160
imtag-i_bulsto.inc.f90	0.953
imtag-i_cashkarp.inc.f90	2.946

File name	Score
imtag-i_linealg.inc.f90	2.939
imtag-i_cashkarp-call.inc.f90	6.539
imtag-i_simeuler.inc.f90	2.139
imtag-i_cg1.inc.f90	1.739
imtag_tag_common.f90	6.947
imtag_iso.f90	3.361
imdouble_cfg_si.f90	2.963
imdouble_dbl_box.f90	7.759
imdouble_dbl_si.f90	3.362
imdouble_frac_box.f90	3.360
imdouble_cfg_box.f90	3.363
imdouble_cfg.f90	3.362
imdouble_dbl_common.f90	3.369
messy_mecca_exp.f90	2.967
kpp_odessa_ddm.f	0.961
sdirk.f90	2.959
sdirk.f	1.359
runge_kutta_adj.f90	2.943
ros3_old.f90	2.542
kpp_dvode.f	0.934
gillespie.f90	2.931
rosenbrock_tlm.f90	3.349
kpp_seulex.f	0.949
atm_odessa_ddm.f	0.945
atm_radau5.f	2.544
exqssa.f	1.344
ros3.f	3.344
ros1_ddm.f	2.944
ros4_ddm.f	2.943
qssa.f	1.343
rodas3_ddm.f	2.943
ros2.f	3.343

File name	Score
ros2_cts_adj.f	0.943
qssa1.f	1.343
twostepj.f	0.943
qssafix.f	3.343
ros1.f	0.943
ros4.f	2.942
ros2.f90	5.341
rodas3.f	3.341
ros3_ddm.f	2.941
kpp_rodas.f	1.341
kpp_ros4.f	1.341
ros2_ddm.f	2.941
runge_kutta.f90	2.934
kpp_sdirk4.f	1.334
kpp_radau5.f90	2.923
rosenbrock_mz.f90	2.526
atm_lsodes.f	2.924
runge_kutta_tlm.f90	3.318
tau_leap.f90	2.903
ros2_manual.f90	4.903
kpp_sdirk4.f90	2.903
rosenbrock_adj.f90	3.323
kpp_lsode.f90	2.927
rosenbrock.f	3.334
ros2_manual.f90	4.934
rosenbrock.f90	2.940
kpp_seulex.f90	3.335
sdirk_adj.f90	2.936
sdirk_tlm.f90	3.335
rosenbrock_posdef.f90	2.940
dFun_dRcoeff.f	5.740
UserRateLaws_FcnHeader.f	5.740

File name	Score
mex.f	1.740
Makefile.f	1.740
dJac_dRcoeff.f90	6.140
UserRateLaws.f	5.739
dFun_dRcoeff.f90	6.139
Mex_Fun.f	0.939
blas.f	3.742
Mex_Jac_SP.f90	2.142
Mex_Hessian.f	0.942
Mex_Hessian.f90	1.743
Mex_Jac_SP.f	0.943
sutil.f90	1.345
Mex_Fun.f90	1.746
UpdateSun.f	7.346
sutil.f	1.346
UpdateSun.f90	7.345
Makefile.f90	5.745
util.f90	4.145
tag2num.f90	4.345
dJac_dRcoeff.f	5.745
util.f	3.345
UserRateLaws.f90	5.747
blas.f90	3.344
general.f	2.144
general_complete.f90	2.144
general_soa.f90	4.143
exact.f	2.143
main.f	4.143
general.f90	3.742
general_adj.f90	4.142
general_stochastic.f90	5.743
general_tlm.f90	4.143

File name	Score
general_ddm_ic.f	2.143
messy_mecca_kpp_parameters.f90	2.112
messy_mecca_kpp_precision.f90	6.113
messy_traject_box.f90	3.317
messy_main_blather.f90	7.719
messy_main_rnd_mtw.f90	2.916
messy_jval_box.f90	3.314
messy_readj_box.f90	3.314
messy_main_timer.f90	5.924
messy_mecca_kpp_function.f90	3.725
messy_mecca_kpp_integrator.f90	2.930
messy_readj.f90	8.530
messy_mecca_kpp_util.f90	4.931
messy_mecca_kpp_jacobiansp.f90	6.131
messy_main_tools_kp4_compress.f90	3.730
messy_mecca_kpp_initialize.f90	5.730
messy_mecca_box.f90	3.328
messy_jval.f90	2.923
messy_sappho.f90	7.323
messy_mecca_kpp_monitor.f90	6.122
messy_sappho_box.f90	7.722
messy_main_rnd.f90	3.321
messy_mecca_kpp_global.f90	6.118
messy_mecca_kpp_linearalgebra.f90	3.319
messy_mecca_aero.f90	3.316
caaba.f90	3.316
messy_main_rnd_lux.f90	4.915
messy_semidep_box.f90	7.313
messy_mecca.f90	6.915
messy_main_constants_mem.f90	8.123
messy_main_tools.f90	3.350
messy_mecca_kpp.f90	3.350

File name	Score
messy_mecca_dbl_box.f90	7.750
caaba_io.f90	6.150
messy_mecca_tag_box.f90	7.749

Total number of files: 161

Total number of lines: 98963

Final table

Metric	Score
the use of IMPLICIT NONE	1.292
ratio	0.567
number of nested loops	0.733
comments at the beginning of the document	0.243
comments in the declaration of a variable	0.157
comments in the declaration of a function	0.234
comments in the declaration of a subroutine	0.119
comments in control structures	0.132
use of the EXIT statement	0.236
use of the CYCLE statement	0.224
cyclomatic complexity	5.484

Final score: 3.022