

/Users/lp1opa/Compare/camb_simdata/hyre
c.F90, Top line: 1

```
01      !-----
02      ! Recombination module for
03      ! Author: Antony Lewis
04      !-----
05
06      module Recombination
07      use constants
08      use AMLUtils
09      implicit none
10      private
11
12      type RecombinationParams
13
14      end type RecombinationParam
15
16      character(LEN=*), parameter
17
18      public RecombinationParams,
19      Recombination_ReadParams, R
20      Recombination_Validate, Rec
21
22
23      contains
24
25      subroutine Recombination_Re
26      use IniFile
27      Type(RecombinationParams) :
28      Type(TIniFile) :: Ini
29
30
```

/Users/lp1opa/Compare/camb_des/hyrec.F9
0, Top line: 1

```
01      !-----
02      ! Recombination module for
03      ! Author: Antony Lewis
04      !-----
05
06      module Recombination
07      use constants
08      use AMLUtils
09      implicit none
10      private
11
12      type RecombinationParams
13
14      end type RecombinationParam
15
16      character(LEN=*), parameter
17
18      public RecombinationParams,
19      Recombination_ReadParam
20      Recombination_Validate,
21
22
23      contains
24
25      subroutine Recombination_Re
26      use IniFile
27      Type(RecombinationParams) :
28      Type(TIniFile) :: Ini
29
30
```

/Users/lp1opa/Compare/camb_simdata/hyrec.F90, Top line: 31

```
31      end subroutine Recombination
32
33
34      subroutine Recombination_Se
35      type (RecombinationParams)
36
37
38      end subroutine Recombination
39
40
41      subroutine Recombination_Va
42      Type(RecombinationParams),
43      logical, intent(inout) :: O
44
45
46      end subroutine Recombination
47
48
49
50      function Recombination_tm(a
51      real(dl), intent(in) :: a
52      real(dl) Recombination_tm,
53      external hyrec_tm
54
55      Recombination_tm = hyrec_t
56
57      end function Recombination_
58
59
60      function Recombination_xe(a
```

/Users/lp1opa/Compare/camb_des/hyrec.F90, Top line: 31

```
31      end subroutine Recombination
32
33
34      subroutine Recombination_Se
35      type (RecombinationParams)
36
37
38      end subroutine Recombination
39
40
41      subroutine Recombination_Va
42      Type(RecombinationParams),
43      logical, intent(inout) :: O
44
45
46      end subroutine Recombination
47
48
49
50      function Recombination_tm(a
51      real(dl), intent(in) :: a
52      real(dl) Recombination_tm,
53      external hyrec_tm
54
55      Recombination_tm = hyrec_t
56
57      end function Recombination_
58
59
60      function Recombination_xe(a
```

/Users/lp1opa/Compare/camb_simdata/hyrec.F90, Top line: 61

```
61      real(dl), intent(in) :: a
62      real(dl) Recombination_xe,h
63      external hyrec_xe
64
65      Recombination_xe = hyrec_xe
66
67      end function Recombination_
68
69
70      subroutine Recombination_in
71      use AMLUtils
72      implicit none
73      Type (RecombinationParams),
74      real(dl), intent(in) :: Ome
75      external rec_build_history_
76
77      call rec_build_history_camb
78
79      end subroutine Recombinatio
80
81
82
83
84      end module Recombination
85
86
```

/Users/lp1opa/Compare/camb_des/hyrec.F90, Top line: 61

```
61      real(dl), intent(in) :: a
62      real(dl) Recombination_xe,h
63      external hyrec_xe
64
65      Recombination_xe = hyrec_xe
66
67      end function Recombination_
68
69
70      subroutine Recombination_in
71      use AMLUtils
72      implicit none
73      Type (RecombinationParams),
74      real(dl), intent(in) :: Ome
75      external rec_build_history_
76
77      call rec_build_history_camb
78
79      end subroutine Recombinatio
80
81
82
83
84      end module Recombination
85
86
```