	rs/lplopa/Compare/camb_simdata/hyre 0, Top line: 1		ers/lp1opa/Compare/camb_des/hyrec.F9 Cop line: 1
01	!	01	!
02	! Recombination module for	02	! Recombination module for
03	! Author: Antony Lewis	03	! Author: Antony Lewis
04	!	04	!
05		05	
06	module Recombination	06	module Recombination
07	use constants	07	use constants
08	use AMLUtils	80	use AMLUtils
09	implicit none	09	implicit none
10	private	10	private
11	_	11	
12	type RecombinationParams	12	type RecombinationParams
13		13	
14	end type RecombinationParam	14	end type RecombinationParam
15		15	
16	<pre>character(LEN=*), parameter</pre>	16	<pre>character(LEN=*), parameter</pre>
17	· · · · · ·	17	<u> </u>
18	public RecombinationParams,	18	public RecombinationParams,
19	Recombination_ReadParams, R	19	Recombination_ReadParam
20	Recombination_Validate, Rec	20	Recombination_Validate,
21		21	
22		22	
23	contains	23	contains
24		24	
25	subroutine Recombination_Re	25	subroutine Recombination_Re
26	use IniFile	26	use IniFile
27	Type(RecombinationParams) :	27	Type(RecombinationParams):
28	Type(TIniFile) :: Ini	28	Type(TIniFile) :: Ini
29		29	
30		30	

<pre>/Users/lplopa/Compare/camb_simdata/hyre c.F90, Top line: 31</pre>		<pre>/Users/lplopa/Compare/camb_des/hyrec.F9 0, Top line: 31</pre>	
31	end subroutine Recombinatio	31	end subroutine Recombinatio
32		32	
33		33	
34	subroutine Recombination_Se	34	subroutine Recombination_Se
35	type (RecombinationParams)	35	type (RecombinationParams)
36		36	
37		37	
38	end subroutine Recombinatio	38	end subroutine Recombinatio
39		39	
40		40	
41	subroutine Recombination_Va	41	subroutine Recombination_Va
42	Type(RecombinationParams),	42	Type(RecombinationParams),
43	logical, intent(inout) :: 0	43	<pre>logical, intent(inout) :: 0</pre>
44		44	
45		45	
46	end subroutine Recombinatio	46	end subroutine Recombinatio
47		47	
48		48	
49		49	
50	function Recombination_tm(a	50	function Recombination_tm(a
51	real(dl), intent(in) :: a	51	real(dl), intent(in) :: a
52	real(dl) Recombination_tm,	52	real(dl) Recombination_tm,
53	external hyrec_tm	53	external hyrec_tm
54		54	_ ,
55	Recombination_tm = hyrec_t		Recombination_tm = hyrec_t
56 57		56 57	
57	end function Recombination_	57	end function Recombination_
58		58 50	
59 60	function Decemberation/-	59 60	function Decemberation
60	function Recombination_xe(a	/2	function Recombination_xe(a

/Users/lplopa/Compare/camb_simdata/hyre c.F90, Top line: 61		<pre>/Users/lplopa/Compare/camb_des/hyrec.F9 0, Top line: 61</pre>	
61	real(dl), intent(in) :: a	61	real(dl), intent(in) :: a
62	real(dl) Recombination xe,h	62	real(dl) Recombination xe,h
63	external hyrec xe	63	external hyrec xe
64		64	
65	Recombination_xe = hyrec_xe	65	Recombination_xe = hyrec_xe
66		66	
67	end function Recombination	67	end function Recombination
68	-	68	-
69		69	
70	subroutine Recombination in	70	subroutine Recombination in
71	use AMLUtils	71	use AMLUtils
72	implicit none	72	implicit none
73	Type (RecombinationParams),	73	Type (RecombinationParams),
74	real(dl), intent(in) :: Ome	74	real(dl), intent(in) :: Ome
75	external rec build history	75	external rec build history
76		76	
77	call rec_build_history_camb	77	call rec build history camb
78		78	
79	end subroutine Recombinatio	79	end subroutine Recombinatio
80		80	
81		81	
82		82	
83		83	
84	end module Recombination	84	end module Recombination
85		85	
86		86	
		•	