

Model call record

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Calculates emission factors

Check package version.

```
packageVersion('ALFAM2')
```

```
## [1] '0.5.1'
```

Parameter values.

```
ALFAM2pars02
```

##	int.f0	app.mthd.os.f0	app.rate.ni.f0	man.dm.f0
##	-0.60568338	-1.74351499	-0.01114900	0.39967070
##	man.source.pig.f0	app.mthd.cs.f0	int.r1	app.mthd.bc.r1
##	-0.59202858	-7.63373787	-0.93921516	0.79352480
##	man.dm.r1	air.temp.r1	wind.2m.r1	app.mthd.ts.r1
##	-0.13988189	0.07354268	0.15026720	-0.45907135
##	ts.cereal.hght.r1	man.ph.r1	int.r2	rain.rate.r2
##	-0.24471238	0.66500000	-1.79918546	0.39402156
##	int.r3	app.mthd.bc.r3	app.mthd.cs.r3	man.ph.r3
##	-3.22841225	0.56153956	-0.66647417	0.23800000
##	incorp.shallow.f4	incorp.shallow.r3	incorp.deep.f4	incorp.deep.r3
##	-0.96496655	-0.58052689	-3.69494954	-1.26569562

```
dat
```

##	app.timing.dk	app.timing	air.temp	wind.2m	rain.rate	app.mthd
## 1	Marts	March	4.900	4.02500	0.09	Trailing hose
## 2	April	April	8.500	3.91000	0.09	Trailing hose
## 3	Maj	May	12.400	3.56500	0.09	Trailing hose

## 4	Sommer	Summer	16.867	3.18167	0.09	Trailing hose
## 5	Efterår	Autumn	14.600	3.45000	0.09	Trailing hose
## 6	Marts	March	4.900	4.02500	0.09	Trailing hose
## 7	April	April	8.500	3.91000	0.09	Trailing hose
## 8	Maj	May	12.400	3.56500	0.09	Trailing hose
## 9	Sommer	Summer	16.867	3.18167	0.09	Trailing hose
## 10	Efterår	Autumn	14.600	3.45000	0.09	Trailing hose
## 11	Marts	March	4.900	4.02500	0.09	Trailing hose
## 12	April	April	8.500	3.91000	0.09	Trailing hose
## 13	Maj	May	12.400	3.56500	0.09	Trailing hose
## 14	Sommer	Summer	16.867	3.18167	0.09	Trailing hose
## 15	Efterår	Autumn	14.600	3.45000	0.09	Trailing hose
## 16	Marts	March	4.900	4.02500	0.09	Open slot injection
## 17	April	April	8.500	3.91000	0.09	Open slot injection
## 18	Maj	May	12.400	3.56500	0.09	Open slot injection
## 19	Sommer	Summer	16.867	3.18167	0.09	Open slot injection
## 20	Efterår	Autumn	14.600	3.45000	0.09	Open slot injection
## 21	Marts	March	4.900	4.02500	0.09	Closed slot injection
## 22	April	April	8.500	3.91000	0.09	Closed slot injection
## 23	Maj	May	12.400	3.56500	0.09	Closed slot injection
## 24	Sommer	Summer	16.867	3.18167	0.09	Closed slot injection
## 25	Efterår	Autumn	14.600	3.45000	0.09	Closed slot injection
## 26	Marts	March	4.900	4.02500	0.09	Trailing hose
## 27	April	April	8.500	3.91000	0.09	Trailing hose
## 28	Maj	May	12.400	3.56500	0.09	Trailing hose
## 29	Sommer	Summer	16.867	3.18167	0.09	Trailing hose
## 30	Efterår	Autumn	14.600	3.45000	0.09	Trailing hose
## 31	Marts	March	4.900	4.02500	0.09	Trailing hose
## 32	April	April	8.500	3.91000	0.09	Trailing hose
## 33	Maj	May	12.400	3.56500	0.09	Trailing hose
## 34	Sommer	Summer	16.867	3.18167	0.09	Trailing hose
## 35	Efterår	Autumn	14.600	3.45000	0.09	Trailing hose
## 36	Marts	March	4.900	4.02500	0.09	Trailing hose
## 37	April	April	8.500	3.91000	0.09	Trailing hose
## 38	Maj	May	12.400	3.56500	0.09	Trailing hose
## 39	Sommer	Summer	16.867	3.18167	0.09	Trailing hose
## 40	Efterår	Autumn	14.600	3.45000	0.09	Trailing hose
## 41	Marts	March	4.900	4.02500	0.09	Open slot injection
## 42	April	April	8.500	3.91000	0.09	Open slot injection

## 43	Maj	May	12.400	3.56500	0.09	Open slot injection
## 44	Sommer	Summer	16.867	3.18167	0.09	Open slot injection
## 45	Efterår	Autumn	14.600	3.45000	0.09	Open slot injection
## 46	Marts	March	4.900	4.02500	0.09	Closed slot injection
## 47	April	April	8.500	3.91000	0.09	Closed slot injection
## 48	Maj	May	12.400	3.56500	0.09	Closed slot injection
## 49	Sommer	Summer	16.867	3.18167	0.09	Closed slot injection
## 50	Efterår	Autumn	14.600	3.45000	0.09	Closed slot injection
## 51	Marts	March	4.900	4.02500	0.09	Trailing hose
## 52	April	April	8.500	3.91000	0.09	Trailing hose
## 53	Maj	May	12.400	3.56500	0.09	Trailing hose
## 54	Sommer	Summer	16.867	3.18167	0.09	Trailing hose
## 55	Efterår	Autumn	14.600	3.45000	0.09	Trailing hose
## 56	Marts	March	4.900	4.02500	0.09	Trailing hose
## 57	April	April	8.500	3.91000	0.09	Trailing hose
## 58	Maj	May	12.400	3.56500	0.09	Trailing hose
## 59	Sommer	Summer	16.867	3.18167	0.09	Trailing hose
## 60	Efterår	Autumn	14.600	3.45000	0.09	Trailing hose
## 61	Marts	March	4.900	4.02500	0.09	Trailing hose
## 62	April	April	8.500	3.91000	0.09	Trailing hose
## 63	Maj	May	12.400	3.56500	0.09	Trailing hose
## 64	Sommer	Summer	16.867	3.18167	0.09	Trailing hose
## 65	Efterår	Autumn	14.600	3.45000	0.09	Trailing hose
## 66	Marts	March	4.900	4.02500	0.09	Open slot injection
## 67	April	April	8.500	3.91000	0.09	Open slot injection
## 68	Maj	May	12.400	3.56500	0.09	Open slot injection
## 69	Sommer	Summer	16.867	3.18167	0.09	Open slot injection
## 70	Efterår	Autumn	14.600	3.45000	0.09	Open slot injection
## 71	Marts	March	4.900	4.02500	0.09	Closed slot injection
## 72	April	April	8.500	3.91000	0.09	Closed slot injection
## 73	Maj	May	12.400	3.56500	0.09	Closed slot injection
## 74	Sommer	Summer	16.867	3.18167	0.09	Closed slot injection
## 75	Efterår	Autumn	14.600	3.45000	0.09	Closed slot injection
## 76	Marts	March	4.900	4.02500	0.09	Trailing hose
## 77	April	April	8.500	3.91000	0.09	Trailing hose
## 78	Maj	May	12.400	3.56500	0.09	Trailing hose
## 79	Sommer	Summer	16.867	3.18167	0.09	Trailing hose
## 80	Efterår	Autumn	14.600	3.45000	0.09	Trailing hose
## 81	Marts	March	4.900	4.02500	0.09	Trailing hose

## 82	April	April	8.500	3.91000	0.09	Trailing hose
## 83	Maj	May	12.400	3.56500	0.09	Trailing hose
## 84	Sommer	Summer	16.867	3.18167	0.09	Trailing hose
## 85	Efterår	Autumn	14.600	3.45000	0.09	Trailing hose
## 86	Marts	March	4.900	4.02500	0.09	Trailing hose
## 87	April	April	8.500	3.91000	0.09	Trailing hose
## 88	Maj	May	12.400	3.56500	0.09	Trailing hose
## 89	Sommer	Summer	16.867	3.18167	0.09	Trailing hose
## 90	Efterår	Autumn	14.600	3.45000	0.09	Trailing hose
##	incorp	t.incorp	app.rate.ni	man.name	man.source	acid man.dm
## 1	None	NA	30	Svinegylle	Pig	FALSE 3.9
## 2	None	NA	30	Svinegylle	Pig	FALSE 3.9
## 3	None	NA	30	Svinegylle	Pig	FALSE 3.9
## 4	None	NA	30	Svinegylle	Pig	FALSE 3.9
## 5	None	NA	30	Svinegylle	Pig	FALSE 3.9
## 6	Shallow	4	30	Svinegylle	Pig	FALSE 3.9
## 7	Shallow	4	30	Svinegylle	Pig	FALSE 3.9
## 8	Shallow	4	30	Svinegylle	Pig	FALSE 3.9
## 9	Shallow	4	30	Svinegylle	Pig	FALSE 3.9
## 10	Shallow	4	30	Svinegylle	Pig	FALSE 3.9
## 11	Deep	4	30	Svinegylle	Pig	FALSE 3.9
## 12	Deep	4	30	Svinegylle	Pig	FALSE 3.9
## 13	Deep	4	30	Svinegylle	Pig	FALSE 3.9
## 14	Deep	4	30	Svinegylle	Pig	FALSE 3.9
## 15	Deep	4	30	Svinegylle	Pig	FALSE 3.9
## 16	None	NA	0	Svinegylle	Pig	FALSE 3.9
## 17	None	NA	0	Svinegylle	Pig	FALSE 3.9
## 18	None	NA	0	Svinegylle	Pig	FALSE 3.9
## 19	None	NA	0	Svinegylle	Pig	FALSE 3.9
## 20	None	NA	0	Svinegylle	Pig	FALSE 3.9
## 21	None	NA	0	Svinegylle	Pig	FALSE 3.9
## 22	None	NA	0	Svinegylle	Pig	FALSE 3.9
## 23	None	NA	0	Svinegylle	Pig	FALSE 3.9
## 24	None	NA	0	Svinegylle	Pig	FALSE 3.9
## 25	None	NA	0	Svinegylle	Pig	FALSE 3.9
## 26	None	NA	30	Kvæggylle	Cattle	FALSE 6.5
## 27	None	NA	30	Kvæggylle	Cattle	FALSE 6.5
## 28	None	NA	30	Kvæggylle	Cattle	FALSE 6.5
## 29	None	NA	30	Kvæggylle	Cattle	FALSE 6.5

## 30	None	NA	30	Kvæggylle	Cattle	FALSE	6.5
## 31	Shallow	4	30	Kvæggylle	Cattle	FALSE	6.5
## 32	Shallow	4	30	Kvæggylle	Cattle	FALSE	6.5
## 33	Shallow	4	30	Kvæggylle	Cattle	FALSE	6.5
## 34	Shallow	4	30	Kvæggylle	Cattle	FALSE	6.5
## 35	Shallow	4	30	Kvæggylle	Cattle	FALSE	6.5
## 36	Deep	4	30	Kvæggylle	Cattle	FALSE	6.5
## 37	Deep	4	30	Kvæggylle	Cattle	FALSE	6.5
## 38	Deep	4	30	Kvæggylle	Cattle	FALSE	6.5
## 39	Deep	4	30	Kvæggylle	Cattle	FALSE	6.5
## 40	Deep	4	30	Kvæggylle	Cattle	FALSE	6.5
## 41	None	NA	0	Kvæggylle	Cattle	FALSE	6.5
## 42	None	NA	0	Kvæggylle	Cattle	FALSE	6.5
## 43	None	NA	0	Kvæggylle	Cattle	FALSE	6.5
## 44	None	NA	0	Kvæggylle	Cattle	FALSE	6.5
## 45	None	NA	0	Kvæggylle	Cattle	FALSE	6.5
## 46	None	NA	0	Kvæggylle	Cattle	FALSE	6.5
## 47	None	NA	0	Kvæggylle	Cattle	FALSE	6.5
## 48	None	NA	0	Kvæggylle	Cattle	FALSE	6.5
## 49	None	NA	0	Kvæggylle	Cattle	FALSE	6.5
## 50	None	NA	0	Kvæggylle	Cattle	FALSE	6.5
## 51	None	NA	30	Afgasset biomasse	Digestate	FALSE	5.1
## 52	None	NA	30	Afgasset biomasse	Digestate	FALSE	5.1
## 53	None	NA	30	Afgasset biomasse	Digestate	FALSE	5.1
## 54	None	NA	30	Afgasset biomasse	Digestate	FALSE	5.1
## 55	None	NA	30	Afgasset biomasse	Digestate	FALSE	5.1
## 56	Shallow	4	30	Afgasset biomasse	Digestate	FALSE	5.1
## 57	Shallow	4	30	Afgasset biomasse	Digestate	FALSE	5.1
## 58	Shallow	4	30	Afgasset biomasse	Digestate	FALSE	5.1
## 59	Shallow	4	30	Afgasset biomasse	Digestate	FALSE	5.1
## 60	Shallow	4	30	Afgasset biomasse	Digestate	FALSE	5.1
## 61	Deep	4	30	Afgasset biomasse	Digestate	FALSE	5.1
## 62	Deep	4	30	Afgasset biomasse	Digestate	FALSE	5.1
## 63	Deep	4	30	Afgasset biomasse	Digestate	FALSE	5.1
## 64	Deep	4	30	Afgasset biomasse	Digestate	FALSE	5.1
## 65	Deep	4	30	Afgasset biomasse	Digestate	FALSE	5.1
## 66	None	NA	0	Afgasset biomasse	Digestate	FALSE	5.1
## 67	None	NA	0	Afgasset biomasse	Digestate	FALSE	5.1
## 68	None	NA	0	Afgasset biomasse	Digestate	FALSE	5.1

## 69	None	NA	0	Afgasset biomasse	Digestate	FALSE	5.1
## 70	None	NA	0	Afgasset biomasse	Digestate	FALSE	5.1
## 71	None	NA	0	Afgasset biomasse	Digestate	FALSE	5.1
## 72	None	NA	0	Afgasset biomasse	Digestate	FALSE	5.1
## 73	None	NA	0	Afgasset biomasse	Digestate	FALSE	5.1
## 74	None	NA	0	Afgasset biomasse	Digestate	FALSE	5.1
## 75	None	NA	0	Afgasset biomasse	Digestate	FALSE	5.1
## 76	None	NA	30	Svinegylle	Pig	TRUE	3.9
## 77	None	NA	30	Svinegylle	Pig	TRUE	3.9
## 78	None	NA	30	Svinegylle	Pig	TRUE	3.9
## 79	None	NA	30	Svinegylle	Pig	TRUE	3.9
## 80	None	NA	30	Svinegylle	Pig	TRUE	3.9
## 81	None	NA	30	Kvæggylle	Cattle	TRUE	6.5
## 82	None	NA	30	Kvæggylle	Cattle	TRUE	6.5
## 83	None	NA	30	Kvæggylle	Cattle	TRUE	6.5
## 84	None	NA	30	Kvæggylle	Cattle	TRUE	6.5
## 85	None	NA	30	Kvæggylle	Cattle	TRUE	6.5
## 86	None	NA	30	Afgasset biomasse	Digestate	TRUE	5.1
## 87	None	NA	30	Afgasset biomasse	Digestate	TRUE	5.1
## 88	None	NA	30	Afgasset biomasse	Digestate	TRUE	5.1
## 89	None	NA	30	Afgasset biomasse	Digestate	TRUE	5.1
## 90	None	NA	30	Afgasset biomasse	Digestate	TRUE	5.1
##	man.ph	man.source.pig	app.mthd.os	app.mthd.cs	incorp.deep	incorp.shallow	ct
## 1	7.20	TRUE	FALSE	FALSE	FALSE	FALSE	168
## 2	7.20	TRUE	FALSE	FALSE	FALSE	FALSE	168
## 3	7.20	TRUE	FALSE	FALSE	FALSE	FALSE	168
## 4	7.20	TRUE	FALSE	FALSE	FALSE	FALSE	168
## 5	7.20	TRUE	FALSE	FALSE	FALSE	FALSE	168
## 6	7.20	TRUE	FALSE	FALSE	FALSE	TRUE	168
## 7	7.20	TRUE	FALSE	FALSE	FALSE	TRUE	168
## 8	7.20	TRUE	FALSE	FALSE	FALSE	TRUE	168
## 9	7.20	TRUE	FALSE	FALSE	FALSE	TRUE	168
## 10	7.20	TRUE	FALSE	FALSE	FALSE	TRUE	168
## 11	7.20	TRUE	FALSE	FALSE	TRUE	FALSE	168
## 12	7.20	TRUE	FALSE	FALSE	TRUE	FALSE	168
## 13	7.20	TRUE	FALSE	FALSE	TRUE	FALSE	168
## 14	7.20	TRUE	FALSE	FALSE	TRUE	FALSE	168
## 15	7.20	TRUE	FALSE	FALSE	TRUE	FALSE	168
## 16	7.20	TRUE	TRUE	FALSE	FALSE	FALSE	168

## 17	7.20	TRUE	TRUE	FALSE	FALSE	FALSE 168
## 18	7.20	TRUE	TRUE	FALSE	FALSE	FALSE 168
## 19	7.20	TRUE	TRUE	FALSE	FALSE	FALSE 168
## 20	7.20	TRUE	TRUE	FALSE	FALSE	FALSE 168
## 21	7.20	TRUE	FALSE	TRUE	FALSE	FALSE 168
## 22	7.20	TRUE	FALSE	TRUE	FALSE	FALSE 168
## 23	7.20	TRUE	FALSE	TRUE	FALSE	FALSE 168
## 24	7.20	TRUE	FALSE	TRUE	FALSE	FALSE 168
## 25	7.20	TRUE	FALSE	TRUE	FALSE	FALSE 168
## 26	7.00	FALSE	FALSE	FALSE	FALSE	FALSE 168
## 27	7.00	FALSE	FALSE	FALSE	FALSE	FALSE 168
## 28	7.00	FALSE	FALSE	FALSE	FALSE	FALSE 168
## 29	7.00	FALSE	FALSE	FALSE	FALSE	FALSE 168
## 30	7.00	FALSE	FALSE	FALSE	FALSE	FALSE 168
## 31	7.00	FALSE	FALSE	FALSE	FALSE	TRUE 168
## 32	7.00	FALSE	FALSE	FALSE	FALSE	TRUE 168
## 33	7.00	FALSE	FALSE	FALSE	FALSE	TRUE 168
## 34	7.00	FALSE	FALSE	FALSE	FALSE	TRUE 168
## 35	7.00	FALSE	FALSE	FALSE	FALSE	TRUE 168
## 36	7.00	FALSE	FALSE	FALSE	TRUE	FALSE 168
## 37	7.00	FALSE	FALSE	FALSE	TRUE	FALSE 168
## 38	7.00	FALSE	FALSE	FALSE	TRUE	FALSE 168
## 39	7.00	FALSE	FALSE	FALSE	TRUE	FALSE 168
## 40	7.00	FALSE	FALSE	FALSE	TRUE	FALSE 168
## 41	7.00	FALSE	TRUE	FALSE	FALSE	FALSE 168
## 42	7.00	FALSE	TRUE	FALSE	FALSE	FALSE 168
## 43	7.00	FALSE	TRUE	FALSE	FALSE	FALSE 168
## 44	7.00	FALSE	TRUE	FALSE	FALSE	FALSE 168
## 45	7.00	FALSE	TRUE	FALSE	FALSE	FALSE 168
## 46	7.00	FALSE	FALSE	TRUE	FALSE	FALSE 168
## 47	7.00	FALSE	FALSE	TRUE	FALSE	FALSE 168
## 48	7.00	FALSE	FALSE	TRUE	FALSE	FALSE 168
## 49	7.00	FALSE	FALSE	TRUE	FALSE	FALSE 168
## 50	7.00	FALSE	FALSE	TRUE	FALSE	FALSE 168
## 51	7.90	FALSE	FALSE	FALSE	FALSE	FALSE 168
## 52	7.90	FALSE	FALSE	FALSE	FALSE	FALSE 168
## 53	7.90	FALSE	FALSE	FALSE	FALSE	FALSE 168
## 54	7.90	FALSE	FALSE	FALSE	FALSE	FALSE 168
## 55	7.90	FALSE	FALSE	FALSE	FALSE	FALSE 168

## 56	7.90	FALSE	FALSE	FALSE	FALSE	TRUE 168
## 57	7.90	FALSE	FALSE	FALSE	FALSE	TRUE 168
## 58	7.90	FALSE	FALSE	FALSE	FALSE	TRUE 168
## 59	7.90	FALSE	FALSE	FALSE	FALSE	TRUE 168
## 60	7.90	FALSE	FALSE	FALSE	FALSE	TRUE 168
## 61	7.90	FALSE	FALSE	FALSE	TRUE	FALSE 168
## 62	7.90	FALSE	FALSE	FALSE	TRUE	FALSE 168
## 63	7.90	FALSE	FALSE	FALSE	TRUE	FALSE 168
## 64	7.90	FALSE	FALSE	FALSE	TRUE	FALSE 168
## 65	7.90	FALSE	FALSE	FALSE	TRUE	FALSE 168
## 66	7.90	FALSE	TRUE	FALSE	FALSE	FALSE 168
## 67	7.90	FALSE	TRUE	FALSE	FALSE	FALSE 168
## 68	7.90	FALSE	TRUE	FALSE	FALSE	FALSE 168
## 69	7.90	FALSE	TRUE	FALSE	FALSE	FALSE 168
## 70	7.90	FALSE	TRUE	FALSE	FALSE	FALSE 168
## 71	7.90	FALSE	FALSE	TRUE	FALSE	FALSE 168
## 72	7.90	FALSE	FALSE	TRUE	FALSE	FALSE 168
## 73	7.90	FALSE	FALSE	TRUE	FALSE	FALSE 168
## 74	7.90	FALSE	FALSE	TRUE	FALSE	FALSE 168
## 75	7.90	FALSE	FALSE	TRUE	FALSE	FALSE 168
## 76	6.47	TRUE	FALSE	FALSE	FALSE	FALSE 168
## 77	6.47	TRUE	FALSE	FALSE	FALSE	FALSE 168
## 78	6.47	TRUE	FALSE	FALSE	FALSE	FALSE 168
## 79	6.47	TRUE	FALSE	FALSE	FALSE	FALSE 168
## 80	6.47	TRUE	FALSE	FALSE	FALSE	FALSE 168
## 81	6.47	FALSE	FALSE	FALSE	FALSE	FALSE 168
## 82	6.47	FALSE	FALSE	FALSE	FALSE	FALSE 168
## 83	6.47	FALSE	FALSE	FALSE	FALSE	FALSE 168
## 84	6.47	FALSE	FALSE	FALSE	FALSE	FALSE 168
## 85	6.47	FALSE	FALSE	FALSE	FALSE	FALSE 168
## 86	6.52	FALSE	FALSE	FALSE	FALSE	FALSE 168
## 87	6.52	FALSE	FALSE	FALSE	FALSE	FALSE 168
## 88	6.52	FALSE	FALSE	FALSE	FALSE	FALSE 168
## 89	6.52	FALSE	FALSE	FALSE	FALSE	FALSE 168
## 90	6.52	FALSE	FALSE	FALSE	FALSE	FALSE 168
##	tan.app id					
## 1	100	1				
## 2	100	2				
## 3	100	3				

## 4	100	4
## 5	100	5
## 6	100	6
## 7	100	7
## 8	100	8
## 9	100	9
## 10	100	10
## 11	100	11
## 12	100	12
## 13	100	13
## 14	100	14
## 15	100	15
## 16	100	16
## 17	100	17
## 18	100	18
## 19	100	19
## 20	100	20
## 21	100	21
## 22	100	22
## 23	100	23
## 24	100	24
## 25	100	25
## 26	100	26
## 27	100	27
## 28	100	28
## 29	100	29
## 30	100	30
## 31	100	31
## 32	100	32
## 33	100	33
## 34	100	34
## 35	100	35
## 36	100	36
## 37	100	37
## 38	100	38
## 39	100	39
## 40	100	40
## 41	100	41
## 42	100	42

## 43	100 43
## 44	100 44
## 45	100 45
## 46	100 46
## 47	100 47
## 48	100 48
## 49	100 49
## 50	100 50
## 51	100 51
## 52	100 52
## 53	100 53
## 54	100 54
## 55	100 55
## 56	100 56
## 57	100 57
## 58	100 58
## 59	100 59
## 60	100 60
## 61	100 61
## 62	100 62
## 63	100 63
## 64	100 64
## 65	100 65
## 66	100 66
## 67	100 67
## 68	100 68
## 69	100 69
## 70	100 70
## 71	100 71
## 72	100 72
## 73	100 73
## 74	100 74
## 75	100 75
## 76	100 76
## 77	100 77
## 78	100 78
## 79	100 79
## 80	100 80
## 81	100 81

```
## 82      100 82
## 83      100 83
## 84      100 84
## 85      100 85
## 86      100 86
## 87      100 87
## 88      100 88
## 89      100 89
## 90      100 90
```

Run model

With set 2 parameters

```
preds <- ALFAM2mod(dat, pars = ALFAM2pars02, app.name = 'tan.app', time.name = 'ct', time.incorp = 't.incep', group = 'id', warn = TRUE)
```

```
## User-supplied parameters are being used.
```

```
## Incorporation applied (for group 10).
```

```
## Incorporation applied (for group 11).
```

```
## Incorporation applied (for group 12).
```

```
## Incorporation applied (for group 13).
```

```
## Incorporation applied (for group 14).
```

```
## Incorporation applied (for group 15).
```

```
## Incorporation applied (for group 31).
```

```
## Incorporation applied (for group 32).
```

```
## Incorporation applied (for group 33).
```

```
## Incorporation applied (for group 34).
```

```
## Incorporation applied (for group 35).
```

```
## Incorporation applied (for group 36).
```

```
## Incorporation applied (for group 37).
```

```
## Incorporation applied (for group 38).
```

```
## Incorporation applied (for group 39).
```

```
## Incorporation applied (for group 40).
```

```

## Incorporation applied (for group 56).
## Incorporation applied (for group 57).
## Incorporation applied (for group 58).
## Incorporation applied (for group 59).
## Incorporation applied (for group 6).
## Incorporation applied (for group 60).
## Incorporation applied (for group 61).
## Incorporation applied (for group 62).
## Incorporation applied (for group 63).
## Incorporation applied (for group 64).
## Incorporation applied (for group 65).
## Incorporation applied (for group 7).
## Incorporation applied (for group 8).
## Incorporation applied (for group 9).

## Warning in ALFAM2mod(dat, pars = ALFAM2pars02, app.name = "tan.app", time.name = "ct", : Running with 20 parameters. Dropped 4 with no
## These secondary parameters have been dropped:
##   app.mthd.bc.r1
##   app.mthd.ts.r1
##   ts.cereal.hght.r1
##   app.mthd.bc.r3
##
## These secondary parameters are being used:
##   int.f0
##   app.mthd.os.f0
##   app.rate.ni.f0
##   man.dm.f0
##   man.source.pig.f0
##   app.mthd.cs.f0
##   int.r1
##   man.dm.r1
##   air.temp.r1
##   wind.2m.r1

```

```
## man.ph.r1
## int.r2
## rain.rate.r2
## int.r3
## app.mthd.cs.r3
## man.ph.r3
## incorp.shallow.f4
## incorp.shallow.r3
## incorp.deep.f4
## incorp.deep.r3
```

Check reference condition.

```
ALFAM2mod(ref, pars = ALFAM2pars01, app.name = 'tan.app', time.name = 'ct', time.incorp = 't.incorp', warn = TRUE)
```

```
## User-supplied parameters are being used.
```

```
## Warning in ALFAM2mod(ref, pars = ALFAM2pars01, app.name = "tan.app", time.name
## = "ct", : No matching column for incorporation parameter(s): incorp.deep,
## incorp.shallow. Skipping incorporation.
```

```
## Warning in ALFAM2mod(ref, pars = ALFAM2pars01, app.name = "tan.app", time.name = "ct", : Running with 15 parameters. Dropped 5 with no
## These secondary parameters have been dropped:
```

```
## app.rate.f0
## incorp.deep.f4
## incorp.shallow.f4
## incorp.deep.r3
## rain.cum.r3
##
```

```
## These secondary parameters are being used:
```

```
## int.f0
## int.r1
## int.r2
## int.r3
## app.mthd.os.f0
## man.dm.f0
## app.mthd.bc.r1
## man.dm.r1
## air.temp.r1
## wind.2m.r1
## man.ph.r1
```

```

##  air.temp.r3
##  app.mthd.os.r3
##  man.ph.r3
##  rain.rate.r2

##  ct dt      f0      r1      r2      r3 f4      f      s
##  1 168 168 0.3237724 0.06628499 0.1110777 0.001255181 1 3.7119e-12 71.30525
##      j      e      e.int      er
##  1 0.1708021 28.69475 28.69475 0.2869475

ALFAM2mod(ref, pars = ALFAM2pars02, app.name = 'tan.app', time.name = 'ct', time.incorp = 't.incorp', warn = TRUE)

## User-supplied parameters are being used.

## Warning in ALFAM2mod(ref, pars = ALFAM2pars02, app.name = "tan.app", time.name
## = "ct", : No matching column for incorporation parameter(s): incorp.shallow,
## incorp.deep. Skipping incorporation.

## Warning in ALFAM2mod(ref, pars = ALFAM2pars02, app.name = "tan.app", time.name = "ct", : Running with 20 parameters. Dropped 4 with no
## These secondary parameters have been dropped:
##  incorp.shallow.f4
##  incorp.shallow.r3
##  incorp.deep.f4
##  incorp.deep.r3
##
## These secondary parameters are being used:
##  int.f0
##  app.mthd.os.f0
##  app.rate.ni.f0
##  man.dm.f0
##  man.source.pig.f0
##  app.mthd.cs.f0
##  int.r1
##  app.mthd.bc.r1
##  man.dm.r1
##  air.temp.r1
##  wind.2m.r1
##  app.mthd.ts.r1
##  ts.cereal.hght.r1
##  man.ph.r1
##  int.r2

```

```
## rain.rate.r2
## int.r3
## app.mthd.bc.r3
## app.mthd.cs.r3
## man.ph.r3

## ct dt f0 r1 r2 r3 f4 f s
## 1 168 168 0.2589096 0.115023 0.01587869 0.0005910004 1 7.283926e-09 69.96107
## j e e.int er
## 1 0.1788032 30.03893 30.03893 0.3003893
```

Add results to main df

```
dat$EF <- signif(preds$er, 2)
dat$EFp <- 100 * signif(preds$er, 2)
```