

Model call record

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Calculates emission factors

Check package version.

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

```
## [1] '1.5.1'
```

Parameter values.

```
pars
```

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

Run ALFAM2 model

```
preds <- ALFAM2mod(dat, pars = pars, time.name = 'ct', app.name = 'tan.app', group = 'rid', parallel = TRUE, n.cpus = 4)
```

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

```
## Warning in ALFAM2mod(dat, pars = pars, time.name = "ct", app.name = "tan.app", : Running with 13 parameters. Dropped 11 with no match.
```

```
## These secondary parameters have been dropped:
```

```
## app.mthd.os.f0
```

```
## app.mthd.cs.f0
```

```
## app.mthd.bc.r1
```

```

## app.mthd.ts.r1
## ts.cereal.hght.r1
## app.mthd.bc.r3
## app.mthd.cs.r3
## incorp.shallow.f4
## incorp.shallow.r3
## incorp.deep.f4
## incorp.deep.r3
##
## These secondary parameters are being used:
## int.f0
## app.rate.ni.f0
## man.dm.f0
## man.source.pig.f0
## int.r1
## man.dm.r1
## air.temp.r1
## wind.2m.r1
## man.ph.r1
## int.r2
## rain.rate.r2
## int.r3
## man.ph.r3

dat$e.rel <- 100 * preds$er

preds.ul <- ALFAM2mod(dat, pars = pars.ul, time.name = 'ct', app.name = 'tan.app', group = 'rid', parallel = TRUE, n.cpus = 4)

## User-supplied parameters are being used.

## Warning in ALFAM2mod(dat, pars = pars.ul, time.name = "ct", app.name = "tan.app", : Running with 13 parameters. Dropped 11 with no matches
## These secondary parameters have been dropped:
## app.mthd.os.f0
## app.mthd.cs.f0
## app.mthd.bc.r1
## app.mthd.ts.r1
## ts.cereal.hght.r1
## app.mthd.bc.r3
## app.mthd.cs.r3
## incorp.shallow.f4

```

```
##   incorp.shallow.r3
##   incorp.deep.f4
##   incorp.deep.r3
##
## These secondary parameters are being used:
##   int.f0
##   app.rate.ni.f0
##   man.dm.f0
##   man.source.pig.f0
##   int.r1
##   man.dm.r1
##   air.temp.r1
##   wind.2m.r1
##   man.ph.r1
##   int.r2
##   rain.rate.r2
##   int.r3
##   man.ph.r3
dat$e.rel.ul <- 100 * preds.ul$er
```