

Model call record

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Calculates emission factors

Check package version.

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

```
## [1] '2.0'
```

Parameter values.

```
ALFAM2pars02
```

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

Run model with set 2 parameters

```
preds <- ALFAM2mod(dat, pars = ALFAM2pars02, app.name = 'tan.app', time.name = 'ct', group = 'id', prep = TRUE)
```

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

```
## Warning in ALFAM2mod(dat, pars = ALFAM2pars02, app.name = "tan.app", time.name = "ct", : Running with 13 parameters. Dropped 11 with no
```

```
## 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
```

Add results to main df

```
names(preds) <- paste0(names(preds), '.pred')
dat <- cbind(dat, preds)
dat$EFp <- 100 * dat$er.pred
```