

Model call record

Sasha D. Hafner

July 2020

Calculates emission factors

Check package version.

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

```
## [1] '0.4.1'
```

Parameter values.

```
pars
```

##	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

Run model

With set 2 parameters

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

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

Incorporation applied (for group 0009-1980).
Incorporation applied (for group 0009-1990).
Incorporation applied (for group 0009-2000).
Incorporation applied (for group 0009-2010).
Incorporation applied (for group 0010-1980).
Incorporation applied (for group 0010-1990).
Incorporation applied (for group 0010-2000).
Incorporation applied (for group 0010-2010).
Incorporation applied (for group 0011-1980).
Incorporation applied (for group 0011-1990).
Incorporation applied (for group 0011-2000).
Incorporation applied (for group 0011-2010).
Incorporation applied (for group 0012-1980).
Incorporation applied (for group 0012-1990).
Incorporation applied (for group 0012-2000).
Incorporation applied (for group 0012-2010).
Incorporation applied (for group 0013-1980).
Incorporation applied (for group 0013-1990).
Incorporation applied (for group 0013-2000).
Incorporation applied (for group 0013-2010).
Incorporation applied (for group 0014-1980).
Incorporation applied (for group 0014-1990).
Incorporation applied (for group 0014-2000).
Incorporation applied (for group 0014-2010).
Incorporation applied (for group 0015-1980).
Incorporation applied (for group 0015-1990).

Incorporation applied (for group 0015-2000).
Incorporation applied (for group 0015-2010).
Incorporation applied (for group 0016-1980).
Incorporation applied (for group 0016-1990).
Incorporation applied (for group 0016-2000).
Incorporation applied (for group 0016-2010).
Incorporation applied (for group 0021-1980).
Incorporation applied (for group 0021-1990).
Incorporation applied (for group 0021-2000).
Incorporation applied (for group 0021-2010).
Incorporation applied (for group 0022-1980).
Incorporation applied (for group 0022-1990).
Incorporation applied (for group 0022-2000).
Incorporation applied (for group 0022-2010).
Incorporation applied (for group 0023-1980).
Incorporation applied (for group 0023-1990).
Incorporation applied (for group 0023-2000).
Incorporation applied (for group 0023-2010).
Incorporation applied (for group 0024-1980).
Incorporation applied (for group 0024-1990).
Incorporation applied (for group 0024-2000).
Incorporation applied (for group 0024-2010).
Incorporation applied (for group 0026-1980).
Incorporation applied (for group 0026-1990).
Incorporation applied (for group 0026-2000).
Incorporation applied (for group 0026-2010).

Incorporation applied (for group 0027-1980).
Incorporation applied (for group 0027-1990).
Incorporation applied (for group 0027-2000).
Incorporation applied (for group 0027-2010).
Incorporation applied (for group 0028-1980).
Incorporation applied (for group 0028-1990).
Incorporation applied (for group 0028-2000).
Incorporation applied (for group 0028-2010).
Incorporation applied (for group 0029-1980).
Incorporation applied (for group 0029-1990).
Incorporation applied (for group 0029-2000).
Incorporation applied (for group 0029-2010).
Incorporation applied (for group 0030-1980).
Incorporation applied (for group 0030-1990).
Incorporation applied (for group 0030-2000).
Incorporation applied (for group 0030-2010).
Incorporation applied (for group 0031-1980).
Incorporation applied (for group 0031-1990).
Incorporation applied (for group 0031-2000).
Incorporation applied (for group 0031-2010).
Incorporation applied (for group 0035-1980).
Incorporation applied (for group 0035-1990).
Incorporation applied (for group 0035-2000).
Incorporation applied (for group 0035-2010).
Incorporation applied (for group 0036-1980).
Incorporation applied (for group 0036-1990).

Incorporation applied (for group 0036-2000).
Incorporation applied (for group 0036-2010).
Incorporation applied (for group 0046-1980).
Incorporation applied (for group 0046-1990).
Incorporation applied (for group 0046-2000).
Incorporation applied (for group 0046-2010).
Incorporation applied (for group 0047-1980).
Incorporation applied (for group 0047-1990).
Incorporation applied (for group 0047-2000).
Incorporation applied (for group 0047-2010).
Incorporation applied (for group 0048-1980).
Incorporation applied (for group 0048-1990).
Incorporation applied (for group 0048-2000).
Incorporation applied (for group 0048-2010).
Incorporation applied (for group 0049-1980).
Incorporation applied (for group 0049-1990).
Incorporation applied (for group 0049-2000).
Incorporation applied (for group 0049-2010).
Incorporation applied (for group 0050-1980).
Incorporation applied (for group 0050-1990).
Incorporation applied (for group 0050-2000).
Incorporation applied (for group 0050-2010).
Incorporation applied (for group 0051-1980).
Incorporation applied (for group 0051-1990).
Incorporation applied (for group 0051-2000).
Incorporation applied (for group 0051-2010).

Incorporation applied (for group 0052-1980).
Incorporation applied (for group 0052-1990).
Incorporation applied (for group 0052-2000).
Incorporation applied (for group 0052-2010).
Incorporation applied (for group 0053-1980).
Incorporation applied (for group 0053-1990).
Incorporation applied (for group 0053-2000).
Incorporation applied (for group 0053-2010).
Incorporation applied (for group 0058-1980).
Incorporation applied (for group 0058-1990).
Incorporation applied (for group 0058-2000).
Incorporation applied (for group 0058-2010).
Incorporation applied (for group 0059-1980).
Incorporation applied (for group 0059-1990).
Incorporation applied (for group 0059-2000).
Incorporation applied (for group 0059-2010).
Incorporation applied (for group 0060-1980).
Incorporation applied (for group 0060-1990).
Incorporation applied (for group 0060-2000).
Incorporation applied (for group 0060-2010).
Incorporation applied (for group 0061-1980).
Incorporation applied (for group 0061-1990).
Incorporation applied (for group 0061-2000).
Incorporation applied (for group 0061-2010).
Incorporation applied (for group 0063-1980).
Incorporation applied (for group 0063-1990).

Incorporation applied (for group 0063-2000).
Incorporation applied (for group 0063-2010).
Incorporation applied (for group 0064-1980).
Incorporation applied (for group 0064-1990).
Incorporation applied (for group 0064-2000).
Incorporation applied (for group 0064-2010).
Incorporation applied (for group 0065-1980).
Incorporation applied (for group 0065-1990).
Incorporation applied (for group 0065-2000).
Incorporation applied (for group 0065-2010).
Incorporation applied (for group 0066-1980).
Incorporation applied (for group 0066-1990).
Incorporation applied (for group 0066-2000).
Incorporation applied (for group 0066-2010).
Incorporation applied (for group 0067-1980).
Incorporation applied (for group 0067-1990).
Incorporation applied (for group 0067-2000).
Incorporation applied (for group 0067-2010).
Incorporation applied (for group 0068-1980).
Incorporation applied (for group 0068-1990).
Incorporation applied (for group 0068-2000).
Incorporation applied (for group 0068-2010).
Incorporation applied (for group 0072-1980).
Incorporation applied (for group 0072-1990).
Incorporation applied (for group 0072-2000).
Incorporation applied (for group 0072-2010).

Incorporation applied (for group 0073-1980).
Incorporation applied (for group 0073-1990).
Incorporation applied (for group 0073-2000).
Incorporation applied (for group 0073-2010).
Incorporation applied (for group 0083-1980).
Incorporation applied (for group 0083-1990).
Incorporation applied (for group 0083-2000).
Incorporation applied (for group 0083-2010).
Incorporation applied (for group 0084-1980).
Incorporation applied (for group 0084-1990).
Incorporation applied (for group 0084-2000).
Incorporation applied (for group 0084-2010).
Incorporation applied (for group 0085-1980).
Incorporation applied (for group 0085-1990).
Incorporation applied (for group 0085-2000).
Incorporation applied (for group 0085-2010).
Incorporation applied (for group 0086-1980).
Incorporation applied (for group 0086-1990).
Incorporation applied (for group 0086-2000).
Incorporation applied (for group 0086-2010).
Incorporation applied (for group 0087-1980).
Incorporation applied (for group 0087-1990).
Incorporation applied (for group 0087-2000).
Incorporation applied (for group 0087-2010).
Incorporation applied (for group 0088-1980).
Incorporation applied (for group 0088-1990).

Incorporation applied (for group 0088-2000).
Incorporation applied (for group 0088-2010).
Incorporation applied (for group 0089-1980).
Incorporation applied (for group 0089-1990).
Incorporation applied (for group 0089-2000).
Incorporation applied (for group 0089-2010).
Incorporation applied (for group 0090-1980).
Incorporation applied (for group 0090-1990).
Incorporation applied (for group 0090-2000).
Incorporation applied (for group 0090-2010).
Incorporation applied (for group 0095-1980).
Incorporation applied (for group 0095-1990).
Incorporation applied (for group 0095-2000).
Incorporation applied (for group 0095-2010).
Incorporation applied (for group 0096-1980).
Incorporation applied (for group 0096-1990).
Incorporation applied (for group 0096-2000).
Incorporation applied (for group 0096-2010).
Incorporation applied (for group 0097-1980).
Incorporation applied (for group 0097-1990).
Incorporation applied (for group 0097-2000).
Incorporation applied (for group 0097-2010).
Incorporation applied (for group 0098-1980).
Incorporation applied (for group 0098-1990).
Incorporation applied (for group 0098-2000).
Incorporation applied (for group 0098-2010).

Incorporation applied (for group 0100-1980).
Incorporation applied (for group 0100-1990).
Incorporation applied (for group 0100-2000).
Incorporation applied (for group 0100-2010).
Incorporation applied (for group 0101-1980).
Incorporation applied (for group 0101-1990).
Incorporation applied (for group 0101-2000).
Incorporation applied (for group 0101-2010).
Incorporation applied (for group 0102-1980).
Incorporation applied (for group 0102-1990).
Incorporation applied (for group 0102-2000).
Incorporation applied (for group 0102-2010).
Incorporation applied (for group 0103-1980).
Incorporation applied (for group 0103-1990).
Incorporation applied (for group 0103-2000).
Incorporation applied (for group 0103-2010).
Incorporation applied (for group 0104-1980).
Incorporation applied (for group 0104-1990).
Incorporation applied (for group 0104-2000).
Incorporation applied (for group 0104-2010).
Incorporation applied (for group 0105-1980).
Incorporation applied (for group 0105-1990).
Incorporation applied (for group 0105-2000).
Incorporation applied (for group 0105-2010).
Incorporation applied (for group 0109-1980).
Incorporation applied (for group 0109-1990).

Incorporation applied (for group 0109-2000).
Incorporation applied (for group 0109-2010).
Incorporation applied (for group 0110-1980).
Incorporation applied (for group 0110-1990).
Incorporation applied (for group 0110-2000).
Incorporation applied (for group 0110-2010).
Incorporation applied (for group 0112-1980).
Incorporation applied (for group 0112-1990).
Incorporation applied (for group 0112-2000).
Incorporation applied (for group 0112-2010).
Incorporation applied (for group 0113-1980).
Incorporation applied (for group 0113-1990).
Incorporation applied (for group 0113-2000).
Incorporation applied (for group 0113-2010).
Incorporation applied (for group 0114-1980).
Incorporation applied (for group 0114-1990).
Incorporation applied (for group 0114-2000).
Incorporation applied (for group 0114-2010).
Incorporation applied (for group 0115-1980).
Incorporation applied (for group 0115-1990).
Incorporation applied (for group 0115-2000).
Incorporation applied (for group 0115-2010).
Incorporation applied (for group 0116-1980).
Incorporation applied (for group 0116-1990).
Incorporation applied (for group 0116-2000).
Incorporation applied (for group 0116-2010).

Incorporation applied (for group 0117-1980).
Incorporation applied (for group 0117-1990).
Incorporation applied (for group 0117-2000).
Incorporation applied (for group 0117-2010).
Incorporation applied (for group 0118-1980).
Incorporation applied (for group 0118-1990).
Incorporation applied (for group 0118-2000).
Incorporation applied (for group 0118-2010).
Incorporation applied (for group 0119-1980).
Incorporation applied (for group 0119-1990).
Incorporation applied (for group 0119-2000).
Incorporation applied (for group 0119-2010).
Incorporation applied (for group 0124-1980).
Incorporation applied (for group 0124-1990).
Incorporation applied (for group 0124-2000).
Incorporation applied (for group 0124-2010).
Incorporation applied (for group 0125-1980).
Incorporation applied (for group 0125-1990).
Incorporation applied (for group 0125-2000).
Incorporation applied (for group 0125-2010).
Incorporation applied (for group 0126-1980).
Incorporation applied (for group 0126-1990).
Incorporation applied (for group 0126-2000).
Incorporation applied (for group 0126-2010).
Incorporation applied (for group 0127-1980).
Incorporation applied (for group 0127-1990).

Incorporation applied (for group 0127-2000).
Incorporation applied (for group 0127-2010).
Incorporation applied (for group 0129-1980).
Incorporation applied (for group 0129-1990).
Incorporation applied (for group 0129-2000).
Incorporation applied (for group 0129-2010).
Incorporation applied (for group 0130-1980).
Incorporation applied (for group 0130-1990).
Incorporation applied (for group 0130-2000).
Incorporation applied (for group 0130-2010).
Incorporation applied (for group 0131-1980).
Incorporation applied (for group 0131-1990).
Incorporation applied (for group 0131-2000).
Incorporation applied (for group 0131-2010).
Incorporation applied (for group 0132-1980).
Incorporation applied (for group 0132-1990).
Incorporation applied (for group 0132-2000).
Incorporation applied (for group 0132-2010).
Incorporation applied (for group 0137-1980).
Incorporation applied (for group 0137-1990).
Incorporation applied (for group 0137-2000).
Incorporation applied (for group 0137-2010).
Incorporation applied (for group 0138-1980).
Incorporation applied (for group 0138-1990).
Incorporation applied (for group 0138-2000).
Incorporation applied (for group 0138-2010).

Incorporation applied (for group 0142-1980).
Incorporation applied (for group 0142-1990).
Incorporation applied (for group 0142-2000).
Incorporation applied (for group 0142-2010).
Incorporation applied (for group 0143-1980).
Incorporation applied (for group 0143-1990).
Incorporation applied (for group 0143-2000).
Incorporation applied (for group 0143-2010).
Incorporation applied (for group 0145-1980).
Incorporation applied (for group 0145-1990).
Incorporation applied (for group 0145-2000).
Incorporation applied (for group 0145-2010).
Incorporation applied (for group 0146-1980).
Incorporation applied (for group 0146-1990).
Incorporation applied (for group 0146-2000).
Incorporation applied (for group 0146-2010).
Incorporation applied (for group 0147-1980).
Incorporation applied (for group 0147-1990).
Incorporation applied (for group 0147-2000).
Incorporation applied (for group 0147-2010).
Incorporation applied (for group 0148-1980).
Incorporation applied (for group 0148-1990).
Incorporation applied (for group 0148-2000).
Incorporation applied (for group 0148-2010).
Incorporation applied (for group 0149-1980).
Incorporation applied (for group 0149-1990).

Incorporation applied (for group 0149-2000).
Incorporation applied (for group 0149-2010).
Incorporation applied (for group 0150-1980).
Incorporation applied (for group 0150-1990).
Incorporation applied (for group 0150-2000).
Incorporation applied (for group 0150-2010).
Incorporation applied (for group 0151-1980).
Incorporation applied (for group 0151-1990).
Incorporation applied (for group 0151-2000).
Incorporation applied (for group 0151-2010).
Incorporation applied (for group 0152-1980).
Incorporation applied (for group 0152-1990).
Incorporation applied (for group 0152-2000).
Incorporation applied (for group 0152-2010).
Incorporation applied (for group 0157-1980).
Incorporation applied (for group 0157-1990).
Incorporation applied (for group 0157-2000).
Incorporation applied (for group 0157-2010).
Incorporation applied (for group 0158-1980).
Incorporation applied (for group 0158-1990).
Incorporation applied (for group 0158-2000).
Incorporation applied (for group 0158-2010).
Incorporation applied (for group 0159-1980).
Incorporation applied (for group 0159-1990).
Incorporation applied (for group 0159-2000).
Incorporation applied (for group 0159-2010).

Incorporation applied (for group 0160-1980).
Incorporation applied (for group 0160-1990).
Incorporation applied (for group 0160-2000).
Incorporation applied (for group 0160-2010).
Incorporation applied (for group 0162-1980).
Incorporation applied (for group 0162-1990).
Incorporation applied (for group 0162-2000).
Incorporation applied (for group 0162-2010).
Incorporation applied (for group 0163-1980).
Incorporation applied (for group 0163-1990).
Incorporation applied (for group 0163-2000).
Incorporation applied (for group 0163-2010).
Incorporation applied (for group 0164-1980).
Incorporation applied (for group 0164-1990).
Incorporation applied (for group 0164-2000).
Incorporation applied (for group 0164-2010).
Incorporation applied (for group 0165-1980).
Incorporation applied (for group 0165-1990).
Incorporation applied (for group 0165-2000).
Incorporation applied (for group 0165-2010).
Incorporation applied (for group 0170-1980).
Incorporation applied (for group 0170-1990).
Incorporation applied (for group 0170-2000).
Incorporation applied (for group 0170-2010).
Incorporation applied (for group 0171-1980).
Incorporation applied (for group 0171-1990).

Incorporation applied (for group 0171-2000).
Incorporation applied (for group 0171-2010).
Incorporation applied (for group 0175-1980).
Incorporation applied (for group 0175-1990).
Incorporation applied (for group 0175-2000).
Incorporation applied (for group 0175-2010).
Incorporation applied (for group 0176-1980).
Incorporation applied (for group 0176-1990).
Incorporation applied (for group 0176-2000).
Incorporation applied (for group 0176-2010).
Incorporation applied (for group 0178-1980).
Incorporation applied (for group 0178-1990).
Incorporation applied (for group 0178-2000).
Incorporation applied (for group 0178-2010).
Incorporation applied (for group 0179-1980).
Incorporation applied (for group 0179-1990).
Incorporation applied (for group 0179-2000).
Incorporation applied (for group 0179-2010).
Incorporation applied (for group 0180-1980).
Incorporation applied (for group 0180-1990).
Incorporation applied (for group 0180-2000).
Incorporation applied (for group 0180-2010).
Incorporation applied (for group 0181-1980).
Incorporation applied (for group 0181-1990).
Incorporation applied (for group 0181-2000).
Incorporation applied (for group 0181-2010).

Incorporation applied (for group 0182-1980).
Incorporation applied (for group 0182-1990).
Incorporation applied (for group 0182-2000).
Incorporation applied (for group 0182-2010).
Incorporation applied (for group 0183-1980).
Incorporation applied (for group 0183-1990).
Incorporation applied (for group 0183-2000).
Incorporation applied (for group 0183-2010).
Incorporation applied (for group 0184-1980).
Incorporation applied (for group 0184-1990).
Incorporation applied (for group 0184-2000).
Incorporation applied (for group 0184-2010).
Incorporation applied (for group 0185-1980).
Incorporation applied (for group 0185-1990).
Incorporation applied (for group 0185-2000).
Incorporation applied (for group 0185-2010).
Incorporation applied (for group 0190-1980).
Incorporation applied (for group 0190-1990).
Incorporation applied (for group 0190-2000).
Incorporation applied (for group 0190-2010).
Incorporation applied (for group 0191-1980).
Incorporation applied (for group 0191-1990).
Incorporation applied (for group 0191-2000).
Incorporation applied (for group 0191-2010).
Incorporation applied (for group 0192-1980).
Incorporation applied (for group 0192-1990).

Incorporation applied (for group 0192-2000).
Incorporation applied (for group 0192-2010).
Incorporation applied (for group 0193-1980).
Incorporation applied (for group 0193-1990).
Incorporation applied (for group 0193-2000).
Incorporation applied (for group 0193-2010).
Incorporation applied (for group 0195-1980).
Incorporation applied (for group 0195-1990).
Incorporation applied (for group 0195-2000).
Incorporation applied (for group 0195-2010).
Incorporation applied (for group 0196-1980).
Incorporation applied (for group 0196-1990).
Incorporation applied (for group 0196-2000).
Incorporation applied (for group 0196-2010).
Incorporation applied (for group 0197-1980).
Incorporation applied (for group 0197-1990).
Incorporation applied (for group 0197-2000).
Incorporation applied (for group 0197-2010).
Incorporation applied (for group 0198-1980).
Incorporation applied (for group 0198-1990).
Incorporation applied (for group 0198-2000).
Incorporation applied (for group 0198-2010).
Incorporation applied (for group 0203-1980).
Incorporation applied (for group 0203-1990).
Incorporation applied (for group 0203-2000).
Incorporation applied (for group 0203-2010).

Incorporation applied (for group 0204-1980).
Incorporation applied (for group 0204-1990).
Incorporation applied (for group 0204-2000).
Incorporation applied (for group 0204-2010).
Incorporation applied (for group 0208-1980).
Incorporation applied (for group 0208-1990).
Incorporation applied (for group 0208-2000).
Incorporation applied (for group 0208-2010).
Incorporation applied (for group 0209-1980).
Incorporation applied (for group 0209-1990).
Incorporation applied (for group 0209-2000).
Incorporation applied (for group 0209-2010).
Incorporation applied (for group 0211-1980).
Incorporation applied (for group 0211-1990).
Incorporation applied (for group 0211-2000).
Incorporation applied (for group 0211-2010).
Incorporation applied (for group 0212-1980).
Incorporation applied (for group 0212-1990).
Incorporation applied (for group 0212-2000).
Incorporation applied (for group 0212-2010).
Incorporation applied (for group 0213-1980).
Incorporation applied (for group 0213-1990).
Incorporation applied (for group 0213-2000).
Incorporation applied (for group 0213-2010).
Incorporation applied (for group 0214-1980).
Incorporation applied (for group 0214-1990).

Incorporation applied (for group 0214-2000).
Incorporation applied (for group 0214-2010).
Incorporation applied (for group 0215-1980).
Incorporation applied (for group 0215-1990).
Incorporation applied (for group 0215-2000).
Incorporation applied (for group 0215-2010).
Incorporation applied (for group 0216-1980).
Incorporation applied (for group 0216-1990).
Incorporation applied (for group 0216-2000).
Incorporation applied (for group 0216-2010).
Incorporation applied (for group 0217-1980).
Incorporation applied (for group 0217-1990).
Incorporation applied (for group 0217-2000).
Incorporation applied (for group 0217-2010).
Incorporation applied (for group 0218-1980).
Incorporation applied (for group 0218-1990).
Incorporation applied (for group 0218-2000).
Incorporation applied (for group 0218-2010).
Incorporation applied (for group 0223-1980).
Incorporation applied (for group 0223-1990).
Incorporation applied (for group 0223-2000).
Incorporation applied (for group 0223-2010).
Incorporation applied (for group 0224-1980).
Incorporation applied (for group 0224-1990).
Incorporation applied (for group 0224-2000).
Incorporation applied (for group 0224-2010).

Incorporation applied (for group 0225-1980).
Incorporation applied (for group 0225-1990).
Incorporation applied (for group 0225-2000).
Incorporation applied (for group 0225-2010).
Incorporation applied (for group 0226-1980).
Incorporation applied (for group 0226-1990).
Incorporation applied (for group 0226-2000).
Incorporation applied (for group 0226-2010).
Incorporation applied (for group 0228-1980).
Incorporation applied (for group 0228-1990).
Incorporation applied (for group 0228-2000).
Incorporation applied (for group 0228-2010).
Incorporation applied (for group 0229-1980).
Incorporation applied (for group 0229-1990).
Incorporation applied (for group 0229-2000).
Incorporation applied (for group 0229-2010).
Incorporation applied (for group 0230-1980).
Incorporation applied (for group 0230-1990).
Incorporation applied (for group 0230-2000).
Incorporation applied (for group 0230-2010).
Incorporation applied (for group 0231-1980).
Incorporation applied (for group 0231-1990).
Incorporation applied (for group 0231-2000).
Incorporation applied (for group 0231-2010).
Incorporation applied (for group 0236-1980).
Incorporation applied (for group 0236-1990).

```

## Incorporation applied (for group 0236-2000).
## Incorporation applied (for group 0236-2010).
## Incorporation applied (for group 0237-1980).
## Incorporation applied (for group 0237-1990).
## Incorporation applied (for group 0237-2000).
## Incorporation applied (for group 0237-2010).
## Incorporation applied (for group 0241-1980).
## Incorporation applied (for group 0241-1990).
## Incorporation applied (for group 0241-2000).
## Incorporation applied (for group 0241-2010).
## Incorporation applied (for group 0242-1980).
## Incorporation applied (for group 0242-1990).
## Incorporation applied (for group 0242-2000).
## Incorporation applied (for group 0242-2010).

## Warning in ALFAM2mod(dat, pars = pars, app.name = "tan.app", time.name = "ct", : Running with 22 parameters. Dropped 2 with no match.
## These secondary parameters have been dropped:
##   app.mthd.ts.r1
##   ts.cereal.hght.r1
##
## 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
##   man.ph.r1

```

```
## int.r2
## rain.rate.r2
## int.r3
## app.mthd.bc.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 = pars, app.name = 'tan.app', time.name = 'ct', time.incorp = 't.incorp', warn = TRUE)
```

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

```
## Warning in ALFAM2mod(ref, pars = pars, 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 = pars, app.name = "tan.app", time.name = "ct", : Running with 20 parameters. Dropped 4 with no match.
## 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
```

With default values

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

```
## Default parameters (version 1) are being used.
## Incorporation applied (for group 0009-1980).
## Incorporation applied (for group 0009-1990).
## Incorporation applied (for group 0009-2000).
## Incorporation applied (for group 0009-2010).
## Incorporation applied (for group 0010-1980).
## Incorporation applied (for group 0010-1990).
## Incorporation applied (for group 0010-2000).
## Incorporation applied (for group 0010-2010).
## Incorporation applied (for group 0011-1980).
## Incorporation applied (for group 0011-1990).
## Incorporation applied (for group 0011-2000).
## Incorporation applied (for group 0011-2010).
## Incorporation applied (for group 0012-1980).
## Incorporation applied (for group 0012-1990).
```

Incorporation applied (for group 0012-2000).
Incorporation applied (for group 0012-2010).
Incorporation applied (for group 0013-1980).
Incorporation applied (for group 0013-1990).
Incorporation applied (for group 0013-2000).
Incorporation applied (for group 0013-2010).
Incorporation applied (for group 0014-1980).
Incorporation applied (for group 0014-1990).
Incorporation applied (for group 0014-2000).
Incorporation applied (for group 0014-2010).
Incorporation applied (for group 0015-1980).
Incorporation applied (for group 0015-1990).
Incorporation applied (for group 0015-2000).
Incorporation applied (for group 0015-2010).
Incorporation applied (for group 0016-1980).
Incorporation applied (for group 0016-1990).
Incorporation applied (for group 0016-2000).
Incorporation applied (for group 0016-2010).
Incorporation applied (for group 0021-1980).
Incorporation applied (for group 0021-1990).
Incorporation applied (for group 0021-2000).
Incorporation applied (for group 0021-2010).
Incorporation applied (for group 0022-1980).
Incorporation applied (for group 0022-1990).
Incorporation applied (for group 0022-2000).
Incorporation applied (for group 0022-2010).

Incorporation applied (for group 0023-1980).
Incorporation applied (for group 0023-1990).
Incorporation applied (for group 0023-2000).
Incorporation applied (for group 0023-2010).
Incorporation applied (for group 0024-1980).
Incorporation applied (for group 0024-1990).
Incorporation applied (for group 0024-2000).
Incorporation applied (for group 0024-2010).
Incorporation applied (for group 0026-1980).
Incorporation applied (for group 0026-1990).
Incorporation applied (for group 0026-2000).
Incorporation applied (for group 0026-2010).
Incorporation applied (for group 0027-1980).
Incorporation applied (for group 0027-1990).
Incorporation applied (for group 0027-2000).
Incorporation applied (for group 0027-2010).
Incorporation applied (for group 0028-1980).
Incorporation applied (for group 0028-1990).
Incorporation applied (for group 0028-2000).
Incorporation applied (for group 0028-2010).
Incorporation applied (for group 0029-1980).
Incorporation applied (for group 0029-1990).
Incorporation applied (for group 0029-2000).
Incorporation applied (for group 0029-2010).
Incorporation applied (for group 0030-1980).
Incorporation applied (for group 0030-1990).

Incorporation applied (for group 0030-2000).
Incorporation applied (for group 0030-2010).
Incorporation applied (for group 0031-1980).
Incorporation applied (for group 0031-1990).
Incorporation applied (for group 0031-2000).
Incorporation applied (for group 0031-2010).
Incorporation applied (for group 0035-1980).
Incorporation applied (for group 0035-1990).
Incorporation applied (for group 0035-2000).
Incorporation applied (for group 0035-2010).
Incorporation applied (for group 0036-1980).
Incorporation applied (for group 0036-1990).
Incorporation applied (for group 0036-2000).
Incorporation applied (for group 0036-2010).
Incorporation applied (for group 0046-1980).
Incorporation applied (for group 0046-1990).
Incorporation applied (for group 0046-2000).
Incorporation applied (for group 0046-2010).
Incorporation applied (for group 0047-1980).
Incorporation applied (for group 0047-1990).
Incorporation applied (for group 0047-2000).
Incorporation applied (for group 0047-2010).
Incorporation applied (for group 0048-1980).
Incorporation applied (for group 0048-1990).
Incorporation applied (for group 0048-2000).
Incorporation applied (for group 0048-2010).

Incorporation applied (for group 0049-1980).
Incorporation applied (for group 0049-1990).
Incorporation applied (for group 0049-2000).
Incorporation applied (for group 0049-2010).
Incorporation applied (for group 0050-1980).
Incorporation applied (for group 0050-1990).
Incorporation applied (for group 0050-2000).
Incorporation applied (for group 0050-2010).
Incorporation applied (for group 0051-1980).
Incorporation applied (for group 0051-1990).
Incorporation applied (for group 0051-2000).
Incorporation applied (for group 0051-2010).
Incorporation applied (for group 0052-1980).
Incorporation applied (for group 0052-1990).
Incorporation applied (for group 0052-2000).
Incorporation applied (for group 0052-2010).
Incorporation applied (for group 0053-1980).
Incorporation applied (for group 0053-1990).
Incorporation applied (for group 0053-2000).
Incorporation applied (for group 0053-2010).
Incorporation applied (for group 0058-1980).
Incorporation applied (for group 0058-1990).
Incorporation applied (for group 0058-2000).
Incorporation applied (for group 0058-2010).
Incorporation applied (for group 0059-1980).
Incorporation applied (for group 0059-1990).

Incorporation applied (for group 0059-2000).
Incorporation applied (for group 0059-2010).
Incorporation applied (for group 0060-1980).
Incorporation applied (for group 0060-1990).
Incorporation applied (for group 0060-2000).
Incorporation applied (for group 0060-2010).
Incorporation applied (for group 0061-1980).
Incorporation applied (for group 0061-1990).
Incorporation applied (for group 0061-2000).
Incorporation applied (for group 0061-2010).
Incorporation applied (for group 0063-1980).
Incorporation applied (for group 0063-1990).
Incorporation applied (for group 0063-2000).
Incorporation applied (for group 0063-2010).
Incorporation applied (for group 0064-1980).
Incorporation applied (for group 0064-1990).
Incorporation applied (for group 0064-2000).
Incorporation applied (for group 0064-2010).
Incorporation applied (for group 0065-1980).
Incorporation applied (for group 0065-1990).
Incorporation applied (for group 0065-2000).
Incorporation applied (for group 0065-2010).
Incorporation applied (for group 0066-1980).
Incorporation applied (for group 0066-1990).
Incorporation applied (for group 0066-2000).
Incorporation applied (for group 0066-2010).

Incorporation applied (for group 0067-1980).
Incorporation applied (for group 0067-1990).
Incorporation applied (for group 0067-2000).
Incorporation applied (for group 0067-2010).
Incorporation applied (for group 0068-1980).
Incorporation applied (for group 0068-1990).
Incorporation applied (for group 0068-2000).
Incorporation applied (for group 0068-2010).
Incorporation applied (for group 0072-1980).
Incorporation applied (for group 0072-1990).
Incorporation applied (for group 0072-2000).
Incorporation applied (for group 0072-2010).
Incorporation applied (for group 0073-1980).
Incorporation applied (for group 0073-1990).
Incorporation applied (for group 0073-2000).
Incorporation applied (for group 0073-2010).
Incorporation applied (for group 0083-1980).
Incorporation applied (for group 0083-1990).
Incorporation applied (for group 0083-2000).
Incorporation applied (for group 0083-2010).
Incorporation applied (for group 0084-1980).
Incorporation applied (for group 0084-1990).
Incorporation applied (for group 0084-2000).
Incorporation applied (for group 0084-2010).
Incorporation applied (for group 0085-1980).
Incorporation applied (for group 0085-1990).

Incorporation applied (for group 0085-2000).
Incorporation applied (for group 0085-2010).
Incorporation applied (for group 0086-1980).
Incorporation applied (for group 0086-1990).
Incorporation applied (for group 0086-2000).
Incorporation applied (for group 0086-2010).
Incorporation applied (for group 0087-1980).
Incorporation applied (for group 0087-1990).
Incorporation applied (for group 0087-2000).
Incorporation applied (for group 0087-2010).
Incorporation applied (for group 0088-1980).
Incorporation applied (for group 0088-1990).
Incorporation applied (for group 0088-2000).
Incorporation applied (for group 0088-2010).
Incorporation applied (for group 0089-1980).
Incorporation applied (for group 0089-1990).
Incorporation applied (for group 0089-2000).
Incorporation applied (for group 0089-2010).
Incorporation applied (for group 0090-1980).
Incorporation applied (for group 0090-1990).
Incorporation applied (for group 0090-2000).
Incorporation applied (for group 0090-2010).
Incorporation applied (for group 0095-1980).
Incorporation applied (for group 0095-1990).
Incorporation applied (for group 0095-2000).
Incorporation applied (for group 0095-2010).

Incorporation applied (for group 0096-1980).
Incorporation applied (for group 0096-1990).
Incorporation applied (for group 0096-2000).
Incorporation applied (for group 0096-2010).
Incorporation applied (for group 0097-1980).
Incorporation applied (for group 0097-1990).
Incorporation applied (for group 0097-2000).
Incorporation applied (for group 0097-2010).
Incorporation applied (for group 0098-1980).
Incorporation applied (for group 0098-1990).
Incorporation applied (for group 0098-2000).
Incorporation applied (for group 0098-2010).
Incorporation applied (for group 0100-1980).
Incorporation applied (for group 0100-1990).
Incorporation applied (for group 0100-2000).
Incorporation applied (for group 0100-2010).
Incorporation applied (for group 0101-1980).
Incorporation applied (for group 0101-1990).
Incorporation applied (for group 0101-2000).
Incorporation applied (for group 0101-2010).
Incorporation applied (for group 0102-1980).
Incorporation applied (for group 0102-1990).
Incorporation applied (for group 0102-2000).
Incorporation applied (for group 0102-2010).
Incorporation applied (for group 0103-1980).
Incorporation applied (for group 0103-1990).

Incorporation applied (for group 0103-2000).
Incorporation applied (for group 0103-2010).
Incorporation applied (for group 0104-1980).
Incorporation applied (for group 0104-1990).
Incorporation applied (for group 0104-2000).
Incorporation applied (for group 0104-2010).
Incorporation applied (for group 0105-1980).
Incorporation applied (for group 0105-1990).
Incorporation applied (for group 0105-2000).
Incorporation applied (for group 0105-2010).
Incorporation applied (for group 0109-1980).
Incorporation applied (for group 0109-1990).
Incorporation applied (for group 0109-2000).
Incorporation applied (for group 0109-2010).
Incorporation applied (for group 0110-1980).
Incorporation applied (for group 0110-1990).
Incorporation applied (for group 0110-2000).
Incorporation applied (for group 0110-2010).
Incorporation applied (for group 0112-1980).
Incorporation applied (for group 0112-1990).
Incorporation applied (for group 0112-2000).
Incorporation applied (for group 0112-2010).
Incorporation applied (for group 0113-1980).
Incorporation applied (for group 0113-1990).
Incorporation applied (for group 0113-2000).
Incorporation applied (for group 0113-2010).

Incorporation applied (for group 0114-1980).
Incorporation applied (for group 0114-1990).
Incorporation applied (for group 0114-2000).
Incorporation applied (for group 0114-2010).
Incorporation applied (for group 0115-1980).
Incorporation applied (for group 0115-1990).
Incorporation applied (for group 0115-2000).
Incorporation applied (for group 0115-2010).
Incorporation applied (for group 0116-1980).
Incorporation applied (for group 0116-1990).
Incorporation applied (for group 0116-2000).
Incorporation applied (for group 0116-2010).
Incorporation applied (for group 0117-1980).
Incorporation applied (for group 0117-1990).
Incorporation applied (for group 0117-2000).
Incorporation applied (for group 0117-2010).
Incorporation applied (for group 0118-1980).
Incorporation applied (for group 0118-1990).
Incorporation applied (for group 0118-2000).
Incorporation applied (for group 0118-2010).
Incorporation applied (for group 0119-1980).
Incorporation applied (for group 0119-1990).
Incorporation applied (for group 0119-2000).
Incorporation applied (for group 0119-2010).
Incorporation applied (for group 0124-1980).
Incorporation applied (for group 0124-1990).

Incorporation applied (for group 0124-2000).
Incorporation applied (for group 0124-2010).
Incorporation applied (for group 0125-1980).
Incorporation applied (for group 0125-1990).
Incorporation applied (for group 0125-2000).
Incorporation applied (for group 0125-2010).
Incorporation applied (for group 0126-1980).
Incorporation applied (for group 0126-1990).
Incorporation applied (for group 0126-2000).
Incorporation applied (for group 0126-2010).
Incorporation applied (for group 0127-1980).
Incorporation applied (for group 0127-1990).
Incorporation applied (for group 0127-2000).
Incorporation applied (for group 0127-2010).
Incorporation applied (for group 0129-1980).
Incorporation applied (for group 0129-1990).
Incorporation applied (for group 0129-2000).
Incorporation applied (for group 0129-2010).
Incorporation applied (for group 0130-1980).
Incorporation applied (for group 0130-1990).
Incorporation applied (for group 0130-2000).
Incorporation applied (for group 0130-2010).
Incorporation applied (for group 0131-1980).
Incorporation applied (for group 0131-1990).
Incorporation applied (for group 0131-2000).
Incorporation applied (for group 0131-2010).

Incorporation applied (for group 0132-1980).
Incorporation applied (for group 0132-1990).
Incorporation applied (for group 0132-2000).
Incorporation applied (for group 0132-2010).
Incorporation applied (for group 0137-1980).
Incorporation applied (for group 0137-1990).
Incorporation applied (for group 0137-2000).
Incorporation applied (for group 0137-2010).
Incorporation applied (for group 0138-1980).
Incorporation applied (for group 0138-1990).
Incorporation applied (for group 0138-2000).
Incorporation applied (for group 0138-2010).
Incorporation applied (for group 0142-1980).
Incorporation applied (for group 0142-1990).
Incorporation applied (for group 0142-2000).
Incorporation applied (for group 0142-2010).
Incorporation applied (for group 0143-1980).
Incorporation applied (for group 0143-1990).
Incorporation applied (for group 0143-2000).
Incorporation applied (for group 0143-2010).
Incorporation applied (for group 0145-1980).
Incorporation applied (for group 0145-1990).
Incorporation applied (for group 0145-2000).
Incorporation applied (for group 0145-2010).
Incorporation applied (for group 0146-1980).
Incorporation applied (for group 0146-1990).

Incorporation applied (for group 0146-2000).
Incorporation applied (for group 0146-2010).
Incorporation applied (for group 0147-1980).
Incorporation applied (for group 0147-1990).
Incorporation applied (for group 0147-2000).
Incorporation applied (for group 0147-2010).
Incorporation applied (for group 0148-1980).
Incorporation applied (for group 0148-1990).
Incorporation applied (for group 0148-2000).
Incorporation applied (for group 0148-2010).
Incorporation applied (for group 0149-1980).
Incorporation applied (for group 0149-1990).
Incorporation applied (for group 0149-2000).
Incorporation applied (for group 0149-2010).
Incorporation applied (for group 0150-1980).
Incorporation applied (for group 0150-1990).
Incorporation applied (for group 0150-2000).
Incorporation applied (for group 0150-2010).
Incorporation applied (for group 0151-1980).
Incorporation applied (for group 0151-1990).
Incorporation applied (for group 0151-2000).
Incorporation applied (for group 0151-2010).
Incorporation applied (for group 0152-1980).
Incorporation applied (for group 0152-1990).
Incorporation applied (for group 0152-2000).
Incorporation applied (for group 0152-2010).

Incorporation applied (for group 0157-1980).
Incorporation applied (for group 0157-1990).
Incorporation applied (for group 0157-2000).
Incorporation applied (for group 0157-2010).
Incorporation applied (for group 0158-1980).
Incorporation applied (for group 0158-1990).
Incorporation applied (for group 0158-2000).
Incorporation applied (for group 0158-2010).
Incorporation applied (for group 0159-1980).
Incorporation applied (for group 0159-1990).
Incorporation applied (for group 0159-2000).
Incorporation applied (for group 0159-2010).
Incorporation applied (for group 0160-1980).
Incorporation applied (for group 0160-1990).
Incorporation applied (for group 0160-2000).
Incorporation applied (for group 0160-2010).
Incorporation applied (for group 0162-1980).
Incorporation applied (for group 0162-1990).
Incorporation applied (for group 0162-2000).
Incorporation applied (for group 0162-2010).
Incorporation applied (for group 0163-1980).
Incorporation applied (for group 0163-1990).
Incorporation applied (for group 0163-2000).
Incorporation applied (for group 0163-2010).
Incorporation applied (for group 0164-1980).
Incorporation applied (for group 0164-1990).

Incorporation applied (for group 0164-2000).
Incorporation applied (for group 0164-2010).
Incorporation applied (for group 0165-1980).
Incorporation applied (for group 0165-1990).
Incorporation applied (for group 0165-2000).
Incorporation applied (for group 0165-2010).
Incorporation applied (for group 0170-1980).
Incorporation applied (for group 0170-1990).
Incorporation applied (for group 0170-2000).
Incorporation applied (for group 0170-2010).
Incorporation applied (for group 0171-1980).
Incorporation applied (for group 0171-1990).
Incorporation applied (for group 0171-2000).
Incorporation applied (for group 0171-2010).
Incorporation applied (for group 0175-1980).
Incorporation applied (for group 0175-1990).
Incorporation applied (for group 0175-2000).
Incorporation applied (for group 0175-2010).
Incorporation applied (for group 0176-1980).
Incorporation applied (for group 0176-1990).
Incorporation applied (for group 0176-2000).
Incorporation applied (for group 0176-2010).
Incorporation applied (for group 0178-1980).
Incorporation applied (for group 0178-1990).
Incorporation applied (for group 0178-2000).
Incorporation applied (for group 0178-2010).

Incorporation applied (for group 0179-1980).
Incorporation applied (for group 0179-1990).
Incorporation applied (for group 0179-2000).
Incorporation applied (for group 0179-2010).
Incorporation applied (for group 0180-1980).
Incorporation applied (for group 0180-1990).
Incorporation applied (for group 0180-2000).
Incorporation applied (for group 0180-2010).
Incorporation applied (for group 0181-1980).
Incorporation applied (for group 0181-1990).
Incorporation applied (for group 0181-2000).
Incorporation applied (for group 0181-2010).
Incorporation applied (for group 0182-1980).
Incorporation applied (for group 0182-1990).
Incorporation applied (for group 0182-2000).
Incorporation applied (for group 0182-2010).
Incorporation applied (for group 0183-1980).
Incorporation applied (for group 0183-1990).
Incorporation applied (for group 0183-2000).
Incorporation applied (for group 0183-2010).
Incorporation applied (for group 0184-1980).
Incorporation applied (for group 0184-1990).
Incorporation applied (for group 0184-2000).
Incorporation applied (for group 0184-2010).
Incorporation applied (for group 0185-1980).
Incorporation applied (for group 0185-1990).

Incorporation applied (for group 0185-2000).
Incorporation applied (for group 0185-2010).
Incorporation applied (for group 0190-1980).
Incorporation applied (for group 0190-1990).
Incorporation applied (for group 0190-2000).
Incorporation applied (for group 0190-2010).
Incorporation applied (for group 0191-1980).
Incorporation applied (for group 0191-1990).
Incorporation applied (for group 0191-2000).
Incorporation applied (for group 0191-2010).
Incorporation applied (for group 0192-1980).
Incorporation applied (for group 0192-1990).
Incorporation applied (for group 0192-2000).
Incorporation applied (for group 0192-2010).
Incorporation applied (for group 0193-1980).
Incorporation applied (for group 0193-1990).
Incorporation applied (for group 0193-2000).
Incorporation applied (for group 0193-2010).
Incorporation applied (for group 0195-1980).
Incorporation applied (for group 0195-1990).
Incorporation applied (for group 0195-2000).
Incorporation applied (for group 0195-2010).
Incorporation applied (for group 0196-1980).
Incorporation applied (for group 0196-1990).
Incorporation applied (for group 0196-2000).
Incorporation applied (for group 0196-2010).

Incorporation applied (for group 0197-1980).
Incorporation applied (for group 0197-1990).
Incorporation applied (for group 0197-2000).
Incorporation applied (for group 0197-2010).
Incorporation applied (for group 0198-1980).
Incorporation applied (for group 0198-1990).
Incorporation applied (for group 0198-2000).
Incorporation applied (for group 0198-2010).
Incorporation applied (for group 0203-1980).
Incorporation applied (for group 0203-1990).
Incorporation applied (for group 0203-2000).
Incorporation applied (for group 0203-2010).
Incorporation applied (for group 0204-1980).
Incorporation applied (for group 0204-1990).
Incorporation applied (for group 0204-2000).
Incorporation applied (for group 0204-2010).
Incorporation applied (for group 0208-1980).
Incorporation applied (for group 0208-1990).
Incorporation applied (for group 0208-2000).
Incorporation applied (for group 0208-2010).
Incorporation applied (for group 0209-1980).
Incorporation applied (for group 0209-1990).
Incorporation applied (for group 0209-2000).
Incorporation applied (for group 0209-2010).
Incorporation applied (for group 0211-1980).
Incorporation applied (for group 0211-1990).

Incorporation applied (for group 0211-2000).
Incorporation applied (for group 0211-2010).
Incorporation applied (for group 0212-1980).
Incorporation applied (for group 0212-1990).
Incorporation applied (for group 0212-2000).
Incorporation applied (for group 0212-2010).
Incorporation applied (for group 0213-1980).
Incorporation applied (for group 0213-1990).
Incorporation applied (for group 0213-2000).
Incorporation applied (for group 0213-2010).
Incorporation applied (for group 0214-1980).
Incorporation applied (for group 0214-1990).
Incorporation applied (for group 0214-2000).
Incorporation applied (for group 0214-2010).
Incorporation applied (for group 0215-1980).
Incorporation applied (for group 0215-1990).
Incorporation applied (for group 0215-2000).
Incorporation applied (for group 0215-2010).
Incorporation applied (for group 0216-1980).
Incorporation applied (for group 0216-1990).
Incorporation applied (for group 0216-2000).
Incorporation applied (for group 0216-2010).
Incorporation applied (for group 0217-1980).
Incorporation applied (for group 0217-1990).
Incorporation applied (for group 0217-2000).
Incorporation applied (for group 0217-2010).

Incorporation applied (for group 0218-1980).
Incorporation applied (for group 0218-1990).
Incorporation applied (for group 0218-2000).
Incorporation applied (for group 0218-2010).
Incorporation applied (for group 0223-1980).
Incorporation applied (for group 0223-1990).
Incorporation applied (for group 0223-2000).
Incorporation applied (for group 0223-2010).
Incorporation applied (for group 0224-1980).
Incorporation applied (for group 0224-1990).
Incorporation applied (for group 0224-2000).
Incorporation applied (for group 0224-2010).
Incorporation applied (for group 0225-1980).
Incorporation applied (for group 0225-1990).
Incorporation applied (for group 0225-2000).
Incorporation applied (for group 0225-2010).
Incorporation applied (for group 0226-1980).
Incorporation applied (for group 0226-1990).
Incorporation applied (for group 0226-2000).
Incorporation applied (for group 0226-2010).
Incorporation applied (for group 0228-1980).
Incorporation applied (for group 0228-1990).
Incorporation applied (for group 0228-2000).
Incorporation applied (for group 0228-2010).
Incorporation applied (for group 0229-1980).
Incorporation applied (for group 0229-1990).

Incorporation applied (for group 0229-2000).
Incorporation applied (for group 0229-2010).
Incorporation applied (for group 0230-1980).
Incorporation applied (for group 0230-1990).
Incorporation applied (for group 0230-2000).
Incorporation applied (for group 0230-2010).
Incorporation applied (for group 0231-1980).
Incorporation applied (for group 0231-1990).
Incorporation applied (for group 0231-2000).
Incorporation applied (for group 0231-2010).
Incorporation applied (for group 0236-1980).
Incorporation applied (for group 0236-1990).
Incorporation applied (for group 0236-2000).
Incorporation applied (for group 0236-2010).
Incorporation applied (for group 0237-1980).
Incorporation applied (for group 0237-1990).
Incorporation applied (for group 0237-2000).
Incorporation applied (for group 0237-2010).
Incorporation applied (for group 0241-1980).
Incorporation applied (for group 0241-1990).
Incorporation applied (for group 0241-2000).
Incorporation applied (for group 0241-2010).
Incorporation applied (for group 0242-1980).
Incorporation applied (for group 0242-1990).
Incorporation applied (for group 0242-2000).
Incorporation applied (for group 0242-2010).

```
## Warning in ALFAM2mod(dat, app.name = "tan.app", time.name = "ct", time.incorp = "t.incorp", : Running with 19 parameters. Dropped 1 wit
## These secondary parameters have been dropped:
##   rain.cum.r3
##
## These secondary parameters are being used:
##   int.f0
##   int.r1
##   int.r2
##   int.r3
##   app.mthd.os.f0
##   app.rate.f0
##   man.dm.f0
##   incorp.deep.f4
##   incorp.shallow.f4
##   app.mthd.bc.r1
##   man.dm.r1
##   air.temp.r1
##   wind.2m.r1
##   man.ph.r1
##   air.temp.r3
##   incorp.deep.r3
##   app.mthd.os.r3
##   man.ph.r3
##   rain.rate.r2
```

Add results to main df

```
dat$emis <- signif(preds$e, 2)
dat$EF <- signif(preds$er, 2)

dat$emis.def <- signif(preds.def$e, 2)
dat$EF.def <- signif(preds.def$er, 2)
```