



aggregated_dimensions:
Dimensions of the aggregated data

aggregated_data:
Instructions for aggregating the fragments

location:
Locations of fragments in
the aggregated data

format:
Formats of fragment files

address:
Addresses of data
in fragment file

file:
URIs of fragments

```
netcdf January-December.nc
dimensions:
```

```
// Aggregated dimensions
```

```
> time = 12 ;
> latitude = 73 ;
> longitude = 144 ;
```

```
// Fragment dimensions
```

```
f_time = 2 ;
f_latitude = 1 ;
f_longitude = 1 ;
```

```
i = 3 ; // i = number of aggregated dimensions
j = 2 ; // j = maximum of fragment dimension sizes
```

```
variables:
```

```
double temp ; // Aggregation variable, encoded as a scalar
temp:standard_name = "sea_surface_temperature" ;
temp:units = "K" ;
temp:cell_methods = "time: mean" ;
temp:aggregated_dimensions = "time latitude longitude" ;
temp:aggregated_data = "location: aggregation_location
                        file: aggregation_file
                        format: aggregation_format
                        address: aggregation_address" ;
```

```
float time(time) ;
time:units = "days since 2022-01-01" ;
float latitude(latitude) ;
latitude:units = "degrees_north" ;
float longitude(longitude) ;
longitude:units = "degrees_east" ;
// Aggregation instruction variables
```

```
string aggregation_address(f_time, f_latitude, f_longitude) ;
string aggregation_format ;
string aggregation_file(f_time, f_latitude, f_longitude) ;
int aggregation_location(i, j) ;
```

```
// Global attributes
:Conventions = "CF-1.9 CFA-0.6.1" ; // CF and CFA conventions
```

```
data:
time = 0, 31, 59, 90, 120, 151, 181, 212, 243, 273, 304, 334 ;
temp = _ ;
```

```
> aggregation_location = 6, 6, // Each fragment spans half the time range
                        73, _ , // All fragments span the whole latitude range
                        144, _ ; // All fragments span the whole longitude range
```

```
> aggregation_file = "file:///data1/Jan-June.nc", "file:///data2/July-Dec.nc" ;
```

```
> aggregation_format = "nc" ;
```

```
> aggregation_address = "tos", "tos" ;
```

Dimensions indexing the
number of fragments
along each aggregated
dimension

Dimensions indexing the
fragment data sizes
along each
aggregated dimension
(padded with missing
values as required)