```
netcdf 20090325_gop9_arst_lmk {
dimensions:
        time = 96 ;
        forecast_period_dim = 8 ;
        time1h = 24 ;
        forecast_period1h_dim = 8 ;
        area_dim = 68 ;
        statistics1_dim = 3 ;
        statistics2_dim = 5 ;
        statistics_wind_dim = 73 ;
        statistics_bft_dim = 13 ;
        statistics_soiltyp_dim = 9 ;
        statistics_20bins_dim = 25 ;
        statistics_prec_dim = 23 ;
        statistics_20binsplus1_dim = 26 ;
        statistics_tqv50binsplus1_dim = 56 ;
        statistics_cot50binsplus2_dim = 57 ;
        statistics_20binsplus2_dim = 27 ;
        statistics_dbz60binsplus2_dim = 67 ;
        area_description_len = 52 ;
        area_len = 4 ;
variables:
        int time(time) ;
                time:long_name = "UTC valid time of model" ;
                time:standard_name = "time" ;
                time:units = "seconds since 1970-1-1 0:00:00 0:00" ;
                time:valid_min = 0 ;
                time:_FillValue = -9999 ;
        int time1h(time1h) ;
                time1h:long_name = "UTC valid time of model 1-hourly" ;
                time1h:units = "seconds since 1970-1-1 0:00:00 0:00" ;
                time1h:valid_min = 0 ;
                time1h:_FillValue = -9999 ;
        int forecast_period(forecast_period_dim, time) ;
                forecast_period:long_name = "time since start of model forecast"
 ;
                forecast_period:standard_name = "forecast_period" ;
                forecast_period:units = "s" ;
                forecast_period:valid_min = 0 ;
                forecast_period:_FillValue = -9999 ;
        int forecast_period1h(forecast_period1h_dim, time1h) ;
                forecast_period1h:long_name = "time since start of model forecas
t (variables with hourly output)" ;
                forecast_period1h:standard_name = "forecast_period" ;
                forecast_period1h:units = "s" ;
                forecast_period1h:valid_min = 0 ;
                forecast_period1h:_FillValue = -9999 ;
        char area(area_dim, area_len) ;
                area:long_name = "Area Code" ;
                area:FORTRAN_format = "(A4)" ;
        char area_description(area_dim, area_description_len) ;
                area_description:long_name = "area description" ;
        int area_gp(area_dim) ;
                area_gp:long_name = "number of model gridpoints in area" ;
        int land_area_gp(area_dim) ;
                land_area_gp:long_name = "number of model land gridpoints (land_
area_fraction>0.5) in area" ;
        float latitude(statistics1_dim, area_dim) ;
                latitude:long_name = "latitude" ;
                latitude:standard_name = "latitude" ;
                latitude:units = "degree_north" ;
                latitude:valid_min = -90.f ;
                latitude:valid_max = 90.f ;
                latitude:comment = "statistics1_dim: mean, min, max" ;
                latitude:_FillValue = -9999.f ;
        float longitude(statistics1_dim, area_dim) ;
                longitude:long_name = "longitude" ;
                longitude:standard_name = "longitude" ;
                longitude:units = "degree_east" ;
                longitude:valid_min = -180.f ;
                longitude:valid_max = 180.f ;
                longitude:comment = "statistics1_dim: mean, min, max" ;
                longitude:_FillValue = -9999.f ;
        float hsurf(statistics2_dim, area_dim) ;
                hsurf:long_name = "Model surface height above sea level." ;
                hsurf:standard_name = "surface_altitude" ;
                hsurf:units = "m" ;
                hsurf:valid_min = -999.f ;
                hsurf:valid_max = 9999.f ;
                hsurf:comment = "statistics_2_dim: mean, min, max, median, stdev
" ;
        float fr_land(statistics1_dim, area_dim) ;
                fr_land:long_name = "land-sea fraction" ;
                fr_land:standard_name = "land_area_fraction" ;
                fr_land:units = "1" ;
                fr_land:valid_min = 0.f ;
                fr_land:valid_max = 1.f ;
                fr_land:comment = "statistics1_dim: mean, min, max" ;
                fr_land:_FillValue = -9999.f ;
        float rootdp(statistics1_dim, area_dim) ;
                rootdp:long_name = "root depth" ;
                rootdp:standard_name = "root_depth" ;
                rootdp:units = "m" ;
                rootdp:valid_min = 0.f ;
                rootdp:valid_max = 9999.f ;
                rootdp:comment = "statistics1_dim: mean, min, max" ;
                rootdp:_FillValue = -9999.f ;
        float plcov(statistics1_dim, area_dim) ;
                plcov:long_name = "vegetation area fraction" ;
                plcov:standard_name = "vegetation_area_fraction" ;
                plcov:units = "1" ;
                plcov:valid_min = 0.f ;
                plcov:valid_max = 1.f ;
                plcov:comment = "statistics1_dim: mean, min, max" ;
                plcov:_FillValue = -9999.f ;
        float lai(statistics1_dim, area_dim) ;
                lai:long_name = "leaf area index" ;
                lai:standard_name = "leaf_area_index" ;
                lai:units = "1" ;
                lai:valid_min = 0.f ;
                lai:valid_max = 9999.f ;
                lai:comment = "statistics1_dim: mean, min, max" ;
                lai:_FillValue = -9999.f ;
        float soiltyp(statistics_soiltyp_dim, area_dim) ;
                soiltyp:long_name = "soil type" ;
                soiltyp:standard_name = "soil_type" ;
                soiltyp:units = "1" ;
                soiltyp:comment = "statistics_soiltyp_dim: frequencies of 9 soil
types" ;
        float clct(statistics_20bins_dim, area_dim, forecast_period_dim, time) ;
                clct:long_name = "total cloud cover" ;
                clct:standard_name = "cloud_area_fraction" ;
                clct:units = "1" ;
                clct:add_offset = 0.f ;
                clct:valid_min = 0.f ;
                clct:valid_max = 1.f ;
                clct:comment = "statistics_20bins_dim: mean, min, max, median, s
tdev, frequency distribution of 20 bins from 0.0 to 1.0" ;
                clct:_FillValue = -9999.f ;
        float clch(statistics_20bins_dim, area_dim, forecast_period1h_dim, time1
h) ;
                clch:long_name = "high cloud cover" ;
                clch:standard_name = "cloud_area_fraction_in_atmosphere_layer" ;
                clch:units = "1" ;
```

```
                clch:add_offset = 0.f ;
                clch:valid_min = 0.f ;
                clch:valid_max = 1.f ;
                clch:comment = "statistics_20bins_dim: mean, min, max, median, s
tdev, frequency distribution of 20 bins from 0.0 to 1.0" ;
                clch:_FillValue = -9999.f ;
        float clcm(statistics_20bins_dim, area_dim, forecast_period1h_dim, time1
h) ;
                clcm:long_name = "medium cloud cover" ;
                clcm:standard_name = "cloud_area_fraction_in_atmosphere_layer" ;
                clcm:units = "1" ;
                clcm:add_offset = 0.f ;
                clcm:valid_min = 0.f ;
                clcm:valid_max = 1.f ;
                clcm:comment = "statistics_20bins_dim: mean, min, max, median, s
tdev, frequency distribution of 20 bins from 0.0 to 1.0" ;
                clcm:_FillValue = -9999.f ;
        float clcl(statistics_20bins_dim, area_dim, forecast_period1h_dim, time1
h) ;
                clcl:long_name = "low cloud cover" ;
                clcl:standard_name = "cloud_area_fraction_in_atmosphere_layer" ;
                clcl:units = "1" ;
                clcl:add_offset = 0.f ;
                clcl:valid_min = 0.f ;
                clcl:valid_max = 1.f ;
                clcl:comment = "statistics_20bins_dim: mean, min, max, median, s
tdev, frequency distribution of 20 bins from 0.0 to 1.0" ;
                clcl:_FillValue = -9999.f ;
        float surface_air_pressure(statistics1_dim, area_dim, forecast_period1h_
dim, time1h) ;
                surface_air_pressure:long_name = "surface air pressure" ;
                surface_air_pressure:standard_name = "surface_air_pressure" ;
                surface_air_pressure:units = "Pa" ;
                surface_air_pressure:add_offset = 0.f ;
                surface_air_pressure:valid_min = 0.f ;
                surface_air_pressure:valid_max = 999999.f ;
                surface_air_pressure:comment = "statistics1_dim: mean, min, max"
 ;
                surface_air_pressure:_FillValue = -9999.f ;
        float pmsl(statistics1_dim, area_dim, forecast_period1h_dim, time1h) ;
                pmsl:long_name = "mean sea level pressure" ;
                pmsl:standard_name = "air_pressure_at_sea_level" ;
                pmsl:units = "Pa" ;
                pmsl:add_offset = 0.f ;
                pmsl:valid_min = 0.f ;
                pmsl:valid_max = 999999.f ;
                pmsl:comment = "statistics1_dim: mean, min, max" ;
                pmsl:_FillValue = -9999.f ;
        float t_2m(statistics1_dim, area_dim, forecast_period1h_dim, time1h) ;
                t_2m:long_name = "2-m temperature" ;
                t_2m:standard_name = "air_temperature" ;
                t_2m:units = "K" ;
                t_2m:add_offset = 0.f ;
                t_2m:valid_min = 0.f ;
                t_2m:valid_max = 399.f ;
                t_2m:comment = "statistics1_dim: mean, min, max" ;
                t_2m:_FillValue = -9999.f ;
        float t_10m(statistics1_dim, area_dim, forecast_period1h_dim, time1h) ;
                t_10m:long_name = "10-m (lowest model level) temperature" ;
                t_10m:standard_name = "air_temperature" ;
                t_10m:units = "K" ;
                t_10m:add_offset = 0.f ;
                t_10m:valid_min = 0.f ;
                t_10m:valid_max = 399.f ;
                t_10m:comment = "statistics1_dim: mean, min, max" ;
                t_10m:_FillValue = -9999.f ;
        float qv_10m(statistics1_dim, area_dim, forecast_period1h_dim, time1h) ;
```

```
                qv_10m:long_name = "10-m (lowest model level) specific humidity"
 ;
                qv_10m:standard_name = "specific_humidity" ;
                qv_10m:units = "kg kg-1" ;
                qv_10m:add_offset = 0.f ;
                qv_10m:valid_min = 0.f ;
                qv_10m:valid_max = 1.f ;
                qv_10m:comment = "statistics1_dim: mean, min, max" ;
                qv_10m:_FillValue = -9999.f ;
        float t_s(statistics1_dim, area_dim, forecast_period1h_dim, time1h) ;
                t_s:long_name = "soil surface temperature" ;
                t_s:units = "K" ;
                t_s:add_offset = 0.f ;
                t_s:valid_min = 0.f ;
                t_s:valid_max = 399.f ;
                t_s:comment = "for sea points: sea surface temperature; statisti
cs1_dim: mean, min, max" ;
                t_s:_FillValue = -9999.f ;
        float t_g(statistics1_dim, area_dim, forecast_period1h_dim, time1h) ;
                t_g:long_name = "grid mean surface temperature" ;
                t_g:standard_name = "surface_temperature" ;
                t_g:units = "K" ;
                t_g:add_offset = 0.f ;
                t_g:valid_min = 0.f ;
                t_g:valid_max = 399.f ;
                t_g:comment = "statistics1_dim: mean, min, max" ;
                t_g:_FillValue = -9999.f ;
        float qv_s(statistics1_dim, area_dim, forecast_period1h_dim, time1h) ;
                qv_s:long_name = "surface specific humidity" ;
                qv_s:standard_name = "surface_specific_humidity" ;
                qv_s:units = "kg kg-1" ;
                qv_s:add_offset = 0.f ;
                qv_s:valid_min = 0.f ;
                qv_s:valid_max = 1.f ;
                qv_s:comment = "statistics1_dim: mean, min, max" ;
                qv_s:_FillValue = -9999.f ;
        float t_so_05(area_dim, forecast_period1h_dim, time1h) ;
                t_so_05:long_name = "soil temperature (depth: 0.5 cm)" ;
                t_so_05:standard_name = "soil_temperature" ;
                t_so_05:units = "K" ;
                t_so_05:add_offset = 0.f ;
                t_so_05:valid_min = 0.f ;
                t_so_05:valid_max = 399.f ;
                t_so_05:comment = "only land-points considered" ;
                t_so_05:_FillValue = -9999.f ;
        float t_so_2(area_dim, forecast_period1h_dim, time1h) ;
                t_so_2:long_name = "soil temperature (depth: 2 cm)" ;
                t_so_2:standard_name = "soil_temperature" ;
                t_so_2:units = "K" ;
                t_so_2:add_offset = 0.f ;
                t_so_2:valid_min = 0.f ;
                t_so_2:valid_max = 399.f ;
                t_so_2:comment = "only land-points considered" ;
                t_so_2:_FillValue = -9999.f ;
        float t_so_6(area_dim, forecast_period1h_dim, time1h) ;
                t_so_6:long_name = "soil temperature (depth: 6 cm)" ;
                t_so_6:standard_name = "soil_temperature" ;
                t_so_6:units = "K" ;
                t_so_6:add_offset = 0.f ;
                t_so_6:valid_min = 0.f ;
                t_so_6:valid_max = 399.f ;
                t_so_6:comment = "only land-points considered" ;
                t_so_6:_FillValue = -9999.f ;
        float t_so_18(area_dim, forecast_period1h_dim, time1h) ;
                t_so_18:long_name = "soil temperature (depth: 18 cm)" ;
                t_so_18:standard_name = "soil_temperature" ;
                t_so_18:units = "K" ;
```

```
                t_so_18:add_offset = 0.f ;
                t_so_18:valid_min = 0.f ;
                t_so_18:valid_max = 399.f ;
                t_so_18:comment = "only land-points considered" ;
                t_so_18:_FillValue = -9999.f ;
        float t_so_54(area_dim, forecast_period1h_dim, time1h) ;
                t_so_54:long_name = "soil temperature (depth: 54 cm)" ;
                t_so_54:standard_name = "soil_temperature" ;
                t_so_54:units = "K" ;
                t_so_54:add_offset = 0.f ;
                t_so_54:valid_min = 0.f ;
                t_so_54:valid_max = 399.f ;
                t_so_54:comment = "only land-points considered" ;
                t_so_54:_FillValue = -9999.f ;
        float t_so_162(area_dim, forecast_period1h_dim, time1h) ;
                t_so_162:long_name = "soil temperature (depth: 162 cm)" ;
                t_so_162:standard_name = "soil_temperature" ;
                t_so_162:units = "K" ;
                t_so_162:add_offset = 0.f ;
                t_so_162:valid_min = 0.f ;
                t_so_162:valid_max = 399.f ;
                t_so_162:comment = "only land-points considered" ;
                t_so_162:_FillValue = -9999.f ;
        float t_so_486(area_dim, forecast_period1h_dim, time1h) ;
                t_so_486:long_name = "soil temperature (depth: 486 cm)" ;
                t_so_486:standard_name = "soil_temperature" ;
                t_so_486:units = "K" ;
                t_so_486:add_offset = 0.f ;
                t_so_486:valid_min = 0.f ;
                t_so_486:valid_max = 399.f ;
                t_so_486:comment = "only land-points considered" ;
                t_so_486:_FillValue = -9999.f ;
        float t_so_1458(area_dim) ;
                t_so_1458:long_name = "soil temperature (depth: 1458 cm)" ;
                t_so_1458:standard_name = "soil_temperature" ;
                t_so_1458:units = "K" ;
                t_so_1458:add_offset = 0.f ;
                t_so_1458:valid_min = 0.f ;
                t_so_1458:valid_max = 399.f ;
                t_so_1458:comment = "constant value (climate); only land-points
considered" ;
                t_so_1458:_FillValue = -9999.f ;
        float w_so_05(area_dim, forecast_period1h_dim, time1h) ;
                w_so_05:long_name = "soil water content (depth: 0.5 cm)" ;
                w_so_05:standard_name = "lwe_thickness_of_moisture_content_of_so
il_layer" ;
                w_so_05:units = "m" ;
                w_so_05:add_offset = 0.f ;
                w_so_05:valid_min = 0.f ;
                w_so_05:valid_max = 999.f ;
                w_so_05:comment = "only land-points considered" ;
                w_so_05:_FillValue = -9999.f ;
        float w_so_2(area_dim, forecast_period1h_dim, time1h) ;
                w_so_2:long_name = "soil water content (depth: 2 cm)" ;
                w_so_2:standard_name = "lwe_thickness_of_moisture_content_of_soi
l_layer" ;
                w_so_2:units = "m" ;
                w_so_2:add_offset = 0.f ;
                w_so_2:valid_min = 0.f ;
                w_so_2:valid_max = 999.f ;
                w_so_2:comment = "only land-points considered" ;
                w_so_2:_FillValue = -9999.f ;
        float w_so_6(area_dim, forecast_period1h_dim, time1h) ;
                w_so_6:long_name = "soil water content (depth: 6 cm)" ;
                w_so_6:standard_name = "lwe_thickness_of_moisture_content_of_soi
l_layer" ;
                w_so_6:units = "m" ;
```

```
                w_so_6:add_offset = 0.f ;
                w_so_6:valid_min = 0.f ;
                w_so_6:valid_max = 999.f ;
                w_so_6:comment = "only land-points considered" ;
                w_so_6:_FillValue = -9999.f ;
        float w_so_18(area_dim, forecast_period1h_dim, time1h) ;
                w_so_18:long_name = "soil water content (depth: 18 cm)" ;
                w_so_18:standard_name = "lwe_thickness_of_moisture_content_of_so
il_layer" ;
                w_so_18:units = "m" ;
                w_so_18:add_offset = 0.f ;
                w_so_18:valid_min = 0.f ;
                w_so_18:valid_max = 999.f ;
                w_so_18:comment = "only land-points considered" ;
                w_so_18:_FillValue = -9999.f ;
        float w_so_54(area_dim, forecast_period1h_dim, time1h) ;
                w_so_54:long_name = "soil water content (depth: 54 cm)" ;
                w_so_54:standard_name = "lwe_thickness_of_moisture_content_of_so
il_layer" ;
                w_so_54:units = "m" ;
                w_so_54:add_offset = 0.f ;
                w_so_54:valid_min = 0.f ;
                w_so_54:valid_max = 999.f ;
                w_so_54:comment = "only land-points considered" ;
                w_so_54:_FillValue = -9999.f ;
        float w_so_162(area_dim, forecast_period1h_dim, time1h) ;
                w_so_162:long_name = "soil water content (depth: 162 cm)" ;
                w_so_162:standard_name = "lwe_thickness_of_moisture_content_of_s
oil_layer" ;
                w_so_162:units = "m" ;
                w_so_162:add_offset = 0.f ;
                w_so_162:valid_min = 0.f ;
                w_so_162:valid_max = 999.f ;
                w_so_162:comment = "only land-points considered" ;
                w_so_162:_FillValue = -9999.f ;
        float w_i(area_dim, forecast_period1h_dim, time1h) ;
                w_i:long_name = "canopy water amount" ;
                w_i:standard_name = "canopy_water_amount" ;
                w_i:units = "m" ;
                w_i:add_offset = 0.f ;
                w_i:valid_min = 0.f ;
                w_i:valid_max = 999.f ;
                w_i:_FillValue = -9999.f ;
        float w_snow(area_dim, forecast_period1h_dim, time1h) ;
                w_snow:long_name = "surface snow amount" ;
                w_snow:standard_name = "lwe_thickness_of_surface_snow_amount" ;
                w_snow:units = "m" ;
                w_snow:add_offset = 0.f ;
                w_snow:valid_min = 0.f ;
                w_snow:valid_max = 999.f ;
                w_snow:_FillValue = -9999.f ;
        float runoff_s(statistics1_dim, area_dim, forecast_period1h_dim, time1h)
 ;
                runoff_s:long_name = "surface runoff" ;
                runoff_s:standard_name = "surface_runoff_amount" ;
                runoff_s:units = "kg m-2" ;
                runoff_s:add_offset = 0.f ;
                runoff_s:valid_min = 0.f ;
                runoff_s:valid_max = 9999.f ;
                runoff_s:_FillValue = -9999.f ;
                runoff_s:comment = "sum since forecast start; statistics1_dim: m
ean, min, max" ;
        float runoff_g(statistics1_dim, area_dim, forecast_period1h_dim, time1h)
 ;
                runoff_g:long_name = "subsurface runoff" ;
                runoff_g:standard_name = "subsurface_runoff_amount" ;
                runoff_g:units = "kg m-2" ;
```

```
                runoff_g:add_offset = 0.f ;
                runoff_g:valid_min = 0.f ;
                runoff_g:valid_max = 9999.f ;
                runoff_g:_FillValue = -9999.f ;
                runoff_g:comment = "sum since forecast start; statistics1_dim: m
ean, min, max" ;
        float asob_s(statistics1_dim, area_dim, forecast_period1h_dim, time1h) ;
                asob_s:long_name = "averaged surface net downward shortwave radi
ation" ;
                asob_s:standard_name = "surface_net_downward_shortwave_flux" ;
                asob_s:units = "W m-2" ;
                asob_s:add_offset = 0.f ;
                asob_s:valid_min = -9998.f ;
                asob_s:valid_max = 9999.f ;
                asob_s:_FillValue = -9999.f ;
                asob_s:comment = "average since forecast start; statistics1_dim:
 mean, min, max" ;
        float athb_s(statistics1_dim, area_dim, forecast_period1h_dim, time1h) ;
                athb_s:long_name = "averaged surface net downward longwave radia
tion" ;
                athb_s:standard_name = "surface_net_downward_longwave_flux" ;
                athb_s:units = "W m-2" ;
                athb_s:add_offset = 0.f ;
                athb_s:valid_min = -9998.f ;
                athb_s:valid_max = 9999.f ;
                athb_s:_FillValue = -9999.f ;
                athb_s:comment = "average since forecast start; statistics1_dim:
 mean, min, max" ;
        float ashfl_s(statistics1_dim, area_dim, forecast_period1h_dim, time1h)
;
                ashfl_s:long_name = "averaged surface sensible heat flux" ;
                ashfl_s:standard_name = "surface_downward_sensible_heat_flux" ;
                ashfl_s:units = "1" ;
                ashfl_s:add_offset = 0.f ;
                ashfl_s:valid_min = -999.f ;
                ashfl_s:valid_max = 999.f ;
                ashfl_s:_FillValue = -9999.f ;
                ashfl_s:comment = "average since forecast start; statistics1_dim
: mean, min, max" ;
        float alhfl_s(statistics1_dim, area_dim, forecast_period1h_dim, time1h)
;
                alhfl_s:long_name = "averaged surface latent heat flux" ;
                alhfl_s:standard_name = "surface_downward_latent_heat_flux" ;
                alhfl_s:units = "1" ;
                alhfl_s:add_offset = 0.f ;
                alhfl_s:valid_min = -999.f ;
                alhfl_s:valid_max = 999.f ;
                alhfl_s:_FillValue = -9999.f ;
                alhfl_s:comment = "average since forecast start; statistics1_dim
: mean, min, max" ;
        float aevap_s(statistics1_dim, area_dim, forecast_period1h_dim, time1h)
;
                aevap_s:long_name = "surface evaporation" ;
                aevap_s:standard_name = "water_evaporation_amount" ;
                aevap_s:units = "kg m-2" ;
                aevap_s:add_offset = 0.f ;
                aevap_s:valid_min = -999.f ;
                aevap_s:valid_max = 999.f ;
                aevap_s:_FillValue = -9999.f ;
                aevap_s:comment = "sum since forecast start; statistics1_dim: me
an, min, max" ;
        float twater(statistics2_dim, area_dim, forecast_period1h_dim, time1h) ;
                twater:long_name = "total water content" ;
                twater:standard_name = "atmosphere_water_content" ;
                twater:units = "kg m-2" ;
                twater:add_offset = 0.f ;
                twater:valid_min = 0.f ;
```

```
                twater:valid_max = 99.f ;
                twater:comment = "statistics_2_dim: mean, min, max, median, stde
v" ;
                twater:_FillValue = -9999.f ;
        float tqi(statistics2_dim, area_dim, forecast_period_dim, time) ;
                tqi:long_name = "vertical integrated cloud ice" ;
                tqi:standard_name = "atmosphere_cloud_ice_content" ;
                tqi:units = "kg m-2" ;
                tqi:add_offset = 0.f ;
                tqi:valid_min = 0.f ;
                tqi:valid_max = 99.f ;
                tqi:comment = "statistics_2_dim: mean, min, max, median, stdev"
;
                tqi:_FillValue = -9999.f ;
        float tqv(statistics_tqv50binsplus1_dim, area_dim, forecast_period_dim,
time) ;
                tqv:long_name = "precipitable water" ;
                tqv:standard_name = "atmosphere_water_vapor_content" ;
                tqv:units = "kg m-2" ;
                tqv:add_offset = 0.f ;
                tqv:valid_min = 0.f ;
                tqv:valid_max = 99.f ;
                tqv:comment = "statistics_tqv50binsplus1_dim: mean, min, max, me
dian, stdev, frequency distribution of 50 bins from 0.0 to 50.0 plus >50.0" ;
                tqv:_FillValue = -9999.f ;
        float tqc(statistics2_dim, area_dim, forecast_period_dim, time) ;
                tqc:long_name = "vertical integrated cloud water" ;
                tqc:standard_name = "atmosphere_cloud_liquid_water_content" ;
                tqc:units = "kg m-2" ;
                tqc:add_offset = 0.f ;
                tqc:valid_min = 0.f ;
                tqc:valid_max = 99.f ;
                tqc:comment = "statistics_2_dim: mean, min, max, median, stdev"
;
                tqc:_FillValue = -9999.f ;
        float wmean(statistics_20binsplus2_dim, area_dim, forecast_period_dim, t
ime) ;
                wmean:long_name = "vertical wind velocity; vertically averaged (
highest 15 layers not included" ;
                wmean:standard_name = "upward_air_velocity" ;
                wmean:units = "m s-1" ;
                wmean:add_offset = 0.f ;
                wmean:valid_min = -999.f ;
                wmean:valid_max = 999.f ;
                wmean:comment = "statistics_20bins_dim: mean, min, max, median,
stdev, frequency distribution of 22 bins: <-5.0, 20 bins from -5.0 to 5.0,>5.0"
;
                wmean:_FillValue = -9999.f ;
        float wabsmean(statistics_20binsplus1_dim, area_dim, forecast_period_dim
, time) ;
                wabsmean:long_name = "absolute value of vertical wind velocity"
;
                wabsmean:units = "m s-1" ;
                wabsmean:add_offset = 0.f ;
                wabsmean:valid_min = 0.f ;
                wabsmean:valid_max = 999.f ;
                wabsmean:comment = "statistics_20bins1_dim: mean, min, max, medi
an, stdev, frequency distribution of 20 bins from 0.0 to 10.0 plus >10.0" ;
                wabsmean:_FillValue = -9999.f ;
        float w5000(area_dim, forecast_period1h_dim, time1h) ;
                w5000:long_name = "vertical wind velocity in 5000m above sea lev
el" ;
                w5000:units = "m s-1" ;
                w5000:add_offset = 0.f ;
                w5000:valid_min = -999.f ;
                w5000:valid_max = 999.f ;
                w5000:_FillValue = -9999.f ;
```

```
        float w3000(area_dim, forecast_period1h_dim, time1h) ;
                w3000:long_name = "vertical wind velocity in 3000m above sea lev
el" ;
                w3000:units = "m s-1" ;
                w3000:add_offset = 0.f ;
                w3000:valid_min = -999.f ;
                w3000:valid_max = 999.f ;
                w3000:_FillValue = -9999.f ;
        float w2000(area_dim, forecast_period1h_dim, time1h) ;
                w2000:long_name = "vertical wind velocity in 2000m above sea lev
el" ;
                w2000:units = "m s-1" ;
                w2000:add_offset = 0.f ;
                w2000:valid_min = -999.f ;
                w2000:valid_max = 999.f ;
                w2000:_FillValue = -9999.f ;
        float w1500(area_dim, forecast_period1h_dim, time1h) ;
                w1500:long_name = "vertical wind velocity in 1500m above sea lev
el" ;
                w1500:units = "m s-1" ;
                w1500:add_offset = 0.f ;
                w1500:valid_min = -999.f ;
                w1500:valid_max = 999.f ;
                w1500:_FillValue = -9999.f ;
        float w1000(area_dim, forecast_period1h_dim, time1h) ;
                w1000:long_name = "vertical wind velocity in 1000m above sea lev
el" ;
                w1000:units = "m s-1" ;
                w1000:add_offset = 0.f ;
                w1000:valid_min = -999.f ;
                w1000:valid_max = 999.f ;
                w1000:_FillValue = -9999.f ;
        float w500(area_dim, forecast_period1h_dim, time1h) ;
                w500:long_name = "vertical wind velocity in 500m above sea level
" ;
                w500:units = "m s-1" ;
                w500:add_offset = 0.f ;
                w500:valid_min = -999.f ;
                w500:valid_max = 999.f ;
                w500:_FillValue = -9999.f ;
        float temperature_300(area_dim, forecast_period1h_dim, time1h) ;
                temperature_300:long_name = "temperature in 300 hPa" ;
                temperature_300:standard_name = "air_temperature" ;
                temperature_300:units = "K" ;
                temperature_300:add_offset = 0.f ;
                temperature_300:valid_min = 0.f ;
                temperature_300:valid_max = 399.f ;
                temperature_300:_FillValue = -9999.f ;
        float temperature_500(area_dim, forecast_period1h_dim, time1h) ;
                temperature_500:long_name = "temperature in 500 hPa" ;
                temperature_500:standard_name = "air_temperature" ;
                temperature_500:units = "K" ;
                temperature_500:add_offset = 0.f ;
                temperature_500:valid_min = 0.f ;
                temperature_500:valid_max = 399.f ;
                temperature_500:_FillValue = -9999.f ;
        float temperature_700(area_dim, forecast_period1h_dim, time1h) ;
                temperature_700:long_name = "temperature in 700 hPa" ;
                temperature_700:standard_name = "air_temperature" ;
                temperature_700:units = "K" ;
                temperature_700:add_offset = 0.f ;
                temperature_700:valid_min = 0.f ;
                temperature_700:valid_max = 399.f ;
                temperature_700:_FillValue = -9999.f ;
        float temperature_850(area_dim, forecast_period1h_dim, time1h) ;
                temperature_850:long_name = "temperature in 850 hPa" ;
                temperature_850:standard_name = "air_temperature" ;
                temperature_850:units = "K" ;
                temperature_850:add_offset = 0.f ;
                temperature_850:valid_min = 0.f ;
                temperature_850:valid_max = 399.f ;
                temperature_850:_FillValue = -9999.f ;
        float temperature_950(area_dim, forecast_period1h_dim, time1h) ;
                temperature_950:long_name = "temperature in 950 hPa" ;
                temperature_950:standard_name = "air_temperature" ;
                temperature_950:units = "K" ;
                temperature_950:add_offset = 0.f ;
                temperature_950:valid_min = 0.f ;
                temperature_950:valid_max = 399.f ;
                temperature_950:_FillValue = -9999.f ;
        float temperature_1000(area_dim, forecast_period1h_dim, time1h) ;
                temperature_1000:long_name = "temperature in 1000 hPa" ;
                temperature_1000:standard_name = "air_temperature" ;
                temperature_1000:units = "K" ;
                temperature_1000:add_offset = 0.f ;
                temperature_1000:valid_min = 0.f ;
                temperature_1000:valid_max = 399.f ;
                temperature_1000:_FillValue = -9999.f ;
        float relhum_300(area_dim, forecast_period1h_dim, time1h) ;
                relhum_300:long_name = "relative humidity in 300 hPa" ;
                relhum_300:standard_name = "relative_humidity" ;
                relhum_300:units = "%" ;
                relhum_300:add_offset = 0.f ;
                relhum_300:valid_min = 0.f ;
                relhum_300:valid_max = 100.f ;
                relhum_300:_FillValue = -9999.f ;
        float relhum_500(area_dim, forecast_period1h_dim, time1h) ;
                relhum_500:long_name = "relative humidity in 500 hPa" ;
                relhum_500:standard_name = "relative_humidity" ;
                relhum_500:units = "%" ;
                relhum_500:add_offset = 0.f ;
                relhum_500:valid_min = 0.f ;
                relhum_500:valid_max = 100.f ;
                relhum_500:_FillValue = -9999.f ;
        float relhum_700(area_dim, forecast_period1h_dim, time1h) ;
                relhum_700:long_name = "relative humidity in 700 hPa" ;
                relhum_700:standard_name = "relative_humidity" ;
                relhum_700:units = "%" ;
                relhum_700:add_offset = 0.f ;
                relhum_700:valid_min = 0.f ;
                relhum_700:valid_max = 100.f ;
                relhum_700:_FillValue = -9999.f ;
        float relhum_850(area_dim, forecast_period1h_dim, time1h) ;
                relhum_850:long_name = "relative humidity in 850 hPa" ;
                relhum_850:standard_name = "relative_humidity" ;
                relhum_850:units = "%" ;
                relhum_850:add_offset = 0.f ;
                relhum_850:valid_min = 0.f ;
                relhum_850:valid_max = 100.f ;
                relhum_850:_FillValue = -9999.f ;
        float relhum_950(area_dim, forecast_period1h_dim, time1h) ;
                relhum_950:long_name = "relative humidity in 950 hPa" ;
                relhum_950:standard_name = "relative_humidity" ;
                relhum_950:units = "%" ;
                relhum_950:add_offset = 0.f ;
                relhum_950:valid_min = 0.f ;
                relhum_950:valid_max = 100.f ;
                relhum_950:_FillValue = -9999.f ;
        float omega_300(area_dim, forecast_period1h_dim, time1h) ;
                omega_300:long_name = "omega in 300 hPa" ;
                omega_300:standard_name = "lagrangian_tendency_of_air_pressure"
;
                omega_300:units = "Pa s-1" ;
                omega_300:add_offset = 0.f ;
```

```
                omega_300:valid_min = -999.f ;
                omega_300:valid_max = 999.f ;
                omega_300:_FillValue = -9999.f ;
        float omega_500(area_dim, forecast_period1h_dim, time1h) ;
                omega_500:long_name = "omega in 500 hPa" ;
                omega_500:standard_name = "lagrangian_tendency_of_air_pressure"
;
                omega_500:units = "Pa s-1" ;
                omega_500:add_offset = 0.f ;
                omega_500:valid_min = -999.f ;
                omega_500:valid_max = 999.f ;
                omega_500:_FillValue = -9999.f ;
        float omega_700(area_dim, forecast_period1h_dim, time1h) ;
                omega_700:long_name = "omega in 700 hPa" ;
                omega_700:standard_name = "lagrangian_tendency_of_air_pressure"
;
                omega_700:units = "Pa s-1" ;
                omega_700:add_offset = 0.f ;
                omega_700:valid_min = -999.f ;
                omega_700:valid_max = 999.f ;
                omega_700:_FillValue = -9999.f ;
        float omega_850(area_dim, forecast_period1h_dim, time1h) ;
                omega_850:long_name = "omega in 850 hPa" ;
                omega_850:standard_name = "lagrangian_tendency_of_air_pressure"
;
                omega_850:units = "Pa s-1" ;
                omega_850:add_offset = 0.f ;
                omega_850:valid_min = -999.f ;
                omega_850:valid_max = 999.f ;
                omega_850:_FillValue = -9999.f ;
        float omega_950(area_dim, forecast_period1h_dim, time1h) ;
                omega_950:long_name = "omega in 950 hPa" ;
                omega_950:standard_name = "lagrangian_tendency_of_air_pressure"
;
                omega_950:units = "Pa s-1" ;
                omega_950:add_offset = 0.f ;
                omega_950:valid_min = -999.f ;
                omega_950:valid_max = 999.f ;
                omega_950:_FillValue = -9999.f ;
        float fi300(area_dim, forecast_period1h_dim, time1h) ;
                fi300:long_name = "geopotential in 300 hPa" ;
                fi300:standard_name = "geopotential" ;
                fi300:units = "m2 s-2" ;
                fi300:add_offset = 0.f ;
                fi300:valid_min = 0.f ;
                fi300:valid_max = 999999.f ;
                fi300:_FillValue = -9999.f ;
        float fi500(area_dim, forecast_period1h_dim, time1h) ;
                fi500:long_name = "geopotential in 500 hPa" ;
                fi500:standard_name = "geopotential" ;
                fi500:units = "m2 s-2" ;
                fi500:add_offset = 0.f ;
                fi500:valid_min = 0.f ;
                fi500:valid_max = 999999.f ;
                fi500:_FillValue = -9999.f ;
        float fi700(area_dim, forecast_period1h_dim, time1h) ;
                fi700:long_name = "geopotential in 700 hPa" ;
                fi700:standard_name = "geopotential" ;
                fi700:units = "m2 s-2" ;
                fi700:add_offset = 0.f ;
                fi700:valid_min = 0.f ;
                fi700:valid_max = 999999.f ;
                fi700:_FillValue = -9999.f ;
        float fi850(area_dim, forecast_period1h_dim, time1h) ;
                fi850:long_name = "geopotential in 850 hPa" ;
                fi850:standard_name = "geopotential" ;
                fi850:units = "m2 s-2" ;
```

```
                fi850:add_offset = 0.f ;
                fi850:valid_min = 0.f ;
                fi850:valid_max = 999999.f ;
                fi850:_FillValue = -9999.f ;
        float fi950(area_dim, forecast_period1h_dim, time1h) ;
                fi950:long_name = "geopotential in 950 hPa" ;
                fi950:standard_name = "geopotential" ;
                fi950:units = "m2 s-2" ;
                fi950:add_offset = 0.f ;
                fi950:valid_min = 0.f ;
                fi950:valid_max = 999999.f ;
                fi950:_FillValue = -9999.f ;
        float u300(area_dim, forecast_period1h_dim, time1h) ;
                u300:long_name = "eastward component of wind in 300 hPa" ;
                u300:standard_name = "eastward_wind" ;
                u300:units = "m s-1" ;
                u300:add_offset = 0.f ;
                u300:valid_min = -999.f ;
                u300:valid_max = 999.f ;
                u300:_FillValue = -9999.f ;
        float v300(area_dim, forecast_period1h_dim, time1h) ;
                v300:long_name = "northward component of wind in 300 hPa" ;
                v300:standard_name = "northward_wind" ;
                v300:units = "m s-1" ;
                v300:add_offset = 0.f ;
                v300:valid_min = -999.f ;
                v300:valid_max = 999.f ;
                v300:_FillValue = -9999.f ;
        float u500(area_dim, forecast_period1h_dim, time1h) ;
                u500:long_name = "eastward component of wind in 500 hPa" ;
                u500:standard_name = "eastward_wind" ;
                u500:units = "m s-1" ;
                u500:add_offset = 0.f ;
                u500:valid_min = -999.f ;
                u500:valid_max = 999.f ;
                u500:_FillValue = -9999.f ;
        float v500(area_dim, forecast_period1h_dim, time1h) ;
                v500:long_name = "northward component of wind in 500 hPa" ;
                v500:standard_name = "northward_wind" ;
                v500:units = "m s-1" ;
                v500:add_offset = 0.f ;
                v500:valid_min = -999.f ;
                v500:valid_max = 999.f ;
                v500:_FillValue = -9999.f ;
        float u700(area_dim, forecast_period1h_dim, time1h) ;
                u700:long_name = "eastward component of wind in 700 hPa" ;
                u700:standard_name = "eastward_wind" ;
                u700:units = "m s-1" ;
                u700:add_offset = 0.f ;
                u700:valid_min = -999.f ;
                u700:valid_max = 999.f ;
                u700:_FillValue = -9999.f ;
        float v700(area_dim, forecast_period1h_dim, time1h) ;
                v700:long_name = "northward component of wind in 700 hPa" ;
                v700:standard_name = "northward_wind" ;
                v700:units = "m s-1" ;
                v700:add_offset = 0.f ;
                v700:valid_min = -999.f ;
                v700:valid_max = 999.f ;
                v700:_FillValue = -9999.f ;
        float u850(area_dim, forecast_period1h_dim, time1h) ;
                u850:long_name = "eastward component of wind in 850 hPa" ;
                u850:standard_name = "eastward_wind" ;
                u850:units = "m s-1" ;
                u850:add_offset = 0.f ;
                u850:valid_min = -999.f ;
                u850:valid_max = 999.f ;
```

```
		u850:_FillValue = -9999.f ;
	float v850(area_dim, forecast_period1h_dim, time1h) ;
		v850:long_name = "northward component of wind in 850 hPa" ;
		v850:standard_name = "northward_wind" ;
		v850:units = "m s-1" ;
		v850:add_offset = 0.f ;
		v850:valid_min = -999.f ;
		v850:valid_max = 999.f ;
		v850:_FillValue = -9999.f ;
	float u950(area_dim, forecast_period1h_dim, time1h) ;
		u950:long_name = "eastward component of wind in 950 hPa" ;
		u950:standard_name = "eastward_wind" ;
		u950:units = "m s-1" ;
		u950:add_offset = 0.f ;
		u950:valid_min = -999.f ;
		u950:valid_max = 999.f ;
		u950:_FillValue = -9999.f ;
	float v950(area_dim, forecast_period1h_dim, time1h) ;
		v950:long_name = "northward component of wind in 950 hPa" ;
		v950:standard_name = "northward_wind" ;
		v950:units = "m s-1" ;
		v950:add_offset = 0.f ;
		v950:valid_min = -999.f ;
		v950:valid_max = 999.f ;
		v950:_FillValue = -9999.f ;
	float u_10m(statistics1_dim, area_dim, forecast_period1h_dim, time1h) ;
		u_10m:long_name = "eastward component of wind in 10m" ;
		u_10m:standard_name = "eastward_wind" ;
		u_10m:units = "m s-1" ;
		u_10m:add_offset = 0.f ;
		u_10m:valid_min = -999.f ;
		u_10m:valid_max = 999.f ;
		u_10m:_FillValue = -9999.f ;
		u_10m:comment = "statistics1_dim: mean, min, max" ;
	float v_10m(statistics1_dim, area_dim, forecast_period1h_dim, time1h) ;
		v_10m:long_name = "northward component of wind in 10m" ;
		v_10m:standard_name = "northward_wind" ;
		v_10m:units = "m s-1" ;
		v_10m:add_offset = 0.f ;
		v_10m:valid_min = -999.f ;
		v_10m:valid_max = 999.f ;
		v_10m:_FillValue = -9999.f ;
		v_10m:comment = "statistics1_dim: mean, min, max" ;
	float wind300(statistics_wind_dim, area_dim, forecast_period1h_dim, time
1h) ;
		wind300:long_name = "wind direction in 300 hPa" ;
		wind300:standard_name = "wind_from_direction" ;
		wind300:units = "degree" ;
		wind300:add_offset = 0.f ;
		wind300:comment = "statistics_wind_dim: mean, frequency distribu
tion in 72 bins from 0.0 to 360.0" ;
		wind300:_FillValue = -9999.f ;
	float wind500(statistics_wind_dim, area_dim, forecast_period1h_dim, time
1h) ;
		wind500:long_name = "wind direction in 500 hPa" ;
		wind500:standard_name = "wind_from_direction" ;
		wind500:units = "degree" ;
		wind500:add_offset = 0.f ;
		wind500:comment = "statistics_wind_dim: mean, frequency distribu
tion in 72 bins from 0.0 to 360.0" ;
		wind500:_FillValue = -9999.f ;
	float wind700(statistics_wind_dim, area_dim, forecast_period1h_dim, time
1h) ;
		wind700:long_name = "wind direction in 700 hPa" ;
		wind700:standard_name = "wind_from_direction" ;
		wind700:units = "degree" ;
		wind700:add_offset = 0.f ;
		wind700:comment = "statistics_wind_dim: mean, frequency distribu
tion of wind direction in 72 bins from 0.0 to 360.0" ;
		wind700:_FillValue = -9999.f ;
	float wind850(statistics_wind_dim, area_dim, forecast_period1h_dim, time
1h) ;
		wind850:long_name = "wind direction in 850 hPa" ;
		wind850:standard_name = "wind_from_direction" ;
		wind850:units = "degree" ;
		wind850:add_offset = 0.f ;
		wind850:comment = "statistics_wind_dim: mean, frequency distribu
tion in 72 bins from 0.0 to 360.0" ;
		wind850:_FillValue = -9999.f ;
	float wind950(statistics_wind_dim, area_dim, forecast_period1h_dim, time
1h) ;
		wind950:long_name = "wind direction in 950 hPa" ;
		wind950:standard_name = "wind_from_direction" ;
		wind950:units = "degree" ;
		wind950:add_offset = 0.f ;
		wind950:comment = "statistics_wind_dim: mean, frequency distribu
tion in 72 bins from 0.0 to 360.0" ;
		wind950:_FillValue = -9999.f ;
	float wind_10m(statistics_wind_dim, area_dim, forecast_period1h_dim, tim
e1h) ;
		wind_10m:long_name = "wind direction in 10m" ;
		wind_10m:standard_name = "wind_from_direction" ;
		wind_10m:units = "degree" ;
		wind_10m:add_offset = 0.f ;
		wind_10m:comment = "statistics_wind_dim: mean, frequency distrib
ution in 72 bins from 0.0 to 360.0" ;
		wind_10m:_FillValue = -9999.f ;
	float windspeed_10m(statistics1_dim, area_dim, forecast_period1h_dim, ti
me1h) ;
		windspeed_10m:long_name = "wind speed in 10m" ;
		windspeed_10m:standard_name = "wind_speed" ;
		windspeed_10m:units = "m s-1" ;
		windspeed_10m:add_offset = 0.f ;
		windspeed_10m:comment = "statistics1_dim: mean, min, max" ;
		windspeed_10m:_FillValue = -9999.f ;
	float bft_10m(statistics_bft_dim, area_dim, forecast_period1h_dim, time1
h) ;
		bft_10m:long_name = "Beaufort wind force in 10m" ;
		bft_10m:standard_name = "beaufort_wind_force" ;
		bft_10m:units = "m s-1" ;
		bft_10m:add_offset = 0.f ;
		bft_10m:comment = "statistics_bft_dim: frequency distribution in
 13 bins (bft 0..12)" ;
		bft_10m:_FillValue = -9999.f ;
	float tot_prec(statistics_prec_dim, area_dim, forecast_period_dim, time)
 ;
		tot_prec:long_name = "total precipitation amount" ;
		tot_prec:standard_name = "precipitation_amount" ;
		tot_prec:units = "kg m-2" ;
		tot_prec:add_offset = 0.f ;
		tot_prec:valid_min = 0.f ;
		tot_prec:valid_max = 9999.f ;
		tot_prec:_FillValue = -9999.f ;
		tot_prec:comment = "sum since forecast start; statistics_prec_di
m: mean, min, max, median, stdev, frequency distribution in 18 bins with margins
: 0.1,0.5,1.0,2.0,5.0,10.0,15.0,20.0,25.0,30.0,35.0,40.0,50.0,60.0,70.0,80.0,90.
0,>90.0" ;
	float rain_gsp(statistics_prec_dim, area_dim, forecast_period_dim, time)
 ;
		rain_gsp:long_name = "large scale rainfall" ;
		rain_gsp:standard_name = "large_scale_rainfall_amount" ;
		rain_gsp:units = "kg m-2" ;
		rain_gsp:add_offset = 0.f ;
		rain_gsp:valid_min = 0.f ;
```

```
                rain_gsp:valid_max = 9999.f ;
                rain_gsp:_FillValue = -9999.f ;
                rain_gsp:comment = "sum since forecast start; statistics_prec_di
m:  mean, min, max, median, stdev, frequency distribution in 18 bins with margin
s: 0.1,0.5,1.0,2.0,5.0,10.0,15.0,20.0,25.0,30.0,35.0,40.0,50.0,60.0,70.0,80.0,90
.0,>90.0" ;
        float snow_gsp(statistics_prec_dim, area_dim, forecast_period_dim, time)
 ;
                snow_gsp:long_name = "large scale snowfall" ;
                snow_gsp:standard_name = "large_scale_snowfall_amount" ;
                snow_gsp:units = "kg m-2" ;
                snow_gsp:add_offset = 0.f ;
                snow_gsp:valid_min = 0.f ;
                snow_gsp:valid_max = 9999.f ;
                snow_gsp:_FillValue = -9999.f ;
                snow_gsp:comment = "sum since forecast start; statistics_prec_di
m: mean, min, max, median, stdev, frequency distribution in 18 bins with margins
: 0.1,0.5,1.0,2.0,5.0,10.0,15.0,20.0,25.0,30.0,35.0,40.0,50.0,60.0,70.0,80.0,90.
0,>90.0" ;
        float ablh(statistics2_dim, area_dim, forecast_period1h_dim, time1h) ;
                ablh:long_name = "atmospheric boundary layer height (above msl)"
 ;
                ablh:units = "m" ;
                ablh:valid_min = 0.f ;
                ablh:valid_max = 99999.f ;
                ablh:comment = "statistics_2_dim: mean, min, max, median, stdev"
 ;
                ablh:_FillValue = -9999.f ;
        float cape(statistics2_dim, area_dim, forecast_period1h_dim, time1h) ;
                cape:long_name = "CAPE (parcel ascent from lowest model level, c
ontributions from positive buoyancy only)" ;
                cape:units = "J kg-1" ;
                cape:valid_min = 0.f ;
                cape:valid_max = 99999.f ;
                cape:comment = "statistics_2_dim: mean, min, max, median, stdev"
 ;
                cape:_FillValue = -9999.f ;
        float hbas_sc(statistics_20binsplus2_dim, area_dim, forecast_period_dim,
 time) ;
                hbas_sc:long_name = "height of shallow convective cloud base" ;
                hbas_sc:standard_name = "convective_cloud_base_altitude" ;
                hbas_sc:units = "m" ;
                hbas_sc:valid_min = 0.f ;
                hbas_sc:valid_max = 99999.f ;
                hbas_sc:comment = "statistics_20binsplus2_dim: mean, min, max, m
edian, stdev, frequency of no shallow convective cloud, frequency distribution i
n 20 bins from 0.0 to 10000.0 plus >10000.0; -999.0 in mean, min, max, median, s
tdev means: no shallow convective cloud at all in area" ;
                hbas_sc:_FillValue = -9999.f ;
        float htop_sc(statistics_20binsplus2_dim, area_dim, forecast_period_dim,
 time) ;
                htop_sc:long_name = "height of shallow convective cloud top" ;
                htop_sc:standard_name = "convective_cloud_top_altitude" ;
                htop_sc:units = "m" ;
                htop_sc:valid_min = 0.f ;
                htop_sc:valid_max = 99999.f ;
                htop_sc:comment = "statistics_20binsplus2_dim:  mean, min, max,
median, stdev, frequency of no shallow convective cloud, frequency distribution
in 20 bins from 0.0 to 10000.0 plus >10000.0; -999.0 in mean, min, max, median,
stdev means: no shallow convective cloud at all in area" ;
                htop_sc:_FillValue = -9999.f ;
        float grau_gsp(statistics_prec_dim, area_dim, forecast_period_dim, time)
 ;
                grau_gsp:long_name = "large scale graupel" ;
                grau_gsp:standard_name = "large_scale_graupel_amount" ;
                grau_gsp:units = "kg m-2" ;
                grau_gsp:add_offset = 0.f ;
```

```
                grau_gsp:valid_min = 0.f ;
                grau_gsp:valid_max = 9999.f ;
                grau_gsp:_FillValue = -9999.f ;
                grau_gsp:comment = "sum since forecast start; statistics_prec_di
m: mean, min, max, median, stdev, frequency distribution in 18 bins with margins
: 0.1,0.5,1.0,2.0,5.0,10.0,15.0,20.0,25.0,30.0,35.0,40.0,50.0,60.0,70.0,80.0,90.
0,>90.0" ;
        float prr_gsp(statistics_prec_dim, area_dim, forecast_period_dim, time)
;
                prr_gsp:long_name = "mass flux density of large scale rainfall"
;
                prr_gsp:standard_name = "large_scale_rainfall_flux" ;
                prr_gsp:units = "kg m-2 h-1" ;
                prr_gsp:add_offset = 0.f ;
                prr_gsp:valid_min = 0.f ;
                prr_gsp:valid_max = 999.f ;
                prr_gsp:comment = "statistics_prec_dim: mean, min, max, median,
stdev, frequency distribution in 18 bins with margins: 0.1,0.5,1.0,2.0,5.0,10.0,
15.0,20.0,25.0,30.0,35.0,40.0,50.0,60.0,70.0,80.0,90.0,>90.0" ;
                prr_gsp:_FillValue = -9999.f ;
        float prs_gsp(statistics_prec_dim, area_dim, forecast_period_dim, time)
;
                prs_gsp:long_name = "mass flux density of large scale snowfall"
;
                prs_gsp:standard_name = "large_scale_snowfall_flux" ;
                prs_gsp:units = "kg m-2 h-1" ;
                prs_gsp:add_offset = 0.f ;
                prs_gsp:valid_min = 0.f ;
                prs_gsp:valid_max = 999.f ;
                prs_gsp:comment = "statistics_prec_dim: mean, min, max, median,
stdev, frequency distribution in 18 bins with margins: 0.1,0.5,1.0,2.0,5.0,10.0,
15.0,20.0,25.0,30.0,35.0,40.0,50.0,60.0,70.0,80.0,90.0,>90.0" ;
                prs_gsp:_FillValue = -9999.f ;
        float prg_gsp(statistics_prec_dim, area_dim, forecast_period_dim, time)
;
                prg_gsp:long_name = "mass flux density of large scale graupel" ;
                prg_gsp:standard_name = "large_scale_graupel_flux" ;
                prg_gsp:units = "kg m-2 h-1" ;
                prg_gsp:add_offset = 0.f ;
                prg_gsp:valid_min = 0.f ;
                prg_gsp:valid_max = 999.f ;
                prg_gsp:comment = "statistics_prec_dim: mean, min, max, median,
stdev, frequency distribution in 18 bins with margins: 0.1,0.5,1.0,2.0,5.0,10.0,
15.0,20.0,25.0,30.0,35.0,40.0,50.0,60.0,70.0,80.0,90.0,>90.0" ;
                prg_gsp:_FillValue = -9999.f ;
        float cape_ml(statistics2_dim, area_dim, forecast_period_dim, time) ;
                cape_ml:long_name = "cape of mean surface layer parcel" ;
                cape_ml:units = "J kg-1" ;
                cape_ml:comment = "statistics_2_dim: mean, min, max, median, std
ev" ;
                cape_ml:_FillValue = -9999.f ;
        float cbase(statistics_20binsplus2_dim, area_dim, forecast_period_dim, t
ime) ;
                cbase:long_name = "Cloud (clc>0.01) base height (above MSL)" ;
                cbase:standard_name = "cloud_base_altitude" ;
                cbase:units = "m" ;
                cbase:valid_min = 0.f ;
                cbase:valid_max = 99999.f ;
                cbase:_FillValue = -9999.f ;
                cbase:comment = "statistics_20binsplus2_dim:  mean, min, max, me
dian, stdev, frequency of no cloud, frequency distribution in 20 bins from 0.0 t
o 10000.0 plus >10000.0; -999.0 in mean, min, max, median, stdev means: no cloud
 (clc>0.01) at all in area" ;
        float cbase50(statistics_20binsplus2_dim, area_dim, forecast_period_dim,
 time) ;
                cbase50:long_name = "Cloud (clc>0.5) base height (above MSL)" ;
                cbase50:standard_name = "cloud_base_altitude" ;
```

```
                cbase50:units = "m" ;
                cbase50:valid_min = 0.f ;
                cbase50:valid_max = 99999.f ;
                cbase50:_FillValue = -9999.f ;
                cbase50:comment = "statistics_20binsplus2_dim:  mean, min, max,
median, stdev, frequency of no cloud, frequency distribution in 20 bins from 0.0
 to 10000.0 plus >10000.0; -999.0 in mean, min, max, median, stdev means: no clo
ud (clc>0.5) at all in area" ;
        float cbase_scal(statistics_20binsplus2_dim, area_dim, forecast_period1h
_dim, time1h) ;
                cbase_scal:long_name = "Cloud (gridscale qc+qi>1.e-10) base heig
ht (above MSL)" ;
                cbase_scal:standard_name = "cloud_base_altitude" ;
                cbase_scal:units = "m" ;
                cbase_scal:valid_min = 0.f ;
                cbase_scal:valid_max = 99999.f ;
                cbase_scal:_FillValue = -9999.f ;
                cbase_scal:comment = "statistics_20binsplus2_dim:  mean, min, ma
x, median, stdev, frequency of no cloud, frequency distribution in 20 bins from
0.0 to 10000.0 plus >10000.0; -999.0 in mean, min, max, median, stdev means: no
gridscale cloud (qc+qi>1e-10) at all in area" ;
        float cbase_scal_qc(statistics_20binsplus2_dim, area_dim, forecast_perio
d1h_dim, time1h) ;
                cbase_scal_qc:long_name = "Liquid-water cloud (gridscale qc>1.e-
10) base height (above MSL)" ;
                cbase_scal_qc:standard_name = "cloud_base_altitude" ;
                cbase_scal_qc:units = "m" ;
                cbase_scal_qc:valid_min = 0.f ;
                cbase_scal_qc:valid_max = 99999.f ;
                cbase_scal_qc:_FillValue = -9999.f ;
                cbase_scal_qc:comment = "statistics_20binsplus2_dim:  mean, min,
 max, median, stdev, frequency of no cloud, frequency distribution in 20 bins fr
om 0.0 to 10000.0 plus >10000.0; -999.0 in mean, min, max, median, stdev means:
no gridscale cloud (qc>1e-10) at all in area" ;
        float ceiling(statistics_20binsplus2_dim, area_dim, forecast_period1h_di
m, time1h) ;
                ceiling:long_name = "Cloud ceiling height (above MSL)" ;
                ceiling:units = "m" ;
                ceiling:valid_min = 0.f ;
                ceiling:valid_max = 99999.f ;
                ceiling:_FillValue = -9999.f ;
                ceiling:comment = "statistics_20binsplus2_dim:  mean, min, max,
median, stdev, frequency of no cloud, frequency distribution in 20 bins from 0.0
 to 10000.0 plus >10000.0; -999.0 in mean, min, max, median, stdev means: no cei
ling at all in area" ;
        float deltai(statistics_cot50binsplus2_dim, area_dim, forecast_period1h_
dim, time1h) ;
                deltai:long_name = "atmosphere cloud optical thickness" ;
                deltai:add_offset = 0.f ;
                deltai:valid_min = 0.f ;
                deltai:valid_max = 9999.f ;
                deltai:comment = "statistics_cot50plus2_dim:  mean, min, max, me
dian, stdev, frequency of no cloud, frequency distribution in 50 bins from 0.0 t
o 100.0 plus >100.0" ;
                deltai:_FillValue = -9999.f ;
        float deltaip4(statistics_cot50binsplus2_dim, area_dim, forecast_period1
h_dim, time1h) ;
                deltaip4:long_name = "atmosphere cloud optical thickness, snow+g
raupel+rain included" ;
                deltaip4:add_offset = 0.f ;
                deltaip4:valid_min = 0.f ;
                deltaip4:valid_max = 9999.f ;
                deltaip4:comment = "statistics_cot50plus2_dim:  mean, min, max,
median, stdev, frequency of no cloud, frequency distribution in 50 bins from 0.0
 to 100.0 plus >100.0" ;
                deltaip4:_FillValue = -9999.f ;
        float deltaip4n(statistics_cot50binsplus2_dim, area_dim, forecast_period
1h_dim, time1h) ;
                deltaip4n:long_name = "atmosphere cloud optical thickness, alter
native calculation, snow+graupel+rain included" ;
                deltaip4n:add_offset = 0.f ;
                deltaip4n:valid_min = 0.f ;
                deltaip4n:valid_max = 9999.f ;
                deltaip4n:comment = "statistics_cot50plus2_dim:  mean, min, max,
 median, stdev, frequency of no cloud, frequency distribution in 50 bins from 0.
0 to 100.0 plus >100.0" ;
                deltaip4n:_FillValue = -9999.f ;
        float deltain(statistics_cot50binsplus2_dim, area_dim, forecast_period1h
_dim, time1h) ;
                deltain:long_name = "atmosphere cloud optical thickness, alterna
tive calculation" ;
                deltain:add_offset = 0.f ;
                deltain:valid_min = 0.f ;
                deltain:valid_max = 9999.f ;
                deltain:comment = "statistics_cot50plus2_dim:  mean, min, max, m
edian, stdev, frequency of no cloud, frequency distribution in 50 bins from 0.0
to 100.0 plus >100.0" ;
                deltain:_FillValue = -9999.f ;
        float ctop(statistics_20binsplus1_dim, area_dim, forecast_period1h_dim,
time1h) ;
                ctop:long_name = "cloud (clc>0.01) top pressure" ;
                ctop:standard_name = "air_pressure_at_cloud_top" ;
                ctop:units = "Pa" ;
                ctop:add_offset = 0.f ;
                ctop:valid_min = 0.f ;
                ctop:valid_max = 999999.f ;
                ctop:comment = "statistics_20bins1_dim: mean, min, max, median,
stdev, frequency of no ctop, frequency distribution of 20 bins from 0.0 to 10000
0.0 plus" ;
                ctop:_FillValue = -9999.f ;
        float ctop50(statistics_20binsplus1_dim, area_dim, forecast_period1h_dim
, time1h) ;
                ctop50:long_name = "cloud (clc>0.5) top pressure" ;
                ctop50:standard_name = "air_pressure_at_cloud_top" ;
                ctop50:units = "Pa" ;
                ctop50:add_offset = 0.f ;
                ctop50:valid_min = 0.f ;
                ctop50:valid_max = 999999.f ;
                ctop50:comment = "statistics_20bins1_dim: mean, min, max, median
, stdev, frequency of no ctop50, frequency distribution of 20 bins from 0.0 to 1
00000.0 plus" ;
                ctop50:_FillValue = -9999.f ;
        float ctop50_msg(statistics_20binsplus1_dim, area_dim, forecast_period1h
_dim, time1h) ;
                ctop50_msg:long_name = "cloud (clc>0.5) top pressure, only cloud
s with grid_scale tqi > 0.7e-3 or tqc >0.7e-3 kg/m2" ;
                ctop50_msg:standard_name = "air_pressure_at_cloud_top" ;
                ctop50_msg:units = "Pa" ;
                ctop50_msg:add_offset = 0.f ;
                ctop50_msg:valid_min = 0.f ;
                ctop50_msg:valid_max = 999999.f ;
                ctop50_msg:comment = "statistics_20bins1_dim: mean, min, max, me
dian, stdev, frequency of no ctop50_msg, frequency distribution of 20 bins from
0.0 to 100000.0 plus" ;
                ctop50_msg:_FillValue = -9999.f ;
        float ctop_scal(statistics_20binsplus1_dim, area_dim, forecast_period1h_
dim, time1h) ;
                ctop_scal:long_name = "cloud (clc>0.01) top pressure" ;
                ctop_scal:standard_name = "air_pressure_at_cloud_top" ;
                ctop_scal:units = "Pa" ;
                ctop_scal:add_offset = 0.f ;
                ctop_scal:valid_min = 0.f ;
                ctop_scal:valid_max = 999999.f ;
                ctop_scal:comment = "statistics_20bins1_dim: mean, min, max, med
```

```
ian, stdev, frequency of no ctop_scal, frequency distribution of 20 bins from 0.
0 to 100000.0 plus" ;
                ctop_scal:_FillValue = -9999.f ;
        float ctop_scal2(statistics_20binsplus1_dim, area_dim, forecast_period1h
_dim, time1h) ;
                ctop_scal2:long_name = "cloud top pressure, grid-scale clouds on
ly, qc>1e-10 or qi>5e-5 kg/kg" ;
                ctop_scal2:standard_name = "air_pressure_at_cloud_top" ;
                ctop_scal2:units = "Pa" ;
                ctop_scal2:add_offset = 0.f ;
                ctop_scal2:valid_min = 0.f ;
                ctop_scal2:valid_max = 999999.f ;
                ctop_scal2:comment = "statistics_20bins1_dim: mean, min, max, me
dian, stdev, frequency of no ctop_scal2, frequency distribution of 20 bins from
0.0 to 100000.0 plus" ;
                ctop_scal2:_FillValue = -9999.f ;
        float ctop_scal3(statistics_20binsplus1_dim, area_dim, forecast_period1h
_dim, time1h) ;
                ctop_scal3:long_name = "cloud top pressure, grid-scale clouds on
ly, qc>1e-10 or qi>1e-7 kg/kg" ;
                ctop_scal3:standard_name = "air_pressure_at_cloud_top" ;
                ctop_scal3:units = "Pa" ;
                ctop_scal3:add_offset = 0.f ;
                ctop_scal3:valid_min = 0.f ;
                ctop_scal3:valid_max = 999999.f ;
                ctop_scal3:comment = "statistics_20bins1_dim: mean, min, max, me
dian, stdev, frequency of no ctop_scal3, frequency distribution of 20 bins from
0.0 to 100000.0 plus" ;
                ctop_scal3:_FillValue = -9999.f ;
        float ctop_scal2s(statistics_20binsplus1_dim, area_dim, forecast_period1
h_dim, time1h) ;
                ctop_scal2s:long_name = "cloud top pressure, grid-scale clouds o
nly, qc>1e-10 or (qi+qs)>5e-5 kg/kg" ;
                ctop_scal2s:standard_name = "air_pressure_at_cloud_top" ;
                ctop_scal2s:units = "Pa" ;
                ctop_scal2s:add_offset = 0.f ;
                ctop_scal2s:valid_min = 0.f ;
                ctop_scal2s:valid_max = 999999.f ;
                ctop_scal2s:comment = "statistics_20bins1_dim: mean, min, max, m
edian, stdev, frequency of no ctop_scal2s, frequency distribution of 20 bins fro
m 0.0 to 100000.0 plus" ;
                ctop_scal2s:_FillValue = -9999.f ;
        float ctop_scal3s(statistics_20binsplus1_dim, area_dim, forecast_period1
h_dim, time1h) ;
                ctop_scal3s:long_name = "cloud top pressure, grid-scale clouds o
nly, qc>1e-10 or (qi+qs)>1e-7 kg/kg" ;
                ctop_scal3s:standard_name = "air_pressure_at_cloud_top" ;
                ctop_scal3s:units = "Pa" ;
                ctop_scal3s:add_offset = 0.f ;
                ctop_scal3s:valid_min = 0.f ;
                ctop_scal3s:valid_max = 999999.f ;
                ctop_scal3s:comment = "statistics_20bins1_dim: mean, min, max, m
edian, stdev, frequency of no ctop_scal3s, frequency distribution of 20 bins fro
m 0.0 to 100000.0 plus" ;
                ctop_scal3s:_FillValue = -9999.f ;
        float ctop_scal4s(statistics_20binsplus1_dim, area_dim, forecast_period1
h_dim, time1h) ;
                ctop_scal4s:long_name = "cloud top pressure, grid-scale clouds o
nly, qc>1e-10 or (qi+qs)>1e-5 kg/kg" ;
                ctop_scal4s:standard_name = "air_pressure_at_cloud_top" ;
                ctop_scal4s:units = "Pa" ;
                ctop_scal4s:add_offset = 0.f ;
                ctop_scal4s:valid_min = 0.f ;
                ctop_scal4s:valid_max = 999999.f ;
                ctop_scal4s:comment = "statistics_20bins1_dim: mean, min, max, m
edian, stdev, frequency of no ctop_scal4s, frequency distribution of 20 bins fro
m 0.0 to 100000.0 plus" ;
                ctop_scal4s:_FillValue = -9999.f ;
        float ctop_scal5s(statistics_20binsplus1_dim, area_dim, forecast_period1
h_dim, time1h) ;
                ctop_scal5s:long_name = "cloud top pressure, grid-scale clouds o
nly, qc>1e-10 or (qi+qs)>2e-5 kg/kg" ;
                ctop_scal5s:standard_name = "air_pressure_at_cloud_top" ;
                ctop_scal5s:units = "Pa" ;
                ctop_scal5s:add_offset = 0.f ;
                ctop_scal5s:valid_min = 0.f ;
                ctop_scal5s:valid_max = 999999.f ;
                ctop_scal5s:comment = "statistics_20bins1_dim: mean, min, max, m
edian, stdev, frequency of no ctop_scal5s, frequency distribution of 20 bins fro
m 0.0 to 100000.0 plus" ;
                ctop_scal5s:_FillValue = -9999.f ;
        float ctop_scal6s(statistics_20binsplus1_dim, area_dim, forecast_period1
h_dim, time1h) ;
                ctop_scal6s:long_name = "cloud top pressure, grid-scale clouds o
nly, qc>1e-10 or (qi+qs)>3e-5 kg/kg" ;
                ctop_scal6s:standard_name = "air_pressure_at_cloud_top" ;
                ctop_scal6s:units = "Pa" ;
                ctop_scal6s:add_offset = 0.f ;
                ctop_scal6s:valid_min = 0.f ;
                ctop_scal6s:valid_max = 999999.f ;
                ctop_scal6s:comment = "statistics_20bins1_dim: mean, min, max, m
edian, stdev, frequency of no ctop_scal6s, frequency distribution of 20 bins fro
m 0.0 to 100000.0 plus" ;
                ctop_scal6s:_FillValue = -9999.f ;
        float ctop_scal7s(statistics_20binsplus1_dim, area_dim, forecast_period1
h_dim, time1h) ;
                ctop_scal7s:long_name = "cloud top pressure, grid-scale clouds o
nly, qc>1e-10 or (qi+qs)>4e-5 kg/kg" ;
                ctop_scal7s:standard_name = "air_pressure_at_cloud_top" ;
                ctop_scal7s:units = "Pa" ;
                ctop_scal7s:add_offset = 0.f ;
                ctop_scal7s:valid_min = 0.f ;
                ctop_scal7s:valid_max = 999999.f ;
                ctop_scal7s:comment = "statistics_20bins1_dim: mean, min, max, m
edian, stdev, frequency of no ctop_scal7s, frequency distribution of 20 bins fro
m 0.0 to 100000.0 plus" ;
                ctop_scal7s:_FillValue = -9999.f ;
        float ctop_msg(statistics_20binsplus1_dim, area_dim, forecast_period1h_d
im, time1h) ;
                ctop_msg:long_name = "cloud (clc>0.01) top pressure, only clouds
 with grid_scale tqi > 0.7e-3 or tqc >0.7e-3 kg/m2" ;
                ctop_msg:standard_name = "air_pressure_at_cloud_top" ;
                ctop_msg:units = "Pa" ;
                ctop_msg:add_offset = 0.f ;
                ctop_msg:valid_min = 0.f ;
                ctop_msg:valid_max = 999999.f ;
                ctop_msg:comment = "statistics_20bins1_dim: mean, min, max, medi
an, stdev, frequency of no ctop_msg, frequency distribution of 20 bins from 0.0
to 100000.0 plus" ;
                ctop_msg:_FillValue = -9999.f ;
        float dbz_850(statistics_dbz60binsplus2_dim, area_dim, forecast_period_d
im, time) ;
                dbz_850:long_name = "unattenuated radar reflectivity in Rayleigh
 approximation in 850 hPa" ;
                dbz_850:units = "1" ;
                dbz_850:valid_min = -999.f ;
                dbz_850:valid_max = 999.f ;
                dbz_850:comment = "Not exactly 850 hPa, but level of model refer
ence atmosphere corresponding to 850 hPa; statistics_dbz60plus2_dim:  mean, min,
 max, median, stdev, frequency of <0, frequency distribution in 60 bins from 0.0
 to 60.0 plus >60.0; -999.0 in mean, min, max, median, stdev means: no dbz_850>0
 at all in area" ;
                dbz_850:_FillValue = -9999.f ;
        float dbz_cmax(statistics_dbz60binsplus2_dim, area_dim, forecast_period_
```

```
dim, time) ;
                dbz_cmax:long_name = "unattenuated radar reflectivity in Rayleig
h approximation: column maximum" ;
                dbz_cmax:units = "1" ;
                dbz_cmax:valid_min = -999.f ;
                dbz_cmax:valid_max = 999.f ;
                dbz_cmax:comment = "statistics_dbz60plus2_dim:  mean, min, max,
median, stdev, frequency of <0, frequency distribution in 60 bins from 0.0 to 60
.0 plus >60.0; -999.0 in mean, min, max, median, stdev means: no dbz_cmax>0 at a
ll in area" ;
                dbz_cmax:_FillValue = -9999.f ;
        float msgcloudbt39(statistics_20bins_dim, area_dim, forecast_period_dim,
 time) ;
                msgcloudbt39:long_name = "synthetic satellite images MSG cloudy
brightness temperature at  3.9 micrometers" ;
                msgcloudbt39:units = "K" ;
                msgcloudbt39:add_offset = 0.f ;
                msgcloudbt39:valid_min = 0.f ;
                msgcloudbt39:valid_max = 999.f ;
                msgcloudbt39:comment = "statistics_20bins_dim: mean, min, max, m
edian, stdev, frequency distribution of 20 bins from 180.0 to 350.0" ;
                msgcloudbt39:_FillValue = -9999.f ;
        float msgcloudbt62(statistics_20bins_dim, area_dim, forecast_period_dim,
 time) ;
                msgcloudbt62:long_name = "synthetic satellite images MSG cloudy
brightness temperature at  6.2 micrometers" ;
                msgcloudbt62:units = "K" ;
                msgcloudbt62:add_offset = 0.f ;
                msgcloudbt62:valid_min = 0.f ;
                msgcloudbt62:valid_max = 999.f ;
                msgcloudbt62:comment = "statistics_20bins_dim: mean, min, max, m
edian, stdev, frequency distribution of 20 bins from 180.0 to 350.0" ;
                msgcloudbt62:_FillValue = -9999.f ;
        float msgcloudbt73(statistics_20bins_dim, area_dim, forecast_period_dim,
 time) ;
                msgcloudbt73:long_name = "synthetic satellite images MSG cloudy
brightness temperature at  7.3 micrometers" ;
                msgcloudbt73:units = "K" ;
                msgcloudbt73:add_offset = 0.f ;
                msgcloudbt73:valid_min = 0.f ;
                msgcloudbt73:valid_max = 999.f ;
                msgcloudbt73:comment = "statistics_20bins_dim: mean, min, max, m
edian, stdev, frequency distribution of 20 bins from 180.0 to 350.0" ;
                msgcloudbt73:_FillValue = -9999.f ;
        float msgcloudbt87(statistics_20bins_dim, area_dim, forecast_period_dim,
 time) ;
                msgcloudbt87:long_name = "synthetic satellite images MSG cloudy
brightness temperature at  8.7 micrometers" ;
                msgcloudbt87:units = "K" ;
                msgcloudbt87:add_offset = 0.f ;
                msgcloudbt87:valid_min = 0.f ;
                msgcloudbt87:valid_max = 999.f ;
                msgcloudbt87:comment = "statistics_20bins_dim: mean, min, max, m
edian, stdev, frequency distribution of 20 bins from 180.0 to 350.0" ;
                msgcloudbt87:_FillValue = -9999.f ;
        float msgcloudbt97(statistics_20bins_dim, area_dim, forecast_period_dim,
 time) ;
                msgcloudbt97:long_name = "synthetic satellite images MSG cloudy
brightness temperature at  9.7 micrometers" ;
                msgcloudbt97:units = "K" ;
                msgcloudbt97:add_offset = 0.f ;
                msgcloudbt97:valid_min = 0.f ;
                msgcloudbt97:valid_max = 999.f ;
                msgcloudbt97:comment = "statistics_20bins_dim: mean, min, max, m
edian, stdev, frequency distribution of 20 bins from 180.0 to 350.0" ;
                msgcloudbt97:_FillValue = -9999.f ;
        float msgcloudbt108(statistics_20bins_dim, area_dim, forecast_period_dim
, time) ;
                msgcloudbt108:long_name = "synthetic satellite images MSG cloudy
 brightness temperature at 10.8 micrometers" ;
                msgcloudbt108:units = "K" ;
                msgcloudbt108:add_offset = 0.f ;
                msgcloudbt108:valid_min = 0.f ;
                msgcloudbt108:valid_max = 999.f ;
                msgcloudbt108:comment = "statistics_20bins_dim: mean, min, max,
median, stdev, frequency distribution of 20 bins from 180.0 to 350.0" ;
                msgcloudbt108:_FillValue = -9999.f ;
        float msgcloudbt121(statistics_20bins_dim, area_dim, forecast_period_dim
, time) ;
                msgcloudbt121:long_name = "synthetic satellite images MSG cloudy
 brightness temperature at 12.1 micrometers" ;
                msgcloudbt121:units = "K" ;
                msgcloudbt121:add_offset = 0.f ;
                msgcloudbt121:valid_min = 0.f ;
                msgcloudbt121:valid_max = 999.f ;
                msgcloudbt121:comment = "statistics_20bins_dim: mean, min, max,
median, stdev, frequency distribution of 20 bins from 180.0 to 350.0" ;
                msgcloudbt121:_FillValue = -9999.f ;
        float msgcloudbt134(statistics_20bins_dim, area_dim, forecast_period_dim
, time) ;
                msgcloudbt134:long_name = "synthetic satellite images MSG cloudy
 brightness temperature at 13.4 micrometers" ;
                msgcloudbt134:units = "K" ;
                msgcloudbt134:add_offset = 0.f ;
                msgcloudbt134:valid_min = 0.f ;
                msgcloudbt134:valid_max = 999.f ;
                msgcloudbt134:comment = "statistics_20bins_dim: mean, min, max,
median, stdev, frequency distribution of 20 bins from 180.0 to 350.0" ;
                msgcloudbt134:_FillValue = -9999.f ;

// global attributes:
                :title = "Operational COSMO-DE model output area statistics." ;
                :Conventions = "CF-1.0" ;
                :GOP_group = "GOP9" ;
                :institution = "Model: Deutscher Wetterdienst; data processing:
Universitaet zu Koeln, Institut fuer Geophysik und Meteorologie" ;
                :source = "COSMO-DE" ;
                :history = "v1.42 created by Thorsten Reinhardt 2009-03-26." ;
                :comment = "if no statistics dimension: mean only" ;
}
```