

How can I multiply the field values by a constant - ecCodes GRIB FAQ

Step-by-step guide

One way is to use `grib_set` with the key "scaleValuesBy". Let's say you have a field in `orig.grib` whose values you want to multiply by 2.1. First check the original data value statistics:

```
% grib_ls -p min,max,avg orig.grib
min      max      avg
234.554   312.085   278.977
```

You could have also checked the statistics by "`grib_ls -n statistics orig.grib`".

Now let's scale all values up by a factor of 2.1:

```
% grib_set -s scaleValuesBy=2.1 orig.grib out.grib
```

And check the new values after the multiplication:

```
% grib_ls -p min,max,avg out.grib
min      max      avg
492.563   655.376   585.853
```

For adding or subtracting a constant, you can use the key "offsetValuesBy".

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