

# Local definitions for MARS

Sébastien Villaume

Manuel Fuentes, Baudouin Raoult, Tiago Quintino

Second Workshop for MARS administrators

7-8 March 2016

# roadmap

- Find out your centre number code
- Add stuff in definitions/grib1
- Add stuff in definitions/grib2
- Add stuff in definitions/mars
- Don't start from scratch, look at other centres local definitions

# In GRIB edition 1

- Create your “tables 2” versions
- Eventually add local table 3 and table 5 (local table 3 very important!)
- Generate your localConcepts: paramId.def, name.def, etc.
- Eventually add some customizations for MARS and grib\_ls labelling
- Hack some files otherwise it does not work :)

## In GRIB edition 2

- Add eventually your local tables but try to use the WMO master tables everytime it is possible
- Generate your localConcepts: paramId.def, name.def, etc.
- Eventually add some customizations for MARS and grib\_ls labelling
- Hack some files otherwise it does not work :)

## LocalConcepts grib1 vs grib2 (in 1.14.5)

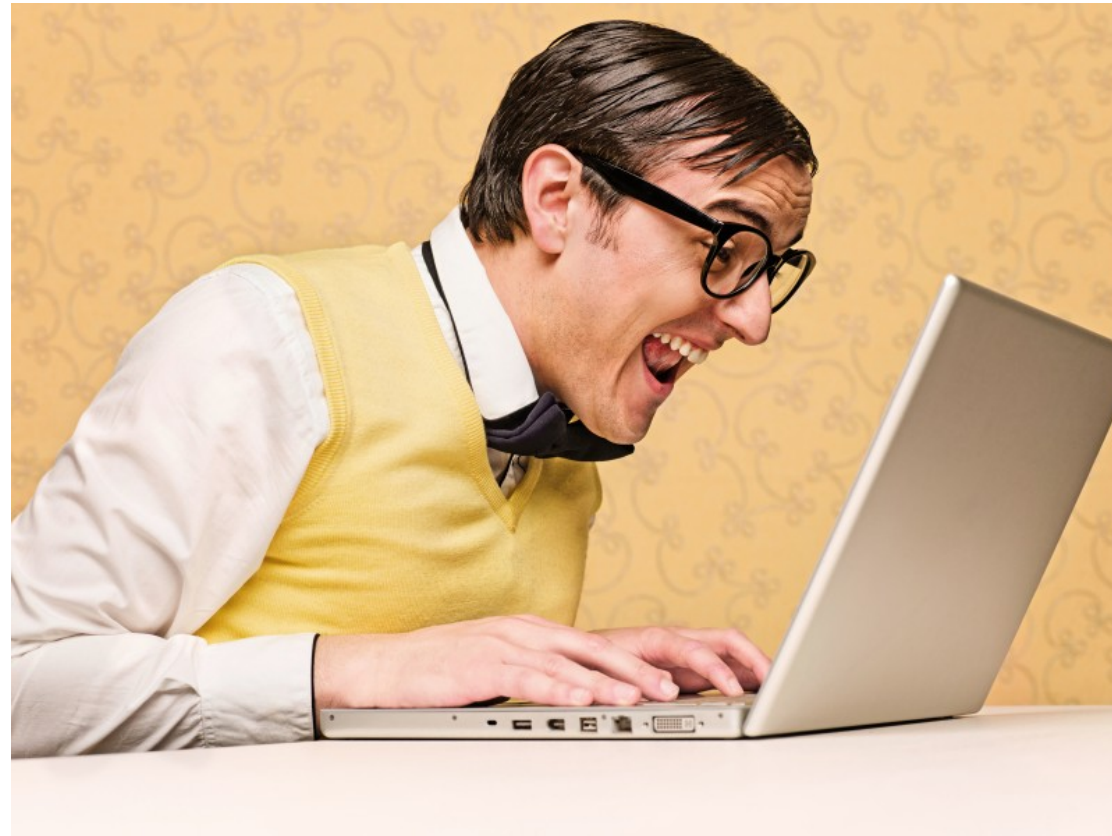
- In GRIB 1:

```
#Maximum temperature at 2 metres in the last 24 hours
'51' = {
    table2Version = 128 ;
    indicatorOfParameter = 51 ;
}
```

- In GRIB-2:

```
#Maximum temperature at 2 metres in the last 24 hours
'51' = {
    discipline = 0 ;
    parameterCategory = 0 ;
    parameterNumber = 0 ;
    scaleFactorOfFirstFixedSurface = 0 ;
    typeOfStatisticalProcessing = 2 ;
    scaledValueOfFirstFixedSurface = 2 ;
    typeOfFirstFixedSurface = 103 ;
    LengthOfTimeRange = 24 ;
    IndicatorOfUnitForTimeRange = 1 ;
}
```

## Live session



# Basic constructs

<code>#</code>	comments
<code>include</code>	Include a snippet from an external file
<code>\$keyword\$</code>	keyword as a string
<code>%keyword%</code>	keyword as an integer
<code>"someString" 'some string'</code>	a string
<code>fail "message"</code>	fail with error message "message", sent back to the client. Typically used in an "otherwise" clause
<code>cluster &lt;keyword string&gt;</code>	Insert keyword or string into the layout "name"
<code>push &lt;keyword string&gt;</code>	Used in function to return something (a keyword, a string, an object)
<code>functionName()</code>	function call
<code>node &lt;nodeType&gt;(args)</code>	Insert a node of type "nodeType", can be a tree node or a leaf node