

Modul:ChartColors

Used by **Vorlage:TI** and **Vorlage:TI**

To translate or review the translation of the module to your language, edit carefully [Data:118n/ChartColors.tab](#).

Function ShowColors

Code	Result
<code>{{#invoke:ChartColors ShowColors Categ20 5}}</code>	Lua-Fehler: bad argument #1 to "get" (not a valid title)
<code>{{ChartColors Categ20 9}}</code>	Lua-Fehler: bad argument #1 to "get" (not a valid title)
<code>{{#invoke:ChartColors ShowColors Categ20 3 -}}</code>	Lua-Fehler: bad argument #1 to "get" (not a valid title)
<code>{{#invoke:ChartColors ShowColors Categ20 3 a}}</code>	Lua-Fehler: bad argument #1 to "get" (not a valid title)
<code>{{#invoke:ChartColors ShowColors Plotter 5}}</code>	Lua-Fehler: bad argument #1 to "get" (not a valid title)
<code>{{ChartColors Plotter 20}}</code>	Lua-Fehler: bad argument #1 to "get" (not a valid title)

Function Legends

```
{{#invoke:ChartColors|Legends|Categ20|5|2}}
```

produces:

Lua-Fehler: expandTemplate: template "div col" does not exist

```
{{#invoke:ChartColors|Legends|Categ20|3|1|One|Two|Three}}
```

produces:

Lua-Fehler: expandTemplate: template "div col" does not exist

```
local p = {}  
  
local ARG = require "Module:Arguments"  
local CFCM = require "Module:ComplForColorModules"
```



```
local TNTT = require "Module:TNTTools"
--local SD = require "Module:SimpleDebug"

local I18n = 'ChartColors'

local function I18nStr (S, ...)
    return TNTT.GetMsgP (I18n, S, {...})
end

--local RS_ColorNameInvalid = 'El nom del color (%s) no és vàlid (ha de ser Categ
--local RS_ColorNumInvalid = 'El nombre de colors hauria d'estar entre 1 i %d (a
--local RS_StartNumInvalid = 'El número del primer color hauria d'estar entre 1 i

local category20 = {
    '#1f77b4', '#aec7e8', '#ff7f0e', '#ffbb78', '#2ca02c', '#98df8a', '#d62728',
    '#8c564b', '#c49c94', '#e377c2', '#f7b6d2', '#7f7f7f', '#c7c7c7', '#bcbd22'
}
local plotter = {--from Module:Plotter/DefaultColors
    'red', 'blue', 'green', 'yellow', 'fuchsia', 'aqua', 'brown', 'orange',
    '#F0A3FF', '#191919', '#005C31', 'honeydew', '#808080', 'khaki', 'lime',
    '#5EF1F2', 'turquoise', '#E0FF66', 'violet', '#FFFF80', '#FF5005',
}

function p.GetColors (ColorName, IsInv, StartN, N, CallError)
    local SelColors = {}
    local ColorNameL = string.lower(ColorName)
    local Palet0 = {}
    if ColorNameL == 'categ20' then
        Palet0 = category20
    elseif ColorNameL == 'plotter' then
        Palet0 = plotter
    elseif CallError then
        error (I18nStr ('ColorNameInvalid',ColorName))
    end
    MaxN = table.getn(Palet0)
    if (N < 0) or (N > MaxN) then
        error (I18nStr ('ColorNumInvalid',tostring(MaxN),tostring(N)))
    else
        Palet = {}
        if IsInv then
            for i=MaxN, 1, -1 do
                table.insert(Palet, Palet0[i])
            end
        else
            Palet = Palet0
        end
        if StartN > MaxN then
            error (I18nStr ('StartNumInvalid',tostring(MaxN),tostring(StartN)))
        end
        local Step = 1
        local NEnd = N
        if (ColorNameL == 'categ20') and (N<=10) then
            Step = 2
            if StartN == 1 then
                NEnd = N*2
            end
        end
        if StartN == 1 then
            for i=1, NEnd, Step do
                table.insert(SelColors, Palet[i])
            end
        else
            Count = 0
            for i=StartN, MaxN, Step do
```

```
        table.insert(SelColors, Palet[i])
        Count = Count + 1
        if Count == NEnd then
            break
        end
    end
    if Count < NEnd then
        for i=1, MaxN, Step do
            table.insert(SelColors, Palet[i])
            Count = Count + 1
            if Count == NEnd then
                break
            end
        end
    end
    return SelColors
end
end --GetColors

function p.ColorNameInvStartFromS (S)
    local StartN = 1
    local ParamsA = {}
    local ColorName, IsInv
    ColorName, IsInv, ParamsA = CFCM.ColorNameInvFromS0 (S)
    local PN = table.getn(ParamsA)
    if PN > 1 then
        if ParamsA[2]=='i' then
            IsInv = true
        else
            StartN = tonumber (ParamsA[2])
        end
        if PN == 3 then
            StartN = tonumber (ParamsA[3])
        end
    end
    return ColorName, IsInv, StartN
end --ColorNameInvStartFromS

function ColorNameInv (args)
    local S = args[1] or ''
    local ColorName, IsInv, ParamsA = CFCM.ColorNameInvFromS0 (S)
    local StartN = 1
    ColorName, IsInv, StartN = p.ColorNameInvStartFromS (S)
    return ColorName, IsInv, StartN
end --ColorNameInv

function p.ShowColors(frame)
    local args = ARG.getArgs(frame,{
        removeBlanks = false
    });
    local ColorName, IsInv, StartN = ColorNameInv (args)
    local N = tonumber(args[2])
    local WriteColor = args[3] or ""
    local ColorFound = {}
    ColorFound = p.GetColors (ColorName, IsInv, StartN, N, true)
    local boxes = {}
    for i=1, table.getn(ColorFound) do
        table.insert(boxes, CFCM.Box(ColorFound[i],WriteColor))
    end
    return table.concat(boxes, " ")
end --ShowColors

function p.Legends(frame)
```



```
local args = ARG.getArgs(frame,{
    removeBlanks = false
})
local Nargs = require("Module:TableTools").length(args)
local ColorName, IsInv, StartN = ColorNameInv (args)
local N = tonumber(args[2])
local ColWidth = args[3]
local ColorFound = {}
local Labels = {}
local NLabels = 0
local IsTemplate = true
ColorFound = p.GetColors (ColorName, IsInv, StartN, N, true)
Labels, NLabels, OutlineColor = CFCM.GetLabels (args, N, 4)
return CFCM.LegendText (ColorFound, Labels, NLabels, ColWidth, IsTemplate)
end

return p
```