

COMPASS Report Editor "Report Field" Macro to calculate and display Offset (intercept) of data

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'*****  
'For help with the programming syntax,  
'search for keyword 'vbscript' on the internet.  
'*****  
'Report Field Macros are intended to return a single value.  
'Manipulate the data in the data collection as desired.  
'ColData    A collection of all active data files.  
'CurFile    ID of the current data file.  
'userParam  User defined parameter passed to the Macro.  
,  
  
'Note that this macro calls Global Macro "PolyFit" or "PolyFitData"  
'So that macro must be present in GlobalCode macros  
'*****  
Function LinearFit_Slope(colData, curFile)  
  
Dim coefs(4,7)  
Dim unit  
With colData (curFile)  
    Redim RefP(.NumberofPressurePoints-1)  
    Redim DUTOUT(.NumberofPressurePoints-1)  
  
    For p = 1 To .NumberofPressurePoints  
        RefP(p-1) = .DataPointRef(1,1,1,CInt(p)).RefPressure  
        DUTOUT(p-1) = .DataPointRef(1,1,1,CInt(p)).DUTRawOutput1  
    Next  
  
    unit_x=""&.DataInfoCollection("ID200002").Unit  
    unit_y=""&.DataInfoCollection("ID300007").Unit  
End With  
  
i = Poly_Fit(DUTOUT, RefP, coefs, 2^0 Or 2^1)  
sensitivityxy = coefs(0,1)  
zeroxy = coefs(0,0)  
  
temp1 = "First Order Fit Equation: y = "& formatNumber(sensitivityxy,6)&"x + "&  
formatNumber(zeroxy,10)  
  
i = Poly_Fit(RefP, DUTOUT, coefs, 2^0 Or 2^1)  
sensitivityyx = coefs(0,1)  
zeroyx = coefs(0,0)  
  
temp2 = "First Order Fit Equation: x = "& formatNumber(sensitivityxy,6)&"y + " &  
formatNumber(zeroxy,10)  
temp3 = "Sensitivity (y/x) = "& formatNumber(sensitivityyx, 6) & " " & unit_y &  
" per " & unit_x  
'temp4 is intercept based on DUT Raw Output1  
temp4 = "Zero Intercept (y) = "& formatNumber(zeroyx, 10) & " " & unit_y  
'temp5 is slope based on DUT Raw Output1  
'temp5 = "Slope (DUT_RawOut/Ref_Final) = " & formatNumber(sensitivityxy, 4) & " " &  
& unit_x & " per " & unit_y  
temp5 = formatNumber(sensitivityxy, 4) & " " & unit_x & " per " & unit_y  
temp6 = "Zero Intercept (Ref_Final) = "& formatNumber(zeroxy, 4) & " " & unit_x
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'Following line is to show all calculated values, uncomment it for  
troubleshooting  
'LinearFit = temp1 & vbcrLf & temp2 & vbcrLf & temp3 & vbcrLf & temp4 & vbcrLf &  
temp5 & vbcrLf & temp6
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'Following line is the value returned by this macro  
LinearFit_Slope = temp5
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End Function
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