The Contour Panel

XREC can superimpose up to 32 fields on the same chart. The appearance of each field (i.e. color, line thickness, etc.) is defined by its rank in the display stack. The appearance and behavior of each stack element is defined in the "**Contour**" panel.

The panel is split in 2 parts. The left part shows the selected display stack element. The right part shows all the display attributes that can be set for each element. Basically, the user selects the display stack element to be modified (eg. "Field 1") and sets the attributes. There are 32 elements, one for each field, plus one for the background and one for the grid.

X xrecContourPanel											
Refresh Close											
Background 스 Grid	Color	white 🗖									
Field 1 Field 2 Field 3	Line Thickness	1									
Field 4	Style	Full lines 🗖									
Field 6 Field 7	Contours	According to Display menu 🗖									
Field 8 Field 9	Labels	According to Display menu 💷 🏾									
Field 10 - Field 11	Label Size	Auto 🖃									
Field 12 Field 13 Field 14	Central A Values	ccording to Display menu 💷									
Field 15 Field 16	Central val Size	. 10 🗖									
Field 18											

One of the major attributes is color. A choice of 9 colors is proposed.

Color	white							
Lino	black							
Thickness	red	-						
04	cyan							
Style	yellow	빋						
Contours	magenta	monu						
contours	green	merru						
Labels	blue	menu						
	gray							
Label Size	Auto							

The other element is line thickness. Thicknesses from 1 to 5 can be selected.

Color	white	
Line	1	
INICKNESS	2	
Style	3	Ľ
Contours	4	meni
0011104110	<u> </u>	

The next element is the contour line styles. The user is given a choice of 4 line dashes, and 3 dash patterns visible only when the values of the field are negative.

Style	Full lines
Contours	
Labels	(< 0 only)
Label	(< 0 only)
Size	(< 0 only)

The next part offers an overriding control on the presence / absence of element. For "**Contours**", "**Labels**" and "**Central values**", for a given field rank, the user can choose to obey to the toggles of the "**Display**" menu of the "Control Panel", or to ignore them by either always or never showing an element.

Contours	According to Display menu 🗖
Labels	Always Never
Label Size	Auto 🗖

In the "Label size" option menu the user can fine tune the size of the labels. "Auto" uses the size defined in the "Legend / interpolation" panel, the other units are fixed pixel sizes.

Central A 14 Values A 14 Central val 18 Size 24	Label	Auto
Central A 14 Values 17 Central val 18 Size 24	3126	12
Central val 18 Size	Central A	14 :
Central val 18 Size	values	17
04	Central val Size	18
24		24 -

The last item is the "Central value size", that the user can set for each field.



Here are a few examples.

We start with a forecast run from the regional configuration of the GEM model. We display the geopotential at 850 mb for 4 forecast times, 00hr, 06hr, 12hr and 18hr. We superimpose the 4 fields, and put the "Colors" option off from the display menu. This is what xrec gives us by default.



We can make this chart more legible by setting the background to white and the line thicknesses of the 0 hr field to 2. Here are the different settings for the contour panel.



		Refresh Close		Refresh Close	Refresh Close Refresh C	Refresh Close				
Background Grid	Color	white 🖵	Background A Bolor	black 🗖	ackground 🖞 Color blue 💳 Background 🖓 Color red 📼	Background A Color green				
Field 1 Field 2	Line	1 =	Field 1 Line Field 2 Thickness	2 =	ield 1 Line 2 - Field 1 Line 2 -	Field 1 Line 2				
Field 3 Field 4	Style	Full lines 💷	Field 3 Field 4 Style Fu	ull lines 💷	ield 3 ield 4 Style Full lines - Field 4 Style Full lines -	Field 3				
Field 5 Field 6	Contours	According to Display many	Field 5	conding to Display many	ield 5 Field 5 Field 6 Contains According to Display many of Field 6 Contains According to Display many	Field 5				
Field 7 Field 8	Lohate	According to Display menu	Field 7 Field 8	conding to Display menu -	ield 7 ield 8 Labela desending to Display menu 2 Field 7 Field 8	Field 7 Field 8				
Field 9 Field 10	Labels	Hecording to Display menu	Field 9 Field 10	cording to Display menu	ield 10 label Field 10 label Field 10 label	Field 9				
Field 11 Field 12	Size	HUTO	Field 11 Size	HUTO	ield 11 Size Huto Field 11 Size Huto	Field 11 Size Huto				
Field 13 Field 14	Central Values	According to Display menu 💷	Field 13 Central Accor Field 14 Values	rding to Display menu 😐	Ield 13 Central Ield 14 Values According to Display menu Field 13 Field 14 Central Values According to Display menu Field 14 Central	Field 13 Central Field 14 Values According to Display menu				
Field 15 Field 16	Central va Size	al. 20 -	Field 15 Field 16 Central val. Size	20	ield 15 Central val. 20 - Field 15 Central val. 20 - Size	Field 15 Field 16 Central val. 20				
Field 17 Field 18	/		Field 17 Field 18		ield 17 Field 17 Field 17 Field 18 7	Field 17 Field 18				

In the following chart, the background color is set to black, the contour lines of "Field 1" are set to white, those of "Field 2" to yellow, those of "Field 3" to red and those of "Field 4" to green. Remark also the different dash patterns for "Field 3" and "Field 4".



	Refresh Close	Refresh Close	Refresh Close	Refresh Close	Refresh Close				
Backsnound Grid	Color black 📼	Background Color white -	Background Color gellow -	Background A Color red 📼	Background A Color green				
Field 1 Field 2	Line I	Field 2 Thickness 2	Field 1 Line 2 -	Field 1 Field 2 Thickness 2	Field 1 Line 2 =				
Field 4 Field 5	Style Full lines	Field 4 Style Full lines	Field 3 Field 5	Field 4 Style	Field 3 Field 5 Style				
Field 6 Field 7	Contours According to Display menu =	Field 6 Field 7 Contours According to Display menu	Field 6 Field 7 Contours Always -	Field 6 Field 7 Contours Always -	Field 6 Field 7 Contours Always				
Field 8 Field 9	Labels According to Display menu -	Field 8 Labels According to Display menu -	Field 8 Field 9 Labels According to Display menu -	Field 8 Labels According to Display menu -	Field 8 Labels According to Display menu -				
Field 10 Field 11 Field 12	Label Auto	Field 11 Label Auto	Field 10 Label Auto	Field 10 Label Auto	Field 11 Field 12 Label Auto				
Field 13 Field 14	Central Values According to Display menu -	Field 13 Central Values According to Display menu =	Field 13 Central Values According to Display menu	Field 13 Central According to Display menu -	Field 13 Central Values According to Display menu				
Field 15 Field 16 Field 17	Central val. 20	Field 15 Field 16 Field 17	Field 15 Central val. 20 -	Field 15 Central val. 20	Field 15 Field 16 Field 17				
Field 18	7	Field 18	Field 18	Field 18	Field 18				

In the following chart, the "Contours" attribute is set to "Off" in the "Display" menu, but set at "Always" for fields 2, 3 and 4.



Refresh Close					Refresh Close				Refresh Close			Re	fresh Close	Refresh Clr				
Background Grid	Color	white 🗆	Background 🖾 Grid	Color	black		Background Grid	Color	blue	-	Background Grid	Bolor	red	-	Background - Grid	Color	green	-
Field 1 Field 2	Line Thickness	1	Field 1 Field 2	Line Thickness	2	-	Field 1 Field 2	Line Thickness	2	-	Field 1 Field 2	Line Thickness	2	-	Field 1 Field 2	Line Thickness	2	-
Field 4 Field 5	Style	Full lines 💷	Field 4 Field 5	Style	Full lines	-	Field 4 Field 5	Style	Full lines	-	Field 4 Field 5	Style		-	Field 5	Style		-
Field 6 Field 7	Contours	According to Display menu =	Field 6 Field 7	Contours	According to Dis	splay menu 🗆	Field 6 Field 7	Contours	Always	-	Field 6 Field 7	Contours	Always	-	Field 6 Field 7	Contours	Always	-
Field 8 Field 9	Labels	According to Display menu =	Field 8 Field 9	Labels	According to Dis	splay menu 💷	Field 8 Field 9	Labels	According to Dis	play menu 🗆	Field 8 Field 9	Labels	According to Displ	lay menu ⊒	Field 8 Field 9	Labels	According to Dis	play menu 🗆
Field 10 Field 11 Field 12	Label Size	Auto 🖃	Field 10 - Field 11 Field 12	Label Size	Auto	-	Field 10 Field 11 Field 12	Label Size	Auto	-	Field 10 Field 11 Field 12	Label Size	Auto	-	Field 10 Field 11 Field 12	Label Size	Auto	-
Field 13 Field 14	Central Values	According to Display menu 🗆	Field 13 Field 14	Central / Values	eccording to Disp	lay menu 🗆	Field 13 Field 14	Central Values	According to Displ	ay menu 💷	Field 13 Field 14	Central Values	According to Display	y menu ⊐	Field 13 Field 14	Central A Values	eccording to Displ	ay menu 💷
Field 15 Field 16 Field 17	Central va Size	1. 20 =	Field 15 Field 16 Field 17	Central va Size	1. 20	-	Field 15 Field 16 Field 17	Central va Size	1. 20	-	Field 15 Field 16 Field 17	Central va Size	20	-	Field 15 Field 16 Field 17	Central vai Size	1. 20	-
Field 18	7		Field 18				Field 18				Field 18	1			Field 18	,		