WXtoIMG

1. First, activate some options, like expert mode in **Options > GUI Options...** and restart wxtoimg.

WXtoImg: GUI Options			CDI N.C.N
Temperature units	c	Use private colormap	V
Distance units		Flip Meteor series 3 images	Π
Help language	FR	Automatically enter record mode	~
Help font size	+0	Automatically update Keplers	2
Date/time format	YYYY-MM-DD HH:MM:SS	Auto-save options on exit	V
Show time as UTC	Г	Maximum number of thumbnails	150 -
Tear off menus	Г	Enable expert mode (requires restart)	~
Enable map and projection support	2	Show image while recording	V
Enable prompt to exit program	v	Auto scroll image if shown	~
Status info text size	Normal -	Disable sat position during record	2
OK		Cancel	

Configure your Ground Station Location (important for avoiding overlay errors)
 Options > Ground Station Location...

City:	Paris
Country:	France
	Lookup Lat/Lon
Enter City an Lat/Lon or en legrees and f east should b south and wes enter 45 degr	<pre>id Country and click Lookup iter latitude and longitude in fractions of degrees. North and we entered as positive numbers, it as negative numbers (example: sees 30 minutes west as -45.500).</pre>
Latitude:	48,71
Longitude:	2.249
Altitude (meters):	52.0
Carrier Conservation	
□ Use GPS on	COM2:
Use GPS on	COM2: at baud
Use GPS on	COM2: at baud

Configure options for recording and auto start
 Options > Recording Options...

0	Record using WEFAX start	/stop tones (for geostationary	satellites on 1.6GHz)	
¢	Record only when active 4	APT satellites are overhead		
	with maximum elevation a	above (degrees W:degrees E)		11:16
	record only when satellite	is above (degrees N:degrees S	3	4:6
	and require			
Comi	mon recording options:		receiver type	none 🛁
	soundcard	SDRSharp (VB-Audio Cable	A)	Advanced
	sample rate	11025	receiver port	none
	antenna type	Discone	receiver baud rate	receiver default 🔟
Aziur	nuth-Elevation Rotor Control			
	rotor type	none 🛁	rotor port	none
	park azimuth/elevation	180.0/90.0	rotor baud rate	controller default

The checked radio box with elevations corresponds to the min and max elevations that will make wxtoimg to start or stop recording. Adapt according to your station on each pass, as this, best result will be obtain after a while.

Configure the auto processing for wanted images
 Options > Auto Processing Options...

C	Record only (show image if enabled)	
¢	Record and auto process	
	I⊄ Create image(s)	Image Settings
	☐ Create movie(s)	Movie Settings
	Create composite image(s)	Composite Image Settings
	Add images to web page	Web Page Settings
	Minimum percent of projection filled	0.1
	Minimum solar elevation for visible images	0.0
	Exclude from composite images and animations	
	Minimum Good Quality Scan Lines	240 (2:00)
	Show MCIR when MSA fails on screen	v
	Remove audio files	never 🛁
	Remove raw images	never
	Remove maps	never
	Remove images	never
	1	

- *Create Images* = Locally auto create some images as configured with the « Image Settings... » buttons, just select wanted enhancements, exemple :

Image Filename Template	%s-%f-%e	
Enhancements	MCIR map colour IR	Ιé
	MCIR with precipitation MCIR anaglyph false 3-D	
	MSA multispectral analysis	11
	MSA with precipitation	
	MSA anaglyph false 3-D	
	HVCT false-colour	1
	HVCT with precipitation	2
White background on projections	Г	

- *Create composite images* = after at less two passes, wxtoimg can create composite images, you can choose which ones with the « Composite Image Settings... » button. Choose the Projection you prefer.

WXtoImg: Record Composite Image Settings		(international international i
Composite Image Filename Template	%g-%@%Y%m%d-%p-%e	
Enhancements	MCIR map colour IR	.
	MCIR with precipitation	
	MCIR anaglyph false 3-D MSA multispectral analysis	
	MSA with precipitation	
	MSA anaglyph false 3-D HVCT false-colour	
	HVCT with precipitation	
Minimum solar elevation for visible images	0.0	
Projection	Orthographic	
Reference Latitude	50.0	Easy Set Defaults
Reference Longitude	0.0	
North Boundary (latitude)	75.0	
South Boundary (latitude)	25.0	
West Boundary (longitude)	-35.0	
East Boundary (longitude)	35.0	
Projection Scale (norm. 1.0) or width	0.8	
Disable Text Overlay	Г	
(Cet)	Can	rel

- Add images to web page = use previously created images and add them to a web page using a html template file.
 Choose your template (you can adapt/create one), then the enhancements and composites images previously created.
 Also, configure the ftp access for your website. I advise to not use an existing folder but a dedicated one (ex : /noaa)

a remplate	D:/Programmes/Radio/WXtoImg/Foui	ine91.html		Brows
Enhancements to use	Normal Pristine Contrast enhance Contrast enhance (NOAA ch A onl Contrast enhance (NOAA ch B onl		MCIR map colour IR MCIR with precipitation HVCT false-colour HVCT with precipitation MSA multispectral analysis	
Composite Enhancements	Normal Contrast enhance (NOAA ch A onl Contrast enhance (NOAA ch B onl MCIR map colour IR MCIR with precipitation	- - - - - - - - - - - - - - - - - - -	MCIR with precipitation HVCT with precipitation MSA with precipitation Thermal	
Show all enhancements	I (otherwise just first available and I	Pristine if sele	cted)	
Thumbnail Size	16.6%			
Exclude				
HTML Filename	index.html			
	anne an added (un checked to mublich a	nanually):		
 Automatically FTP as in 	lages are autoen full-checked to publish h	and a little state of the state		
 Automatically F1P as in Hostname 	radiofouine.net			
 Automatically F1P as in Hostname User 	radiofouine.net			
 Automatically FTP as in Hostname User Password 	radiofouine.net			
 Automatically FTP as in Hostname User Password Directory 	radiofouine.net			
 Automatically FIP as in Hostname User Password Directory Use passive mode FTP 	radiofouine.net			
 Automatically FIP as in Hostname. User Password Directory Use passive mode FTP Place web page into fold 	radiofouine.net			
 Automatically FIP as in Hostname User Password Directory Use passive mode FTP Place web page into fold Folder 	radiofouine.net public_html/noas public_html/noas r Dr/Users/Thibaut/Pictures/WXtoImg/w	veb		Brows

You can see an exemple here : <u>http://www.radiofouine.net/noaa</u>

 Changing the default CLUTs (Color Lookup Palettes) and configuring some image options *Options > Image and Movie Options...*

WXtoImg: Image and Movie Op	tions	×
Default Image Format	JPG 🛁	
Default for Anaglyphs	JPG	
Default for Composites	JPG	
JPEG Quality	100	
DA compatible BMP format	Г	
HVC Palette	D:/Programmes/Radio/WXtoImg/CLUTs/APT	Browse
Thermal Palette	D:/Programmes/Radio/WXtoImg/CLUTs/Tof_	Browse
Sea Surface Temp Palette		Browse
MSA Sea to Land (norm. 50)	50	
MSA Land to Cloud (norm, 50)	50	
AVI Codec	RGB	
AVI Transparency		
AVI Quality	85	
AVI Max Frames	16	
AVI Frame Rate	1.0	
AVI Scale	0.500	
OK	Cancel	

If you can't find CLUT's working with wxtoimg, feel free to contact me : mcfly91 [at] gmail.com, i will send them to you.

6. Some various options i setted

WXtoImg: Map Overlay Options	and the second second	×	🔀 WXtoImg: T	ext Options	
Display Land:	2	yellow 🛁	Text overlay	1;	🔽 Enab
Display Lakes:	Г	light-green	\$N fontsize fontsize	=20,%Y-%m-%d %H:%M UTC =14.Locator JN18CR	yellow
Display Rivers:	П	light-green 🛁	RTL-SDR,	Indoor Discone, LNA4ALL	26pt
Display Country Borders:	2	green —			Y: 30
isplay State/Province Borders:	L	dark-yellow	Text overlay	2:	🖵 Enab
Display Ground Station:	E	orange 🔟			cyan 🛁
Display Cities:	none 🛁	orange 🔟			18pt
Display Lat/Lon (degrees):	none 🛁	red			Y: -30
Antialias	•		TrueType Fo	int:	
Use thick lines	Π		D:/Programe	nes/Radio/WXtoImg/Verdana.ttf	Browse
ок		Cancel			Cancel

SDRSharp

The RX bandwidth should be setted between 38 and 40 kHz. It works in NFM or WFM, but it this case, the sound volume will be lower. Personally, i use NFM.

NOAA APT transmission is analog, so for best result i use the Audio Processor plugin (« Digital Audio Processor »).

In the Audio Processor plugin, set the IF bandwidth between 500 and 4300 Hz, it should avoid some interferences displayed on the decoded image.

Regarding Orbitron and DDE tracking, it will be explain in a future version of this document.