

Responsivity Curves

IED 28 Nov 2008

The twelve figures following page 2 show the responsivity curves according to the latest update by ABM (Oct 2008).

The upper part is on a linear scale and basically supposed to show the nominal interval. The lower part is on a logarithmic scale and shows the whole spectral interval considered.

The latest update is plotted with a straight line, the older version (IEDJan 2008) is plotted with a dotted line.

Correction with the “Flatfield” factor and with the “Davos” factor have been performed in both cases, but more restricted in this latest update (“Flatfield” only within BESSY measured interval, “Davos” only above 300 nm; for factors and intervals see page 2).

The nominal spectral interval of each channel is denoted with vertical red lines. The spectral positions of flatfield measurements are denoted with an asterisk, to give an idea about their significance.

New Davos Simulation Results

IED 25 Nov 2008

ch.	2006 sim.		2007 sim.		2008 sim.		Davos obs.		change ?
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1-1	251.519	fA	251.684	fA	251.514	fA	0.2	pA	OK
1-2	59.672	fA	59.7465	fA	59.7018	fA	0.0	pA	OK
1-3	455.338	zA	431.285	zA	398.796	zA	0.0	pA	OK
1-4	136.829	fA	136.846	fA	136.841	fA	1.25	pA	*10
2-1	974.180	fA	975.385	fA	973.929	fA	0.4-0.45	pA	/2
2-2	72.958	fA	72.9704	fA	72.9548	fA	0.0-0.5	pA	OK
2-3	226.566	zA	205.091	zA	64.2373	zA	0.0	pA	OK
2-4	8.118	fA	8.1190	fA	8.0716	fA	0.0-0.2	pA	OK
3-1	35.834	pA	35.8272	pA	128.760	pA	82-88	pA	[*2.5] /1.5
3-2	59.532	fA	59.5234	fA	59.4638	pA	0.0	pA	OK
3-3	3.000	pA	2.9792	pA	2.4429	pA	7.0-8.0	pA	[*2.5] *3
3-4	136.829	fA	136.846	fA	136.841	fA	2.5-2.9	pA	*20

2006 sim. = simulations according to LYRA Radiometric Model on website

2007 sim. = IED simulation approx. one year ago, with updated responsivities from BESSY 2007

2008 sim. = IED simulation with new ABM responsivities from Oct 2008

New Flatfield Correction Limits

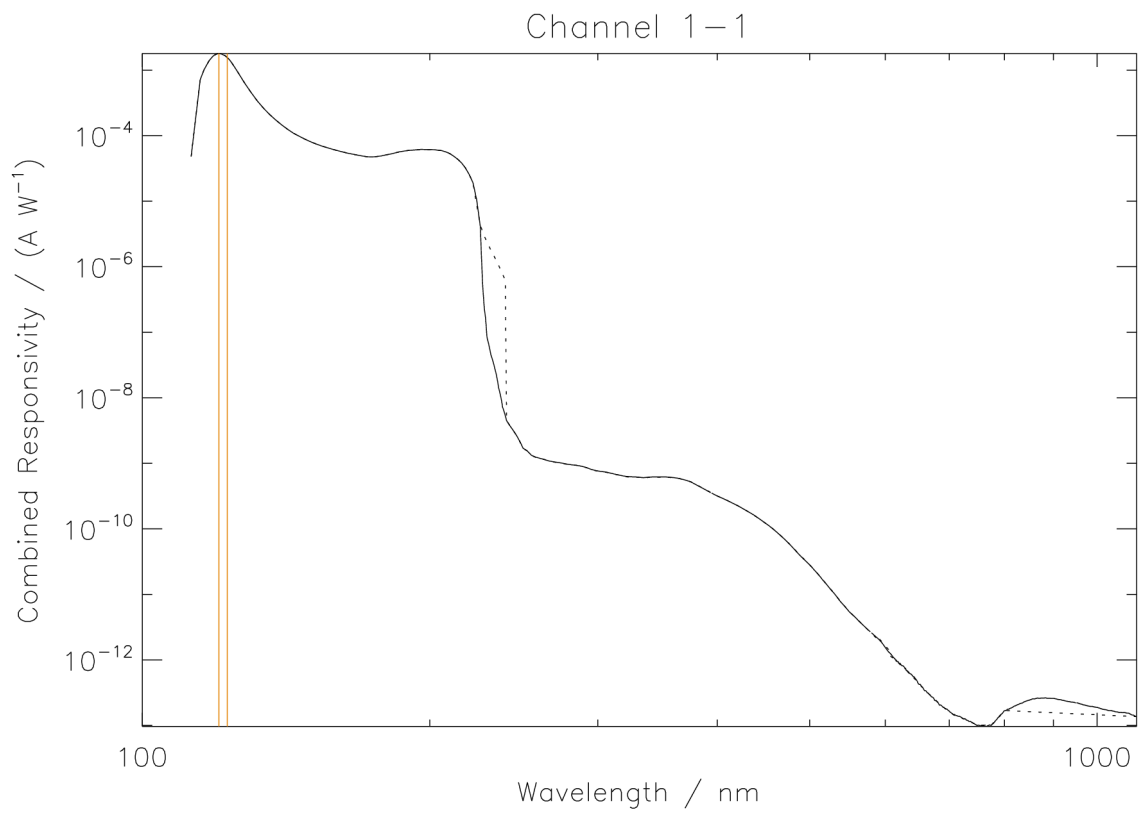
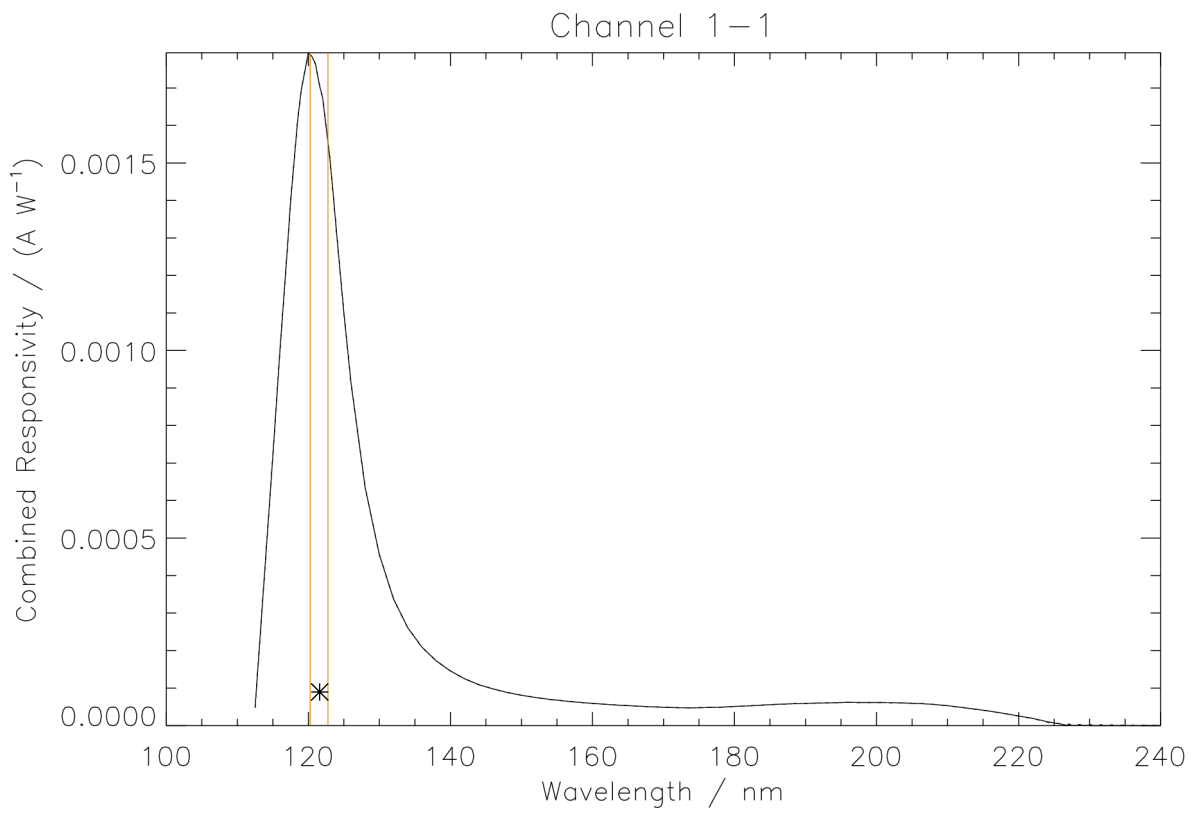
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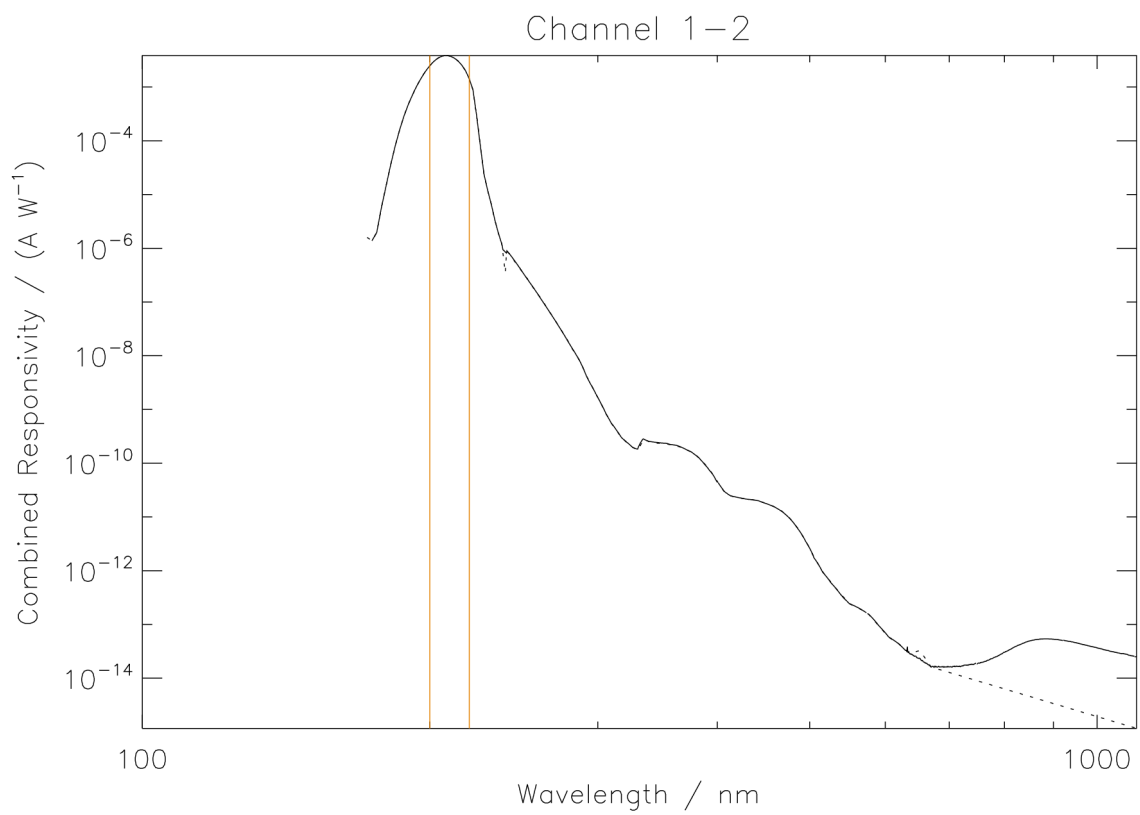
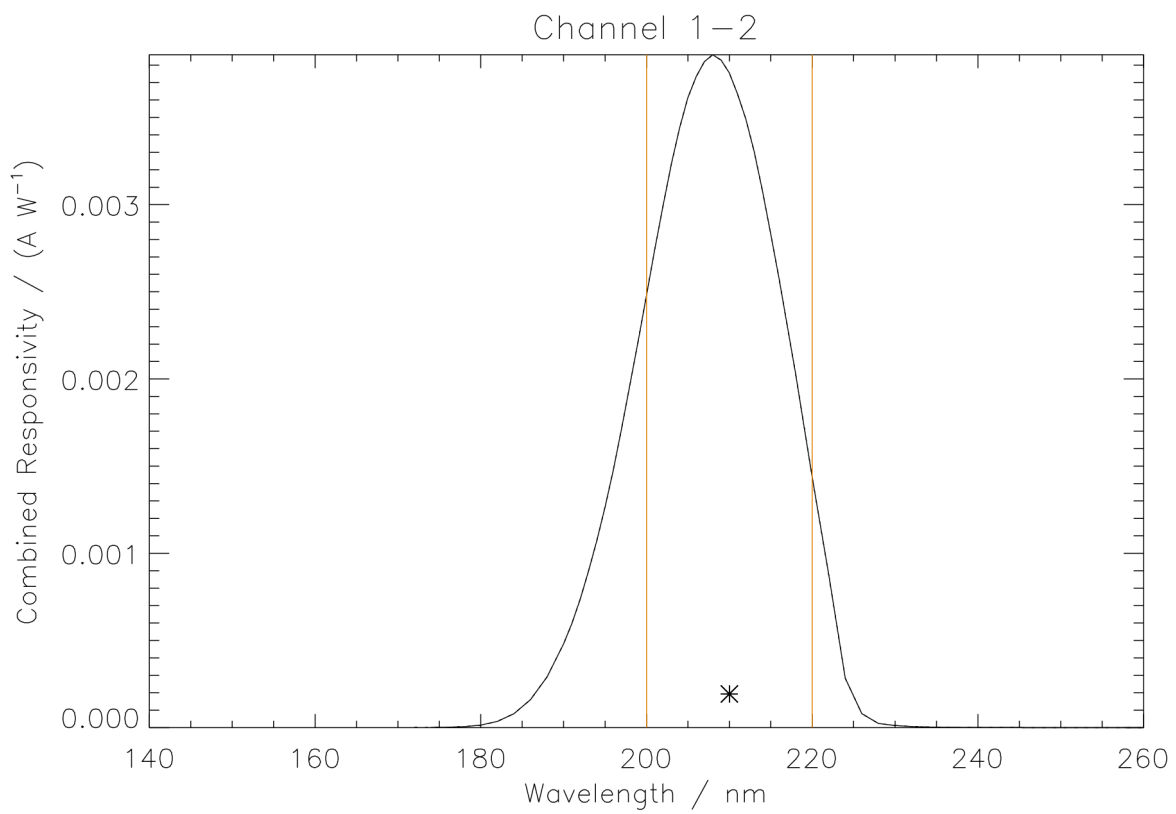
ch.	2007 limit	2008 limit	factor
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1-1	112.5-240.0	112.5- 226.0	(/1.00)
1-2	172.0-240.0	174.0-238.0	/1.16
1-3	1.0- 84.0	1.0- 84.0	/1.28
1-4	1.0- 21.1	1.0- 21.1	/1.19
2-1	112.5-240.0	112.5- 226.0	(/1.00)
2-2	170.0-240.0	176.0-238.0	/1.18
2-3	1.0- 84.0	1.0- 84.0	/1.22
2-4	1.0- 23.7	1.0- 21.1	/1.18
3-1	112.5-240.0	112.5-240.0	/1.13
3-2	170.0-240.0	172.0-240.0	/1.18
3-3	1.0- 84.0	1.0- 84.0	/1.20
3-4	1.0- 21.1	1.0- 21.1	/1.19

2007 limit = IED report approx. one year ago, page 2

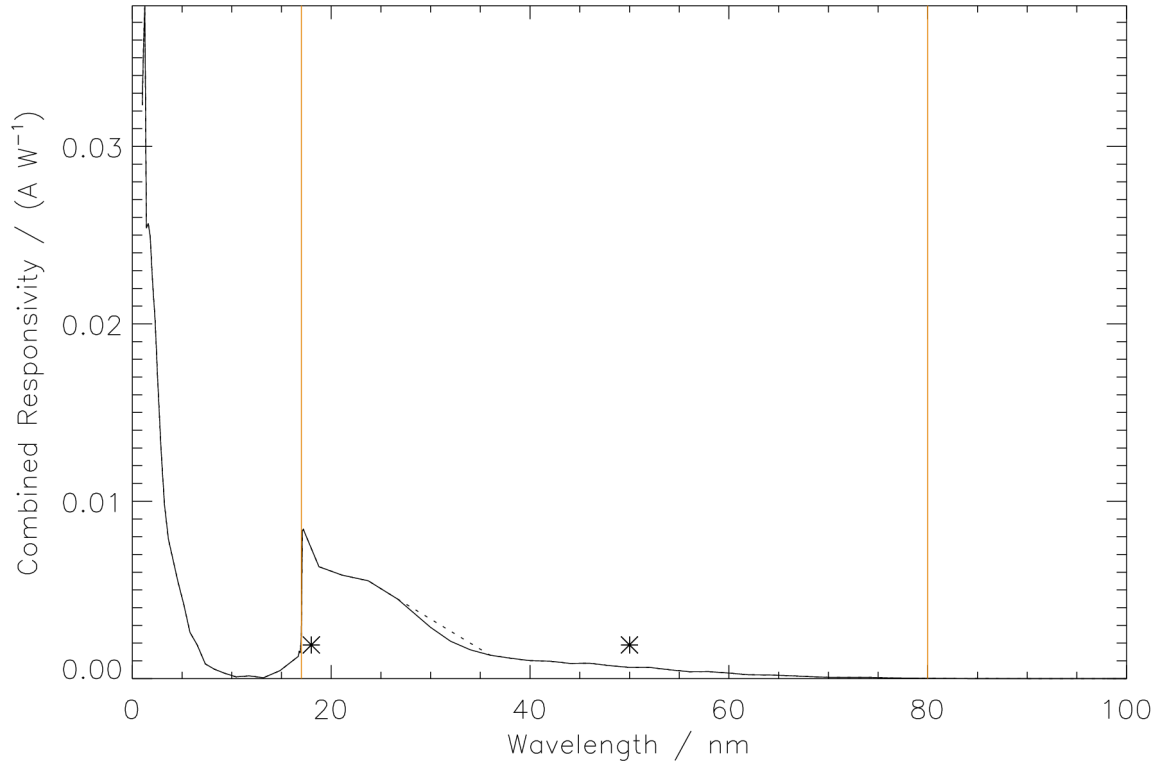
http://solwww.oma.be/users/dammasch/IED_20080115_LYRA_Responsivity_Update.pdf

2008 limit = according to ABM "New_notcorrected" files from 23/24 Oct 2008

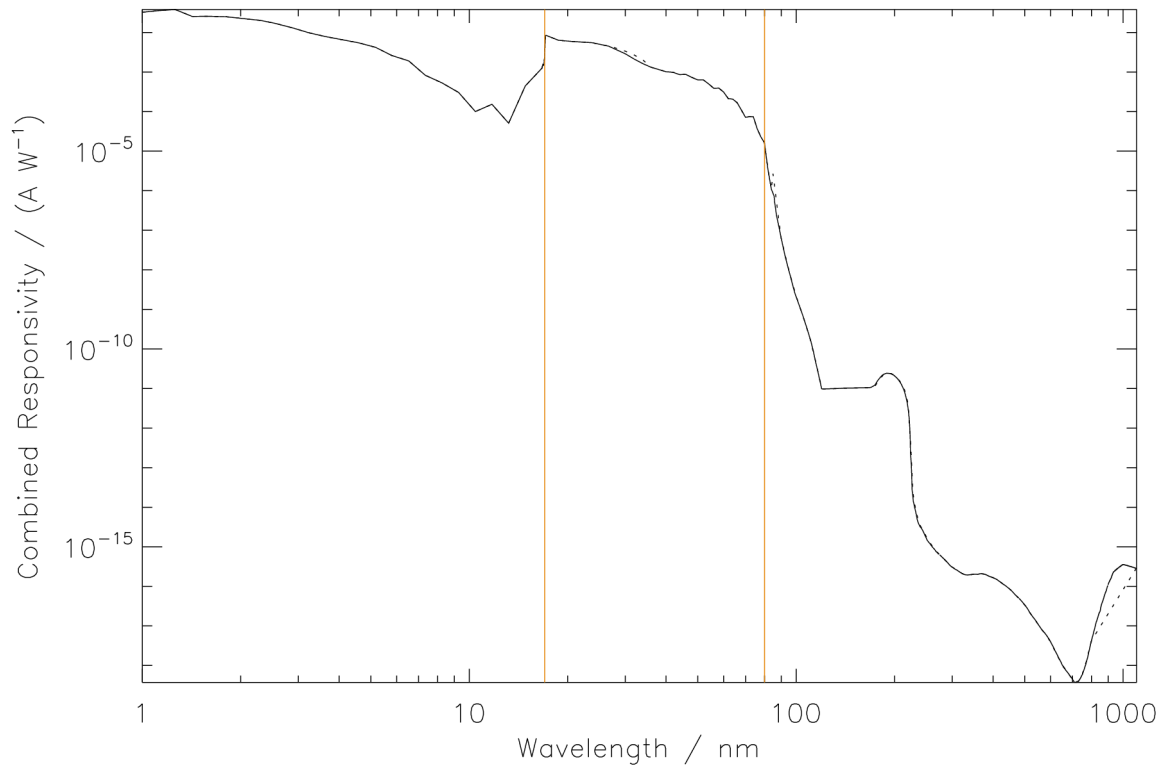


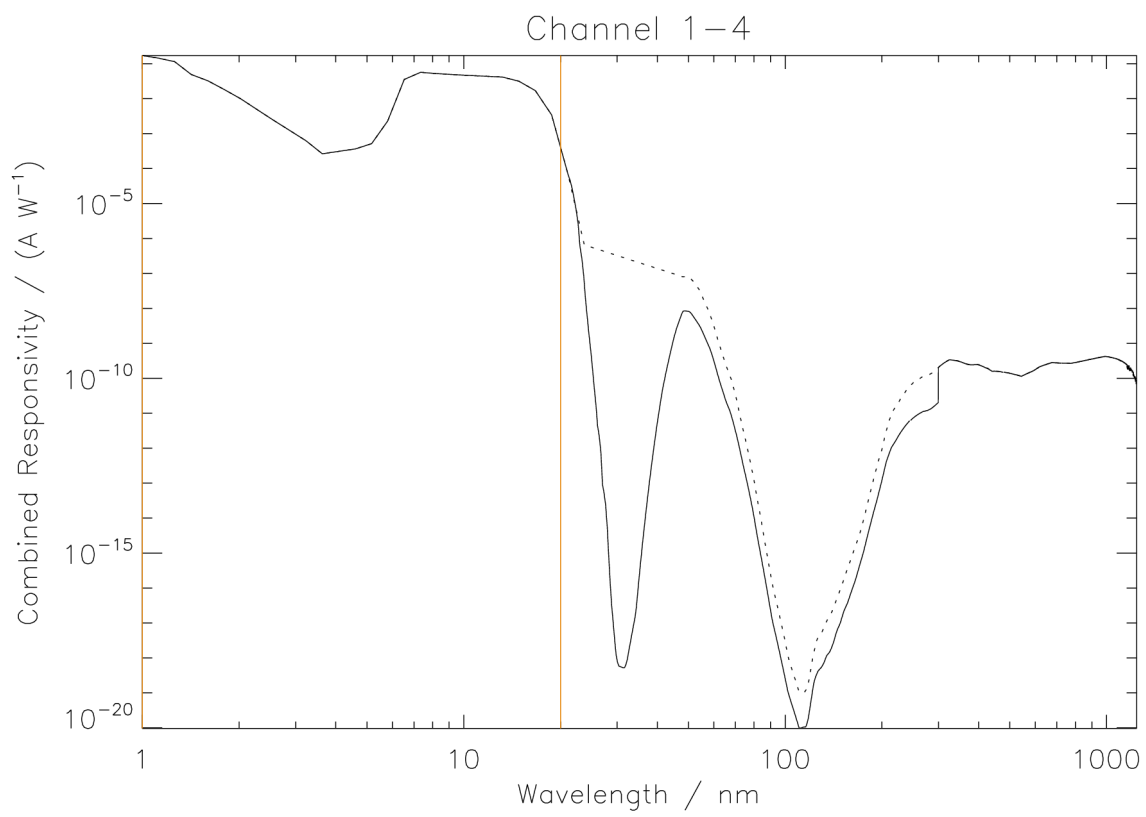
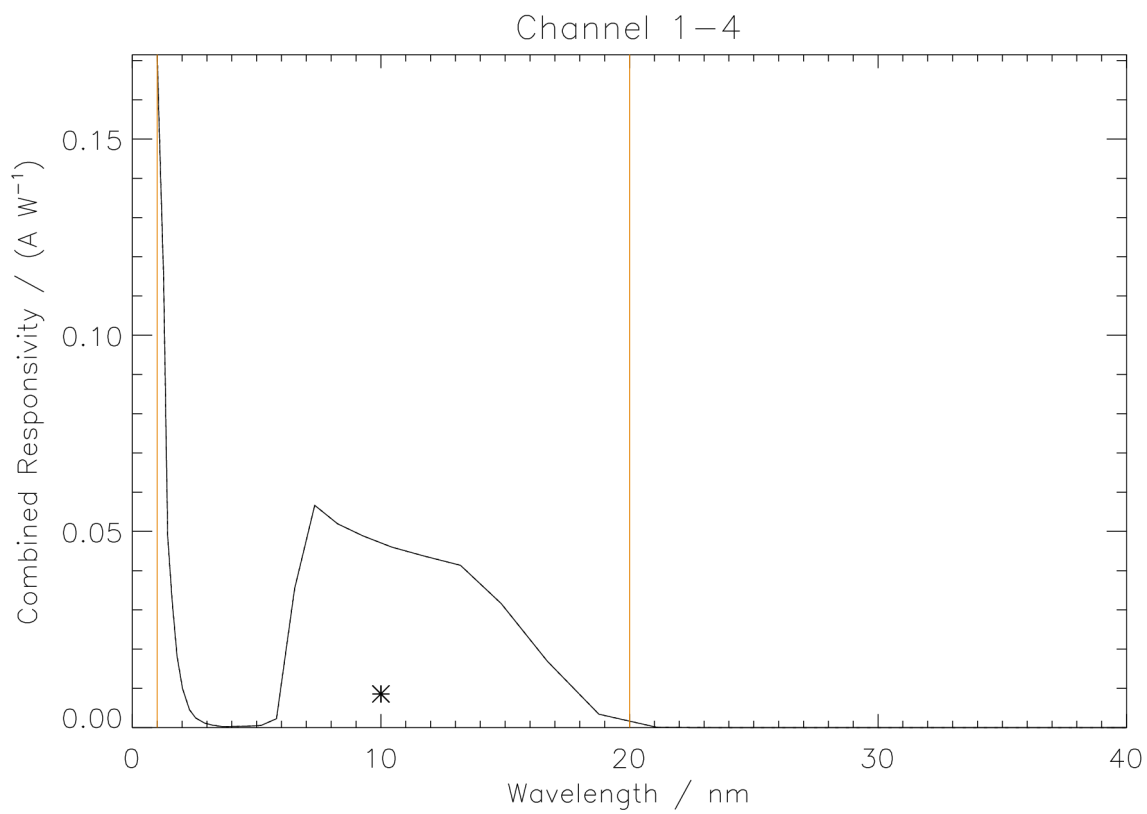


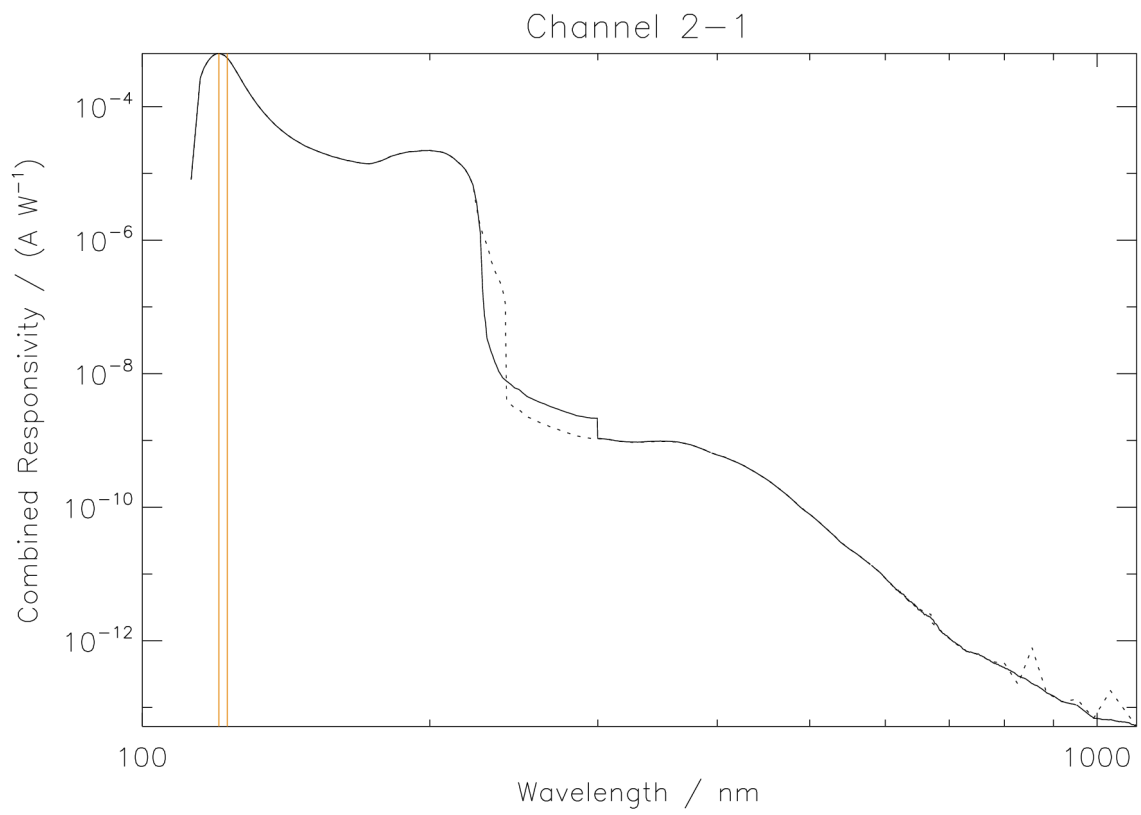
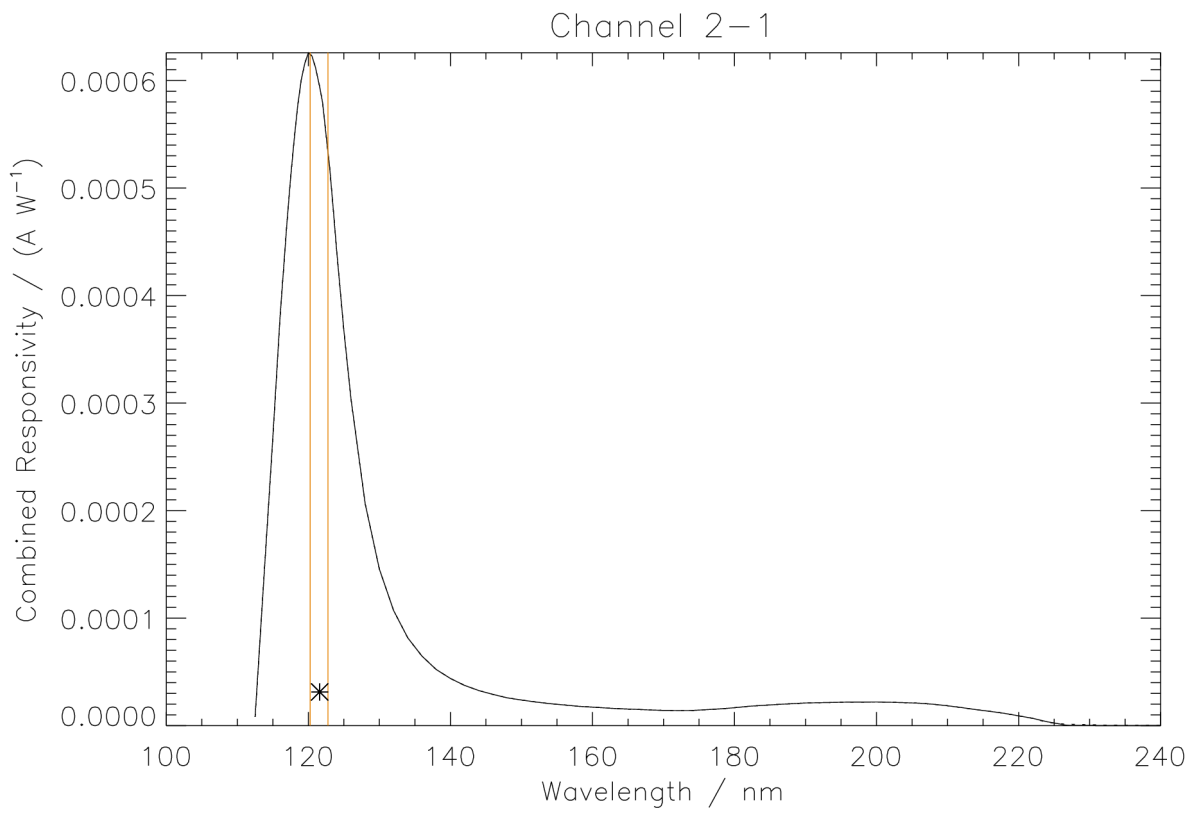
Channel 1-3

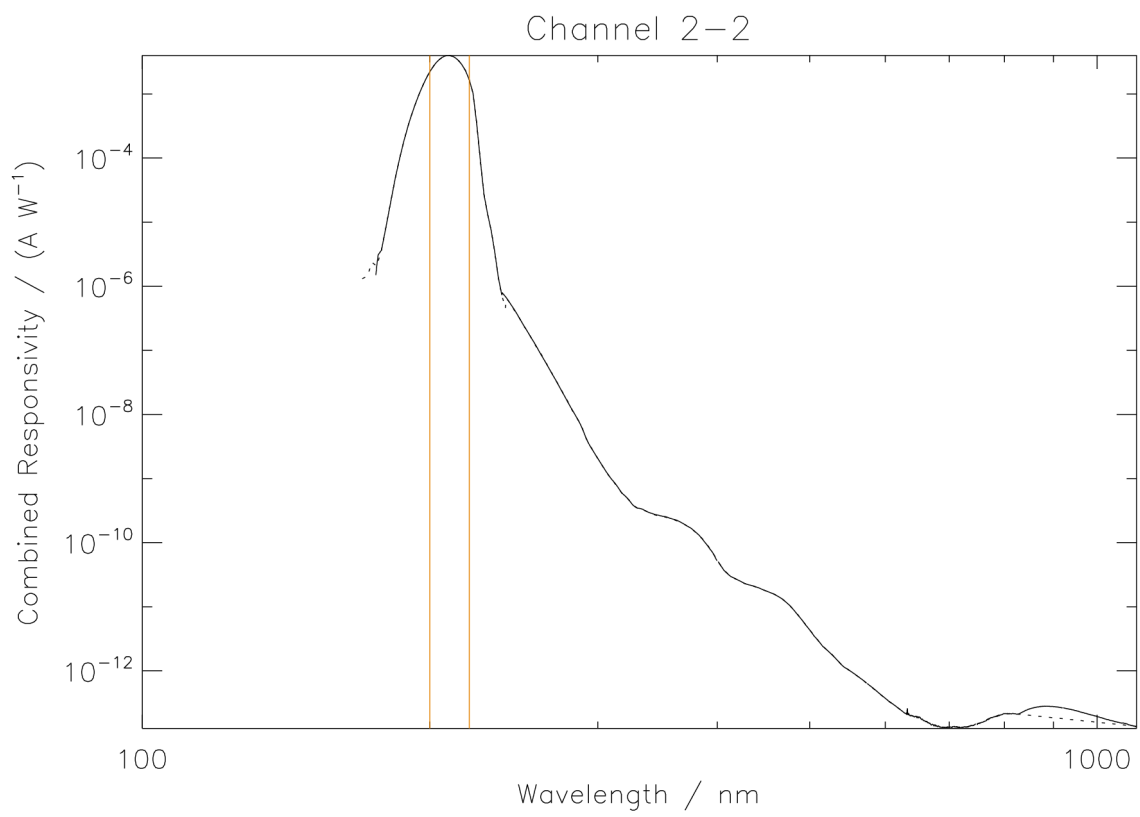
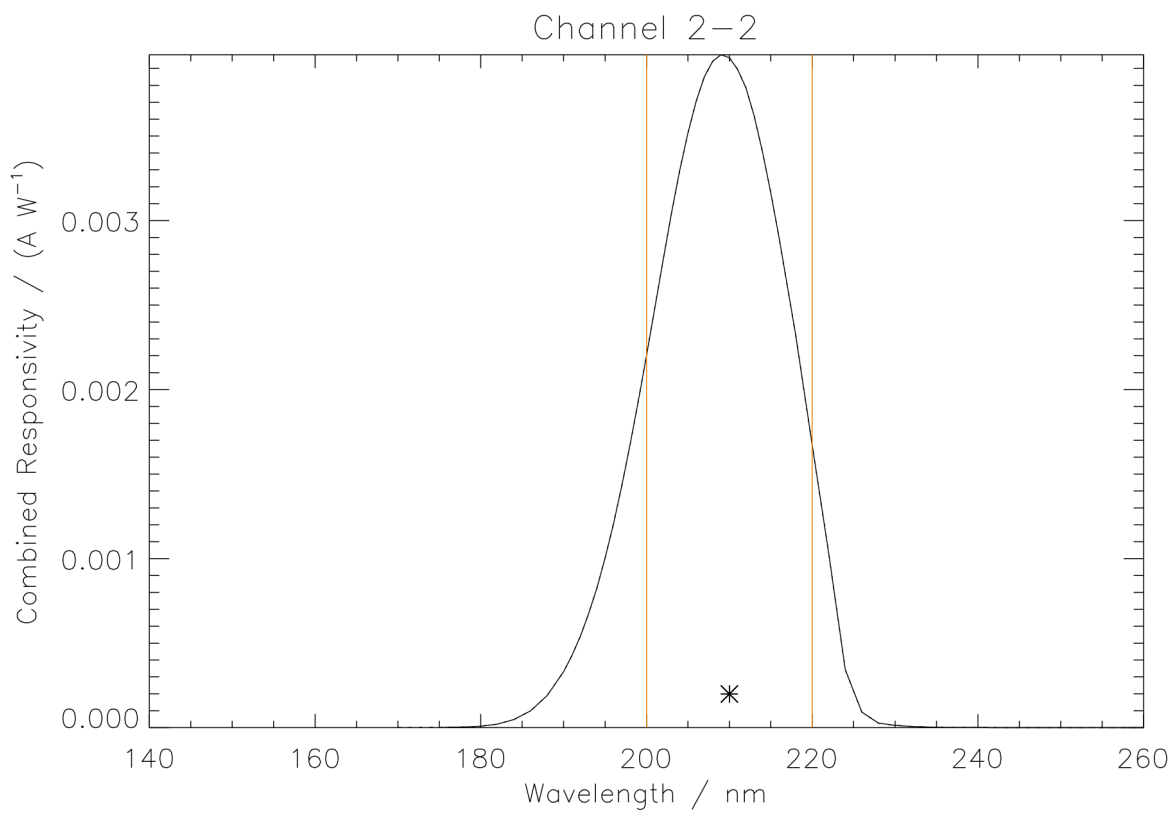


Channel 1-3

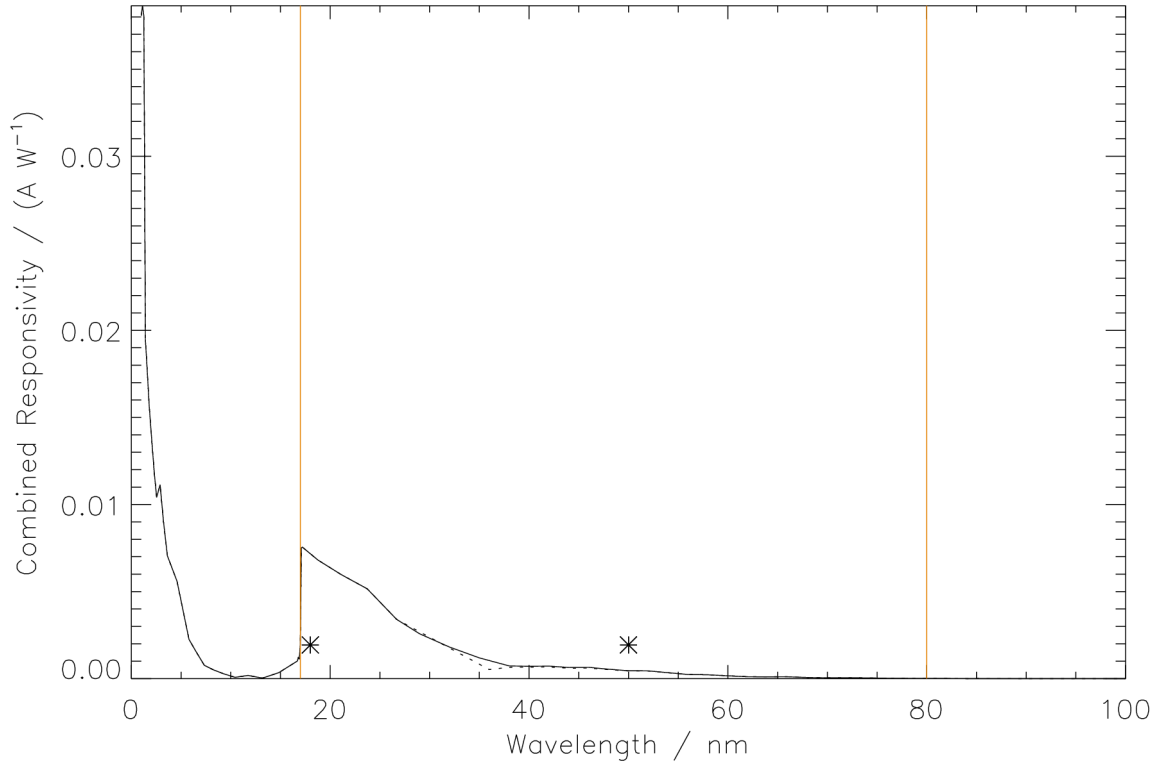




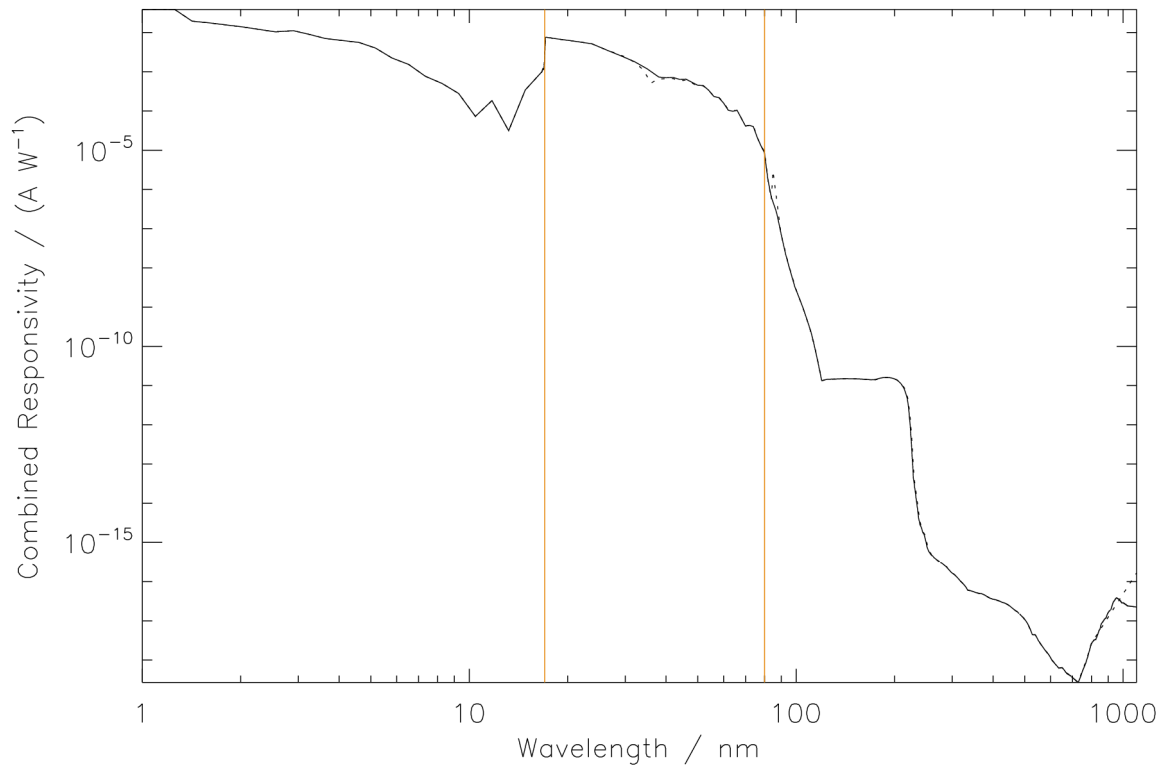


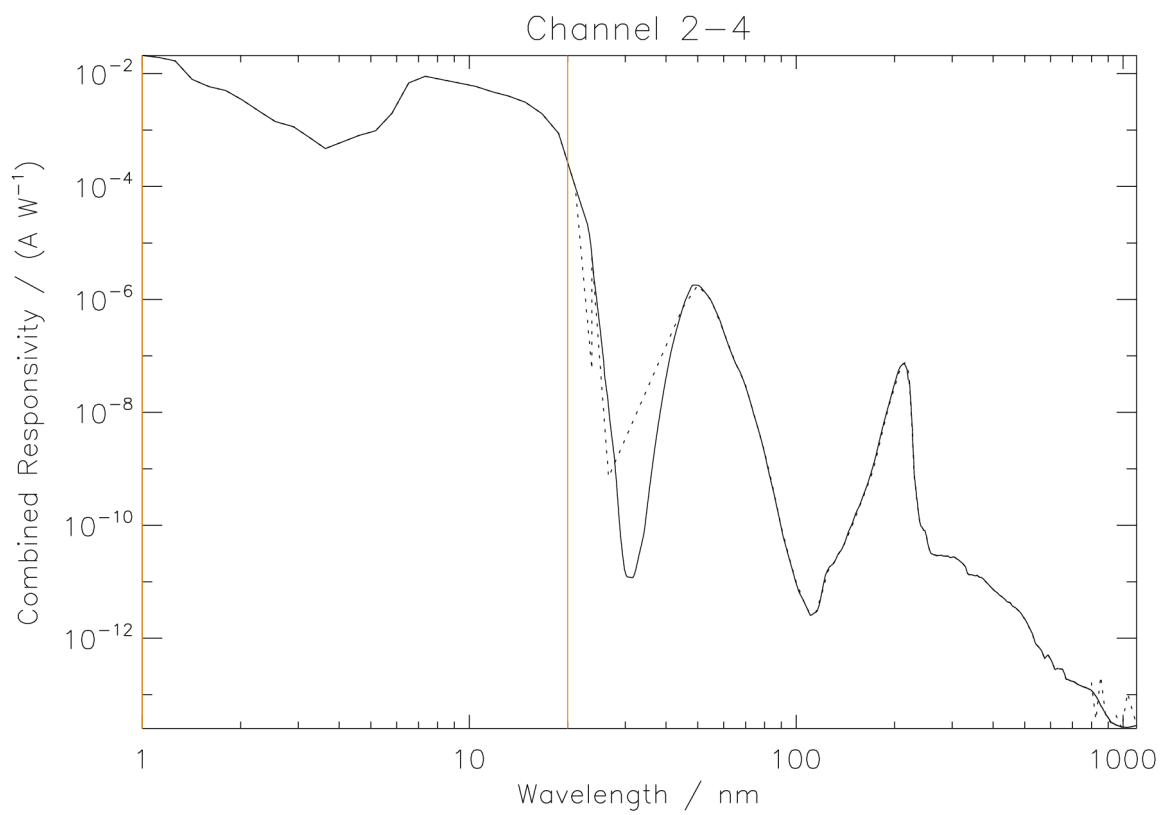
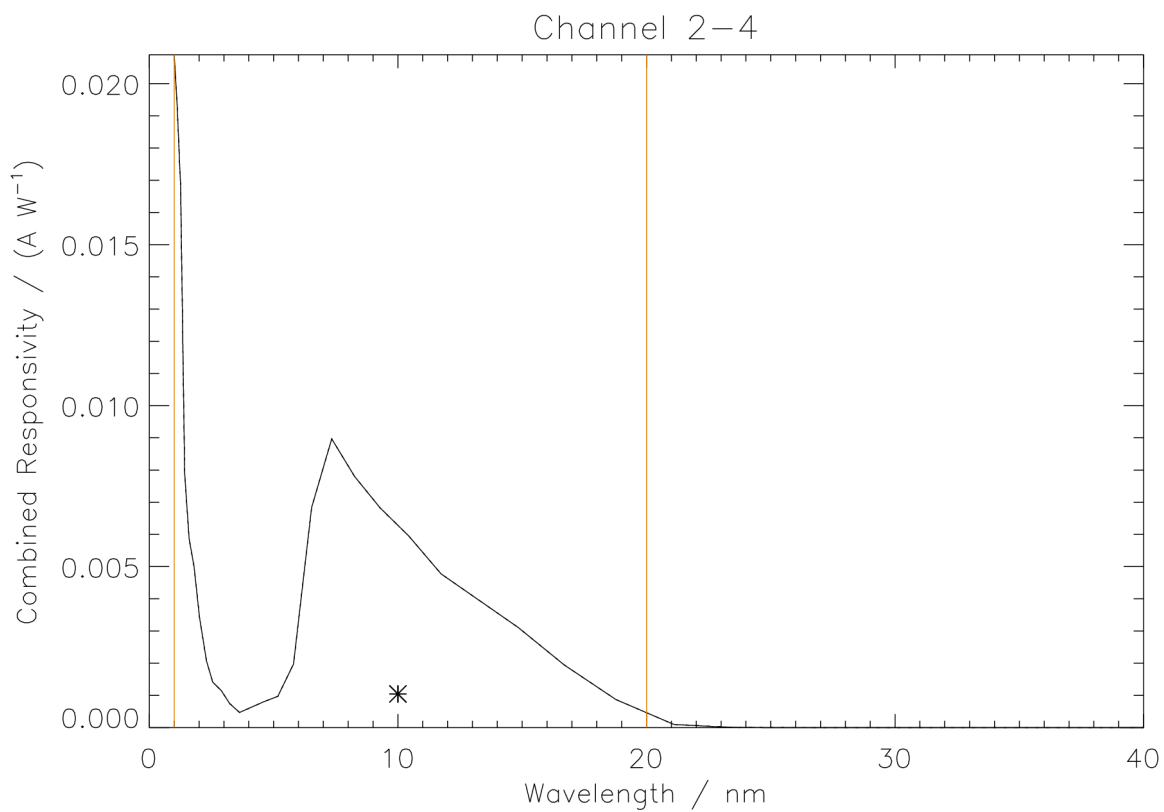


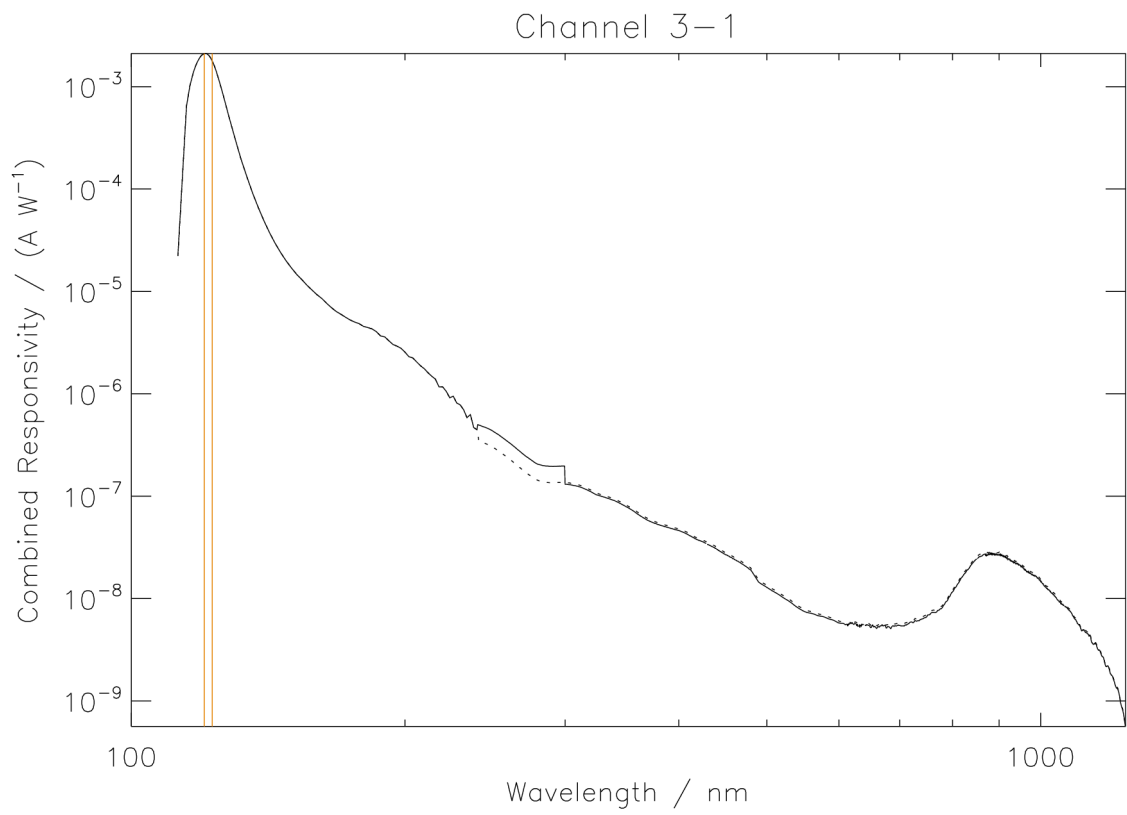
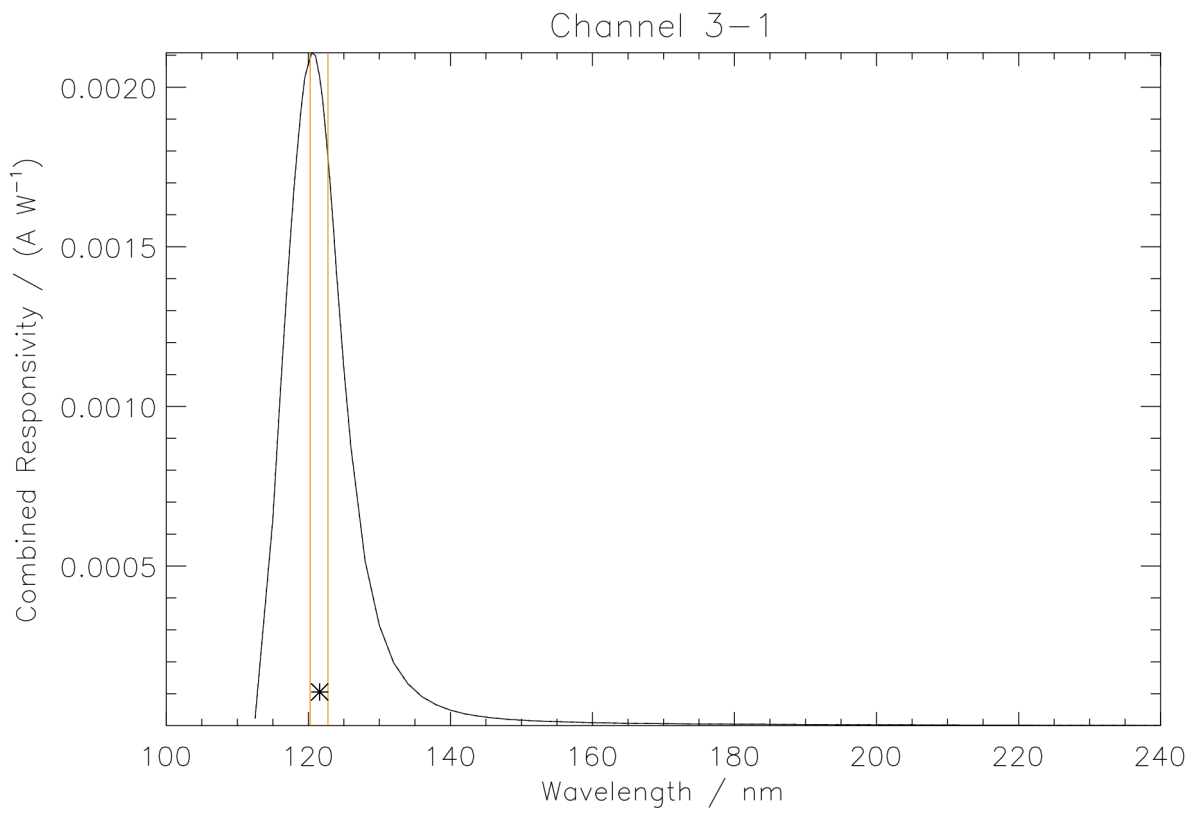
Channel 2-3

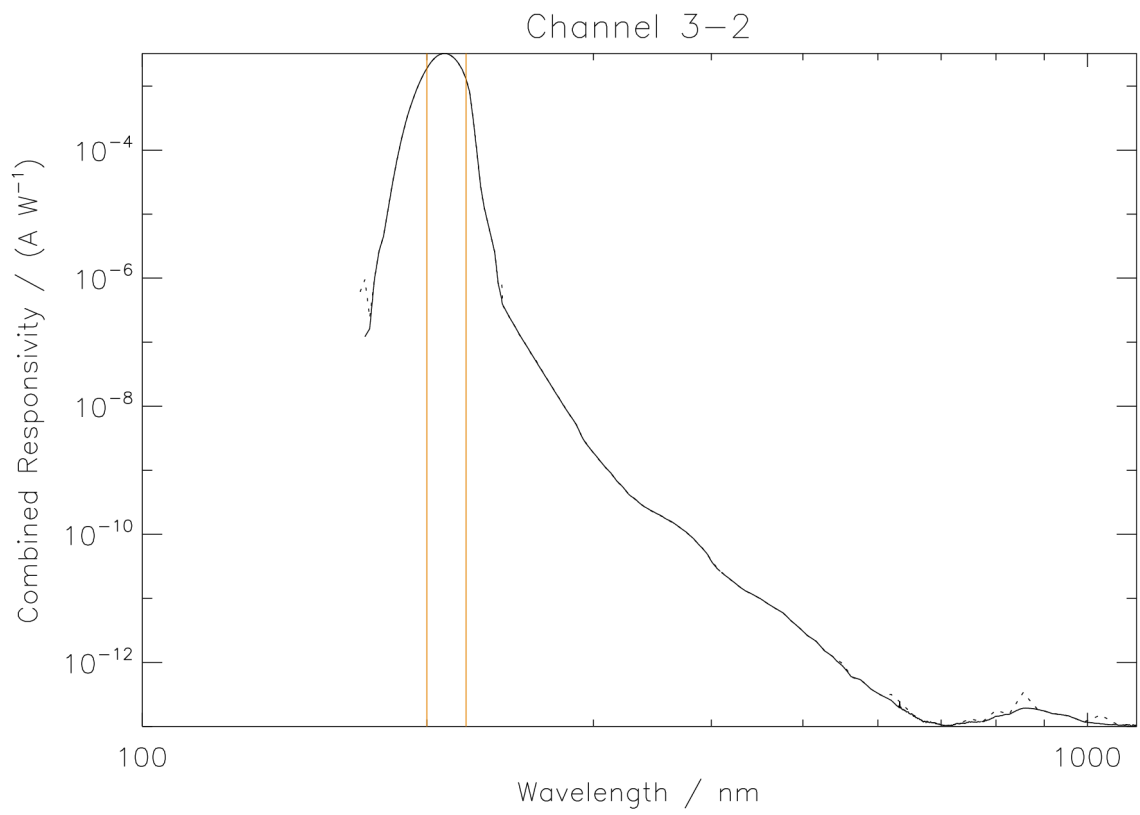
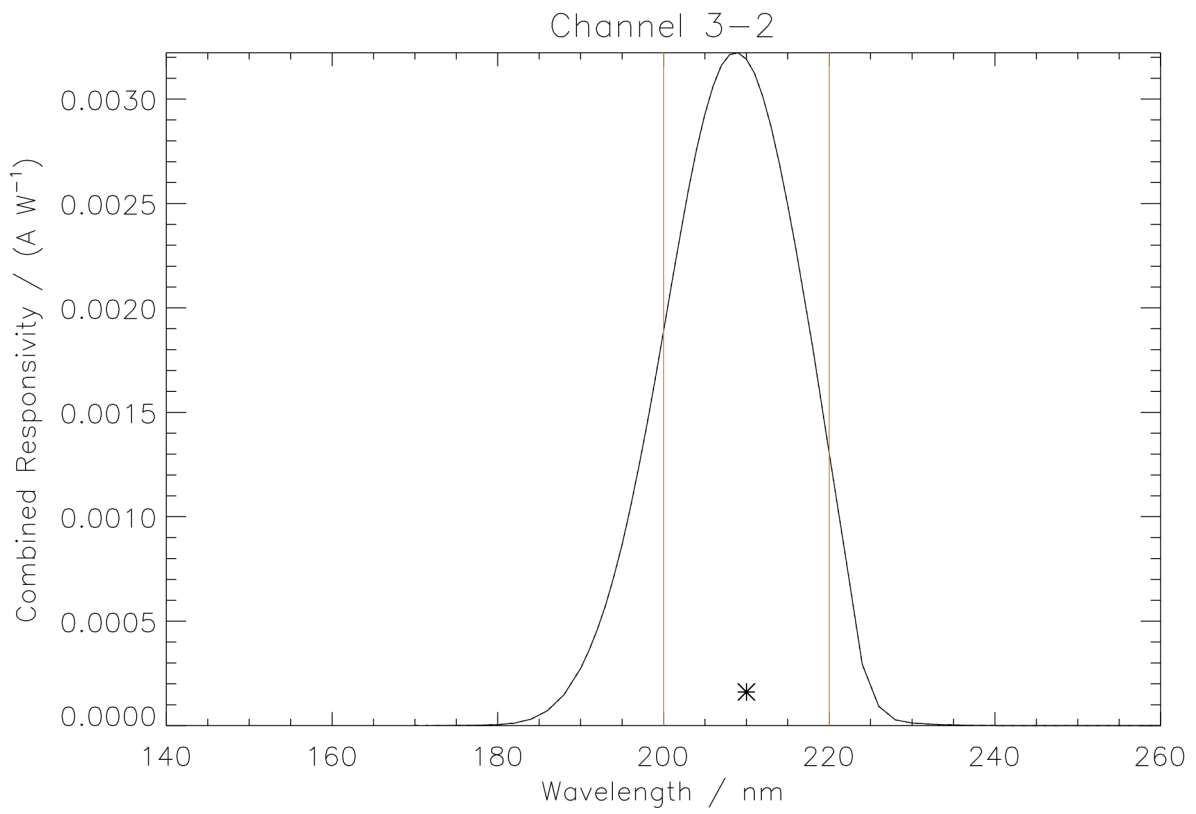


Channel 2-3

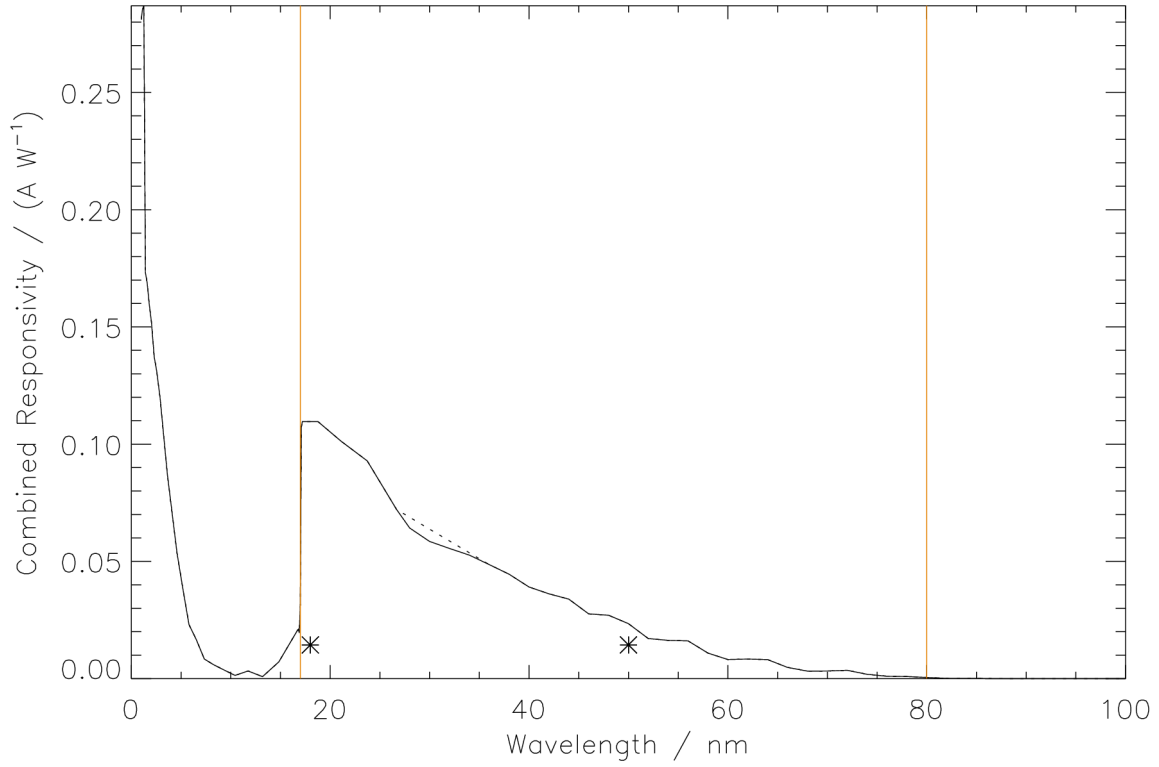




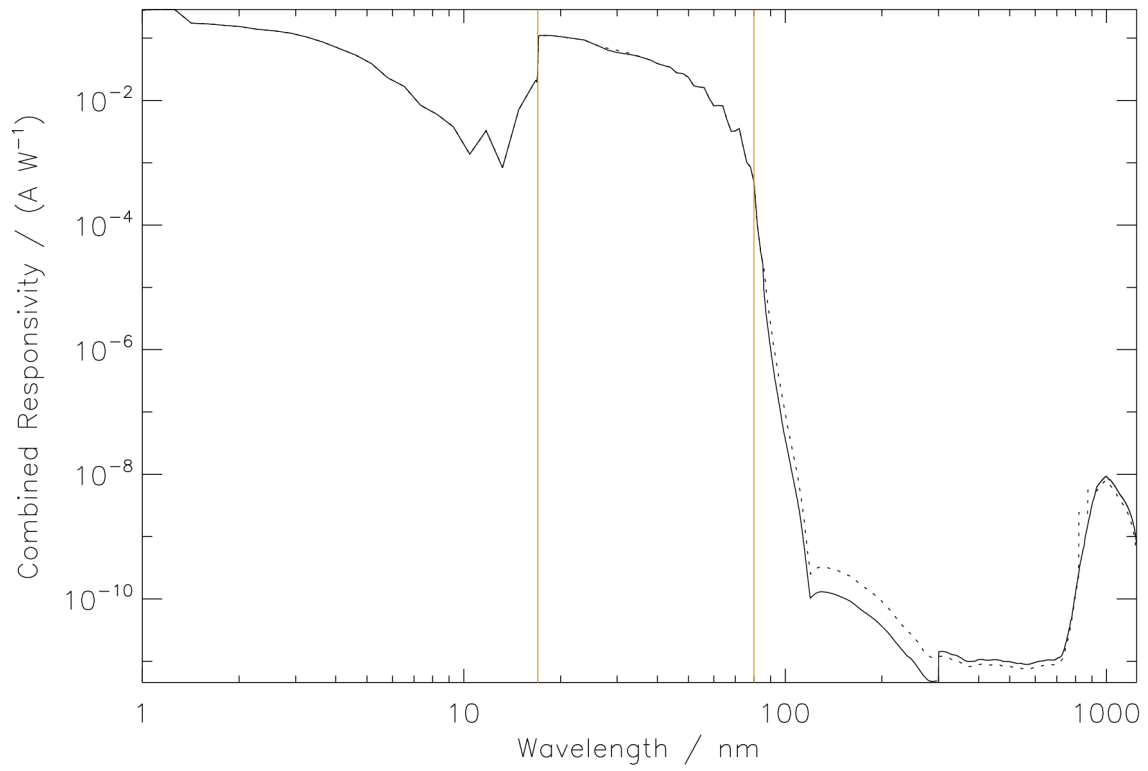




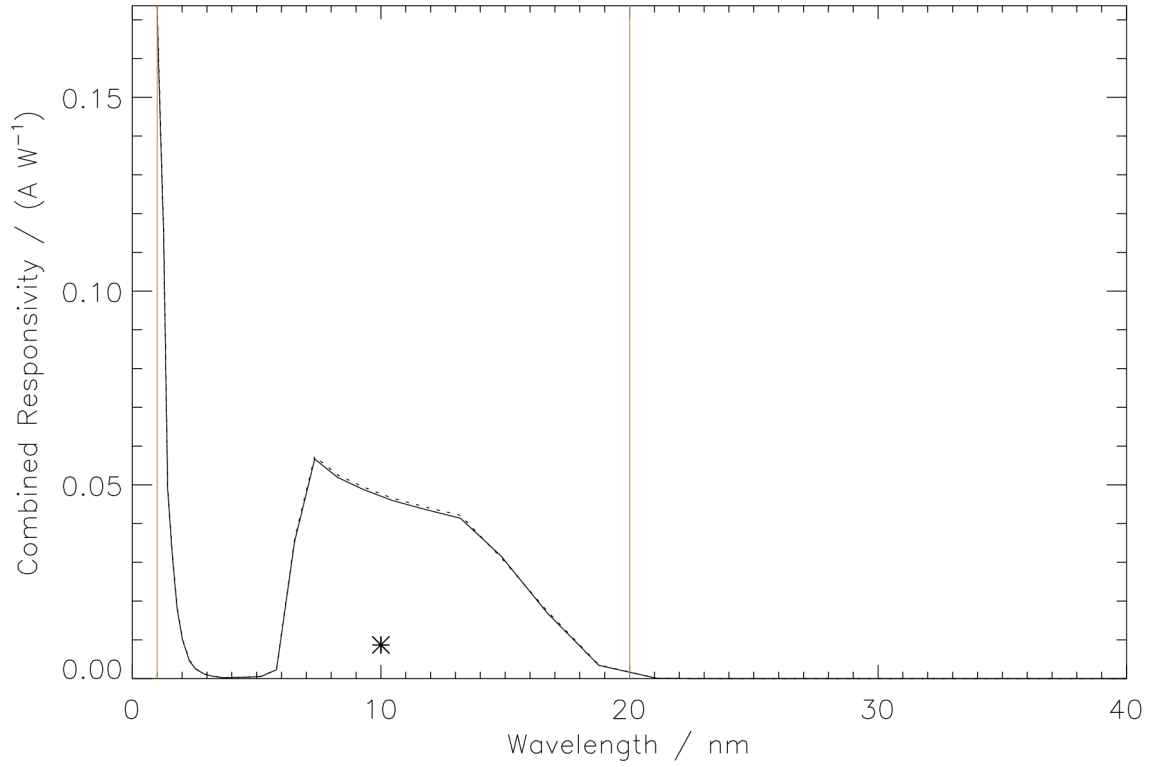
Channel 3-3



Channel 3-3



Channel 3-4



Channel 3-4

