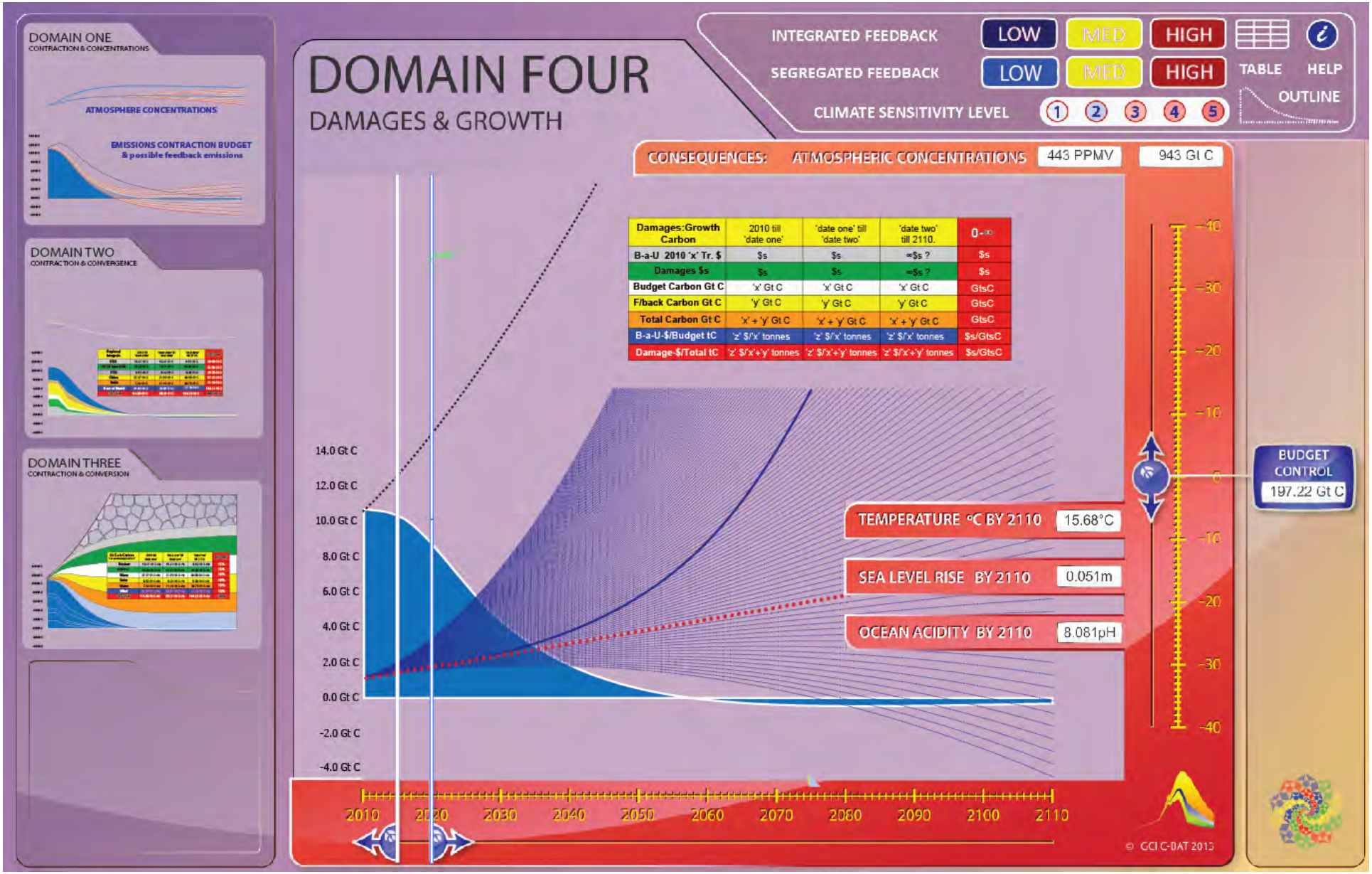

DOMAIN ONE
CONTRACTION & CONCENTRATIONS
ATMOSPHERE CONCENTRATIONS
EMISSIONS CONTRACTION BUDGET
& possible feedback emissions
DOMAIN TWO
CONTRACTION & CONVERGENCE
DOMAIN THREE
CONTRACTION & CONVERSION
DOMAIN FOUR
DAMAGES & GROWTH
INTEGRATED FEEDBACK
LOW
MED
HIGH
SEGREGATED FEEDBACK
LOW
MED
HIGH
TABLE
HELP
OUTLINE
CLIMATE SENSITIVITY LEVEL
1 2 3 4 5
CONSEQUENCES: ATMOSPHERIC CONCENTRATIONS
443 PPMV
943 Gt C
Damages:Growth Carbon
2010 till 'date one'
'date one' till 'date two'
'date two' till 2110.
0 - ∞
B-a-U 2010 'x' Tr. $
$s
$s
∞$s ?
$s
Damages $s
$s
$s
∞$s ?
$s
Budget Carbon Gt C
'x' Gt C
'x' Gt C
'x' Gt C
GtsC
F/back Carbon Gt C
'y' Gt C
'y' Gt C
'y' Gt C
GtsC
Total Carbon Gt C
'x' + 'y' Gt C
'x' + 'y' Gt C
'x' + 'y' Gt C
GtsC
B-a-U-$/Budget tC
'z' $/'x' tonnes
'z' $/'x' tonnes
'z' $/'x' tonnes
$s/GtsC
Damage-$/Total tC
'z' $/'x'+'y' tonnes
'z' $/'x'+'y' tonnes
'z' $/'x'+'y' tonnes
$s/GtsC
14.0 Gt C
12.0 Gt C
10.0 Gt C
8.0 Gt C
6.0 Gt C
4.0 Gt C
2.0 Gt C
0.0 Gt C
-2.0 Gt C
-4.0 Gt C
2010
2020
2030
2040
2050
2060
2070
2080
2090
2100
2110
TEMPERATURE °C BY 2110
15.68°C
SEA LEVEL RISE BY 2110
0.051m
OCEAN ACIDITY BY 2110
8.081pH
10
30
20
10
0
10
20
30
40
BUDGET CONTROL
197.22 Gt C
© GCI C-DAT 2013

In DOMAIN FOUR

A table can be summoned.

This has the same structure/format/syntax as the table in DOMAIN TWO [8 Rows and 5 Columns].

However, it has different titles I.E. Damages:Growth Carbon, B-a-U 2010 'x' Tr. $/Damages $s, BUDGET Carbon Gt C, F/back Carbon Gt C, Total Carbon Gt C, B-a-U $s/Budget tC, Damages-$s/Total tC
and will record ranges of different values arising for 'Gt C:$s.

I will supply the formulae etc. to plot that and – this is only a snap shot – it will read like this: -

Damages:Growth Carbon	2010 till 'date one'	'date one' till 'date two'	'date two' till 2110.	0-∞
B-a-U 2010 'x' Tr. $	$s	$s	∞$s ?	$s
Damages $s	$s	$s	∞$s ?	$s
Budget Carbon Gt C	'x' Gt C	'x' Gt C	'x' Gt C	GtsC
F/back Carbon Gt C	'y' Gt C	'y' Gt C	'y' Gt C	GtsC
Total Carbon Gt C	'x' + 'y' Gt C	'x' + 'y' Gt C	'x' + 'y' Gt C	GtsC
B-a-U-$/Budget tC	'z' $/'x' tonnes	'z' $/'x' tonnes	'z' $/'x' tonnes	$s/GtsC
Damage-$/Total tC	'z' $/'x'+'y' tonnes	'z' $/'x'+'y' tonnes	'z' $/'x'+'y' tonnes	$s/GtsC

The same On/Off switch is needed for this TABLE to appear & disappear [as in DOMAINS 2 & 3];
again, appearance suggested in first graphic.

In DOMAIN FOUR the following all continue to work as before in DOMAINS TWO & THREE: -

1. Budget Buttons [LOW, MEDIUM, HIGH]
2. Feedback Buttons [INTEGRATED, SEGREGATED]
3. Sensitivity Buttons [1 to 5]
4. HELP Button - set to Domain Four feature relevance
5. Vertical Slider + 'BUDGET CONTROL CLOCK'
6. Horizontal Sliders – 'Before', 'During', 'After', the 'Convergence Window'
7. CONSEQUENTIAL 'CLOCK VALUES [ppmv/GtC; temperature; sea-level, ocean pH]
8. Icon-based 'Domain-swapping' [Left-Hand column]

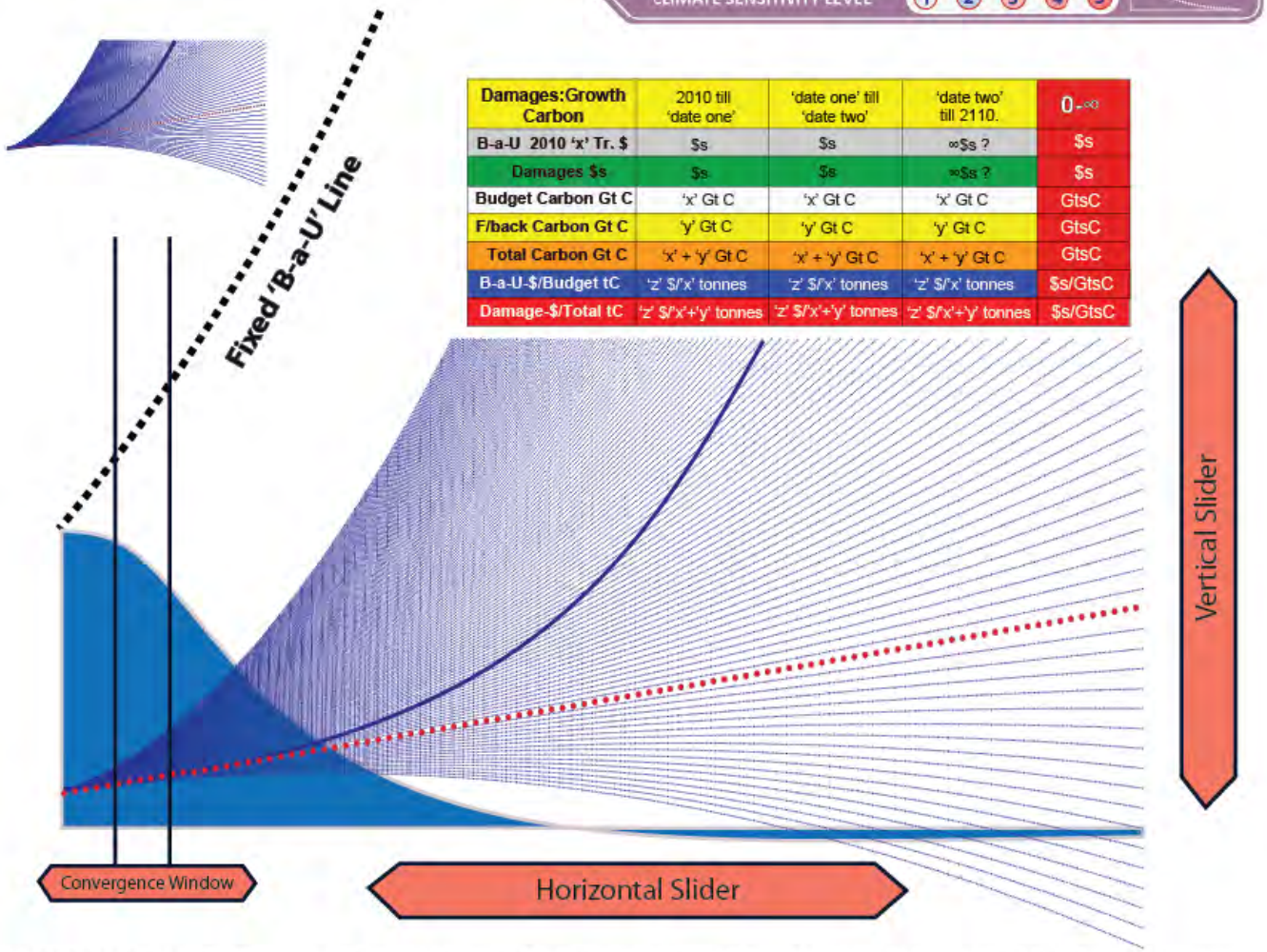
In DOMAIN FOUR this time, the EMISSIONS BUDGET defaults to the 'SEGREGATED FEEDBACK' [which is visibly reacting to the VERTICAL SLIDER in DOMAIN ONE] and beyond that, as before, readings result from settings from the Panel Controls for the Budget [LOW, MEDIUM, HIGH] & 5 Sensitivity Levels with slider use and this time ADDING the CONVERGENCE algorithm over time, but NOT ADDING the 6 Regions of the CARBON BUDGET. The BUDGET-as-a-WHOLE is in the MONOTONE COLOURS of DOMAIN ONE [LOW blue MEDIUM yellow HIGH red] with no regions or per capita values shown.

In this instance, the table reads values for the damage categories that are generated over the EMISSIONS BUDGET + SEGREGATED FEEBDACK CARBON, as before according to the 'Before', 'During', 'After', i.e. the 'Convergence Window' selected, again with the table and colour coding formatted as shown above but recording the new values as designated. There is a FIXED 'Business as Usual' Line. I supply the *.xml values and the formulae for the *.fla for what follows.

IN DOMAIN FOUR, the 'damage-footprint' changes size & position with the budget choice & the sensitivity setting level chosen & the dominant single damage-curve arising, sweeps up and down within it with the movement of the Vertical Slider.

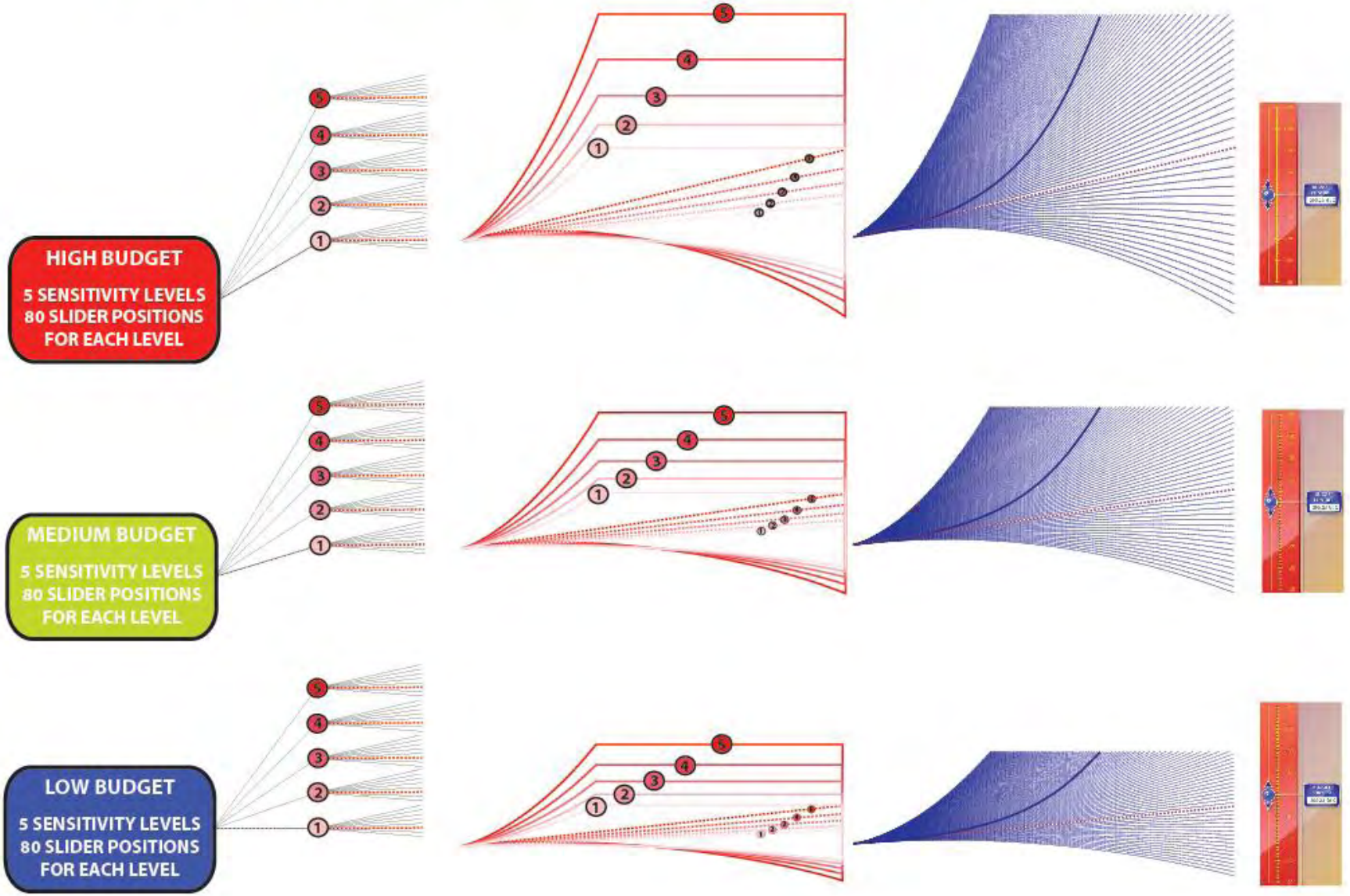
The values in the table change as before, but this time also in lower or higher 'footprint-sets' in response to the level of climate sensitivity [to the temperature response rather than concentrations] chosen [see detailed note on this hereafter]. The next images are 3 varied way of showing the modular syntax/dynamic-structure of damages:budgets:sensitivity-levels. Once the *fla 'templates' of this are secure, to save time I can take on any donkey-work arising.

The 'Damage Footprint' dynamically changes size & position with the budget choice, the sensitivity setting & sweeps with Vertical Slider [see CBAT Damage-Costing Potential Climate Catastrophe].

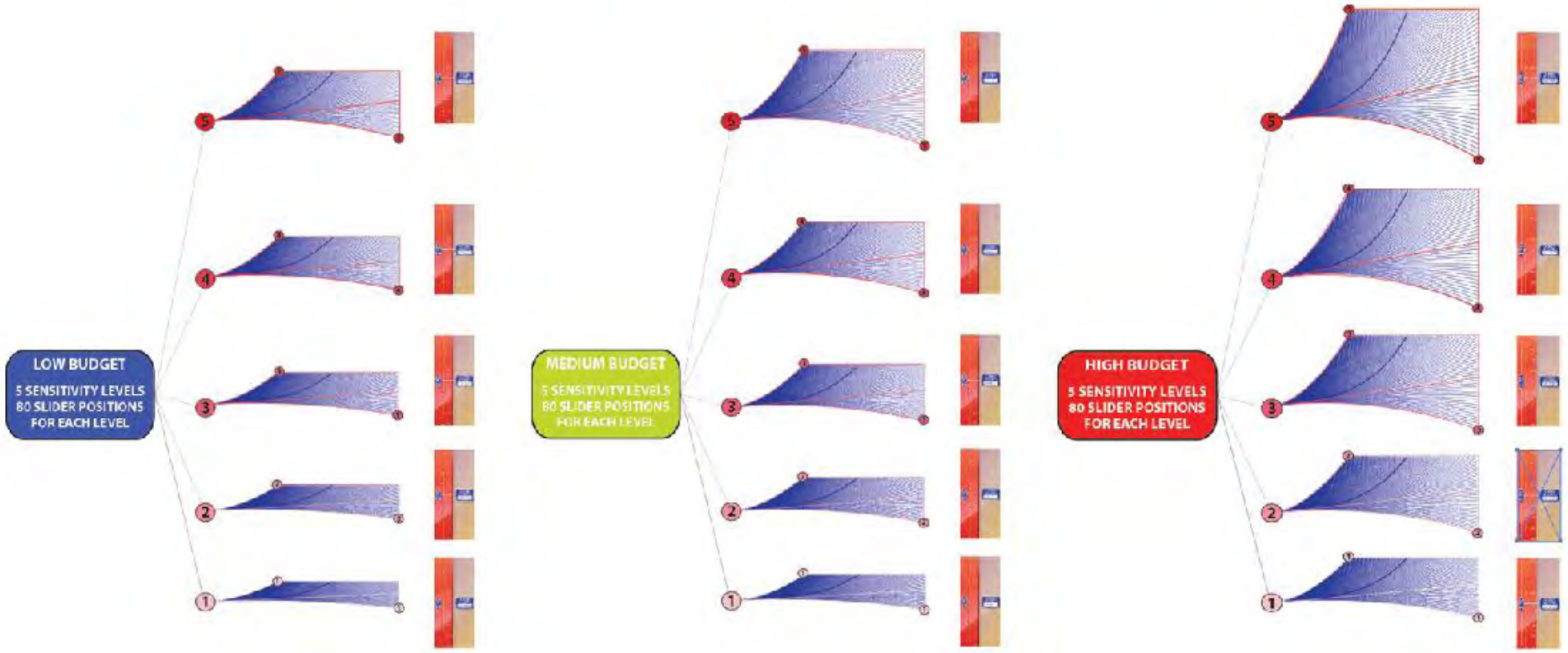


In DOMAIN FOUR, Damage Curves Expand & Contract over the at rates determined by the Emissions Budget and the Sensitivity Level chosen and the Vertical-Slider use. The dotted red line is flat and curves above it are accelerating and curves below it are decelerating. Time division within this, changes with the Horizontal-Slider changing the 'Convergence-Window' as before, this time in the Budget & Damage time-line.

CARBON BUDGET ANALYSIS TOOL [CBAT] DOMAIN FOUR
DAMAGE COSTING POTENTIAL CLIMATE CATASTROPHE



CARBON BUDGET ANALYSIS TOOL [CBAT] DOMAIN FOUR
DAMAGE COSTING POTENTIAL CLIMATE CATASTROPHE



LOW BUDGET
5 SENSITIVITY LEVELS
80 SLIDER POSITIONS
FOR EACH LEVEL

MEDIUM BUDGET
5 SENSITIVITY LEVELS
80 SLIDER POSITIONS
FOR EACH LEVEL

HIGH BUDGET
5 SENSITIVITY LEVELS
80 SLIDER POSITIONS
FOR EACH LEVEL