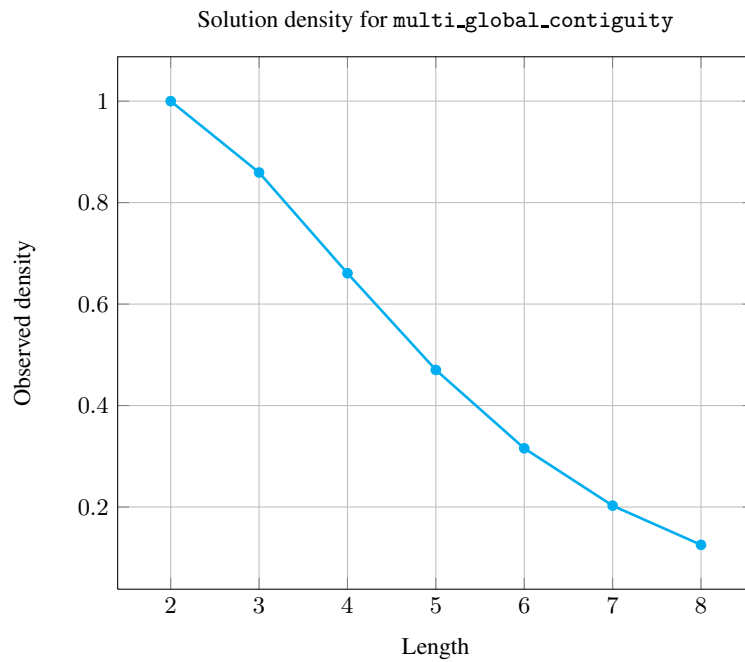
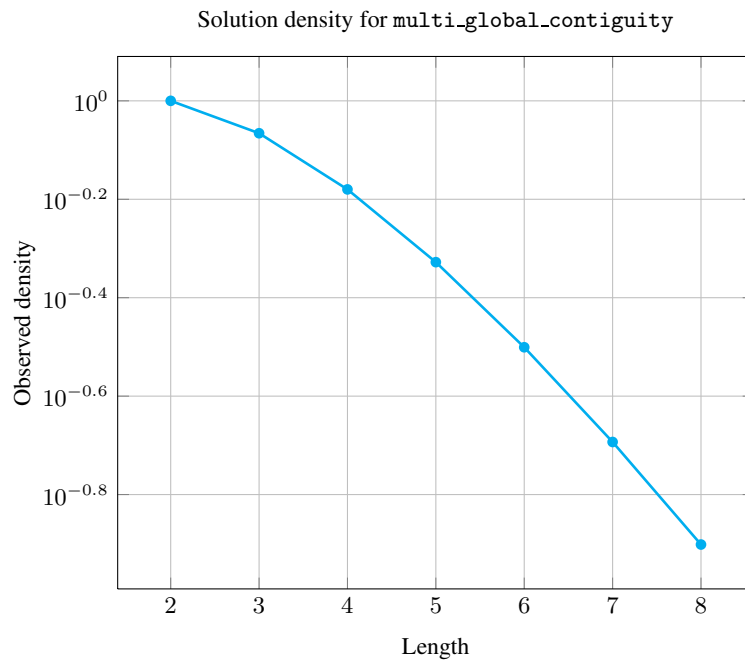


5.267 multi_global_contiguity

	DESCRIPTION	LINKS
Origin	Derived from global_contiguity .	
Constraint	<code>multi_global_contiguity(VARIABLES)</code>	
Synonym	<code>multi_contiguity</code> .	
Argument	<code>VARIABLES : collection(var-dvar)</code>	
Restrictions	<code>required(VARIABLES, var)</code> <code>VARIABLES.var ≥ 0</code>	
Purpose	Enforce all variables of the VARIABLES collection to be assigned a value greater than or equal to 0. In addition, each value v strictly greater than 0 should appear contiguously.	
Example	<div style="border: 1px solid blue; padding: 2px; display: inline-block;"><code>((0, 2, 2, 1, 1, 0, 0, 5))</code></div> <p>The <code>multi_global_contiguity</code> constraint holds since the sequence 0 2 2 1 1 0 0 5 contains no more than one group of contiguous 1, no more than one group of contiguous 2, and no more than one group of contiguous 5.</p>	
Typical	<code> VARIABLES > 3</code>	
Symmetry	Items of VARIABLES can be reversed .	
Arg. properties	Contractible wrt. VARIABLES.	
Counting		

Length (n)	2	3	4	5	6	7	8
Solutions	9	55	413	3656	37147	425069	5400481

Number of solutions for `multi_global_contiguity`: domains $0..n$



See also

common keyword: `group` (*sequence*).

implied by: `all_equal`, `alldifferent`, `alldifferent_except_0`, `decreasing`, `global_contiguity`, `increasing`.

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PREDEFINED

Keywords

combinatorial object: sequence.

constraint type: predefined constraint.

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