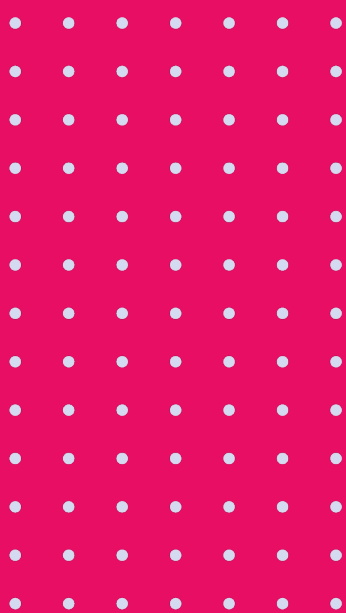




Seeing the Full Picture with the R Shiny Data Visualisation Toolbox

DV03

PHUSE EU Connect 2022

01

Introduction

02

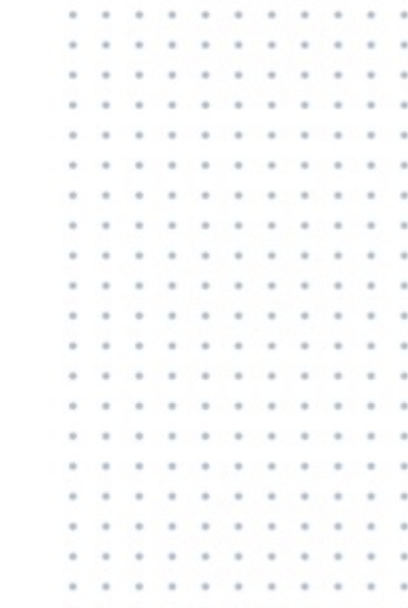
Why is it challenging to produce figures for publications?

03

R Package Solution

04

Conclusion



Introduction

01 INTRODUCTION

Output representation

Table 1–1 Subject Disposition (Referring to Appendix 15.1 Table 15.1.1.1)

Subject Disposition - ITT Population				
Output ID: T_DISPO1 06JAN2012 14:24				
Characteristic	W (N=62) N (%)	K (N=60) N (%)	I (N=62) N (%)	Total (N=206) N (%)
All Screened Subjects				206
Safety Population	61 (98.4)	59 (98.3)	62 (100.0)	182 (88.3)
ITT Population	62 (100.0)	60 (100.0)	62 (100.0)	184 (89.3)
Per Protocol Population	45 (72.6)	36 (60.0)	43 (69.4)	124 (60.2)
Total number (%) of discontinued subjects	60 (96.8)	58 (96.7)	58 (93.5)	177 (85.9)
Reason For Discontinuation As Randomized	60 (100.0)	58 (100.0)	58 (100.0)	177 (100.0)
Adverse Event	9 (10.0)	10 (19.0)	14 (19.0)	23 (15.8)
Death	5 (8.3)	7 (12.1)	5 (8.6)	17 (9.6)
Inclusion And/Or Exclusion Criteria Not Full-filled	0 (0.0)	1 (1.7)	1 (1.7)	2 (1.1)
Subject Withdrew Consent	4 (6.7)	3 (5.2)	2 (3.4)	9 (5.1)
Progressive Disease	33 (55.0)	29 (50.0)	33 (56.9)	95 (53.7)
Symptomatic Deterioration	3 (5.0)	2 (3.4)	1 (1.7)	6 (3.4)
Others	9 (15.0)	5 (8.6)	5 (8.6)	20 (11.3)

Tables

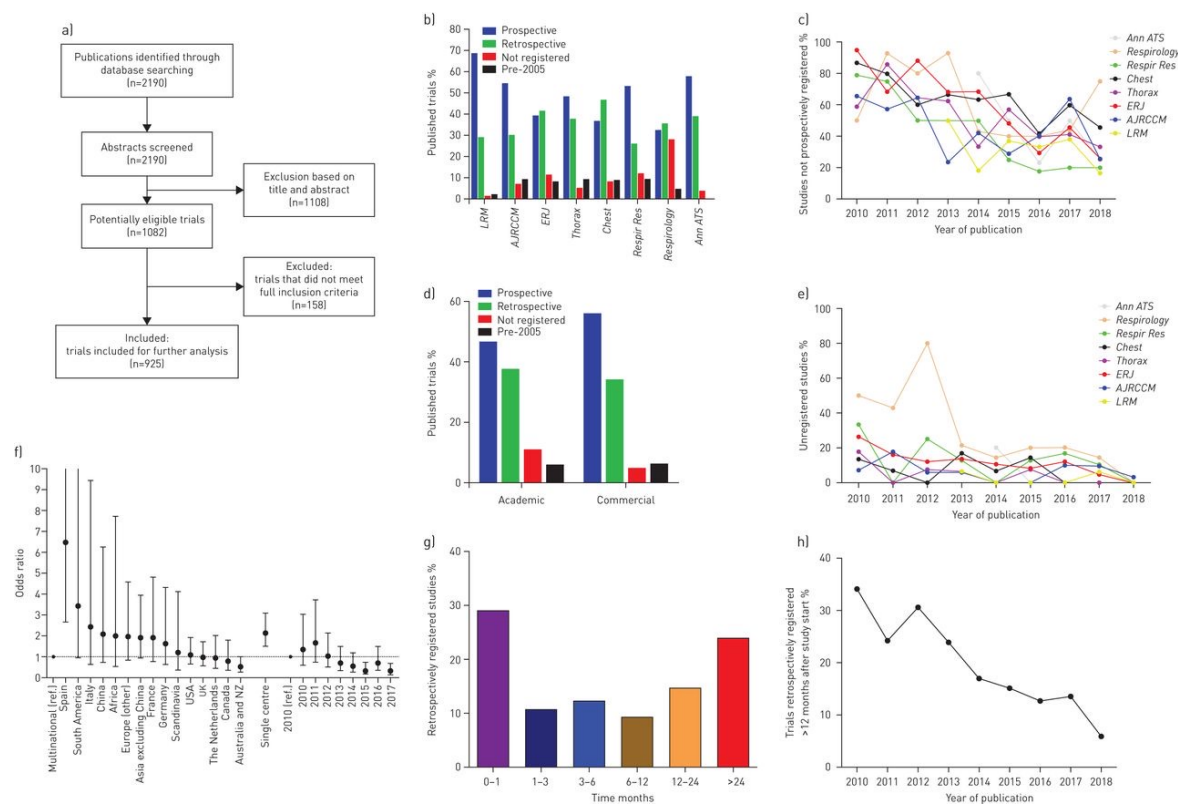
Study (year)	Number (chronologic)	Study design	Allergoid type	Active group	Control group	Dose	Treatment duration	Ref.
Passalacqua <i>et al.</i> (1998)	1	RCT	Mites	10 adults	10 adults (placebo)	4000 AU/week	12–24 months	[47]
Caffarelli <i>et al.</i> (2000)	2	RCT	Grass pollen	24 children	24 children (placebo)	3000 AU/week	12 weeks	[75]
Lombardi <i>et al.</i> (2001)	3	Postmarketing study	Mites, pollen	198 adolescents and adults		2000 AU/week	36 months	[54]
Marogna <i>et al.</i> (2003)	4	Long-term observational study	Mites, grass pollen, birch pollen	106 children and adults	170 children and adults (pharmacotherapy)	1000 AU/week	≥36 months	[79]
Ariano <i>et al.</i> (2005)	5	RCT	Arizona cypress pollen	20 adults	10 adults (placebo)	6 drops per week (3000 AU/ml)	12 months	[46]
Agostinis <i>et al.</i> (2005)	6	Survey	Mites & grass pollen allergoid drops	36 very young children <5 years		4 drops per day (3000 AU/ml)	12–36 months	[52]
Gammeri <i>et al.</i> (2005)	7	Open trial	Mites, Parietaria, Timothy grass pollen	105 children and adults		4000 AU within 20 min	Ultra-rush titration within 20 min	[70]
Passalacqua <i>et al.</i> (2006)	8	RCT	Mites	34 adults	34 adults (placebo)	2000 AU/week	24 months	[49]
Palma-Carlos <i>et al.</i> (2006)	9	RCT	Grass pollen	17 adults	16 adults (placebo)	2000 AU/week	24 months	[51]
Cosmi <i>et al.</i> (2006)	10	RCT	Mites	12 adults	13 adults (pharmacotherapy)	1000 AU/week	6–18 months	[50]
Giordano <i>et al.</i> (2006)	11	Observational study	Mites, pollen	39 children and adults		2000 AU/week	12 months	[71]
La Grutta <i>et al.</i> (2007)	12	RCT	Mites, Parietaria	33 children and adults	23 children and adults (pharmacotherapy)	2000 AU/week	12 months	[57]
Marogna <i>et al.</i> (2007)	13	Long-term RCT, parallel group	Mites	53 adults with four different treatment phase allocations	12 adults (pharmacotherapy)	1000 AU/week, in different treatment phases and observational phases	24–60 months	[80]
D'Anneo <i>et al.</i> (2008)	14	RCT, parallel group	Parietaria	45 children and adults with two different regimens	21 children and adults (pharmacotherapy)	1000 and 3000 AU/week	6 months	[58]
Agostinis <i>et al.</i> (2009)	15	RCT	Grass pollen	20 children	20 children (pharmacotherapy)	5000 AU/week	2 years	[53]

AU: Allergic units; RCT: Randomized controlled trial.

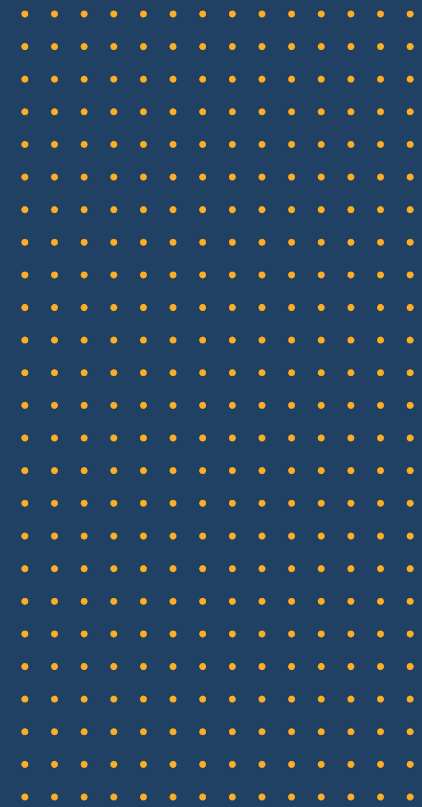
Listings

01 INTRODUCTION

The best output representation



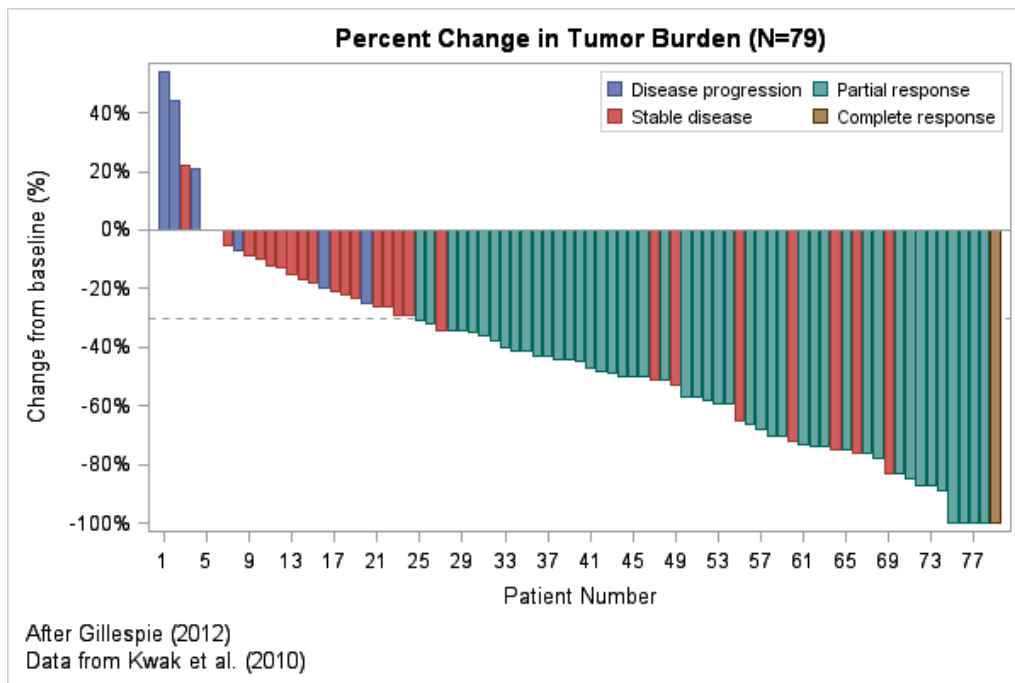
Figures

A decorative graphic on the left side of the slide, consisting of a grid of small orange dots arranged in approximately 10 rows and 20 columns.

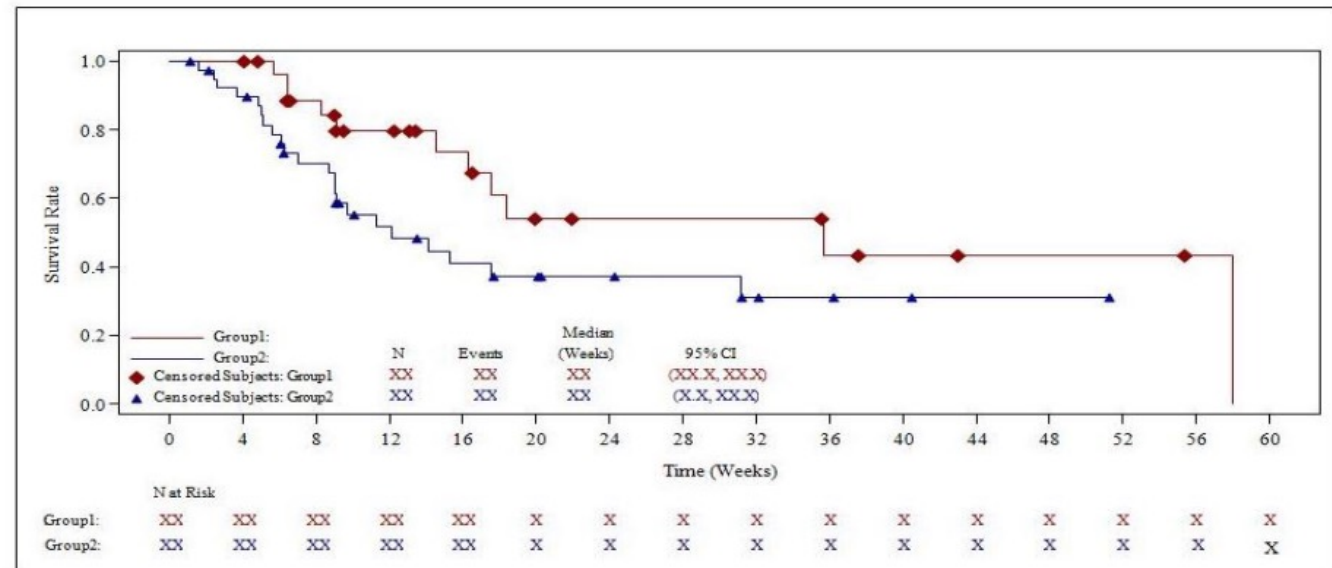
**Why is it challenging to
produce figures for
publications?**

02 WHY IS IT CHALLENGING TO PRODUCE FIGURES FOR PUBLICATIONS?

What could go wrong?



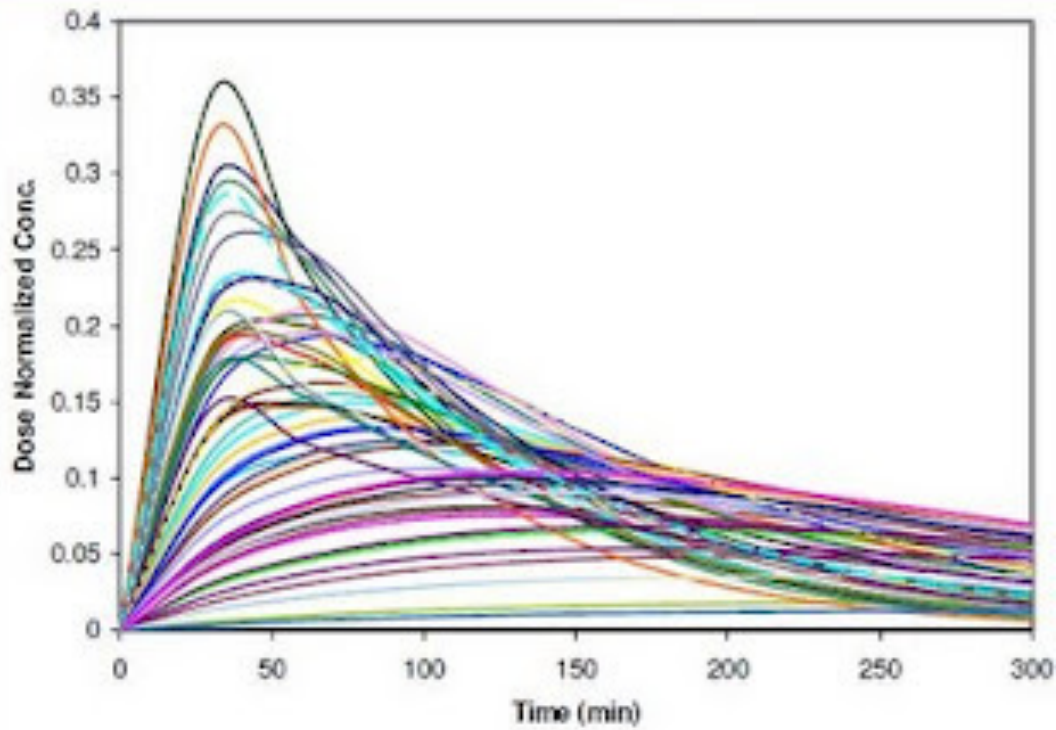
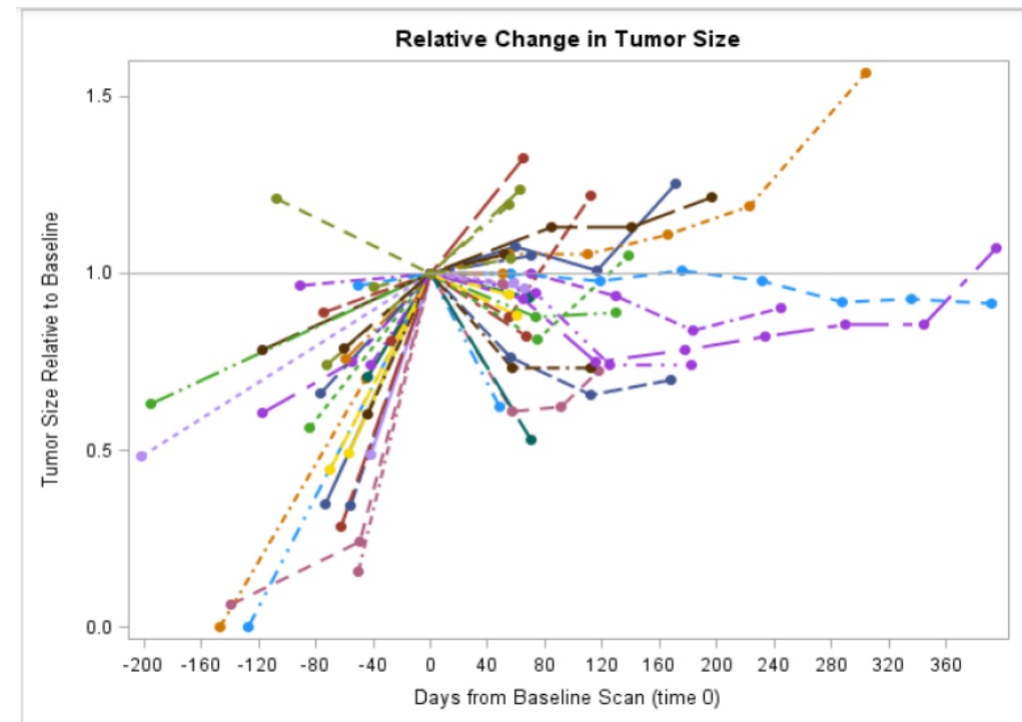
Waterfall Plot



Kaplan Meier Graph

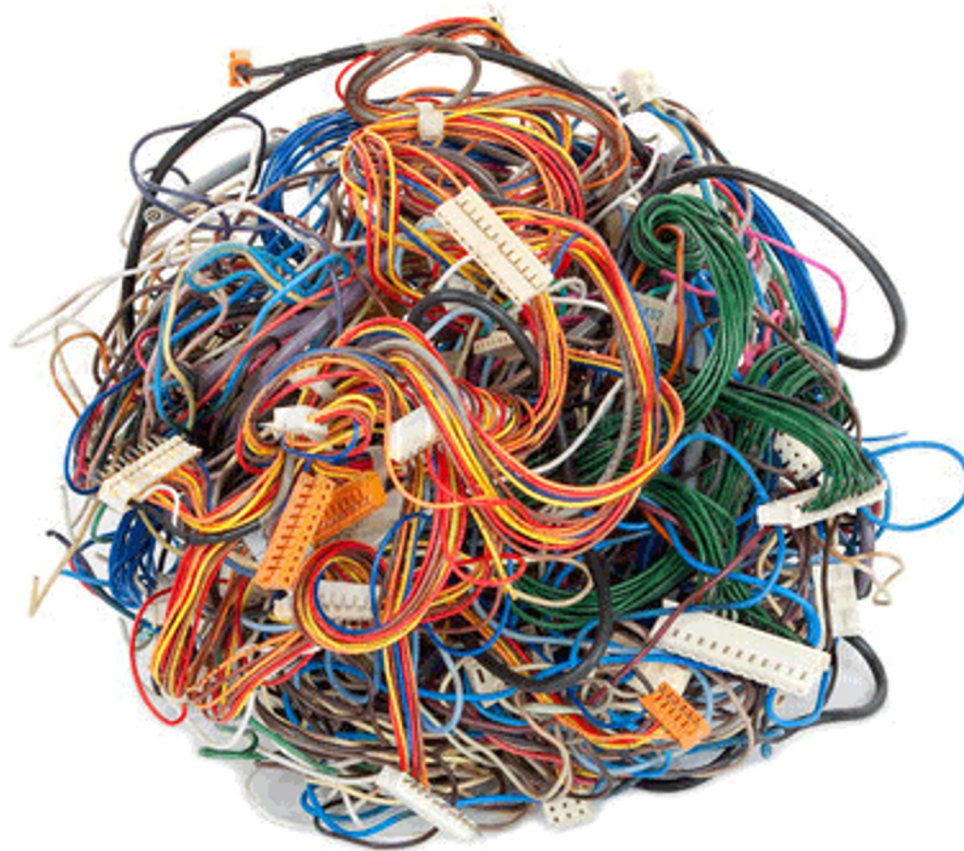
02 WHY IS IT CHALLENGING TO PRODUCE FIGURES FOR PUBLICATIONS?

What is the problem?

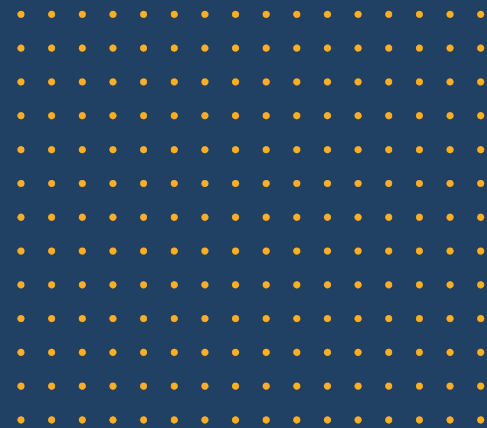
**Spaghetti Plot****Spider Plot**

02 WHY IS IT CHALLENGING TO PRODUCE FIGURES FOR PUBLICATIONS?

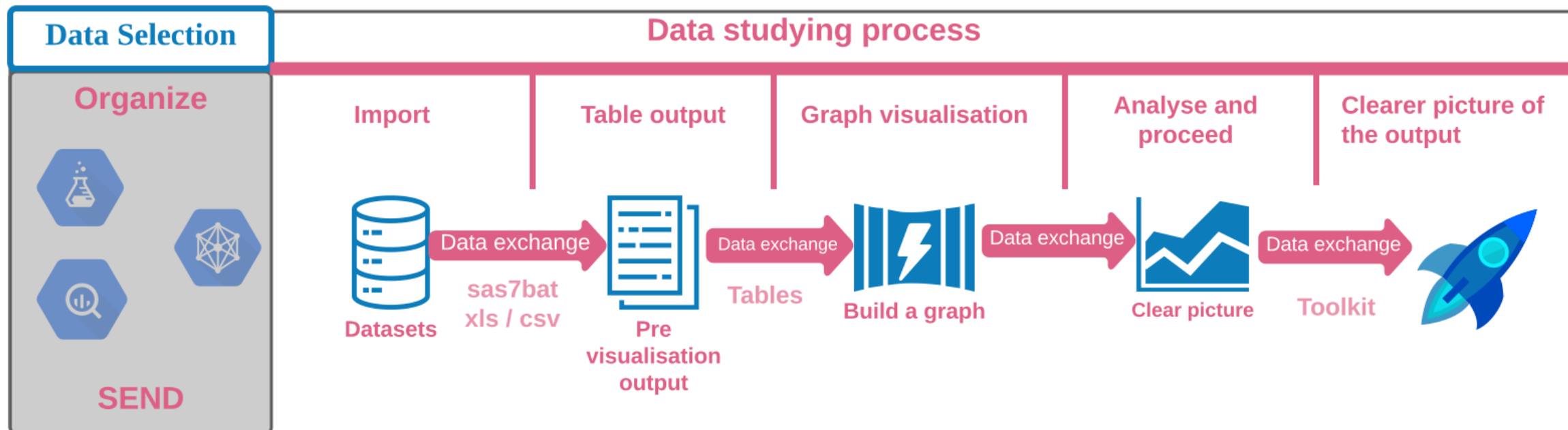
In the end, what do we see?



R Package Solution

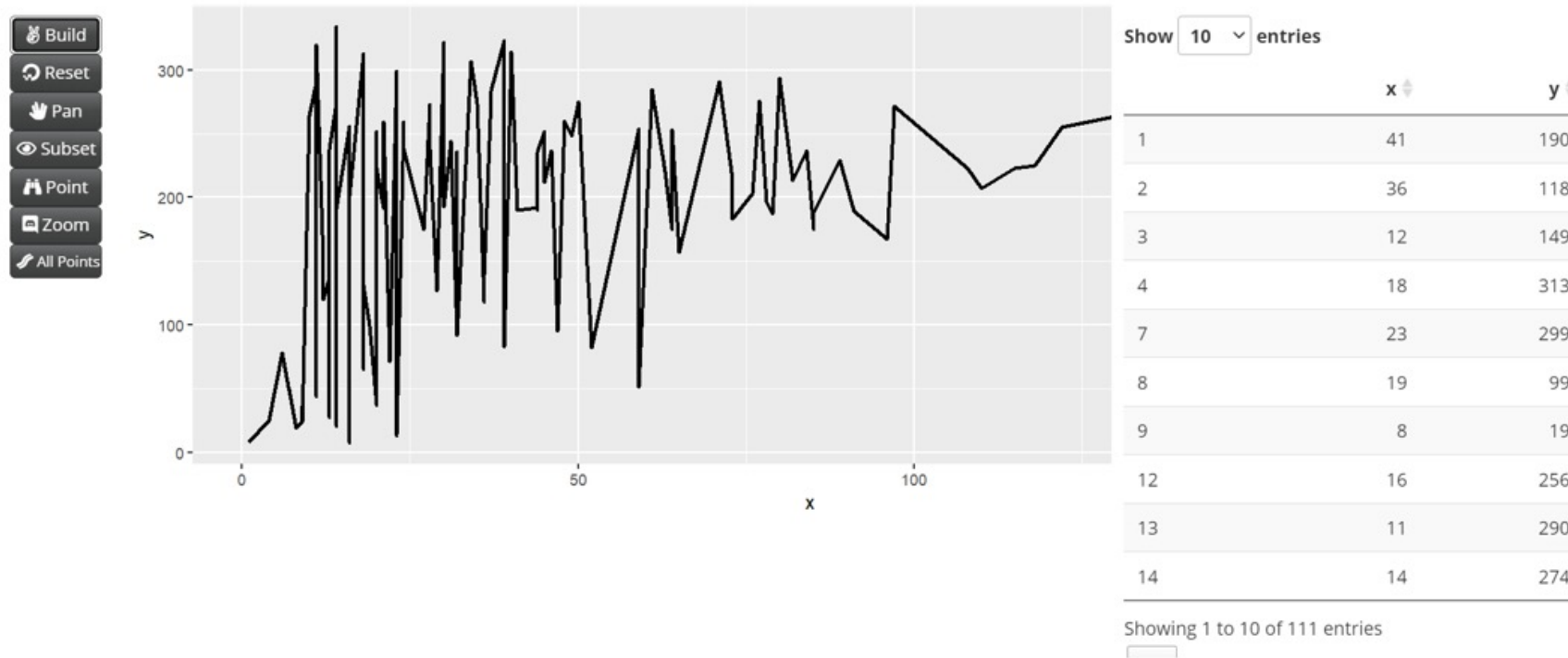


R Shiny App Process flow



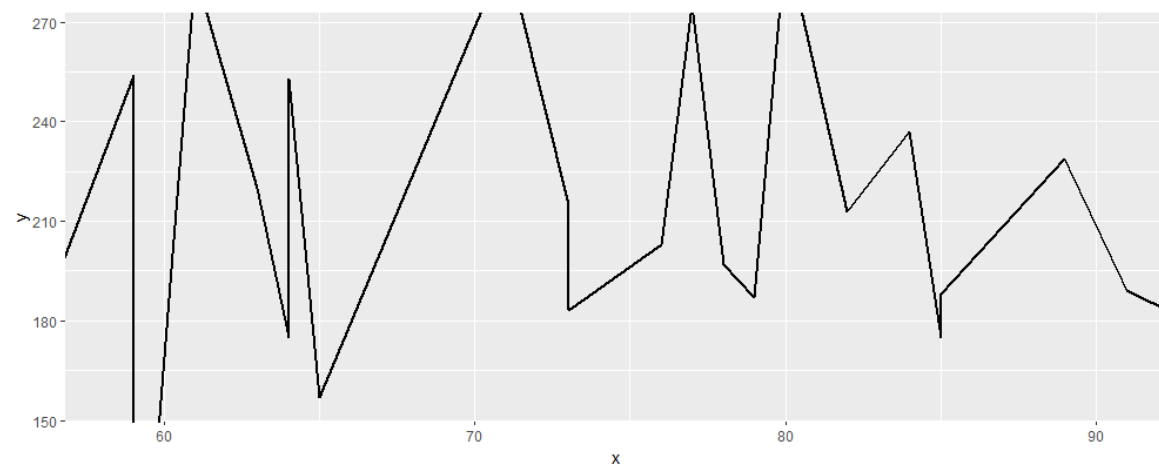
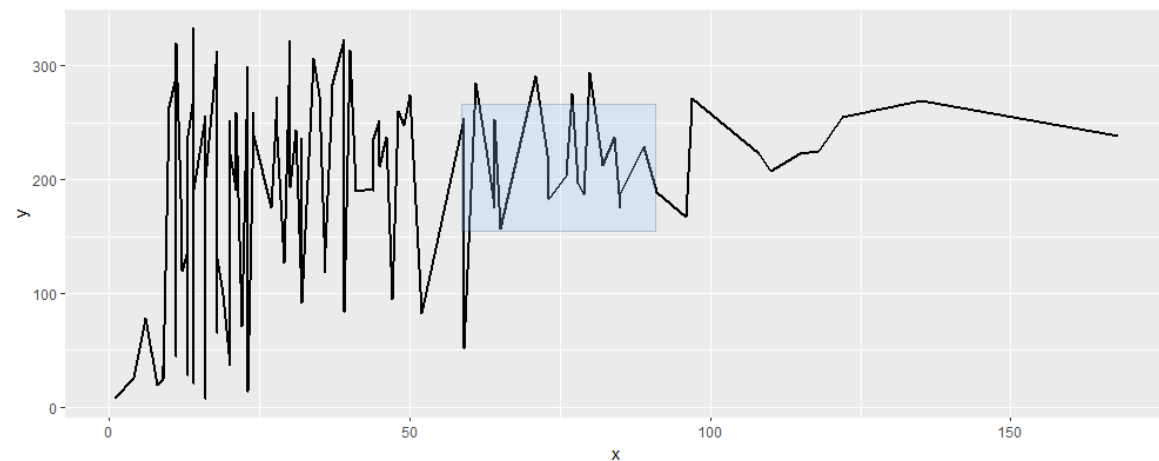
03 R PACKAGE SOLUTION

Visualisation process



03 R PACKAGE SOLUTION

Build
Reset
Pan
Subset
Point
Zoom
All Points



Show 10 entries

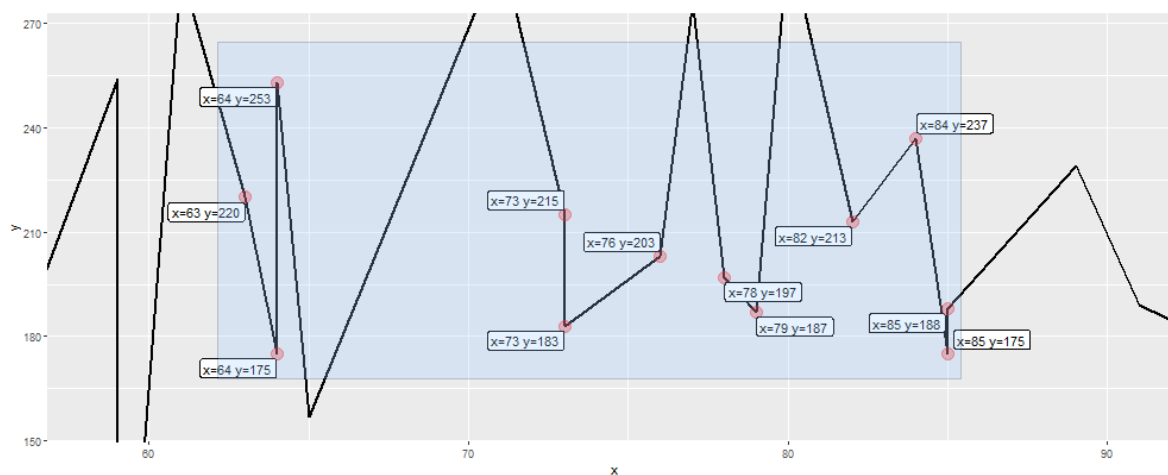
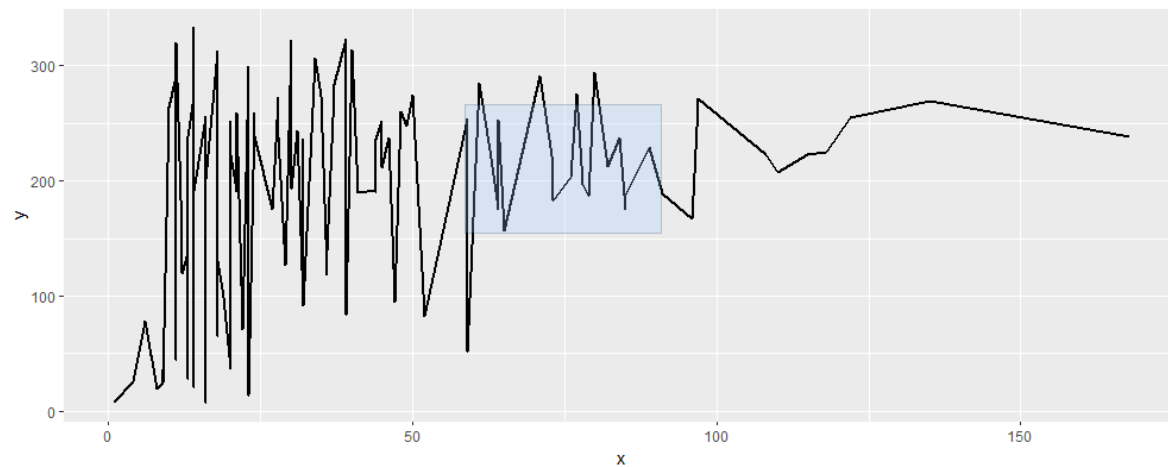
	x	y
1	18	131
2	18	224
3	19	99
4	20	223
5	20	252
6	21	191
7	21	230
8	21	259
9	23	115
10	23	148

Showing 1 to 10 of 47 entries

Previous 1 2 3 4 5 Next

03 R PACKAGE SOLUTION

- Build
- Reset
- Pan
- Subset
- Point
- Zoom
- All Points



Show 10 entries

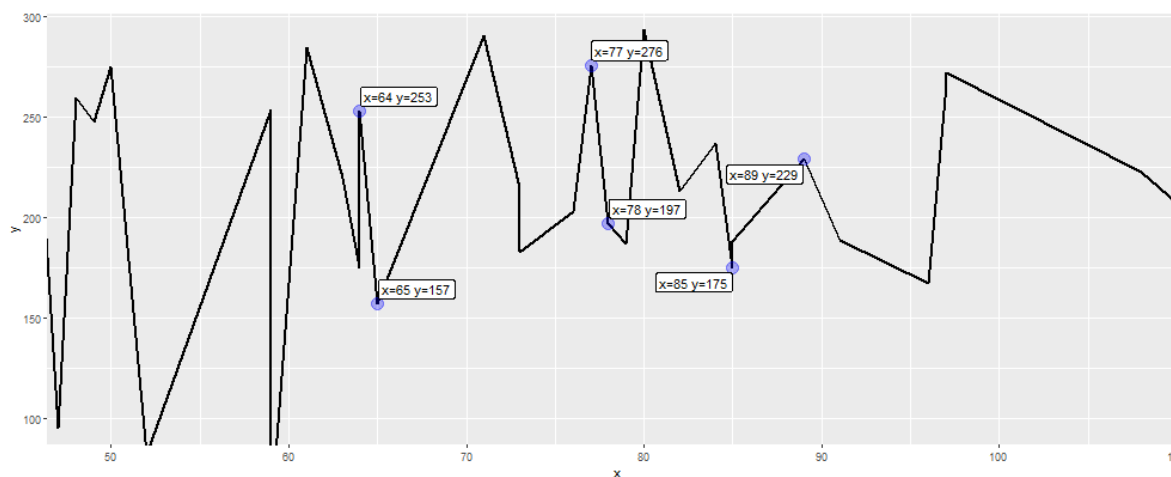
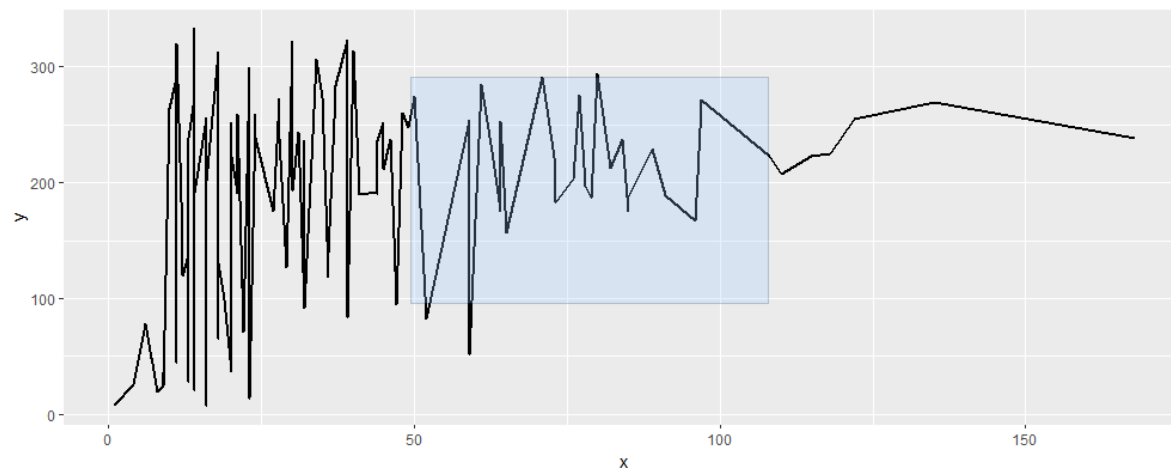
	x	y
1	63	220
2	64	175
3	64	253
4	73	183
5	73	215
6	76	203
7	78	197
8	79	187
9	82	213
10	84	237

Showing 1 to 10 of 12 entries

Previous 1 2 Next

03 R PACKAGE SOLUTION

- Build
- Reset
- Pan
- Subset
- Point
- Zoom
- All Points



Show 10 entries

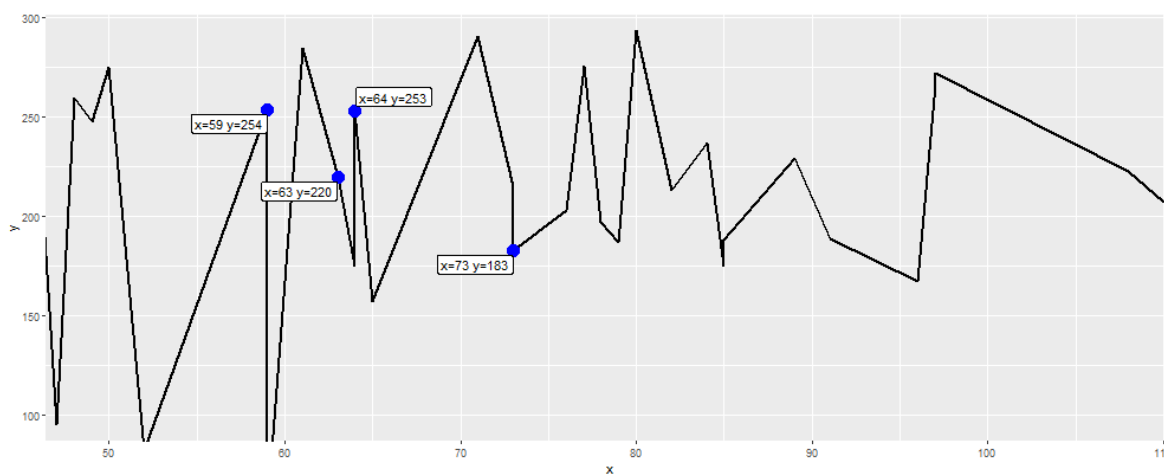
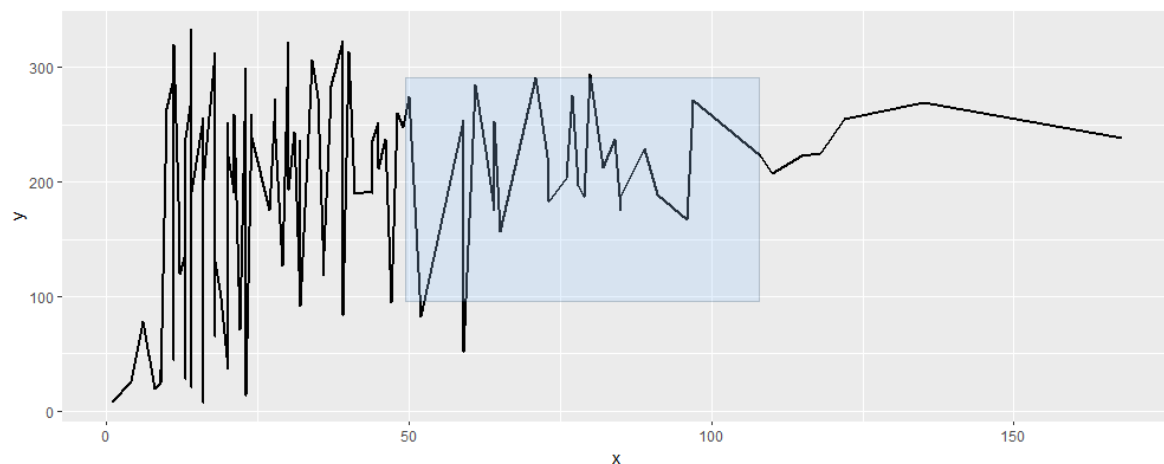
	X85L	X175L
1	85	175
2	64	253
3	89	229
4	65	157
5	78	197
6	77	276

Showing 1 to 6 of 6 entries

Previous 1 Next

03 R PACKAGE SOLUTION

Build
Reset
Pan
Subset
Point
Zoom
All Points



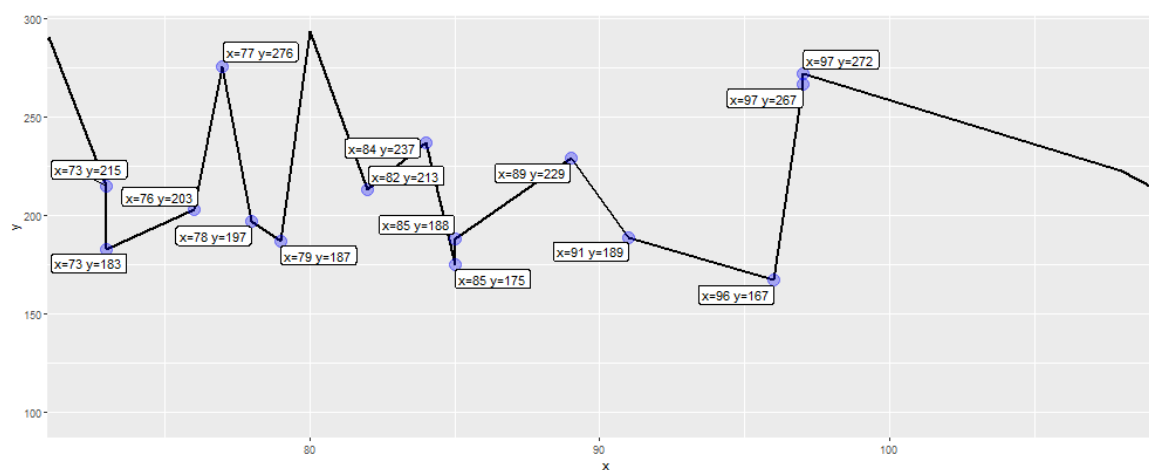
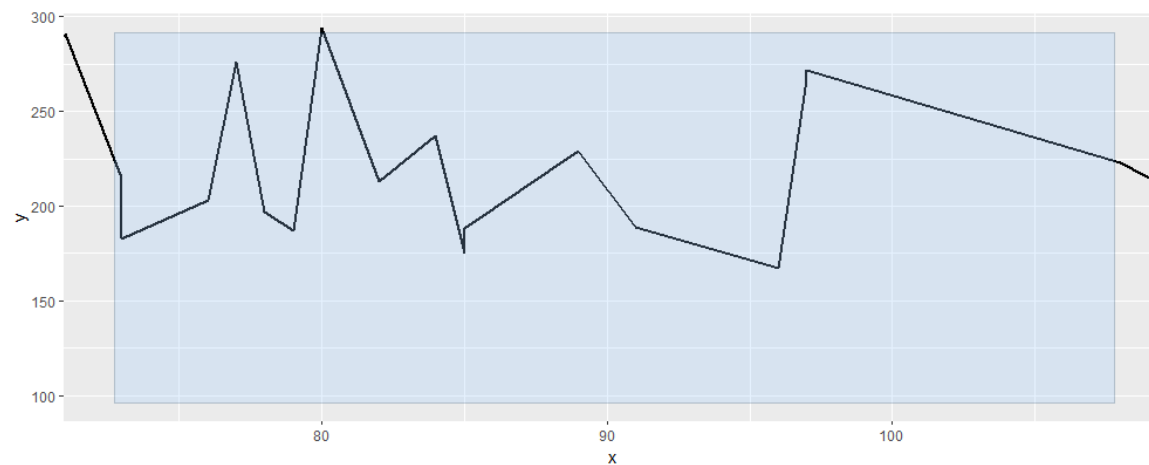
Show 10 entries

	x	y
1	50	275
2	59	254
3	61	285
4	63	220
5	64	175
6	64	253
7	65	157
8	71	291
9	73	183
10	73	215

Showing 1 to 10 of 23 entries

Previous 1 2 3 Next

03 R PACKAGE SOLUTION



Show 10 entries

	x	y
1	73	183
2	73	215
3	76	203
4	77	276
5	78	197
6	79	187
7	82	213
8	84	237
9	85	175
10	85	188

Showing 1 to 10 of 15 entries

Previous 1 2 Next

03 R PACKAGE SOLUTION

R Shiny App work animation

Visualization Toolkit [Select Data](#) More ▾

Pick up the test dataset OR ...

ability.cov ▾

Choose dataset File (.csv)

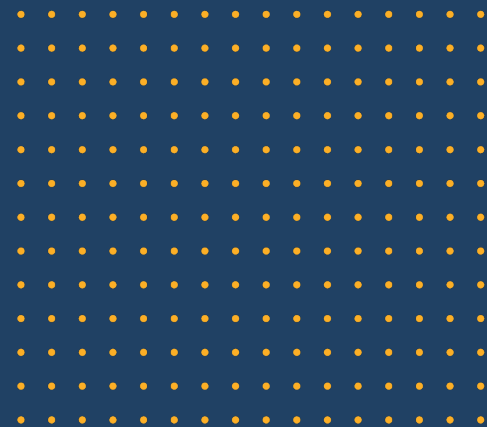
Browse... No file selected

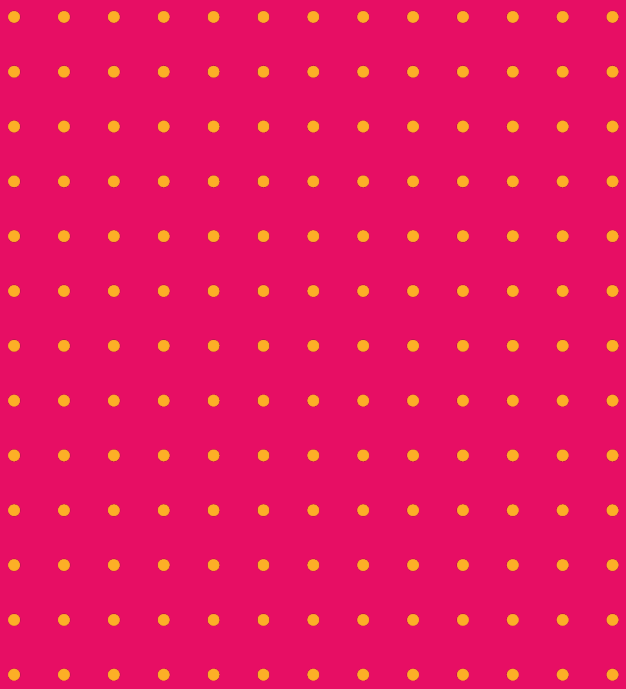
X axis Y1 axis

▾ ▾

Add axis Read Data set Print Table

Conclusion





Contact me:

anastasiia.konvisarova@veramed.co.uk

UA: +380509857287

LinkedIn: [linkedin.com/in/anastasia-konvisarova](https://www.linkedin.com/in/anastasia-konvisarova)

Thank you!

Find us at **BOOTH 26**

Demos:

- Data Visualisation
 - Automation
 - Cloud SCE