This document is named `testcases.tex`. It contains the complete *Getting Started* example from the *StatRep User's Guide*. You can generate the final PDF document `testcases.pdf` as follows:

Generate the SAS program
Compile this document with `pdflatex`. The `StatRep` package automatically generates a SAS program from the document source. The program is named `example_SR.sas` and it is created in the current directory.

Capture the SAS outputs
Run the SAS program `example_SR.sas`. The SAS working directory must be the directory that contains this document.

Create the final PDF
Compile this document with `pdflatex` once more. The outputs that SAS generated in the preceding step are now included in the final PDF `example.pdf`.

The code in the `Datastep` environment is written unchanged to the generated SAS program.

```
proc format;
value $sex 'F' = 'Female' 'M' = 'Male';
data one;
set sashelp.class;
format sex $sex.;
run;
```

Example of transfert of SAS parameters or results to LaTeX:

```
data test;
mydatea = '01JAN2024'd;
mydateb = '01JAN2024'd;
smallnum = 0.00523;
mediunnum = 1234.56;
largenum = 456789.12;
verylarge = 12345678.90;
%STATREPResults(mydatea, WEEKDATE.);
output;
run;

data _null_;
set test (drop=mydatea); *don''t replace mydatea;
%STATREPAllResults();
run;
```

Mydate (a) is equal Monday, January 1, 2024, (b) is equal to 23 376,00 and large numerical value is equal to 456 789,12.

The code in the `Sascode` environment is parsed before it is written to the generated SAS program. For example, lines that begin with the string `%*;` are written to the SAS program and are not displayed in the final document. The other lines in this example are written to the program and are displayed in the final document.

The first line of the following code block can be seen only in the LaTeX source file and in the generated SAS program. The line insures that ODS Graphics are enabled.

```
%*; OPTIONS MPRINT MLOGIC SYMBOLGEN;
%*; ods graphics on;
%startlog(nameoflog)
proc reg;
model weight = height age;
run;
%endlog(store=0,range=_n_ <= 10)
```

The `Listing` and `Graphic` tags convey information to LaTeX and to SAS. The tags specify the names of the output files to insert into the document and the captions for the output. Additionally, they specify the names of the output files to create and which ODS objects to capture.

Illustration 1: Regression Analysis LaTeX

Missing File tex/REGa.tex

Illustration 2: Graphs for Regression Analysis

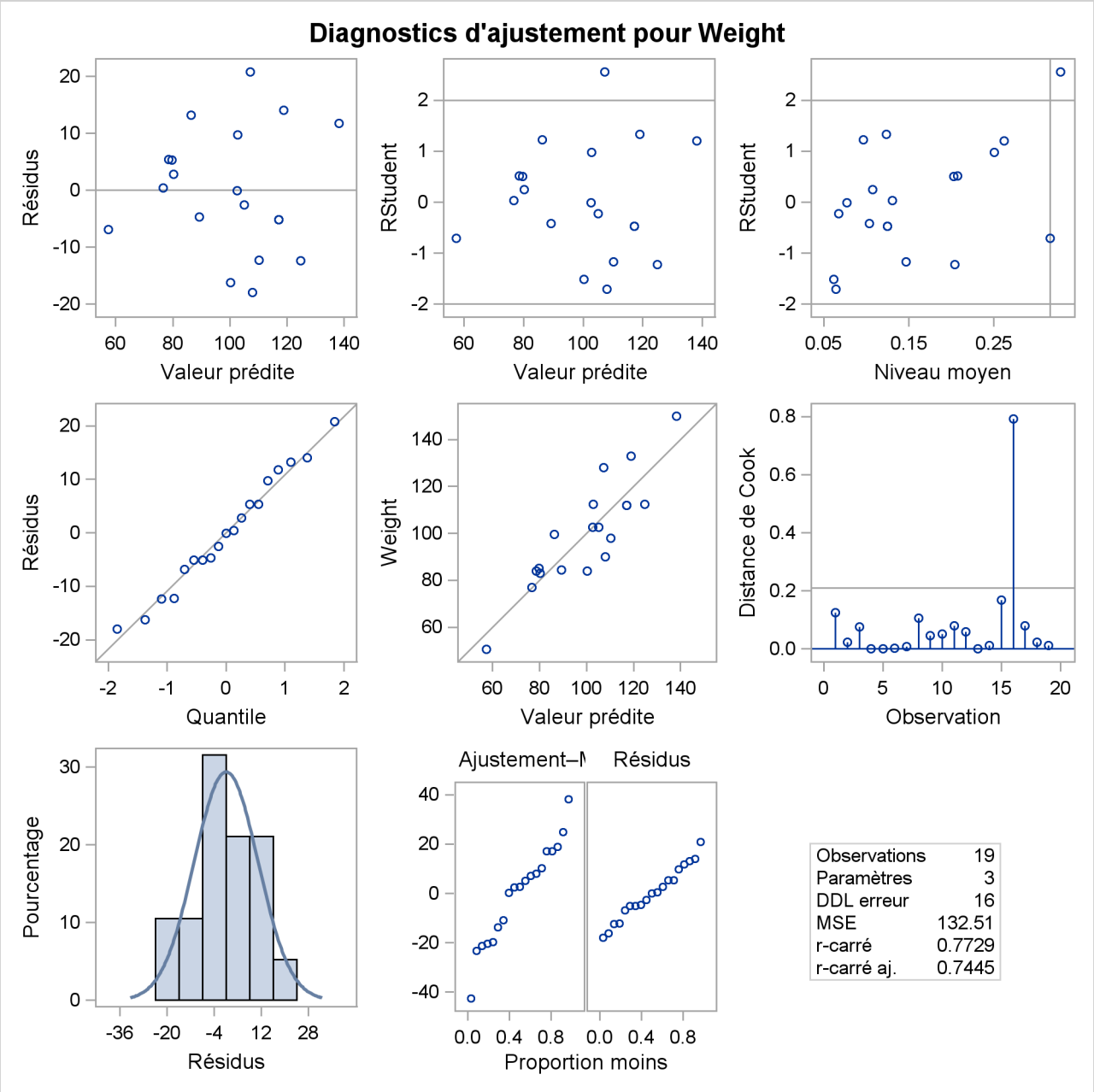


Illustration 2: *continued*

Illustration 3: Regression Analysis listing

Missing File lst/REGc.lst

In this short example only the defaults are used. That is, all output objects are selected and displayed.

Illustration 4: Log de la proc reg

```
MLOGIC(STARTLOG) :  Fin de l'exécution.
ERROR: Variable WEIGHT not found.
ERROR: Variable HEIGHT not found.
ERROR: Variable AGE not found.
NOTE: l'instruction précédente a été supprimée.

WARNING: No variables specified for an SSCP matrix. Execution terminating.

MLOGIC(ENDLOG):  Début de l'exécution.
```

1 More Cases

```
title 'no options';
data one;
  set sashelp.class;
run;

title 'display only';
data one;
  set sashelp.class;
run;
```

```
   title 'first=2';
   data one;

   ... more data lines ...

   title 'first=2 last=2';
   data one;

   ... more data lines ...
     set sashelp.class;
   run;
```

```
title 'first=2 last=2 fontsize=tiny';
data one;

... more data lines ...
run;
```

```
   title 'no options';
   proc print data=one;
   run;


   title 'display only';
   proc print data=one;
   run;

   title 'store=mydoc';
   proc print data=one;
   run;
```

```
title 'store=mydoc0 fontsize=tiny';
proc print data=one;
run;
```

```
   proc print data=one;
   run;

   title 'no options, line command(display)';
   title2 'next title';
   proc print data=one;
   run;

   proc print data=one;
   run;
```

Illustration 5: missing file, no option

Missing File lst/mymiss.lst

store=mydoc

Obs.	Name	Sex	Age	Height	Weight
1	Alfred	M	14	69.0	112.5
2	Alice	F	13	56.5	84.0
3	Barbara	F	13	65.3	98.0
4	Carol	F	14	62.8	102.5
5	Henry	M	14	63.5	102.5
6	James	M	12	57.3	83.0
7	Jane	F	12	59.8	84.5
8	Janet	F	15	62.5	112.5
9	Jeffrey	M	13	62.5	84.0
10	John	M	12	59.0	99.5
11	Joyce	F	11	51.3	50.5
12	Judy	F	14	64.3	90.0
13	Louise	F	12	56.3	77.0
14	Mary	F	15	66.5	112.0
15	Philip	M	16	72.0	150.0
16	Robert	M	12	64.8	128.0
17	Ronald	M	15	67.0	133.0
18	Thomas	M	11	57.5	85.0
19	William	M	15	66.5	112.0

store=mydoc

Obs.	Name	Sex	Age	Height	Weight
1	Alfred	M	14	69.0	112.5
2	Alice	F	13	56.5	84.0
3	Barbara	F	13	65.3	98.0
4	Carol	F	14	62.8	102.5
5	Henry	M	14	63.5	102.5
6	James	M	12	57.3	83.0
7	Jane	F	12	59.8	84.5
8	Janet	F	15	62.5	112.5
9	Jeffrey	M	13	62.5	84.0
10	John	M	12	59.0	99.5
11	Joyce	F	11	51.3	50.5
12	Judy	F	14	64.3	90.0
13	Louise	F	12	56.3	77.0
14	Mary	F	15	66.5	112.0
15	Philip	M	16	72.0	150.0
16	Robert	M	12	64.8	128.0
17	Ronald	M	15	67.0	133.0
18	Thomas	M	11	57.5	85.0
19	William	M	15	66.5	112.0

Illustration 6: fontsize=tiny

store=mydoc

Obs.	Name	Sex	Age	Height	Weight
1	Alfred	M	14	69.0	112.5
2	Alice	F	13	56.5	84.0
3	Barbara	F	13	65.3	98.0
4	Carol	F	14	62.8	102.5
5	Henry	M	14	63.5	102.5
6	James	M	12	57.3	83.0
7	Jane	F	12	59.8	84.5
8	Janet	F	15	62.5	112.5
9	Jeffrey	M	13	62.5	84.0
10	John	M	12	59.0	99.5
11	Joyce	F	11	51.3	50.5
12	Judy	F	14	64.3	90.0
13	Louise	F	12	56.3	77.0
14	Mary	F	15	66.5	112.0
15	Philip	M	16	72.0	150.0
16	Robert	M	12	64.8	128.0
17	Ronald	M	15	67.0	133.0
18	Thomas	M	11	57.5	85.0
19	William	M	15	66.5	112.0

Illustration 7: linesize=96

store=mydoc

Obs.	Name	Sex	Age	Height	Weight
1	Alfred	M	14	69.0	112.5
2	Alice	F	13	56.5	84.0
3	Barbara	F	13	65.3	98.0
4	Carol	F	14	62.8	102.5
5	Henry	M	14	63.5	102.5
6	James	M	12	57.3	83.0
7	Jane	F	12	59.8	84.5
8	Janet	F	15	62.5	112.5
9	Jeffrey	M	13	62.5	84.0
10	John	M	12	59.0	99.5
11	Joyce	F	11	51.3	50.5
12	Judy	F	14	64.3	90.0
13	Louise	F	12	56.3	77.0
14	Mary	F	15	66.5	112.0
15	Philip	M	16	72.0	150.0
16	Robert	M	12	64.8	128.0
17	Ronald	M	15	67.0	133.0
18	Thomas	M	11	57.5	85.0
19	William	M	15	66.5	112.0

Illustration 8: Back to vanilla listing

store=mydoc

Obs.	Name	Sex	Age	Height	Weight
1	Alfred	M	14	69.0	112.5
2	Alice	F	13	56.5	84.0
3	Barbara	F	13	65.3	98.0
4	Carol	F	14	62.8	102.5
5	Henry	M	14	63.5	102.5
6	James	M	12	57.3	83.0
7	Jane	F	12	59.8	84.5
8	Janet	F	15	62.5	112.5
9	Jeffrey	M	13	62.5	84.0
10	John	M	12	59.0	99.5
11	Joyce	F	11	51.3	50.5
12	Judy	F	14	64.3	90.0
13	Louise	F	12	56.3	77.0
14	Mary	F	15	66.5	112.0
15	Philip	M	16	72.0	150.0
16	Robert	M	12	64.8	128.0
17	Ronald	M	15	67.0	133.0
18	Thomas	M	11	57.5	85.0
19	William	M	15	66.5	112.0

```
title;
proc reg data=one;
model weight=age;
run;
```

Illustration 9: vanilla latex dest table

La procédure REG

Modèle : MODEL1

Variable dépendante : Weight

Nb d'observations lues	19
Nb d'obs. utilisées	19

Analyse de variance					
Source	**DDL**	**Somme des carrés**	**Moyenne quadratique**	**Valeur F**	**Pr > F**
Modèle	1	5124.49111	5124.49111	20.69	0.0003
Erreur	17	4211.24573	247.72034		
Total sommes corrigées	18	9335.73684			

Root MSE	15.73913	**R carré**	0.5489
Moyenne dépendante	100.02632	**R car. ajust.**	0.5224
Coeff Var	15.73499		

Paramètres estimés					
Variable	**DDL**	**Valeur estimée des paramètres**	**Erreur type**	**Valeur du test t**	**Pr > |t|**
Intercept	1	−50.49278	33.29023	−1.52	0.1477
Age	1	11.30381	2.48531	4.55	0.0003

Illustration 10: Shifted -1in, vanilla latex dest table

La procédure REG

Modèle : MODEL1

Variable dépendante : Weight

Nb d'observations lues	19
Nb d'obs. utilisées	19

Analyse de variance					
Source	**DDL**	**Somme des carrés**	**Moyenne quadratique**	**Valeur F**	**Pr > F**
Modèle	1	5124.49111	5124.49111	20.69	0.0003
Erreur	17	4211.24573	247.72034		
Total sommes corrigées	18	9335.73684			

Root MSE	15.73913	**R carré**	0.5489
Moyenne dépendante	100.02632	**R car. ajust.**	0.5224
Coeff Var	15.73499		

Paramètres estimés					
Variable	**DDL**	**Valeur estimée des paramètres**	**Erreur type**	**Valeur du test t**	**Pr > |t|**
Intercept	1	−50.49278	33.29023	−1.52	0.1477
Age	1	11.30381	2.48531	4.55	0.0003

Illustration 11: vanilla latex dest graphic

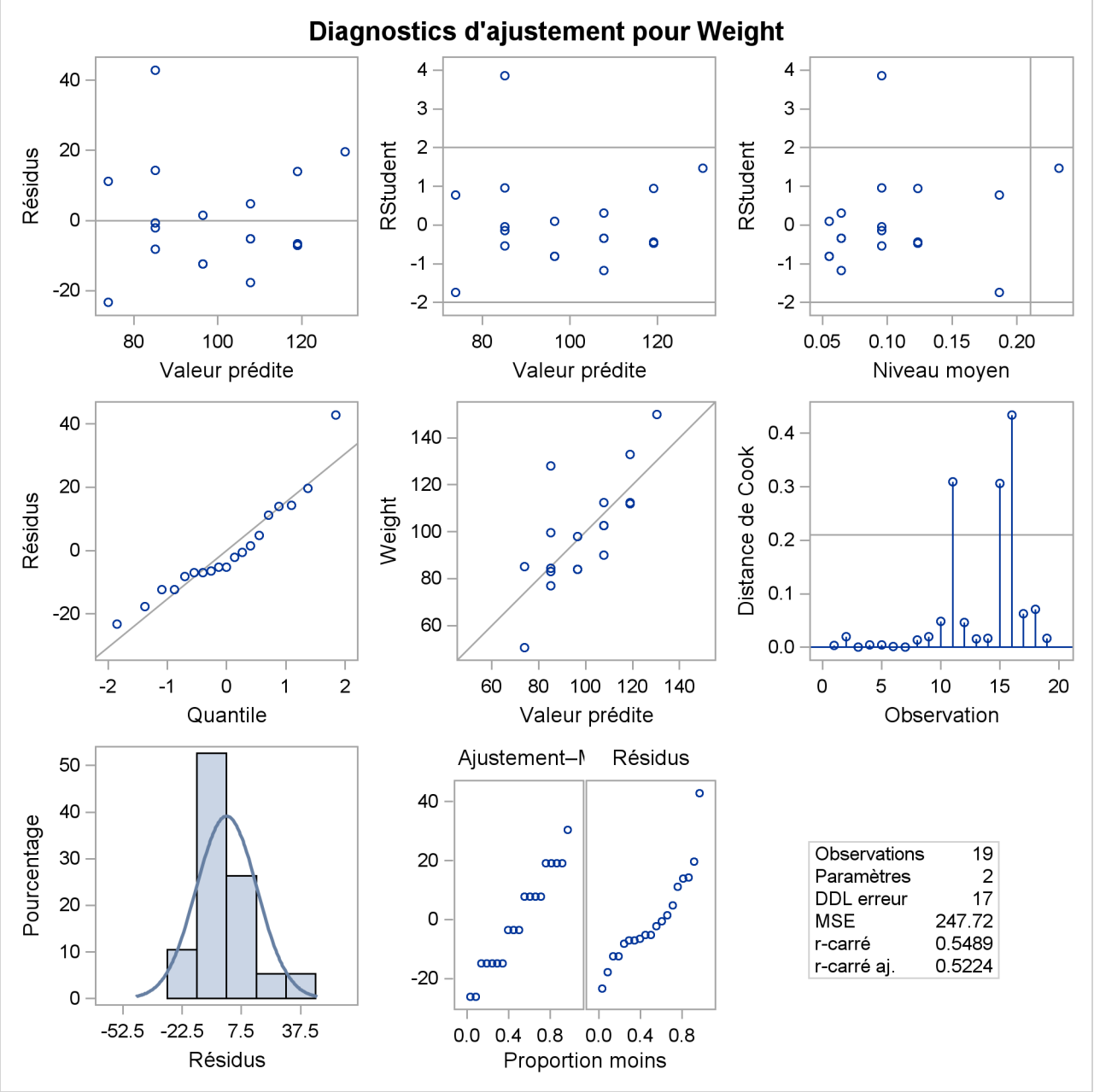


Illustration 11: *continued*

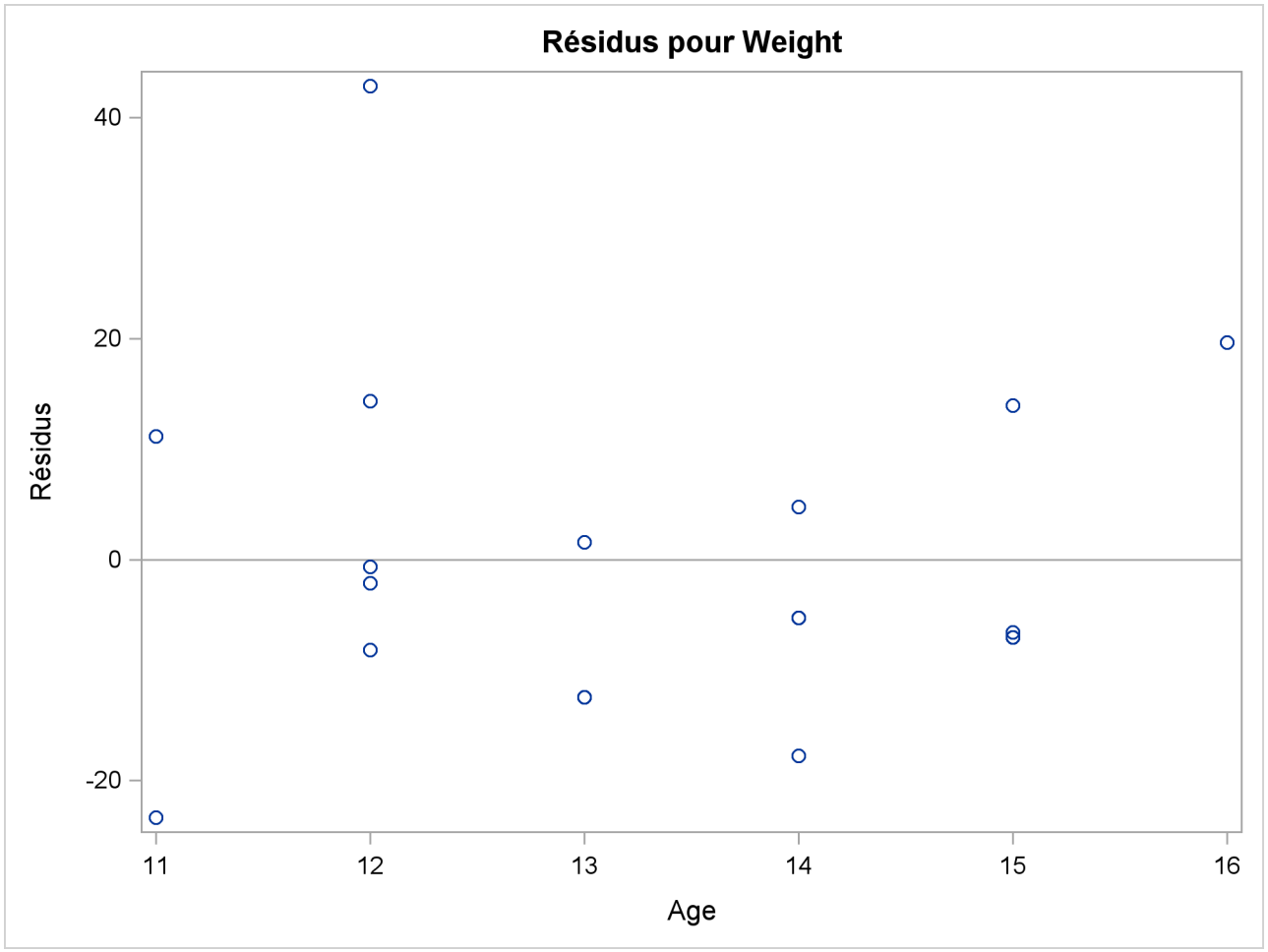


Illustration 11: *continued*

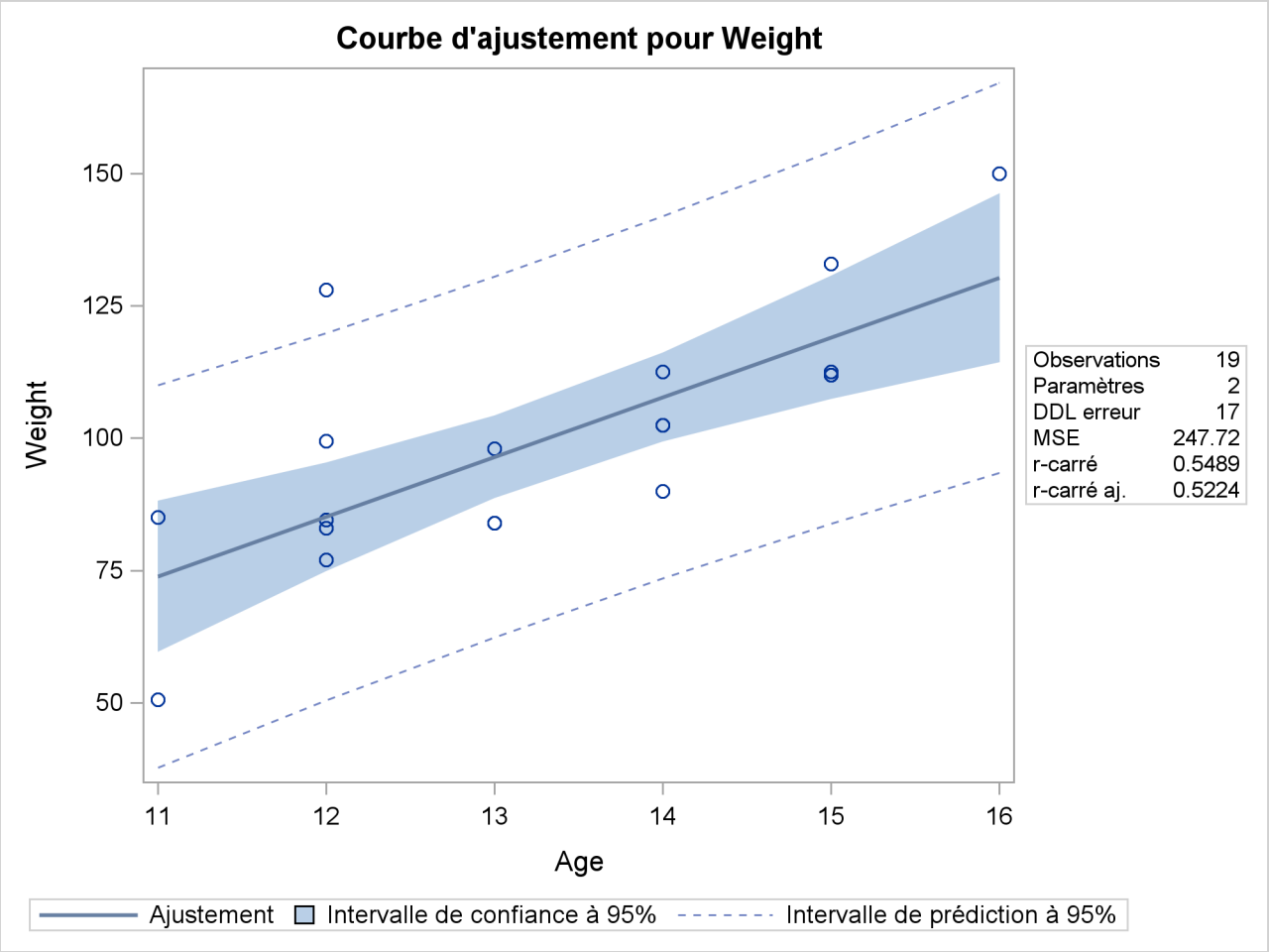


Illustration 12: vanilla graphic

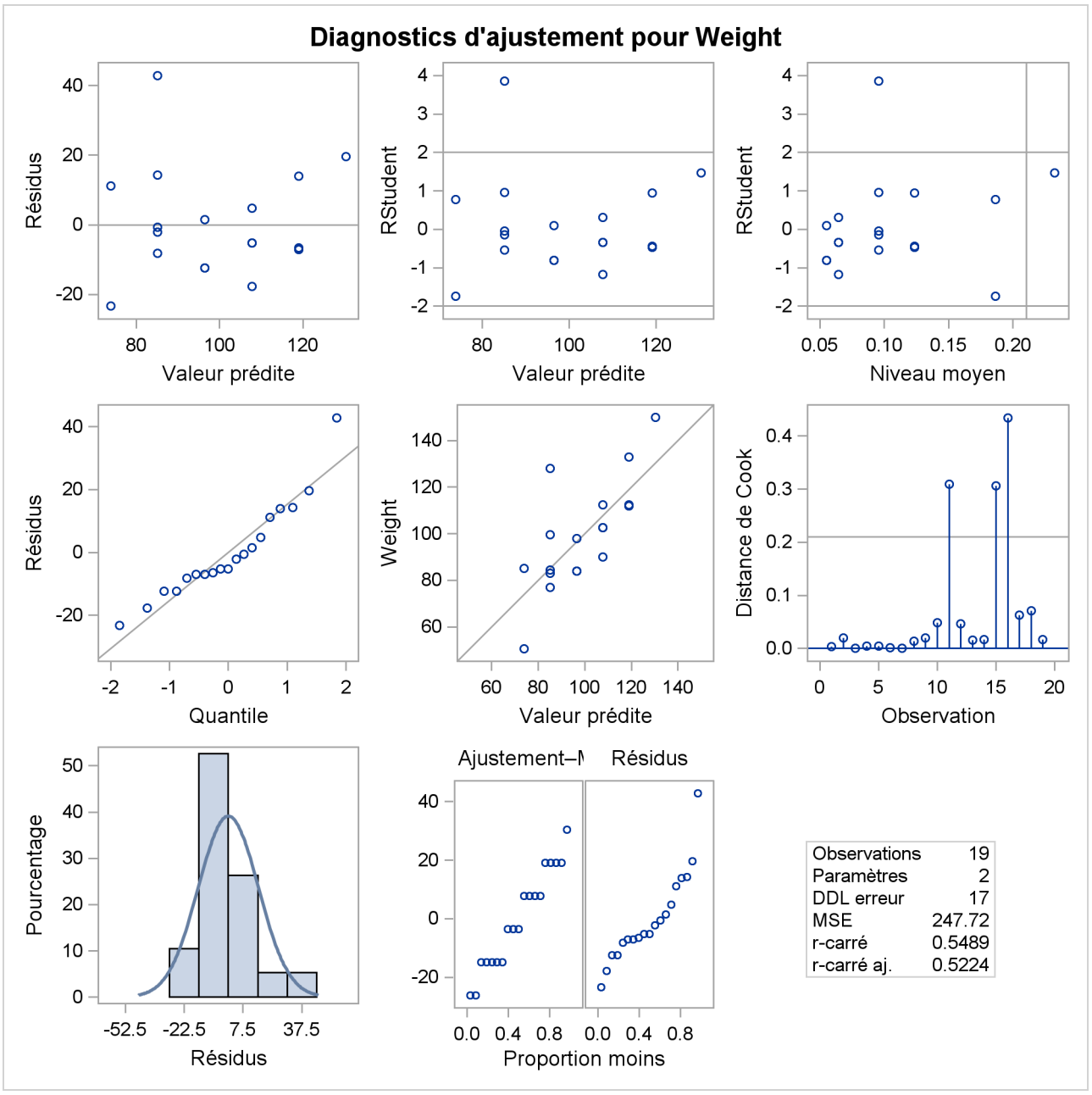


Illustration 12: *continued*

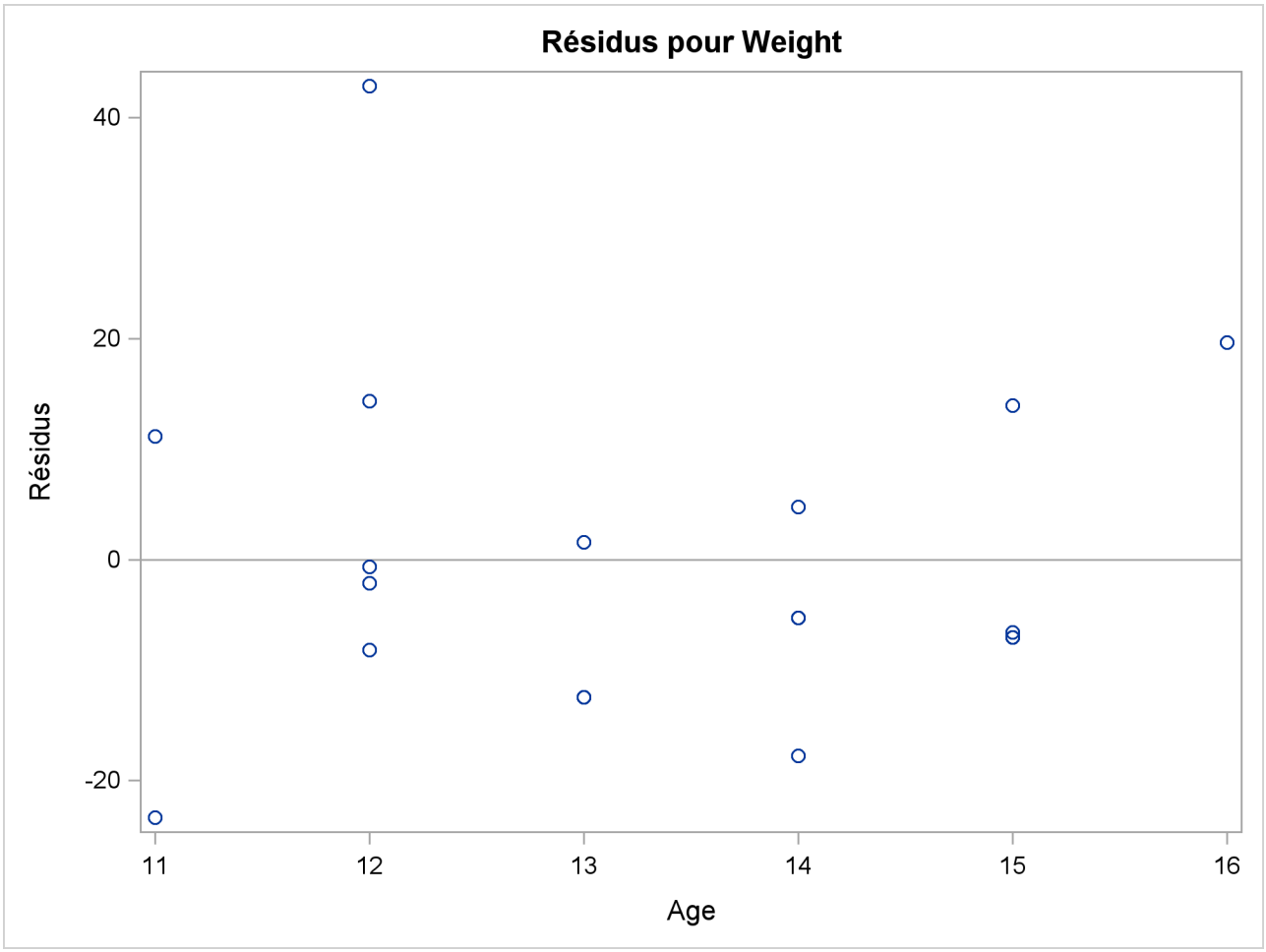


Illustration 12: *continued*

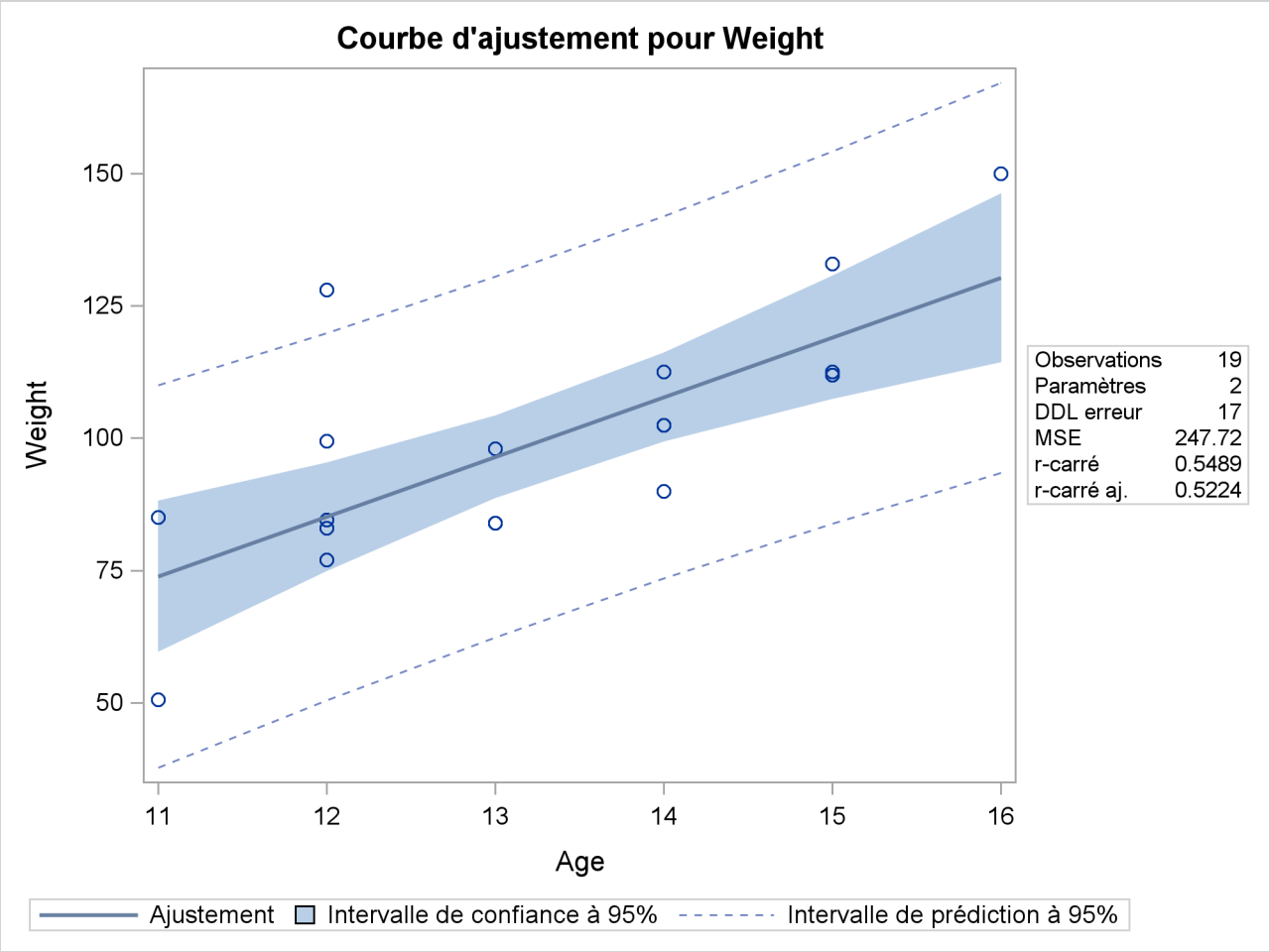


Illustration 13: style=journal, scale=0.4

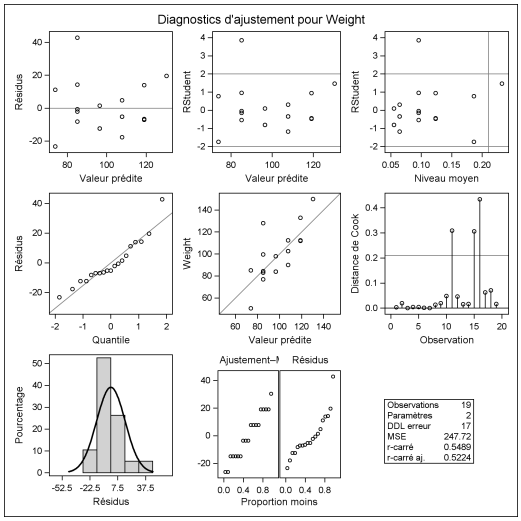


Illustration 13: *continued*

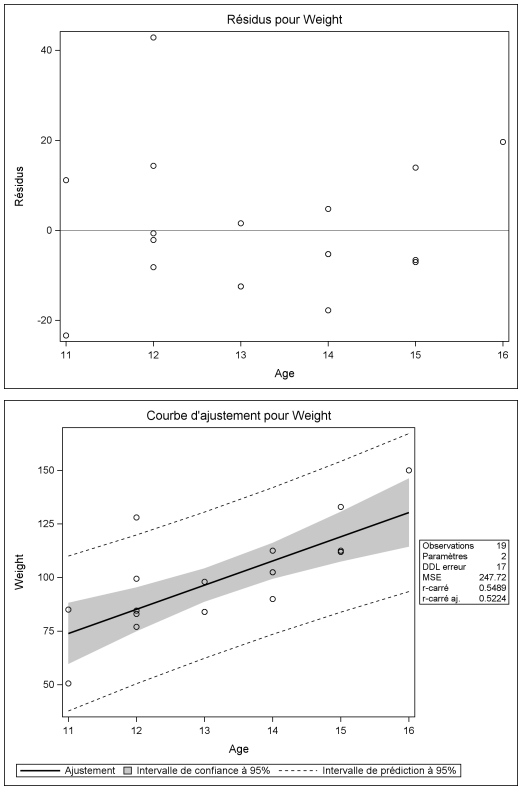


Illustration 14: width=2in

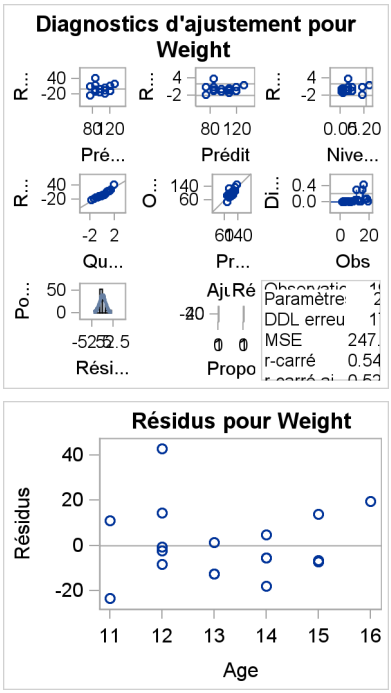


Illustration 14: *continued*

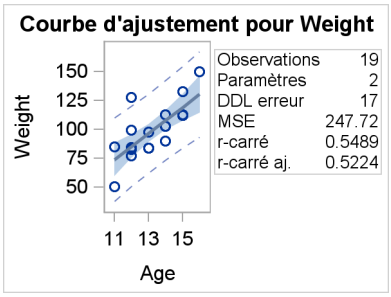


Illustration 15: dpi=100

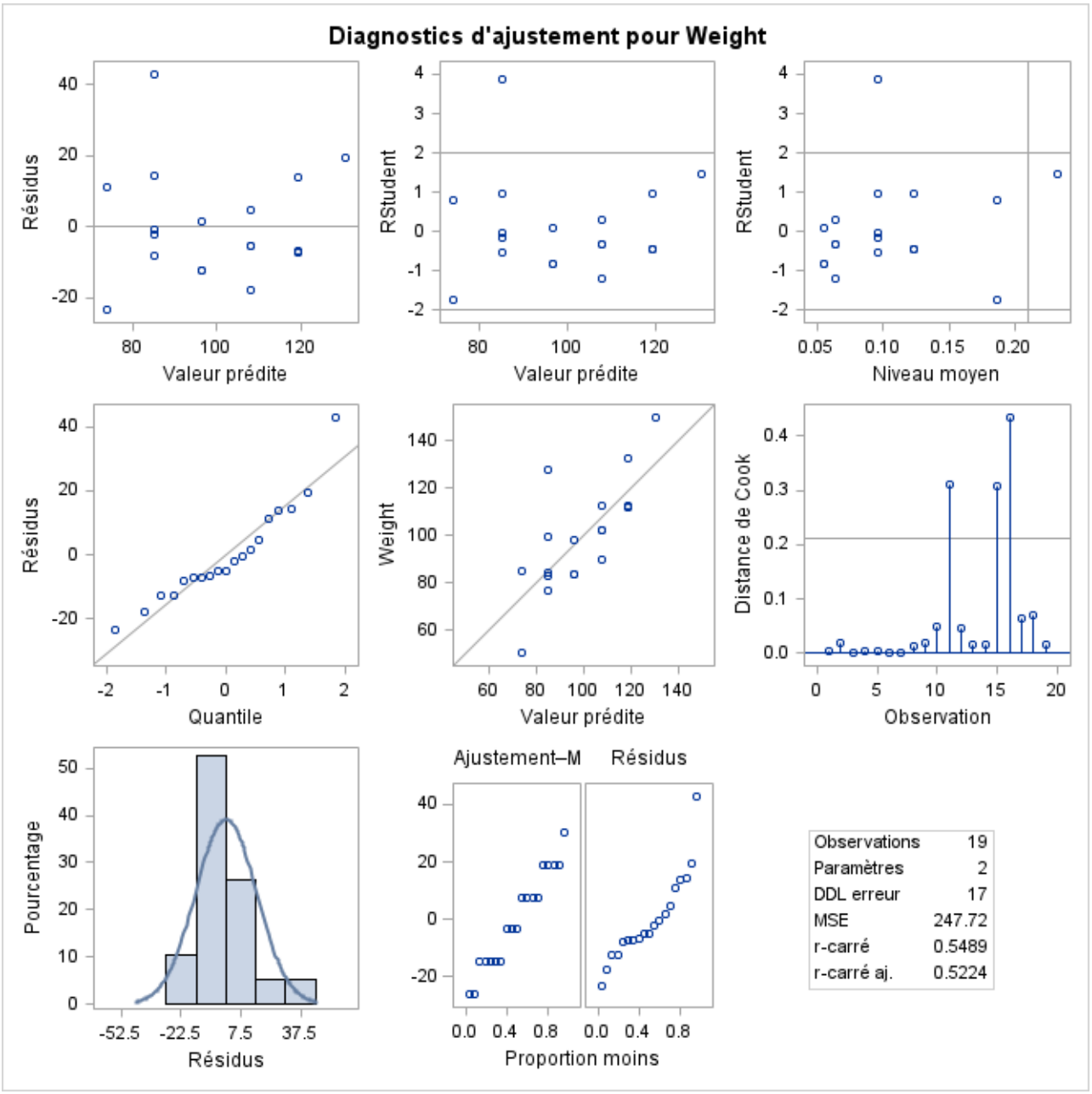


Illustration 15: *continued*

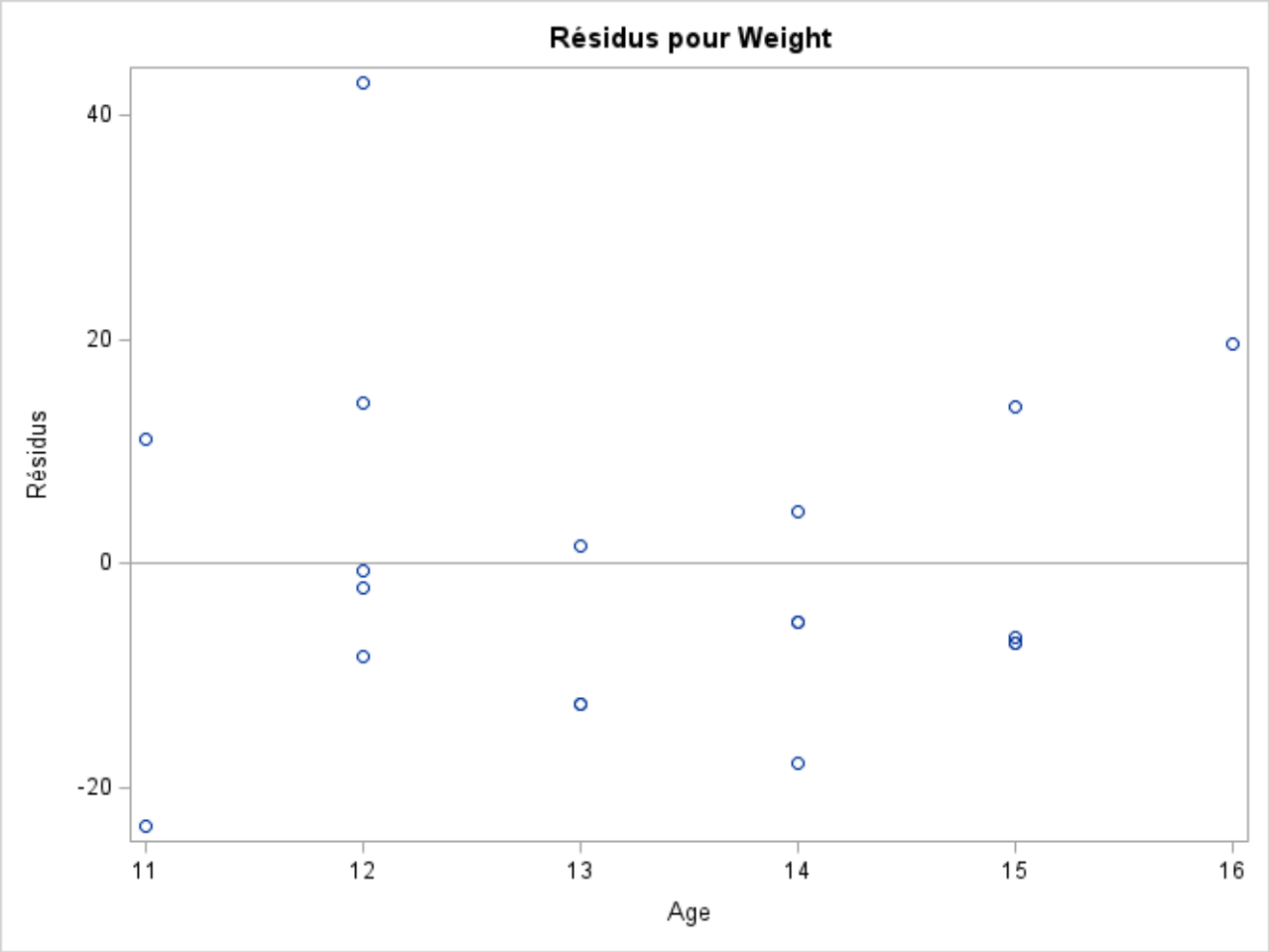


Illustration 15: *continued*

Illustration 16: height=2in

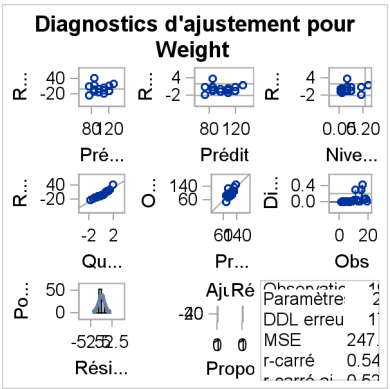
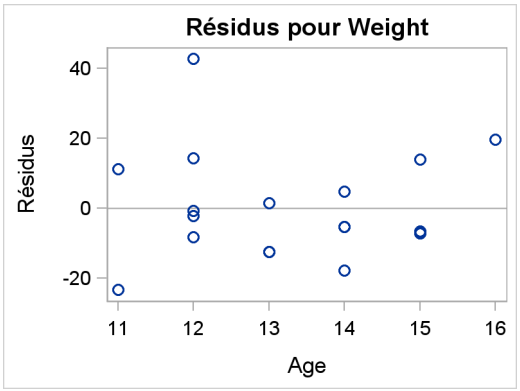


Illustration 16: *continued*



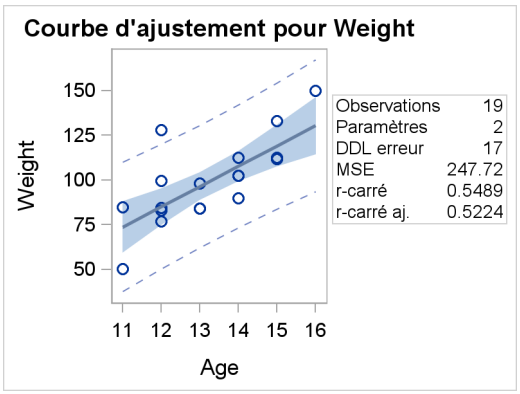


Illustration 17: style=brick

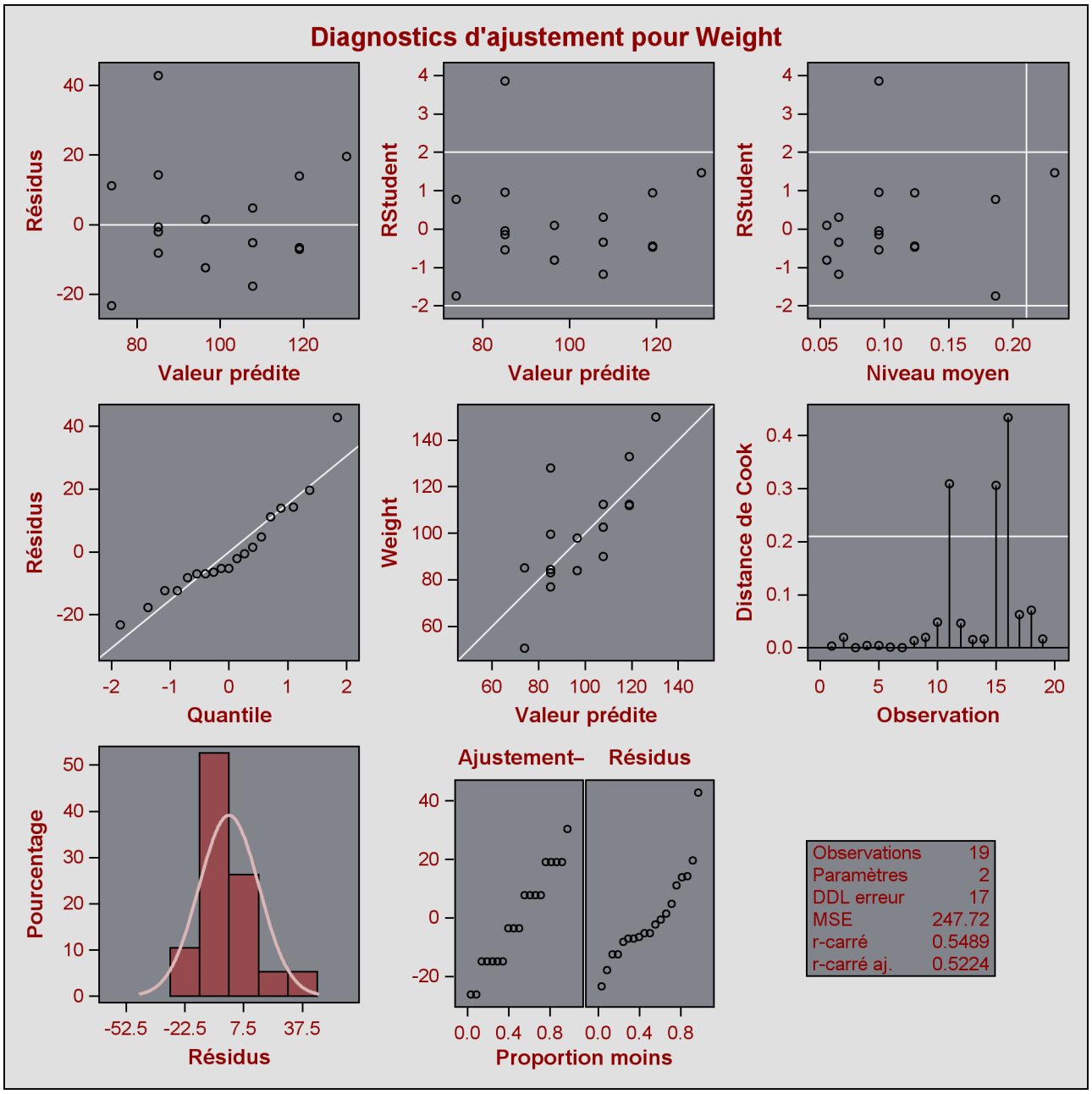


Illustration 17: *continued*

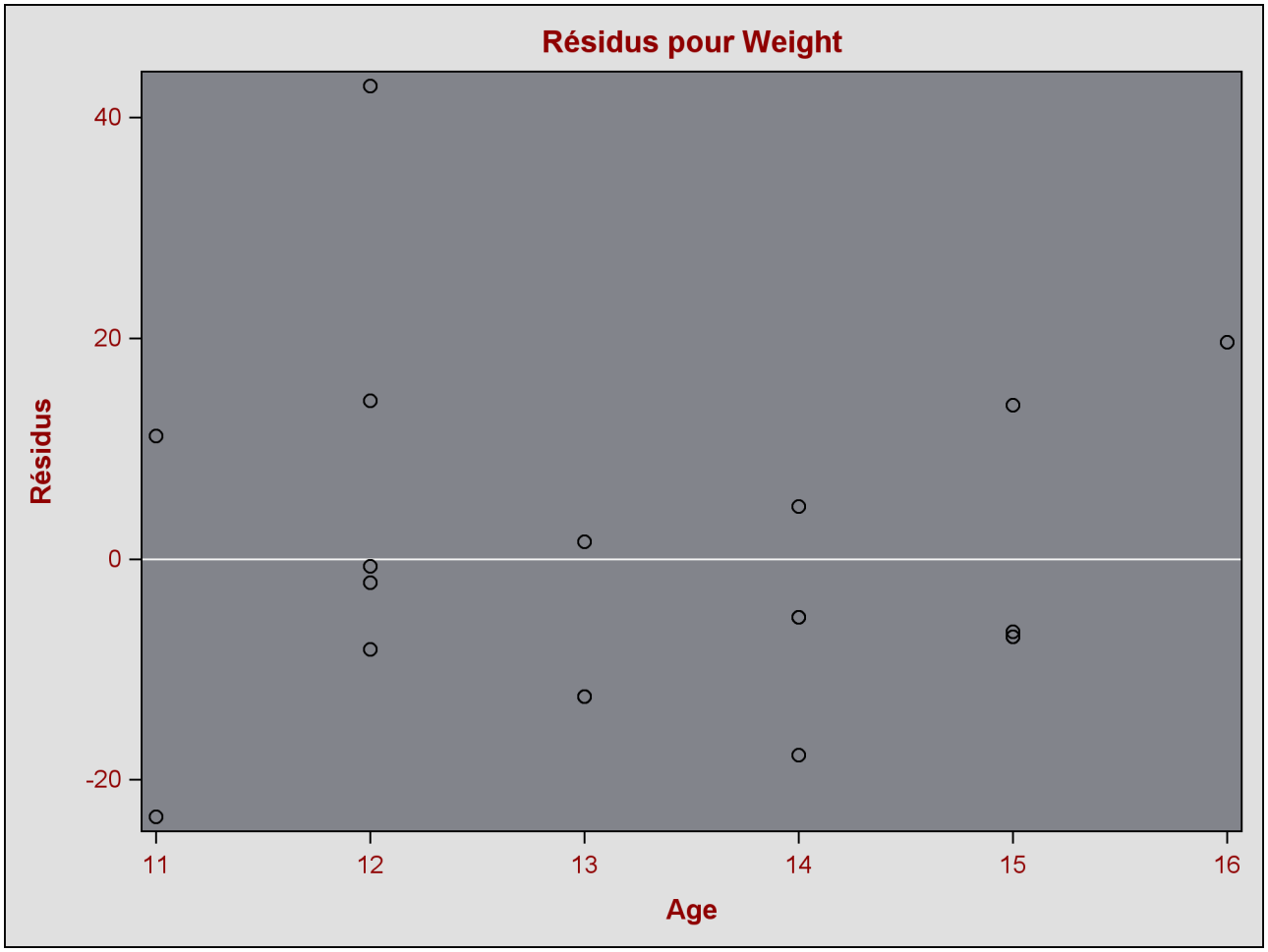


Illustration 17: *continued*

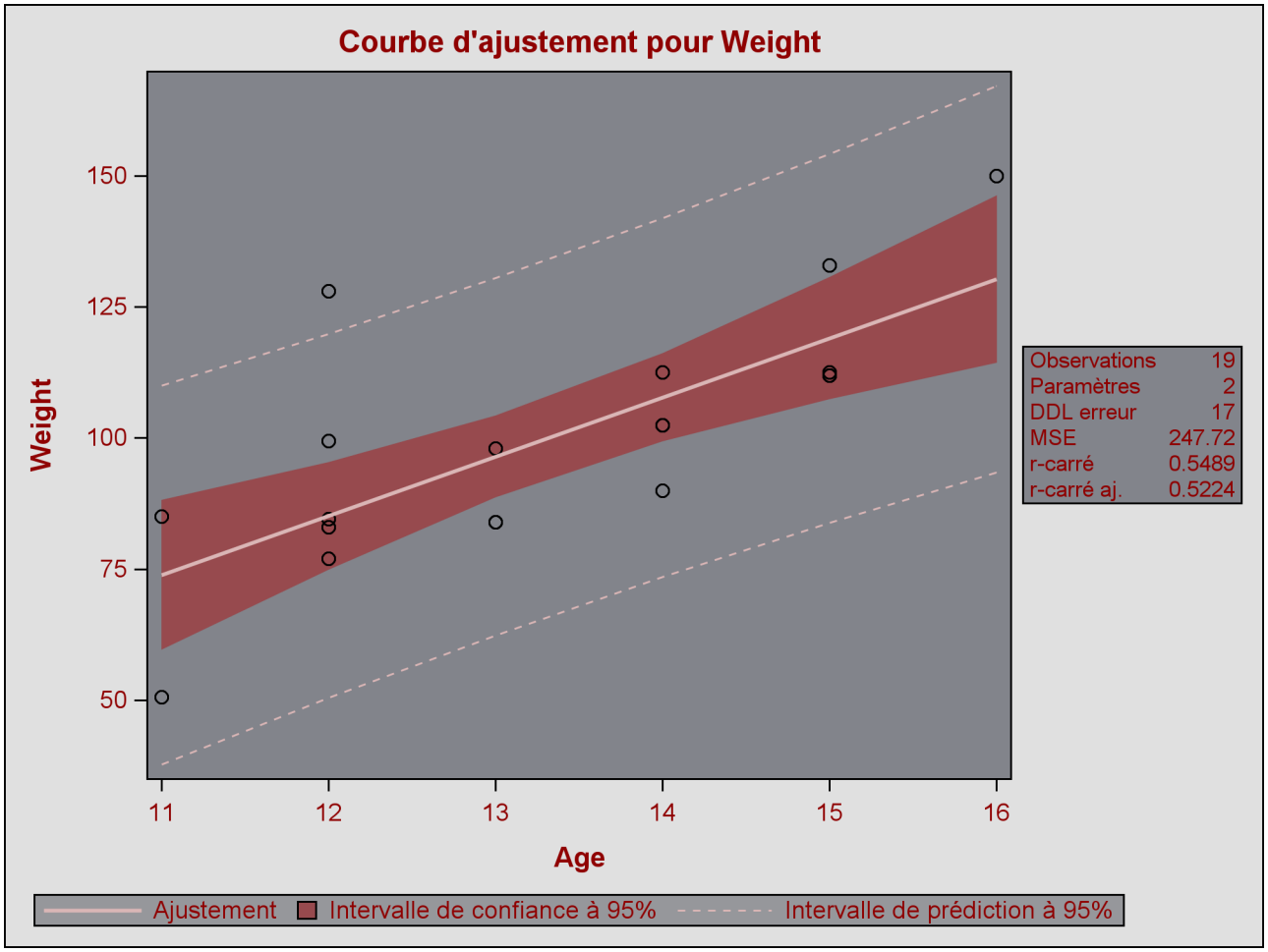


Illustration 18: Back to vanilla graphic

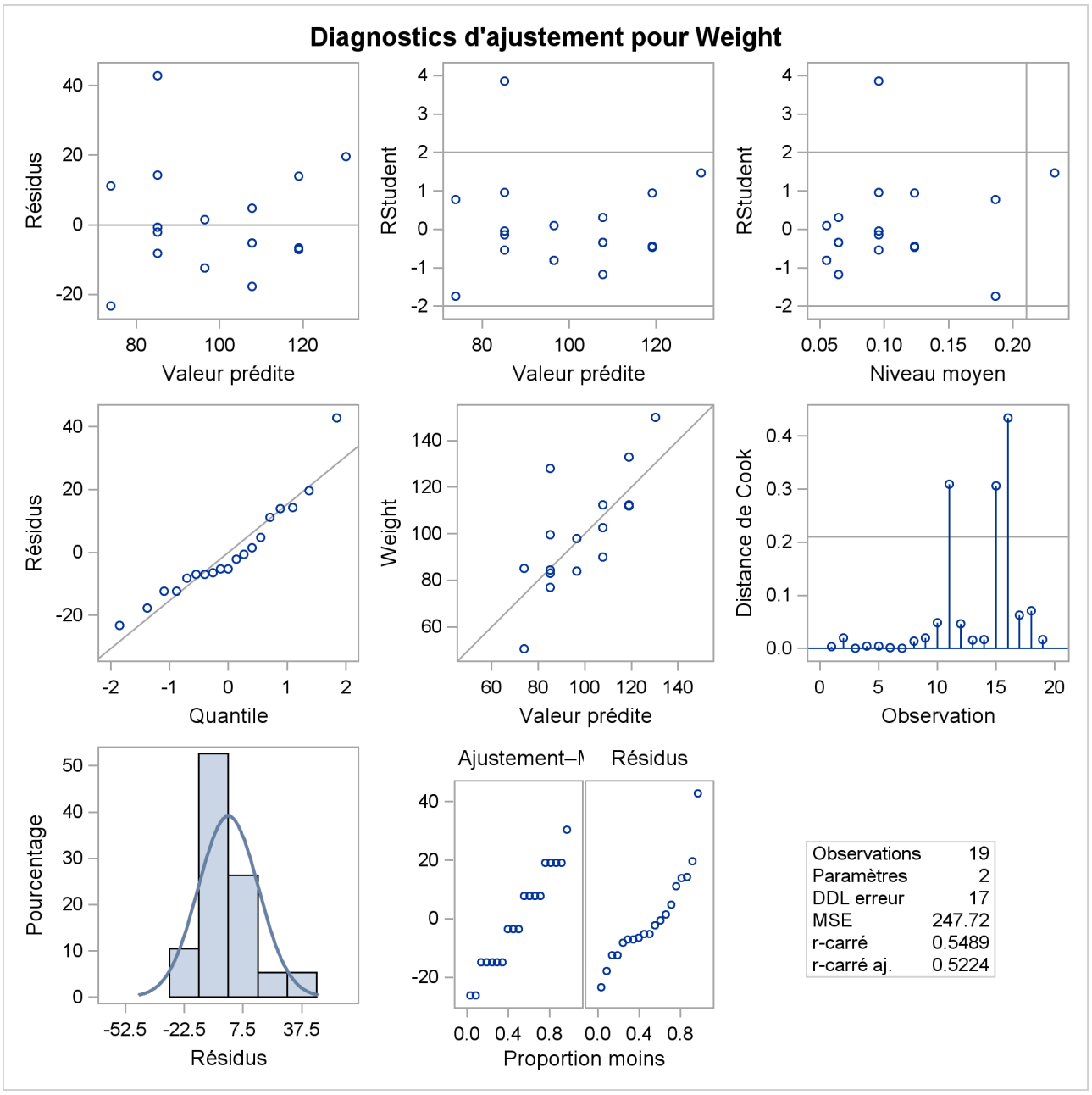


Illustration 18: *continued*

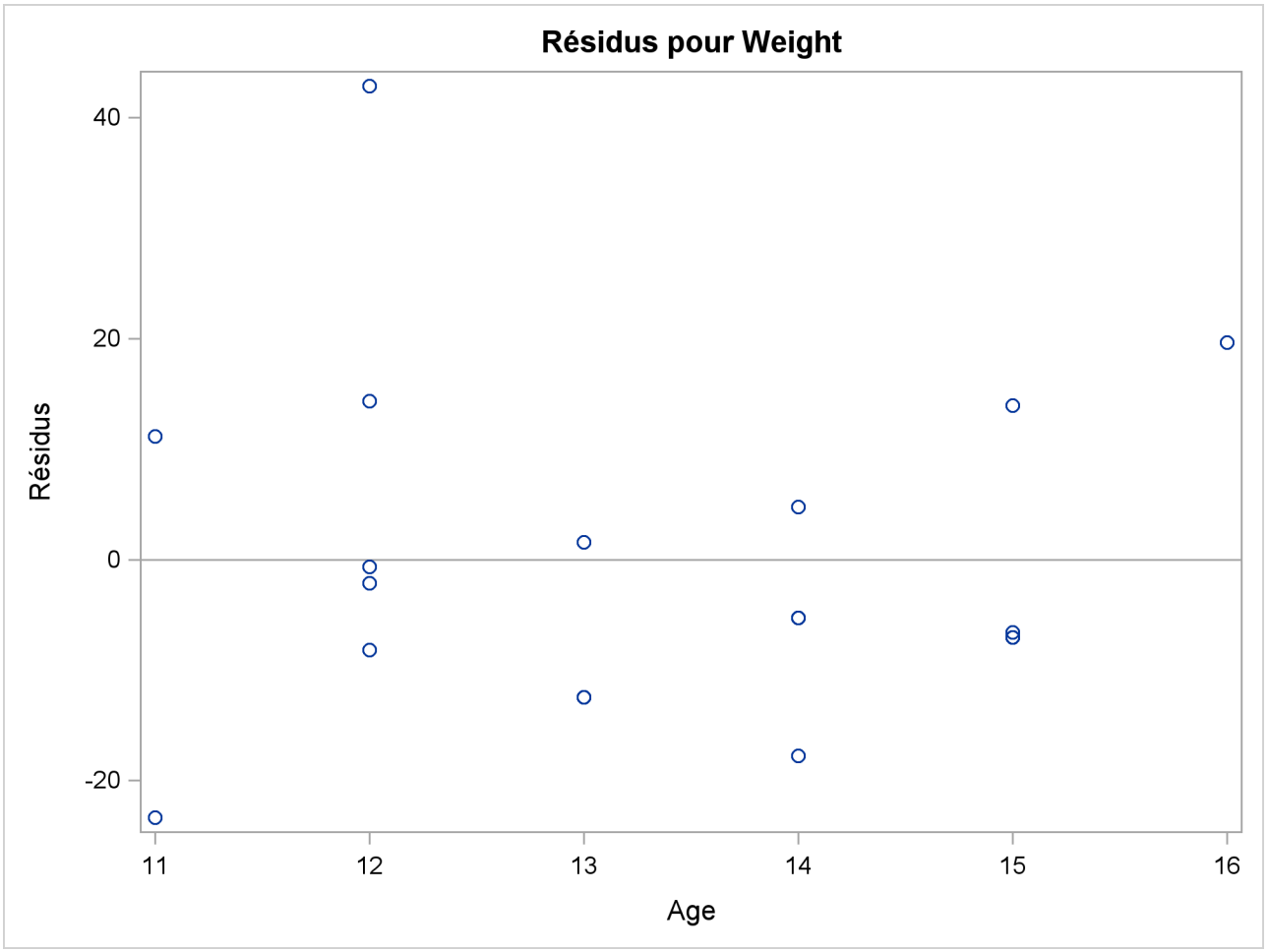
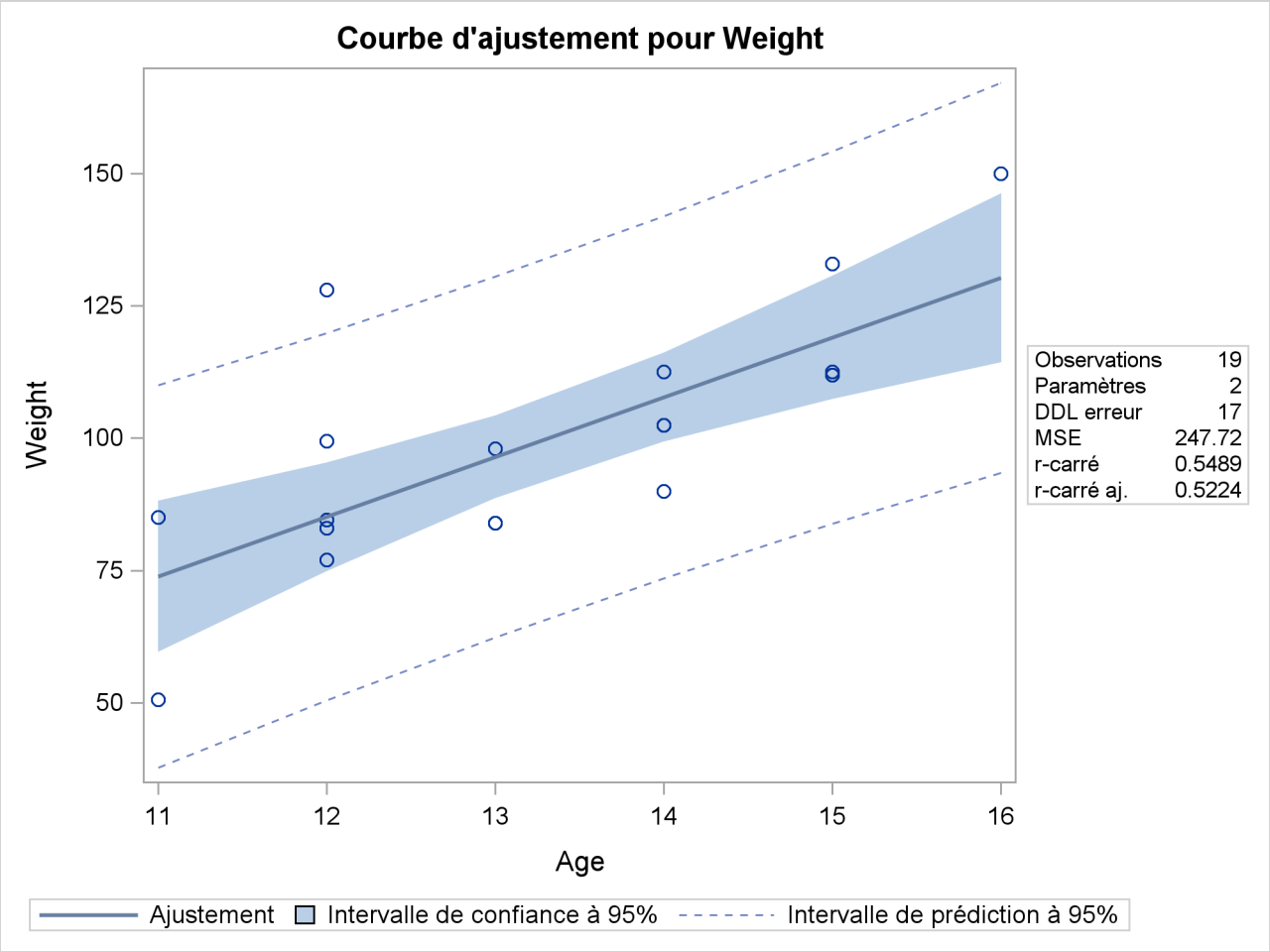


Illustration 18: *continued*




```
data Wine;
   input WineType $ VisitLength @@;
   datalines;
white  80 white  98 white 115 white  89 white 103
white  91 white 119 white  31 white 109 white  95

... more data lines ...

red   104 red    91 red   132 red    78 red   107
red   101 red    92
;

ods graphics on;
proc anova data=Wine;
   class WineType;
   model VisitLength = WineType;
run;
ods graphics off;
```

Illustration 19: Analysis of Variance for Visit Length

La procédure ANOVA

Informations sur les niveaux de classe		
Classe	**Niveaux**	**Valeurs**
WineType	2	red white

Nombre d'observations lues	42
Nombre d'observations utilisées	42

La procédure ANOVA

Variable dépendante : VisitLength

Source	DDL	Somme des carrés	Carré moyen	Valeur F	Pr > F
Modèle	1	225.40896	225.40896	0.47	0.4989
Erreur	40	19363.16247	484.07906		
Total sommes corrigées	41	19588.57143			

Illustration 20: Analysis of Variance for Visit Length

La procédure ANOVA

Variable dépendante : VisitLength

Source	DDL	Somme des carrés	Carré moyen	Valeur F	Pr > F
Modèle	1	225.40896	225.40896	0.47	0.4989
Erreur	40	19363.16247	484.07906		
Total sommes corrigées	41	19588.57143			

```
proc format;
   value $sex 'F' = 'Female' 'M' = 'Male';
data one;
   set sashelp.class;
   format sex $sex.;
run;

proc reg;
    model weight = height age;
run;
```

Illustration 21: Regression Analysis

Paramètres estimés

Variable	DDL	Valeur estimée des paramètres	Erreur type	Valeur du test t	Pr > |t|
Intercept	1	−141.22376	33.38309	−4.23	0.0006
Height	1	3.59703	0.90546	3.97	0.0011
Age	1	1.27839	3.11010	0.41	0.6865

Illustration 22: Regression Analysis

La procédure REG

Modèle : MODEL1

Variable dépendante : Weight

Nb d'observations lues	19
Nb d'obs. utilisées	19

Analyse de variance

Source	DDL	Somme des carrés	Moyenne quadratique	Valeur F	Pr > F
Modèle	2	7215.63710	3607.81855	27.23	<.0001
Erreur	16	2120.09974	132.50623		
Total sommes corrigées	18	9335.73684			

Root MSE	11.51114	**R carré**	0.7729
Moyenne dépendante	100.02632	**R car. ajust.**	0.7445
Coeff Var	11.50811		

Paramètres estimés

Variable	DDL	Valeur estimée des paramètres	Erreur type	Valeur du test t	Pr > |t|
Intercept	1	−141.22376	33.38309	−4.23	0.0006
Height	1	3.59703	0.90546	3.97	0.0011
Age	1	1.27839	3.11010	0.41	0.6865

Illustration 23: Graphs for Regression Analysis

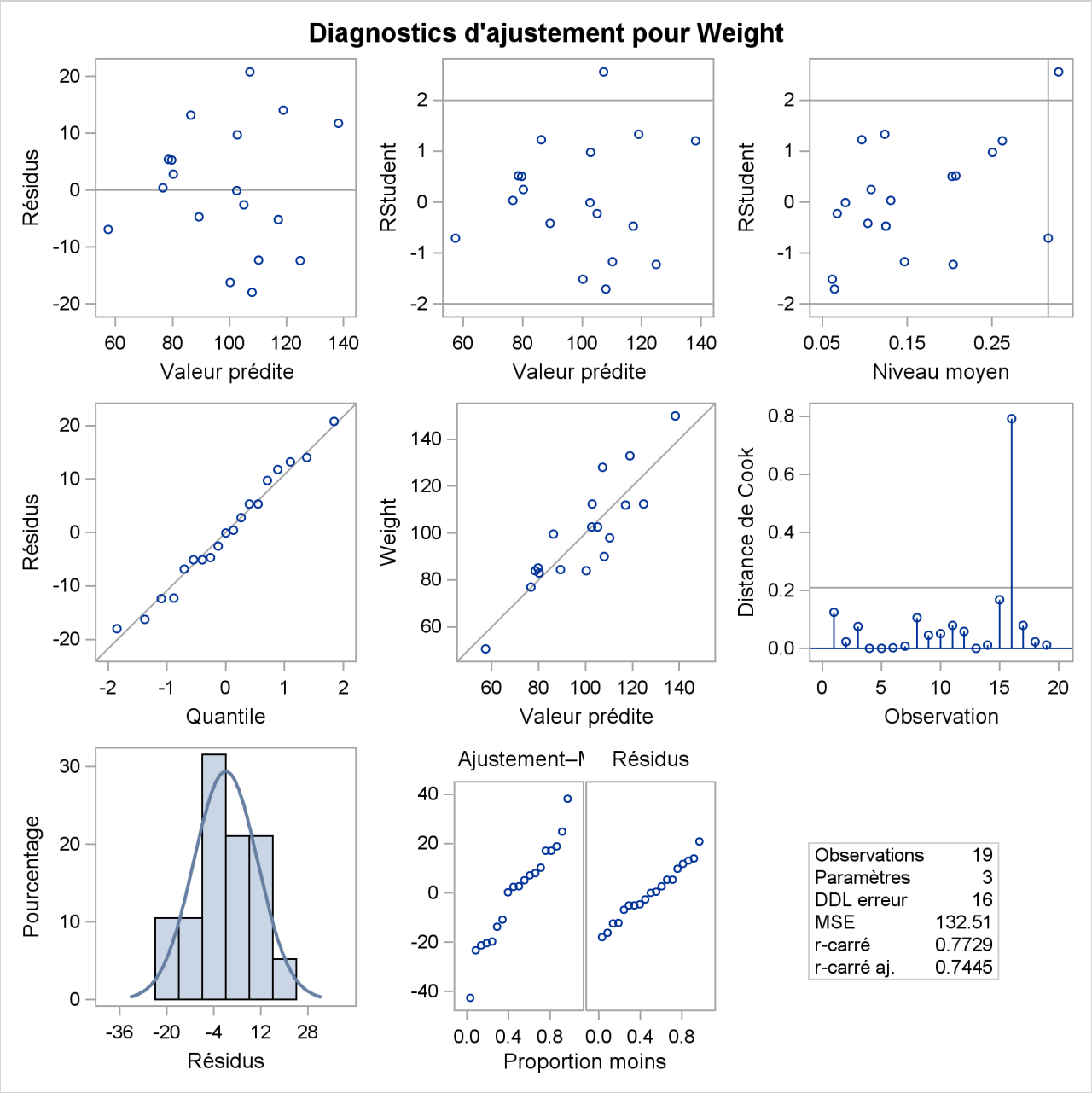
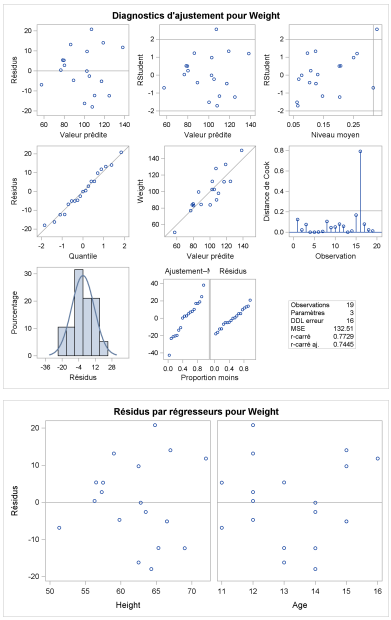


Illustration 23: *continued*

Some Text In this tutorial we'll create simple web browser using Python PyQt framework. As you may know PyQt is a set of Python bindings for Qt framework, and Qt (pronounced cute) is C++ framework used to create GUI-s. To be strict you can use Qt to develop programs without GUI too, but developing user interfaces is probably most common thing people do with this framework. Main benefit of Qt is that it allows.

- text one PyQt is a set of Python bindings for Qt PyQt is a set of Python bindings for Qt PyQt is a set of Python bindings for Qt

Illustration 24: Graphs for Regression Analysis



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- text two PyQt is a set of Python bindings for Qt PyQt is a set of Python bindings for Qt PyQt is a set of Python bindings for Qt

Illustration 25: Regression Analysis

La procédure REG

Modèle : MODEL1

Variable dépendante : Weight

Nb d'observations lues	19
Nb d'obs. utilisées	19

Analyse de variance					
Source	**DDL**	**Somme des carrés**	**Moyenne quadratique**	**Valeur F**	**Pr > F**
Modèle	2	7215.63710	3607.81855	27.23	<.0001
Erreur	16	2120.09974	132.50623		
Total sommes corrigées	18	9335.73684			

Root MSE	11.51114	**R carré**	0.7729
Moyenne dépendante	100.02632	**R car. ajust.**	0.7445
Coeff Var	11.50811		

Paramètres estimés					
Variable	**DDL**	**Valeur estimée des paramètres**	**Erreur type**	**Valeur du test t**	**Pr > |t|**
Intercept	1	−141.22376	33.38309	−4.23	0.0006
Height	1	3.59703	0.90546	3.97	0.0011
Age	1	1.27839	3.11010	0.41	0.6865

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- text three PyQt is a set of Python bindings for Qt PyQt is a set of Python bindings for Qt PyQt is a set of Python bindings for Qt

Some more Text. In this tutorial we'll create simple web browser using Python PyQt framework. As you may know PyQt is a set of Python bindings for Qt framework, and Qt (pronounced cute) is C++ framework used to create GUI-s. To be strict you can use Qt to develop programs without GUI too, but developing user interfaces is probably most common thing people do with this framework. Main benefit of Qt is that it allows.