6/12 → 3/6

Problem (circle) : R1 / R2 / A1 / A2 Group number 21

1. Formatting: 0.75/1

all margins 2.5cm	**informative title**
12 pt size	member names on all pgs
no raw R code or output	all pages numbered
max **7** pages	no blurry plots (**NOT png**)

1/1 2. Introduction/Background:

brief statement of scientific question

all variables defined

1.75/2 3. EDA:

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical

Don't need boxplots

0.5/1 4. Model fitting: why do multiple 1-way instead of multi-way?

over-parametrized as written

define model mathematically → multi-way

state how model fitted (ie, LS)

CLEARLY describe how modelselected

define all terms

(*) Anova tables?

5. Model assessment: what are the 'groups' here?

0.25/2

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):

qq normal plot of residuals, individual (NOT the boxplots)

residuals vs. fitted

(*) Don't need SS formulas

4.25/8

you have too many coefs

0.25/1

unclear

6. Write out final estimated model **mathematically**

hat on response variable max **2 sig digits** on coefs

0.75/1

7. Plots:

label size (not too small) informative captions

placement **NOT BLURRY**

0.25/1

8. Conclusions

recap analysis state and interpret not correct

main findings

0.5/1

logic hard to follow spell check

9. Overall presentation (clarity of explanations and language, appropriate citations / references) :

poor satisfactory good excellent

-cite primary refs (not [2])

1.75/4

5.25/12 ~~2.625/6~~

Problem (circle) : R1 / R2 / A1 / A2 Group number 22

0.5/1

1. Formatting:

all margins 2.5cm — **informative title**

12 pt size — member names on all pgs

no raw R code or output — all pages numbered

max **7** pages — no blurry plots (**NOT png**)

0.5/1

2. Introduction/Background:

brief statement of scientific question — not entirely correct

all variables defined

1/2

3. EDA:

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical } incomplete

0.25/2

4. Model fitting: Table 1 incomplete

define model mathematically

state how model fitted (ie, LS)

CLEARLY describe how modelselected

define all terms

0.5/2

5. Model assessment:

CLEARLY state model assumptions: assuming 1+3?

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):

SQUARE- qq normal plot of residuals, } interpret (don't just conclude)

residuals vs. fitted

interpretation not entirely correct

2.75/8

0.75/1 - Table 2 confusing

6. Write out final estimated model **mathematically**

hat on response variable max **2 sig digits** on coefs

1/1 7. Plots: (incomplete)

label size (not too small) informative captions

placement **NOT BLURRY**

0.25/1 8. Conclusions

recap analysis state and interpret not correct

main findings

0.5/1 9. Overall presentation (clarity of explanations and language, appropriate citations / references) : logic hard to follow

poor satisfactory good excellent

- no refs
- rather incomplete

2.5/4

(*) pas nécessaire à re-faire

Problem (circle) : R1 / R2 / A1 / A2 Group number 23

10/12 → 5/6 → 6/6

1. Formatting:

1/1

all margins 2.5cm	**informative title**
12 pt size	member names on all pgs
no raw R code or output	all pages numbered
max **7** pages	no blurry plots (**NOT png**)

1/1

2. Introduction/Background:

brief statement of scientific question

all variables defined (sat + light only implicitly defined)

2/2

3. EDA:

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical

1.25/2

4. Model fitting: over-parametrized as written

define model mathematically

state how model fitted (ie, LS)

CLEARLY describe how modelselected

define all terms $x, \mu, \alpha, \beta, \gamma, i, j, k, \epsilon$

1.25/2

5. Model assessment: hyps. évaluées (pas vérifiées)

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):

SQUARE qq normal plot of residuals,

residuals vs. fitted

) expliquer + interpreter (pas seulement en conclure)

6.5/9

0.75/1

6. Write out final estimated model **mathematically**

hat on response variable max **2 sig digits** on coefs

^ aussi sur les coefs estimés

1/1

7. Plots:

label size (not too small) informative captions

placement **NOT BLURRY**

0.75/1

8. Conclusions

recap analysis state and interpret not entirely correct

main findings

1/1

9. Overall presentation (clarity of explanations and language, appropriate citations / references) :

poor satisfactory good excellent

3.5/4

5.25/12 → 2.625/6

Problem (circle) : R1 / R2 / A1 / A2 Group number 25

1. Formatting:

1/1

all margins 2.5cm	**informative title**
12 pt size	member names on all pgs
no raw R code or output	all pages numbered
max **7** pages	no blurry plots (**NOT png**)

2. Introduction/Background:

1/1

brief statement of scientific question

all variables defined

1.25/2 3. EDA: -4.5 goes in EDA

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical

EMM not defined

0.5/2 4. Model fitting: over-parametrized

as written no ^ with ϵ | very incomplete

define model mathematically

state how model fitted (ie, LS)

CLEARLY describe how modelselected

define all terms γ_{ijk}, ϵ

- The model you describe is not '2-way'

5. Model assessment: not done?

0/2

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):

qq normal plot of residuals,

residuals vs. fitted

3.75/8

0/1 not done?

6. Write out final estimated model **mathematically**

hat on response variable max **2 sig digits** on coefs

0.5/1

7. Plots:

label size (not too small) informative captions

placement **NOT BLURRY**

- plots not explained

0.5/1

8. Conclusions

recap analysis state and interpret not entirely correct

main findings

0.5/1

9. Overall presentation (clarity of explanations and language, appropriate citations / references):

poor satisfactory good excellent

- cite primary refs (not statology, jim, etc.)
- use words, there are too many bullet points
- no anova tables

1.5/4

7/12 → 3.5/6

Problem (circle) : R1 / R2 / A1 / A2 Group number 26

1. Formatting:

1/1

all margins 2.5cm	**informative title**
12 pt size	member names on all pgs
no raw R code or output	all pages numbered
max **7** pages	no blurry plots (**NOT png**)

0.75/1 2. Introduction/Background:

- brief statement of scientific question (not entirely correct)
- all variables defined

1.25/2 3. EDA: (including categorical)

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical

error bars? somewhat unclear

0.75/2 4. Model fitting: over-parametrized as written

- define model mathematically
- state how model fitted (ie, LS)
- CLEARLY describe how modelselected
- define all terms

- you need to treat the predictors as FACTORS
- you have treated them as numeric (see DF in anova table)

1/2 5. Model assessment:

Don't 'confirm the validity', assess not 'verify'

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated (indep = uncorr for normal dist)
4. errors are normally distributed

carry out assessment (graphics):

SQUARE - qq normal plot of residuals,

residuals vs. fitted - interpretation incomplete

not 'discredit relevance' - pvalue is obtained

EXPLAIN plots + interpret using the assumptions

4.75

0.5/1

not +e

6. Write out final estimated model **mathematically**

hat on response variable max **2 sig digits** on coefs

Don't need stuff below Eq. 5

1/1

7. Plots:

label size (not too small) informative captions

placement **NOT BLURRY**

0.25/1

8. Conclusions

recap analysis (+EDA) state and interpret main findings

logic hard to follow + fitted model incorrect

0.5/1

9. Overall presentation (clarity of explanations and language, appropriate citations / references) :

poor satisfactory good excellent

2.25/4

8.25/12 → 4.125/6

Problem (circle) : R1 / R2 / A1 / A2 Group number 27

1. Formatting:

0.5/1

- all margins 2.5cm
- 12 pt size
- **no raw R code or output**
- max **7** pages
- **informative title**
- member names on all pgs
- all pages numbered
- no blurry plots (**NOT png**)

2. Introduction/Background:

1/1

- brief statement of scientific question
- all variables defined

1.75/2

3. EDA:

- univariate numerical
- bivariate numerical (cor)
- univariate graphical
- bivariate graphical – interaction plots

1.25/2

4. Model fitting:

- define model mathematically – use indicators
- state how model fitted (ie, LS)
- CLEARLY describe how modelselected
- define all terms indicators

Anova Table(s) ?

1/2

5. Model assessment:

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):

- SQUARE qq normal plot of residuals, interpret plot (don't just conclude)
- residuals vs. fitted

5.5/8

0.75 use indicators + Y in words

6. Write out final estimated model **mathematically**

hat on response variable max **2 sig digits** on coefs

1/1

7. Plots:

label size (not too small) informative captions

placement **NOT BLURRY**

0.25/1

8. Conclusions

recap analysis (+ EDA) state and interpret not completely

main findings

0.75/1

9. Overall presentation (clarity of explanations and language, appropriate citations / references) :

poor satisfactory good excellent

2.75/4

8/12 → 4/6

Problem (circle) : R1 / R2 / A1 / A2 Group number 23

1. Formatting: 1/1

all margins 2.5cm	**informative title**
12 pt size	member names on all pgs
no raw R code or output	all pages numbered
max **7** pages	no blurry plots (**NOT png**)

0.75/1 2. Introduction/Background:

brief statement of scientific question (not entirely correct)

all variables defined

Lightness not lightning

1/2 3. EDA:

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical

label factors in design plot

1.25/2 4. Model fitting: - not true that all 2-way interaction model is saturated

define model mathematically

state how model fitted (ie, LS)

CLEARLY describe how modelselected

define all terms - Tukey

- why only 1 plot?
- Model 2 anova table

1/2 5. Model assessment:

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):

qq normal plot of residuals,

residuals vs. fitted

explain plots and interpret, don't just conclude

5/8

(ok - but check interaction model

1/1 6. Write out final estimated model **mathematically**

hat on response variable max **2 sig digits** on coefs

0.75/1 7. Plots:

label size (not too small) informative captions

placement **NOT BLURRY**

0.5/1 8. Conclusions

recap analysis (+EDA) a bit more

state and interpret main findings

0.75/1 9. Overall presentation (clarity of explanations and language, appropriate citations / references) : spell check

poor satisfactory / good excellent

3/4

7.25/12 → 3.625/6

Problem (circle) : R1 / R2 / A1 / A2 Group number 29

1. Formatting:

0.75/1

all margins 2.5cm	**informative title**
12 pt size	member names on all pgs
no raw R code or output	all pages numbered
max **7** pages	no blurry plots (**NOT png**)

- too many digits

2. Introduction/Background:

1/1

brief statement of scientific question

all variables defined

1.75/2

3. EDA: (incomplete)

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical

1/2

4. Model fitting: | incomplete

define model mathematically

state how model fitted (ie, LS)

CLEARLY describe how modelselected

define all terms

- Don't need the anova formulas in Sec 5
- Table 1 is not '2-way' - There are 3 factors

0.75/2

5. Model assessment:

CLEARLY state model assumptions:

1. errors have mean 0 – resids automatically have 0 mean not necessarily errors
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):

SQUARE qq normal plot of residuals,

residuals vs. fitted – to evaluate homoscedasticity

Explain and interpret plots

5.25/8

0/1 not done?

6. Write out final estimated model **mathematically**

hat on response variable max **2 sig digits** on coefs

1/1

7. Plots:

label size (not too small) informative captions

placement **NOT BLURRY**

0.5/1

8. Conclusions - Too vague and ignored not done

recap analysis state and interpret

main findings

0.5/1

9. Overall presentation (clarity of explanations and language, appropriate citations / references) :

poor satisfactory good excellent

- somewhat incomplete - logic a little hard to follow

2/4

6/12 → 3/6

Problem (circle) : R1 / R2 / A1 / A2 Group number 30

0.25/1

1. Formatting:

all margins 2.5cm	**informative title**
12 pt size	member names on all pgs
no raw R code or output	all pages numbered
max **7** pages	no blurry plots (**NOT png**)

0.75/1

2. Introduction/Background:

brief statement of scientific question — not entirely correct

all variables defined

1/2

3. EDA: Exploratory — mean etc not useful for categorical vars

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical - statified boxplots/interaction plots

- Don't need graph 4

0.5/2

4. Model fitting:

define model mathematically — [appears to be over-parametrized as written. — incorrectly specified

state how model fitted (ie, LS)

CLEARLY describe how modelselected — very incomplete

define all terms

anova tables?

5. Model assessment:

.25/2

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):

qq normal plot of residuals, } explain + interpret (don't just conclude)

residuals vs. fitted

3.75/8

(written twice)

1/1

6. Write out final estimated model **mathematically**

hat on response variable max **2 sig digits** on coefs

0.75/1

7. Plots:

label size (not too small) informative captions

placement **NOT BLURRY**

0.25/1

8. Conclusions

recap analysis state and interpret main findings not correct

0.25/1

9. Overall presentation (clarity of explanations and language, appropriate citations / references) :

poor satisfactory good excellent

- no refs
- logic hard to follow
- very incomplete
- use words not bullet points

2.25/4

7.5/12 → 3.75/6

Problem (circle) : R1 / R2 / A1 / A2 Group number 33

0.75/1

1. Formatting:

all margins 2.5cm	**informative title**
12 pt size	member names on all pgs
no raw R code or output	all pages numbered
max **7** pages	no blurry plots (**NOT png**)

model specifications under table 3

1/1

2. Introduction/Background:

brief statement of scientific question

all variables defined

1.25/2

3. EDA: - How are the dists 'nearly identical' when the centers are apparently different?

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical

include a table

0.75/2

4. Model fitting: stepAIC is a function not a 'framework'

define model mathematically - BEFORE fitting

state how model fitted (ie, LS)

CLEARLY describe how modelselected

- write all hyp tests mathematically

define all terms

- Don't need formulas for SS

- Where is illumination in Table 1? If interaction should keep main effect. Also most DF wrong and p=0.00 wrong

1/2

5. Model assessment:

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):

SQUARE - qq normal plot of residuals,

residuals vs. fitted ← Explain clearly, then correctly interpret plots

4.75/8

- Don't use (log) actual illum, it is a separate outcome

1/1 6. Write out final estimated model **mathematically**

hat on response variable max **2 sig digits** on coefs

0.75/1 7. Plots:

label size (not too small) informative captions

placement **NOT BLURRY**

0.25/1 8. Conclusions

recap analysis you don't measure model precision state and interpret main findings vague

0.75/1 9. Overall presentation (clarity of explanations and language, appropriate citations / references) :

poor satisfactory good excellent

- Square QQ plots
- only use the word 'significant' in the context of a statistical test (not colloquial use)

2.75/4

5.5/12 → 2.75/6

Problem (circle) : R1 / R2 / A1 / A2 Group number 34

1. Formatting:

1/1

all margins 2.5cm	**informative title**
12 pt size	member names on all pgs
no raw R code or output	all pages numbered
max **7** pages	no blurry plots (**NOT png**)

0.75/1

2. Introduction/Background:

brief statement of scientific question (not quite correct)

all variables defined

use the term 'hue' rather than illuminant

0.75/2

3. EDA:

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical

incomplete

0.5/2

4. Model fitting:

define model mathematically Before fitting

state how model fitted (ie, LS)

CLEARLY describe how modelselected

define all terms

0.75/2

5. Model assessment: don't 'confirm validity'

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):

SQUARE qq normal plot of residuals,

residuals vs. fitted

Explain and interpret plots, don't just conclude

3.75/8

0/1 not done?

6. Write out final estimated model **mathematically**

hat on response variable max **2 sig digits** on coefs

1/1

7. Plots:

label size (not too small) informative captions

placement **NOT BLURRY**

0.25/1

8. Conclusions

recap analysis state and interpret not correct

main findings

0.5/1

9. Overall presentation (clarity of explanations and language, appropriate citations / references) : logic sometimes hard to follow

poor satisfactory good excellent

- some statement overly vague
- cannot do F-test with 3-way interaction because the model is saturated so there are no error df

1.75/4

8.25/12 → 4.125/6

Problem (circle) : R1 / R2 / A1 / A2 Group number 35

1. Formatting:

all margins 2.5cm	**informative title**
12 pt size	member names on all pgs
no raw R code or output	all pages numbered
max **7** pages	no blurry plots (**NOT png**)

1/1

2. Introduction/Background:

brief statement of scientific question

all variables defined

1/1

3. EDA:

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical

– incomplete

0.75/2

4. Model fitting:

define model mathematically

state how model fitted (ie, LS)

CLEARLY describe how modelselected

define all terms

– not 2-way anova, there are more than 2 factors

– Don't need SS formulas

1.75/2

5. Model assessment:

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):

qq normal plot of residuals,

residuals vs. fitted

First explain plots, then interpret, then conclude

1/2

5.5/8

make sure you put the selected model

0.75/1 6. Write out final estimated model **mathematically**

hat on response variable max **2 sig digits** on coefs

4/1 7. Plots:

label size (not too small) informative captions

placement **NOT BLURRY**

0.25/1 8. Conclusions verified?

recap analysis (+ EDA) state and interpret not completely correct

main findings

0.5/1 9. Overall presentation (clarity of explanations and language, appropriate citations / references) : spell/grammar check

poor satisfactory good excellent

- square QQ plots
- use more paragraphing - in particular, pages 4, 6 + conclusion are difficult to follow

2.5/4

9/12 → 4.5/6

Problem (circle) : R1 / R2 / A1 / A2 Group number 40

1. Formatting: 1/1

all margins 2.5cm	**informative title**
12 pt size	member names on all pgs
no raw R code or output	all pages numbered
max **7** pages	no blurry plots (**NOT png**)

2. Introduction/Background: 1/1

brief statement of scientific question (not entirely correct)

all variables defined

3. EDA: 2/2 (Figures) 1, 2, 6, 7, 8 are Tables

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical

4. Model fitting: 1.25/2 over-parametrized as written

define model mathematically

state how model fitted (ie, LS)

CLEARLY describe how modelselected

define all terms

6c - Cannot do F-tests: This is a saturated model so no error df

5. Model assessment: 1.25/2

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):

qq normal plot of residuals,

residuals vs. fitted

needs clearer explanation and interpretation

6.5/8

0.5/1 not explicitly done - what are the coefs for the final selected model (no interactions)

6. Write out final estimated model **mathematically**

hat on response variable max **2 sig digits** on coefs

0.5/1 Figure 9a confusing

7. Plots:

label size (not too small) informative captions

placement **NOT BLURRY**

0.5/1 not 'confirm'

8. Conclusions

recap analysis (+EDA) state and interpret not correct

main findings

0.5/1 a little hard to follow

9. Overall presentation (clarity of explanations and language, appropriate citations / references) :

poor satisfactory good excellent

- no refs
- Several vague statements: for example 'homoscedasticity... maintains the reliability of statistical inferences' - What does this mean? How so? Hint: it's an assumption for a valid F-test (otherwise the 'p-value' is meaningless)

2.5/4

9.5/12 → 4.75/6

Problem (circle) : R1 / R2 / A1 / A2 Group number 92

1. Formatting:

1/1

all margins 2.5cm	**informative title**
12 pt size	member names on all pgs
no raw R code or output	all pages numbered
max **7** pages	no blurry plots (**NOT png**)

1/1 2. Introduction/Background:

brief statement of scientific question (not completely correct)

all variables defined

2/2 3. EDA:

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical

1.5/2 4. Model fitting: over-parametrized as written

define model mathematically

state how model fitted (ie, LS)

CLEARLY describe how modelselected

define all terms

1/2 5. Model assessment:

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):

SQUARE- qq normal plot of residuals,

residuals vs. fitted

Explain + interpret these plots

6.5/8

why have interactions when not sig?

0.75/1

6. Write out final estimated model **mathematically**

hat on response variable max **2 sig digits** on coefs

1/1

7. Plots:

label size (not too small) informative captions

placement **NOT BLURRY**

0.5/1

8. Conclusions

recap analysis (+EDA) state and interpret not completely correct

main findings

0.75/1

9. Overall presentation (clarity of explanations and language, appropriate citations / references) :

poor satisfactory (good) excellent

3/4