GLM: Name 270360 8.75/12 → 4.375/6 good job!

apprentice

1. Formatting: 0.5/0.5

all margins 2.5cm — informative title — Don't need 'Individual project'

12 pt size — name on all pages

no raw R code or output — all pages numbered

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

0.5/0.5 2. Introduction/Background:

brief statement of scientific question

all variables defined

2/2 3. EDA:

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

1.25/2 4. Model fitting:

give mathematical definition of model — specify GLM in terms of η, linear predictor and link fn.

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected → where does this log like come from??

define all terms — dispersion par?

you must add both R2+R3 at same step

— Display deviances incorrect deviance for Poisson

5. Model assessment:

1.25/2 CLEARLY state model assumptions:

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):

scatterplots (linearity assumption) + explain; residuals not defined; Define Cook's you use before you define it

* Fix i in $P(Y_i \geq x)$; Clearly define + interpret Dummy vars

5.5

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

log(app) =

hat on response variable (ok if coefs in table)

max **2 sig digits** on coefs

+ coefs.

no error term in est. eq.

1/1 7. Plots:

label size (not too small)

captions

placement

NOT BLURRY

0.75/1.5 8. Conclusions

recap analysis

(ok

state main findings)

0.25/0.5 9. ~~Overall~~ presentation (clarity of explanations, appropriate citations / references):

poor satisfactory good excellent

0.5/1 10. Other comments:

- better to display math formulas, if you really want to keep on text, use \displaystyle
- you need 2 digits after decimal for probs (in scientic notation → there should not be any '0' values
- need references (Data + methods)

3.25

GLM: Name 271188 warpbreaks 3/12 → 1.5/6

1. Formatting: 0.5/0.5

all margins 2.5cm — informative title

12 pt size — name on all pages

no raw R code or output — all pages numbered

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

2. Introduction/Background: 0.5/0.5

brief statement of scientific question

all variables defined

3. EDA: 1.5/2

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

4. Model fitting: (not done) 0/2

give mathematical definition of model

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected

define all terms

5. Model assessment: (not done) 0/2

CLEARLY state model assumptions:

1. count outcome Poisson 2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):
scatterplots (linearity assumption)

2.5

0/1 6. Write out final estimated model **mathematically** (incomplete)

hat on response variable (ok if coefs in table)

max **2 sig digits** on coefs

0.5/1 7. Plots:

label size (not too small)

captions

placement

NOT BLURRY

0/1.5 8. Conclusions (not done)

recap analysis

state main findings

0/0.5 9. Overall presentation (clarity of explanations, appropriate citations / references) :

poor satisfactory good excellent (incomplete)

10. Other comments:

- good start, keep going! :)
- references (data and methods)

0.5

GLM: Name 28846 3/12 → 1.5/6

asthma

1. Formatting:

0.25/0.5 all margins 2.5cm

12 pt size

no raw R code or output

~~max 7 pages~~ ok

informative title

name on all pages

all pages numbered

no blurry plots (**NOT png**)

0.5/0.5 2. Introduction/Background:

brief statement of scientific question

all variables defined

3. EDA: put results in table, not in text

univariate numerical

bivariate numerical (cor)

univariate graphical

bivariate graphical

- captions need to be more specific
- don't need t-test
- what do the colors mean?

4. Model fitting:

0.25/2 give mathematical definition of model (not R formula) complete

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected

define all terms

AIC, etc.

section 3.1 - put results in table

5. Model assessment:

0/2 CLEARLY state model assumptions:

not done - what you have described here is model SELECTION

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):
scatterplots (linearity assumption)

- your model specification is not MATHEMATICAL and is INCOMPLETE

0.5/1 ln(attack) (not ln(attack))

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

hat on response variable (ok if coefs in table)

max **2 sig digits** on coefs

0.25/1 7. Plots:

label size (not too small)

placement) ok

captions more descriptive

NOT BLURRY

0.75/1.5 8. Conclusions

recap analysis

state main findings be more detailed and specific

0.25/0.5 9. Overall presentation (clarity of explanations, appropriate citations / references) :

poor satisfactory good excellent

↳ much is unclear

0.25/1 10. Other comments:

- need references (data + methods)

- needs mathematical detail + specificity, what you have is rather superficial

GLM: Name 298495 asthma 5.5/12 → 2.75/6

- Don't need 'Ind. project' part
- title should not be a question

1. Formatting:

0.25/0.5

all margins 2.5cm

12 pt size

no raw R code or output

max ~~7 pages~~ OK

informative title

name on all pages

all pages numbered

no blurry plots (**NOT png**) (or tables)

0.5/0.5 2. Introduction/Background:

brief statement of scientific question

all variables defined

1.5/2 3. EDA: min should be first

univariate numerical

univariate graphical

bivariate numerical (cor)

bivariate graphical

4. Model fitting: complete

show results of the intermediate models in table

give mathematical definition of model

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected

define all terms AIC, etc.

1/2 5. Model assessment:

CLEARLY state model assumptions: + explain

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):
scatterplots (linearity assumption)

- explain what you are doing here and why

3.25

0.75/1

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

ln(attack) not ln(attack)

hat on response variable (ok if coefs in table)

max **2 sig digits** on coefs

0.25/1

7. Plots: - all figures and tables should be numbered and have a caption

label size (not too small)

captions

placement (ok)

NOT BLURRY

- histogram not very informative - bins too wide

0.25/0.5

8. Conclusions

recap analysis not done

state main findings - not coherent, explain clearly

0.25/0.5

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

poor satisfactory good excellent

0.25/1

10. Other comments:

- need primary references (data + methods)

- your explanations lack MATHEMATICAL detail and specificity

- your last 2 models on last page look incorrect, please check

2.25

GLM: Name 297262 asthma

4.5/12 → 2.25/6 (incomplete)

1. Formatting:

0.5/0.5

all margins 2.5cm

12 pt size

no raw R code or output

~~max 7 pages~~ ok

informative title

name on all pages

all pages numbered

no blurry plots (**NOT png**)

0.5/0.5

2. Introduction/Background:

brief statement of scientific question

all variables defined

1.75/2 3. EDA: vars → stats → (in table)

univariate numerical

univariate graphical – Don't need fig 3

bivariate numerical (cor)

bivariate graphical

0/2 4. Model fitting: (not done)

give mathematical definition of model

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected

define all terms

0/2 5. Model assessment: (not done)

CLEARLY state model assumptions:

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):
scatterplots (linearity assumption)

– Don't use footnotes

2.75

0/1 6. Write out final estimated model **mathematically** (not done)

hat on response variable (ok if coefs in table)

max **2 sig digits** on coefs

0.75/1 7. Plots:

label size (not too small)

placement

captions

NOT BLURRY

0.5/1.5 8. Conclusions

recap analysis

state main findings

0.25/0.5 9. Overall presentation (clarity of explanations, appropriate citations / references) : (incomplete

poor satisfactory good excellent

0.25/1 10. Other comments:

- need references (data + methods)

- incomplete

1.75

GLM: Name 302048 5.25/12 → 2.625/6

warp breaks

1. Formatting:

0.25/0.5

all ~~margins~~ 2.5cm

12 pt size

no raw R code or output

max **7** pages ok

informative title

name on all pages

all pages numbered

no blurry plots (**NOT png**)

0.5/0.5

2. Introduction/Background:

brief statement of scientific question

all variables defined

1/2

3. EDA: square mean-variance plot

univariate numerical

bivariate numerical (cor)

univariate graphical

bivariate graphical

0.5/2

4. Model fitting: # obs for each comb? give complete numerical summary

give mathematical definition of model

state how model fitted (ie, maximum likelihood) spell out

CLEARLY describe how model selected

Complete specification

define all terms

0.75/2

5. Model assessment: why not plain Poisson? your narrative is hard to follow

CLEARLY state model assumptions:

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):

scatterplots (linearity assumption)

square Q-Q plot

0.5/1 6. Write out final estimated model **mathematically** equation

hat on response variable (ok if coefs in table)

max **2 sig digits** on coefs

0.75/1 7. Plots: -shapes include p-values rather than CIs

label size (not too small)

captions

placement

NOT BLURRY

0.5/1.5 8. Conclusions

recap analysis + equation

use paragraphs

state main findings

0.25/0.5 9. Overall presentation (clarity of explanations, appropriate citations / references) :

poor satisfactory good excellent

0.25/1 10. Other comments:

- number and caption all figures and tables
- Poisson (not poisson)
- Negative Binomial
- re-paginate, too much blank space
- see previous page
- clearly describe all methods
- don't need to name R functions
- need more CLEAR, mathematical detail
- references for data, methods

2.25

GLM: Name 310 312 warp breaker 5.5/12 → 2.75/6

1. Formatting:

0.5/0.5

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

0.5/0.5 2. Introduction/Background:

- brief statement of scientific question
- all variables defined

1/2 3. EDA: give complete summaries

- univariate numerical
- univariate graphical
- bivariate numerical (cor) not cor
- bivariate graphical

0.75/2 4. Model fitting: too superficial

- give mathematical definition of model specific to this problem, what is y?
- state how model fitted (ie, maximum likelihood)
- CLEARLY describe how model selected
- define all terms

0.5/2 5. Model assessment:

CLEARLY state model assumptions:

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):
scatterplots (linearity assumption)

incomplete

3.25

0.25/1

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

hat on response variable (ok if coefs in table)

max **2 sig digits** on coefs

0.25/1

7. Plots: - interpret

label size (not too small)

captions

1/1.5

placement

NOT BLURRY

8. Conclusions

expand

recap analysis

+ equation

state main findings

0.25/0.5

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

poor satisfactory good excellent

0.5/1

10. Other comments:

- need references (data and methods)

- mathematically vague - your explanations should be complete and specific to this analysis

2.25

GLM: Name 329033 WNV 5.75/12 → 2.875/6

1. Formatting:

0.5/0.5 all margins 2.5cm — informative title

12 pt size — name on all pages

no raw R code or output — all pages numbered

0.5/0.5 ~~max 7 pages~~ 8ok — no blurry plots (**NOT png**)

2. Introduction/Background:

brief statement of scientific question

all variables defined

1.5/2

3. EDA:

univariate numerical — bivariate numerical (cor)

univariate graphical histograms — bivariate graphical

0.25/2

4. Model fitting:

give mathematical definition of model not R formula

state how model fitted (ie, maximum likelihood) → give complete G/LM

CLEARLY describe how model selected

define all terms — where do p-values come from?

0.25/2

5. Model assessment:

CLEARLY state model assumptions: not complete

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):
scatterplots (linearity assumption)

↳ not log X, log Y (the count, not the average)
- Distribution?

0.75/1

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

hat on response variable (ok if coefs in table)

max **2 sig digits** on coefs

(offset term)

0.5/1

7. Plots:

label size (not too small)

captions

placement

NOT BLURRY

0.75/1.5

8. Conclusions

(ok)

recap analysis

state main findings

0.25/0.5

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

poor satisfactory good excellent

0.5

10. Other comments:

- Cite primary refs - J. Bruin not primary, see e.g. Dobson; not bookdown, see Intro GLMs Nelder + Wedderburn GLMs

2.75

GLM: Name 342530 6.5/12 → 3.25/6

asthma

1. Formatting: 0.5/0.5

all margins 2.5cm — informative title

12 pt size — name on all pages

no raw R code or output — all pages numbered

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

0.5/0.5 2. Introduction/Background:

brief statement of scientific question

all variables defined

1/2 3. EDA: Exploratory (not Explorative) put in table

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

0.75/2 4. Model fitting: (all vars)

(incomplete) give mathematical definition of model — Complete specification

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected — be very specific

define all terms AIC etc — $p < 0.05$

1/2 5. Model assessment: - not 'goodness of fit' test in the classical sense

CLEARLY state model assumptions:

incomplete

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics): + EXPLAIN MATHEMATICALLY

scatterplots (linearity assumption)

- Dont put model in Intro
- please name each model in the text, your narrative is hard to follow

3.75

0.75/1

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

In (casting)

hat on response variable
(ok if coefs in table)

max **2 sig digits** on coefs

0.5/1

7. Plots:

label size (not too small)

placement

captions make more descriptive

NOT BLURRY

0.75/1.5

8. Conclusions

recap analysis not done

state main findings (ok - start in new paragraphs

0.25/0.5

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

poor satisfactory good excellent

0.5/1

10. Other comments:

- use Primary refs

- Don't need all the outlier charts at the end

- use 3 digits after decimal, should not have p-values = 0

2.75

GLM: Name 343883 5.75/12 → 2.875/6

WNV

1. Formatting:

0.25/0.5

all margins 2.5cm — informative title

12 pt size — name on all pages

no raw R code or output — all pages numbered

max ~~7 pages~~ 6c — no blurry plots (**NOT png**)

0.5/0.5 2. Introduction/Background:

brief statement of scientific question

all variables defined

1.5/2 3. EDA: + fig 1 too small

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

1/2 4. Model fitting:

give mathematical definition of model — Write using the linear predictor + specify link

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected — AIC? Deviance? not clear

define all terms

not R formula

0/2 5. Model assessment:

CLEARLY state model assumptions:

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):
scatterplots (linearity assumption)

not done?

3.25

0.75/1

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

hat on response variable (ok if coefs in table)

max **2 sig digits** on coefs

0.25/1

7. Plots:

label size (not too small)

captions

placement - Fig 3 before conclusions

NOT BLURRY

0.75/1.5

8. Conclusions

recap analysis

state main findings (ok + equation)

0.25/0.5

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

poor satisfactory good excellent

0.5/1

10. Other comments:

- remove cover sheet and abstract
- don't need my name (I already know it! ☺)
- cite refs in text, use primary refs

2.5

GLM: Name 343914 4.5/12 → 2.25/6

asthma

1. Formatting:

0.5/0.5

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

0.5/0.5

2. Introduction/Background:

- brief statement of scientific question
- all variables defined

stats →

3. EDA: table vars ↓

- univariate numerical
- univariate graphical
- bivariate numerical (cor)
- bivariate graphical

0.75/2

4. Model fitting:

incomplete and misplaced

- give mathematical definition of model
- state how model fitted (ie, maximum likelihood)
- CLEARLY describe how model selected
- define all terms

↳ Analysis of Deviance (NOT goodness of fit)

0.5/2

5. Model assessment:

- CLEARLY state model assumptions:

not done - not complete

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

- carry out assessment (numerical / graphics):
  scatterplots (linearity assumption)

→ Don't put model in intro

what type of resids you are using — make sure that you carefully define

2.25

0.75/1

6. Write out final estimated model **mathematically** log(y)

hat on response variable (ok if coefs in table)

max **2 sig digits** on coefs

0.25/1

7. Plots:

label size (not too small)

placement

captions

NOT BLURRY

0.5/1.5

8. Conclusions

recap analysis expand

state main findings need to revise

0.25/0.5

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

poor satisfactory good excellent

0.5/1

10. Other comments:

- need references (data + methods)
- all figs + tables need to be numbered, have a caption and be described + referred to in text
- your tables are confusing, please try to clarify
- re-organize
- needs more mathematical detail and specificity

2.25

352002

GLM: Name _____ 10.5/12 → 5.25/6 (*)

apprentice

(*) Don't need to re-do, this will be 6/6

good job!

0.5/0.5 1. Formatting:

all margins 2.5cm

12 pt size

no raw R code or output

~~max 7 pages~~ OK

informative title - Don't need 2nd line

name on all pages

all pages numbered

no blurry plots (**NOT png**)

0.5/0.5 2. ~~Introduction~~/Background:

make title specific to this data set

brief statement of scientific question

all variables defined

1.5/2 3. EDA: (Fig 3 square)

univariate numerical

univariate graphical

bivariate numerical (cor)

bivariate graphical

1.75/2 4. Model fitting:

give mathematical definition of model

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected

define all terms AIC

2/2 5. Model assessment:

CLEARLY state model assumptions:

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):
scatterplots (linearity assumption)

good job!

6.25

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

hat on response variable (ok if coefs in table)

max **2 sig digits** on coefs

1/1 7. Plots:

label size (not too small)

captions

placement

NOT BLURRY

1.25/1.5 8. Conclusions

recap analysis

state main findings

0.5/0.5 9. Overall presentation (clarity of explanations, appropriate citations / references) :

poor satisfactory good excellent

0.75/1 10. Other comments:

+ give primary ref(s) for GLMs (eg, Dobson or Nelder/Wedderburn)

4.25

GLM: Name 354976 warpbreaks 9/12 → 4.5/6 good job!

1. Formatting:

0.5/0.5

all margins 2.5cm — informative title

12 pt size — name on all pages

no raw R code or output — all pages numbered

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

⇒ do not » to open quote

0.5/0.5 2. Introduction/Background:

brief statement of scientific question

all variables defined

1.5/2 3. EDA:

univariate numerical → put all summary stats in a table — bivariate numerical (cor)

univariate graphical — bivariate graphical

0.75/2 4. Model fitting:

give mathematical definition of model — not clear, define 'error structure'

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected — define AIC, method used (not the R function)

define all terms

1.75/2 5. Model assessment:

CLEARLY state model assumptions:

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics): + explain

scatterplots (linearity assumption)

- you don't 'validate' the assumptions, you assess them

5

0.5/1 6. Write out final estimated model **mathematically**

hat on response variable (ok if coefs in table)

max **2 sig digits** on coefs

numbers in parentheses not defined

1/1 7. Plots:

label size (not too small)

captions

placement

NOT BLURRY

1.5/1.5 8. Conclusions

recap analysis

state main findings

0.25/0.5 9. Overall presentation (clarity of explanations, appropriate citations / references) :

poor satisfactory good excellent

0.75/1 10. Other comments:

- caption tables
- too many digits
- need references (data and methods)

4

(9) Don't need to re-do, your score will be 6/6

9.75/12 → 4.875/6

GLM: Name 357699

asthma

(Don't need 2 line)

0.5/0.5 1. Formatting:

all margins 2.5cm

12 pt size

no raw R code or output

max **7** pages

informative title

name on all pages

all pages numbered

no blurry plots (**NOT png**)

0.5/0.5 2. Introduction/Background:

brief statement of scientific question

all variables defined

1.75/2 3. EDA: put all stats in table

univariate numerical

univariate graphical

bivariate numerical (cor)

bivariate graphical

1.75/2 4. Model fitting:

give mathematical definition of model

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected Deviance test?

define all terms AIC $(x_i, y_i), \ldots$ (not $(y_i, x_i), \ldots$)

1.75/2 5. Model assessment: (Deviance resids, Cooks, etc

CLEARLY state model assumptions:

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

didn't do?

carry out assessment (~~numerical / graphics~~):

scatterplots (linearity assumption)

What is red line in Cook's plot?

too many digits in table

6.25 → model 5; hat over everything $\log E[Y|X]$

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

hat on response variable (ok if coefs in table)

max **2 sig digits** on coefs

0.5/1 7. Plots:

label size (not too small)

placement

captions

NOT BLURRY

all plots and tables should be numbered and have a relevant caption

1/1.5 8. Conclusions

recap analysis

state main findings

0.5/0.5 9. Overall presentation (clarity of explanations, appropriate citations / references) :

poor satisfactory good excellent

0.75/1 10. Other comments:

- need primary references (data + methods)
- nice job! just some small things that would need fixing

3.5

GLM: Name 359541 WNV 8.75/12 → 9.375/6

1. Formatting:

0.5/0.5

all margins 2.5cm

12 pt size

no raw R code or output

~~max 7 pages~~ Ok

informative title

name on all pages

all pages numbered

no blurry plots (**NOT png**)

good job!

0.5/0.5

2. Introduction/Background:

brief statement of scientific question

all variables defined

1.5/2

3. EDA:

univariate numerical

univariate graphical

bivariate numerical (cor)

bivariate graphical

include cor matrix

make table: min - - - max
eg.
area

1/2

4. Model fitting:

(incomplete)

give mathematical definition of model

↳ not completely correct, use Y instead of log λ on left-hand side

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected

define all terms

give mathematical detail

1.25/2

5. Model assessment:

CLEARLY state model assumptions:

This needs to be more clear and complete

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):

scatterplots (linearity assumption)

(plots not completely clear + should be square (meanings)

4.75

1/1

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

hat on response variable (ok if coefs in table)

max **2 sig digits** on coefs

1/1

7. Plots:

label size (not too small)

captions

placement

NOT BLURRY

1/1.5

8. ~~Conclusions~~

recap analysis + equation ✓

state main findings

0.25/0.5

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

poor satisfactory good excellent

0.75/1

10. Other comments:

- additional references for methods

- needs additional detail and clarity

4

GLM: Name 360971 WNV 8.75/12 → 4.375/6

1. Formatting:

0.5/0.5 all margins 2.5cm

(12 pt size)

no raw R code or output

~~max 7 pages~~ ok

informative title (leave out 'AB Final Project') good job!

name on all pages

all pages numbered

no blurry plots (**NOT png**)

0.5/0.5 2. Introduction/Background:

brief statement of scientific question

all variables defined

2/2 3. EDA:

univariate numerical

univariate graphical

bivariate numerical (cor)

bivariate graphical (square) → since inside pairs plots, can remove Fig 1 (but skip the prelim. version of the model)

1.5/2 4. Model fitting:

give mathematical definition of model including distribution (mathematically)

state how model fitted (ie, maximum likelihood) ok

CLEARLY describe how model selected define BIC

define all terms

1.25/2 5. Model assessment:

why should resids be normal?

CLEARLY state model assumptions:

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):

scatterplots (linearity assumption)

(*) mid page 4: $\log\left(\frac{\cdot}{\cdot}\right) = \cdots$ Poisson (not poisson)

5.75 (***) $\cdots \cdot \left(1 - \frac{\cdot}{\cdot}\right)$.

0.75/1

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

hat on response variable (ok if coefs in table)

max **2 sig digits** on coefs

0.5/1

7. Plots:

label size (not too small)

captions

placement

NOT BLURRY

0.5/1.5

8. Conclusions

recap analysis

+ equation

state main findings

0.5/0.5

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

poor satisfactory good excellent

0.75/1

10. Other comments:

- need references (data + methods)
- Poisson counts (not process)
- too many digits (in text)
- Fig 5 BEFORE conclusions

GLM: Name 365470 6/12 → 3/6

WHY

1. Formatting:

all margins 2.5cm — informative title

0.5/0.5 12 pt size — name on all pages

no raw R code or output — all pages numbered

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

0.5/0.5 2. Introduction/Background:

brief statement of scientific question

all variables defined

1.5/2 3. EDA:

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

0.75/2 4. Model fitting:

give mathematical definition of model

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected

define all terms

Describe as GLM Distribution of (log) Y?

log y

0/2 5. Model assessment: not done?

CLEARLY state model assumptions:

1. count outcome Poisson 2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):
scatterplots (linearity assumption)

3.25

0.5/1 6. Write out final estimated model **mathematically**

hat on response variable (ok if coefs in table)

max **2 sig digits** on coefs

offset?

0.5/1 7. Plots:

log y

label size (not too small)

captions

placement

NOT BLURRY

1/1.5 8. Conclusions

recap analysis (+ final equation) state main findings

0.25/0.5 9. Overall presentation (clarity of explanations, appropriate citations / references) :

poor satisfactory good excellent

0.5/1 10. Other comments:

- references - methods

2-75

GLM; Name 365395 5.5/12 → 2.75/6

asthma

1. Formatting:

0.5/0.5

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

2. Introduction/Background:

0.5/0.5

- brief statement of scientific question
- all variables defined

1.75/2

3. EDA:

- univariate numerical — put summary stats in table, not text
- bivariate numerical (cor)
- univariate graphical
- bivariate graphical

0.5/2

4. Model fitting:

- give mathematical definition of model — your model is mis-specified or incomplete
- state how model fitted (ie, maximum likelihood)
- CLEARLY describe how model selected
- define all terms — AIC, LRT, VIF, etc

0.5/2

5. Model assessment: I can't see how what you have done corresponds with this

CLEARLY state model assumptions:

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):
scatterplots (linearity assumption)

3.75

5.25/1

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

log(y)

hat on response variable
(ok if coefs in table)

max **2 sig digits** on coefs

not clear that what you got is correct

0.5/1

7. Plots:

- label size (not too small)
- placement
- captions
- **NOT BLURRY**

0.5/1.5

8. Conclusions

- recap analysis (expand)
- state main findings

start new paragraph

0.25/0.5

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

poor / satisfactory / good / excellent

Divide report into sections

0.25/

10. Other comments:

- need references (data + methods)
- Give your report structure by dividing into sections: instead of Results right at the beginning, put 'Exploratory Data Analysis', then bottom p.3 'Model Fitting', etc.
- This is a report on Generalized Linear Models
⇒ your outcome variable is a count, so you need to apply appropriate glm methods, like Poisson regression + EXPLAIN MATHEMATICALLY

1.75