

# Lessons

## Future considerations

- We used raw scripts
  - **Text, code with RMarkdown**
- Development environment
  - Package control with renv
- Replication and teaching
  - Online version with Binder



```
21 5 kable(caption = "**Shareholder quorum subsampled diversity through  
2 the Cenozoic.** Diversity is counted in each stage. The number of  
2 collections used for each bin is indicated.") # Lines shown  
2 4 ...  
2 3  
2 2 ## Diversity through time ##  
2 1  
2 370 Diversity shows a generally increasing trend between 60-20 Ma.  
2 Substantial simultaneous changes in raw species diversity most likely  
2 represent changes in the collection regime: either due to increased  
2 sampling effort or preservation rate. Patterns of diversity generally  
2 match between raw species diversity and subsampled diversity, at  
2 at different scales of resolution. Notable differences occur in  
2 substantial increase in raw species diversity of Bryozoa in the  
2 Oligocene onwards that is not present in subsampled diversity, a  
2 stasis in Gastropoda at the same time compared to an increase in  
2 subsampled diversity.  
2 1  
2 2 {r ggplot_pbdb_diversity, fig.cap = "**Species diversity through  
2 the later Palaeogene.** Diversity is counted from raw occurrence  
2 ranges in 0.5 my slices (A) and shareholder quorum subsampled  
2 diversity in stage-level bins (B). The vertical yellow band indicates  
2 the Eocene-Oligocene transition (34-33.5 Ma). The number of  
2 collections included in each bin is indicated in the top panel of B.",  
2 fig.show = "hold"}  
2 3 pbdb_diversity_labels <-  
2 4 c("Diversity", names(taxon_matching))  
2 5 event_ages <- # big events in the Palaeogene  
2 6 tribble(  
2 7 ~event, ~xmax, ~xmin, ~hjust,  
2 8 "PETM", 55.6, 55.4, 0.7,  
2 9 "EECO", 53.3, 49.1, 0.5,  
2 10 "EOT", 34.0, 33.5, -0.2  
<run> shelf-diversity-over-eot-analyses.Rmd[+] utf-8 36% 370:619  
21 >  
71835:R [-] 21:1  
pg_diversity-3 ~/G/eot-diversity fish 03 ? 2021-03-24 Wed 16:47:16  
24/03, 4:47 pm ~/O/C/t/revision
```

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