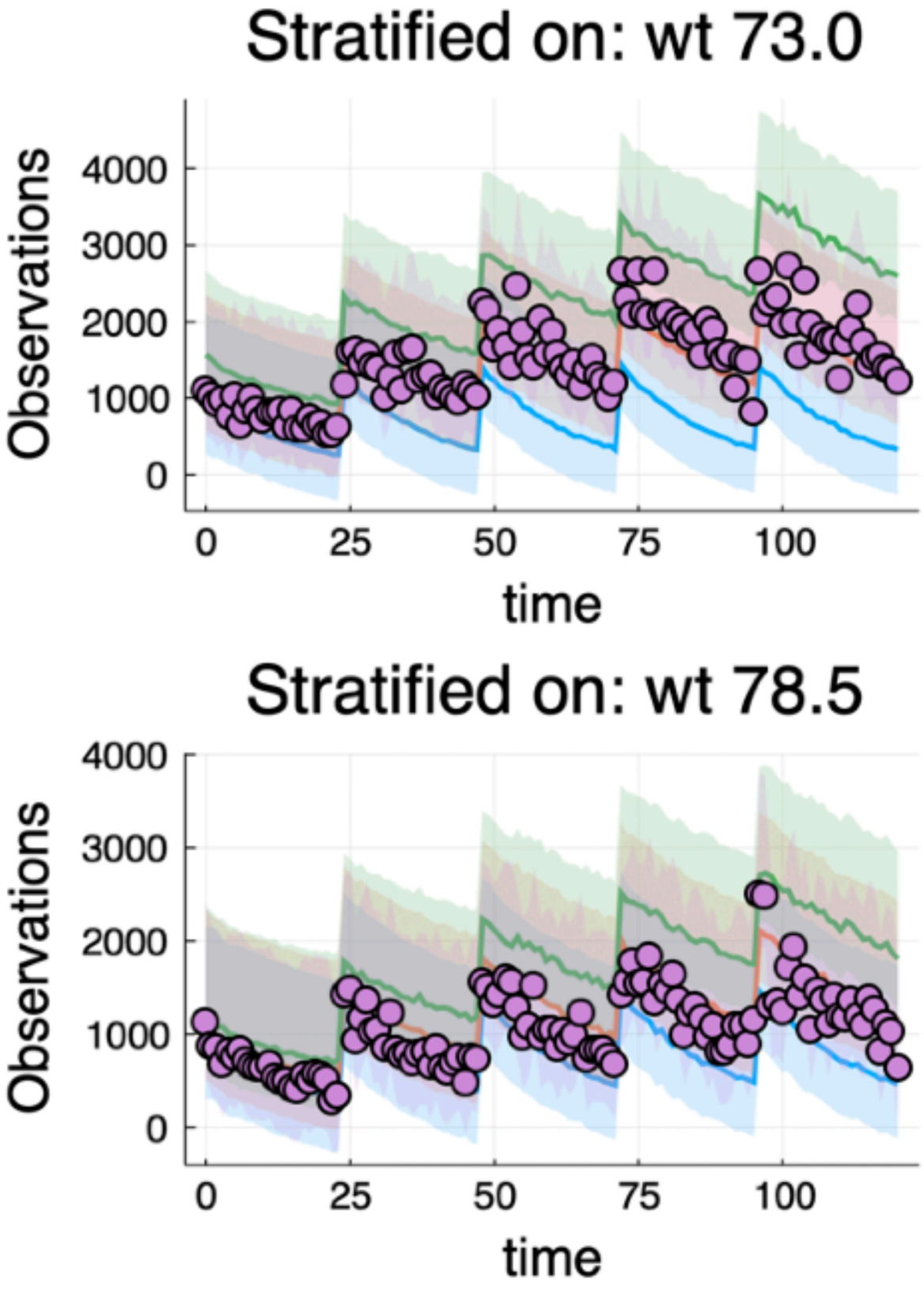
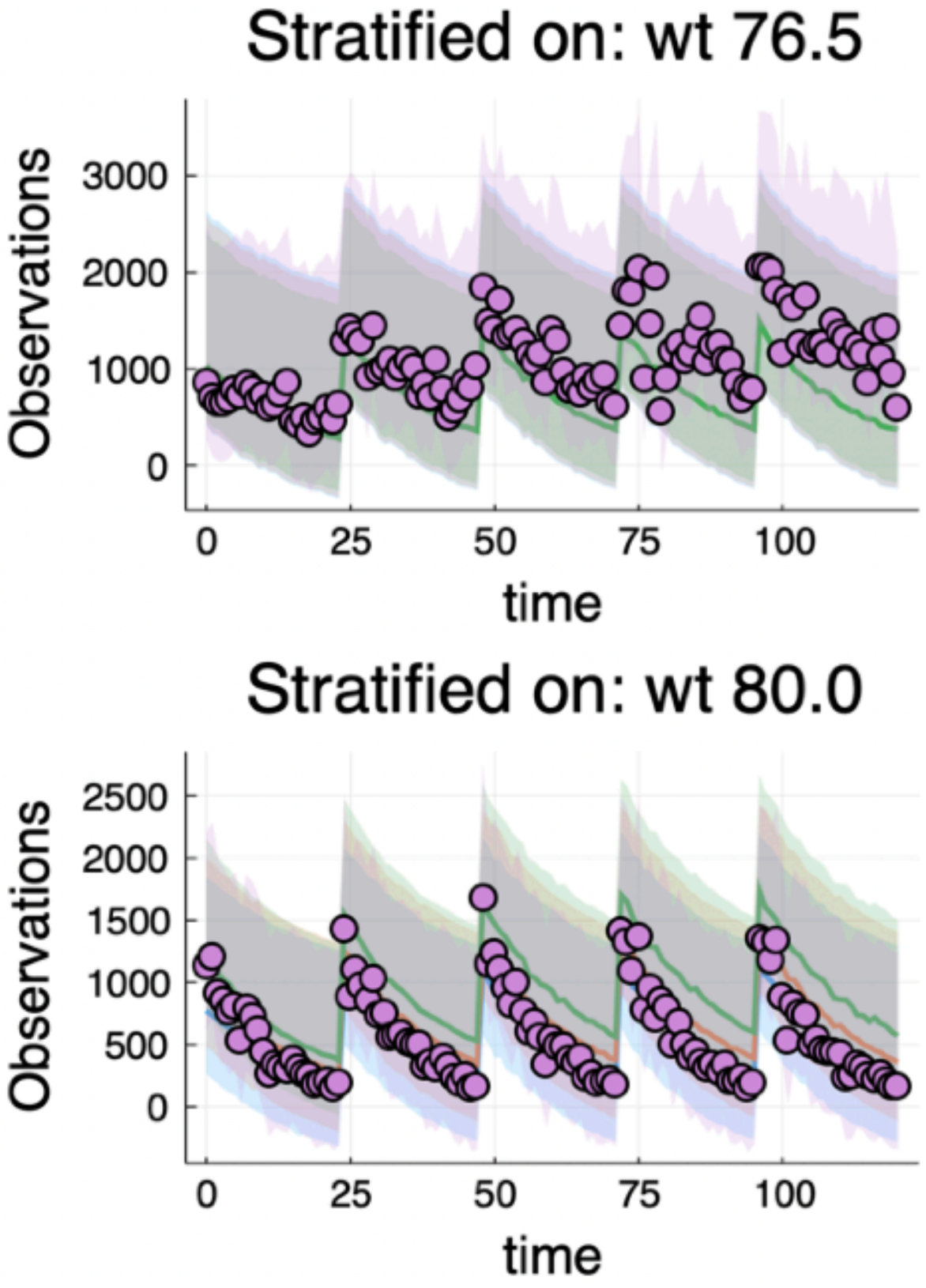
```
julia> vpc(res,200;stratify_on=[:wt]) |> plot
```





Simulation

First we need a dosage regimen for the population we want to simulate. Basically, when and how much of the drug is entering the body, in which compartment, what are the values of the covariates for the subjects.

```
julia> ev = DosageRegimen(100, time=0)
DosageRegimen(1×8 DataFrame
 Row │ time     cmt    amt      evid   ii       addl   rate     ss
     │ Float64  Int64  Float64  Int8   Float64  Int64  Float64  Int8
─────┼──────────────────────────────────────────────────────────────
   1 │     0.0      1    100.0      1      0.0      0      0.0      0)
```

```
julia> sub = Subject(id=1,evs=ev,cvs=(isPM=0, Wt=70))
Subject
  ID: 1
  Events: 1
```

The fields of a Subject (sub) contain the details of the dose for the subject

```
id 1
covariates (isPM = 0, Wt = 70)
events PuMaS.Event[Dose event
  dose amount = 100.0
  dose time = 0.0
  compartment = 1
  instantaneous
  interdose interval = 0.0
  infusion start time = 0.0
]
```