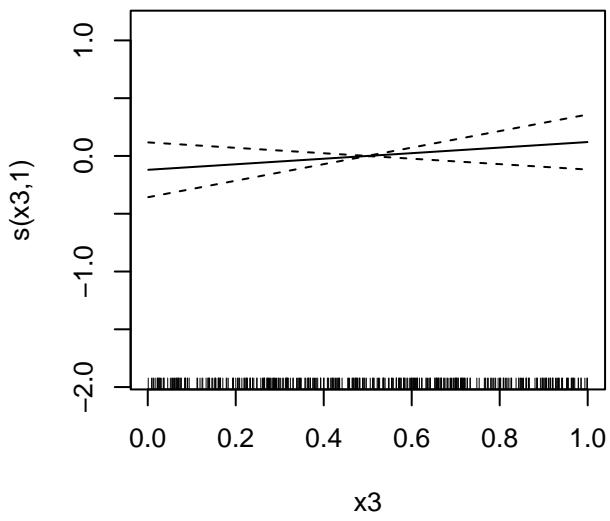
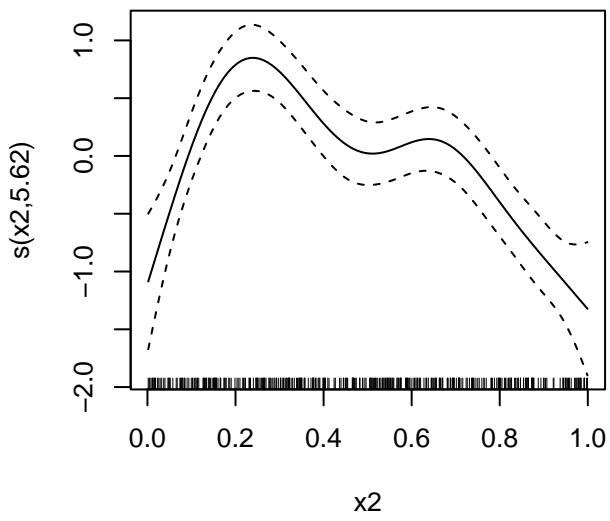
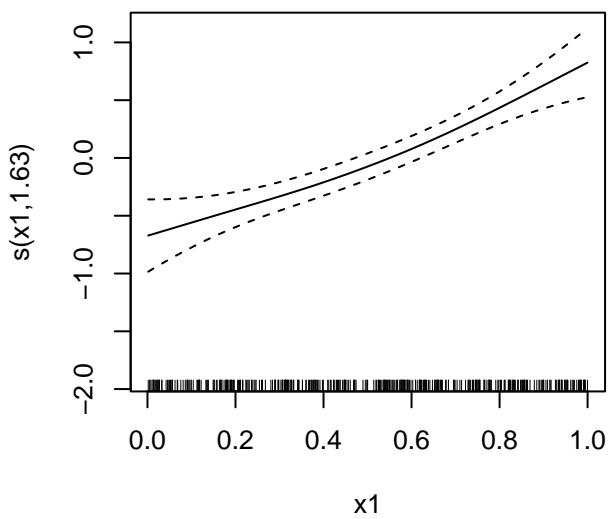
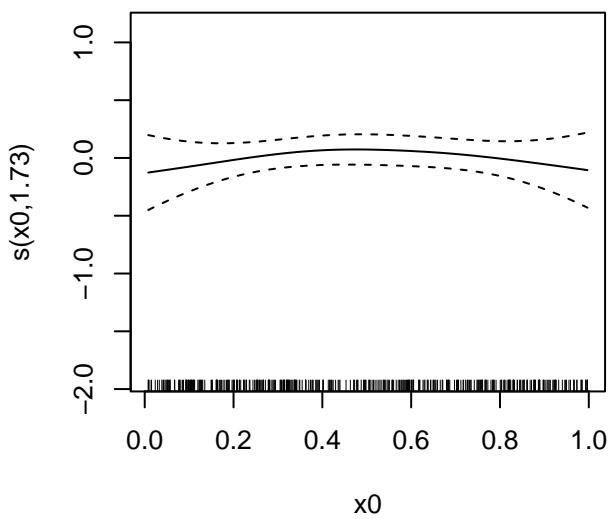
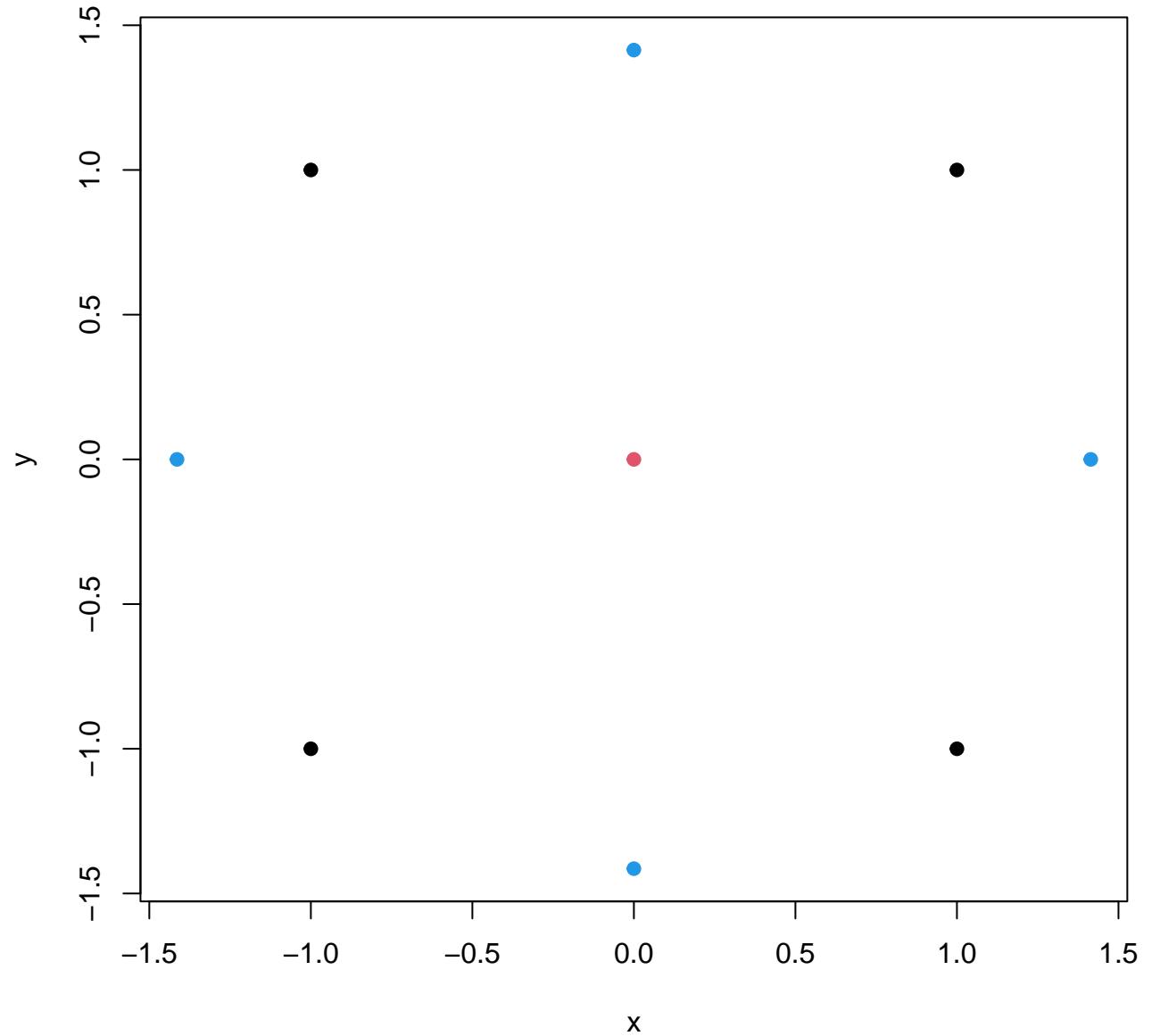


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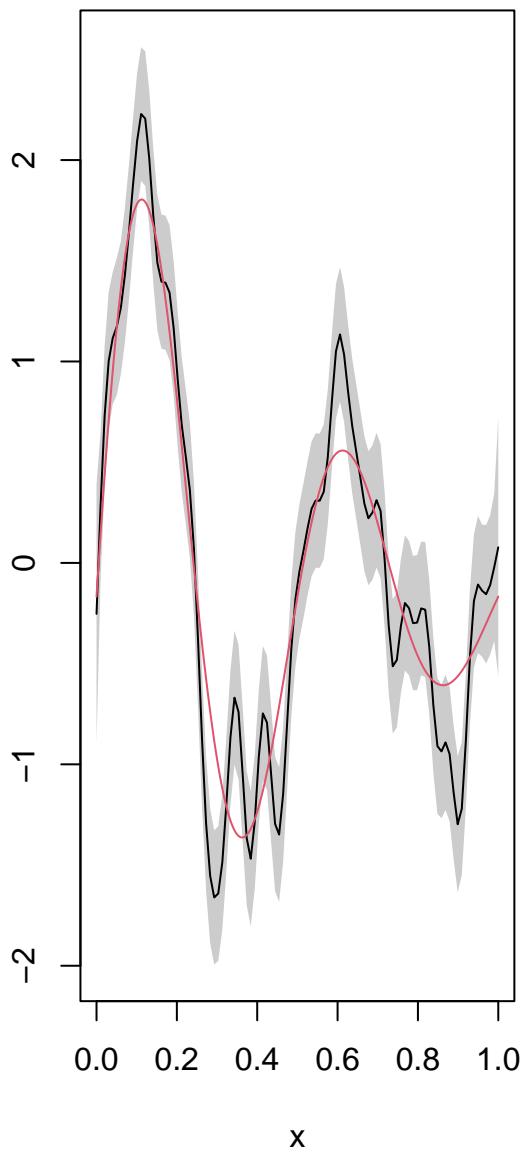


# CCD

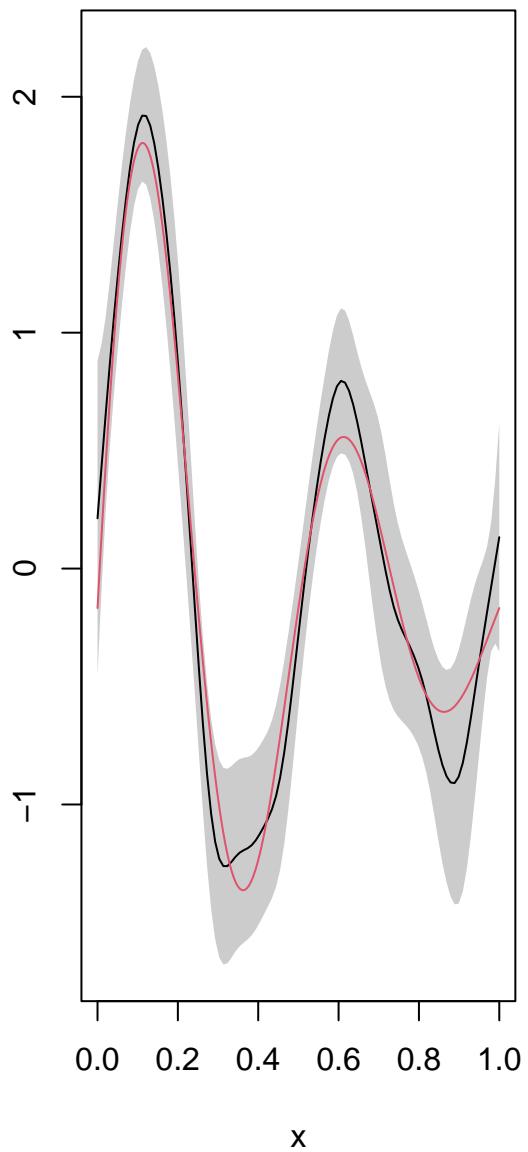


help("FFdes")

$s(x, 32.12)$



$s(x, 11.41)$



help("NCV")

fsb[[1]]\$y

0.5

0.0

-0.5

-1

0

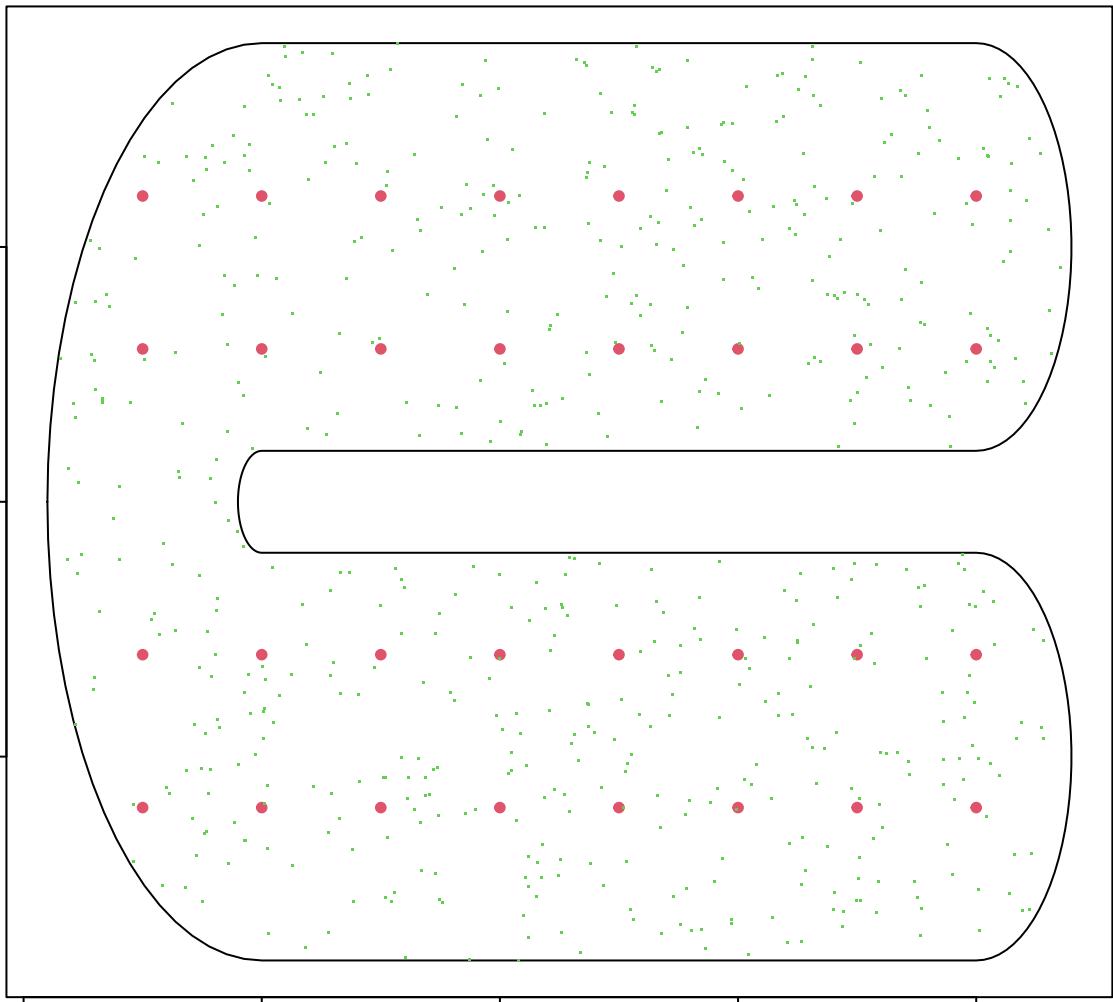
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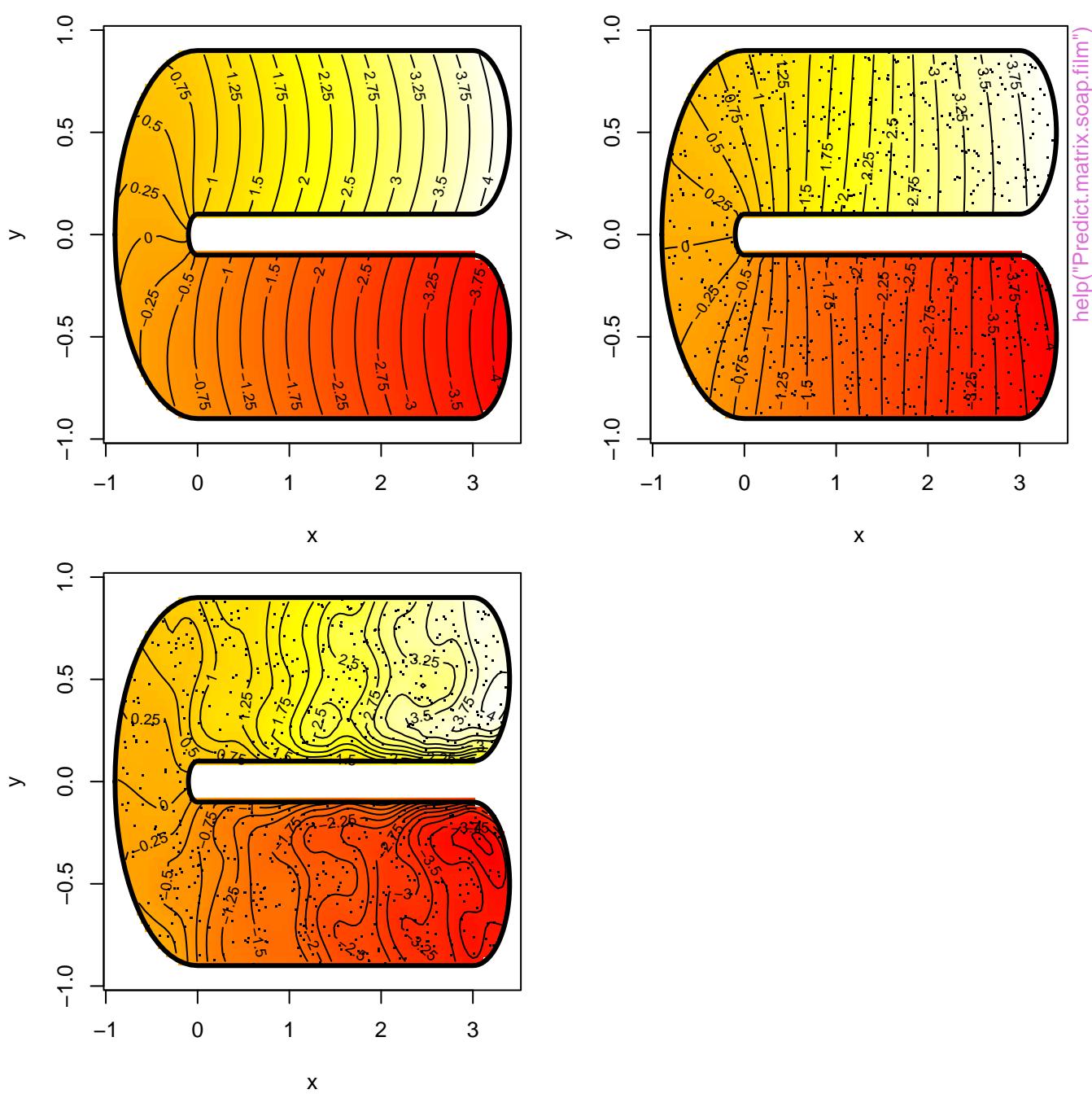
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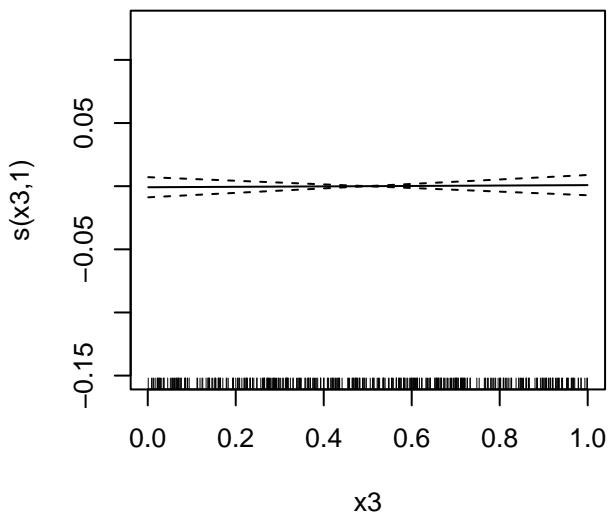
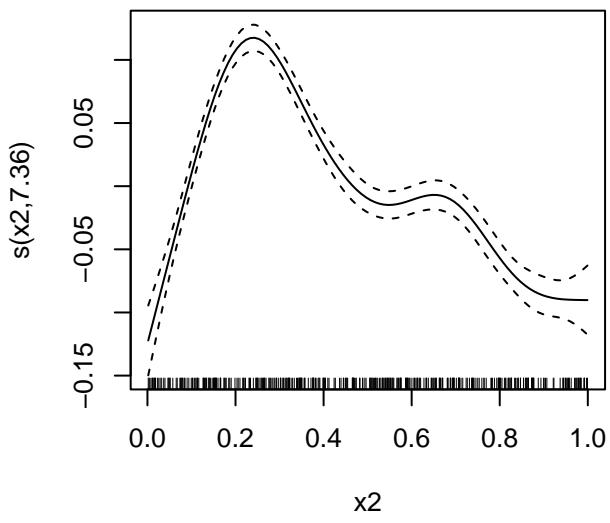
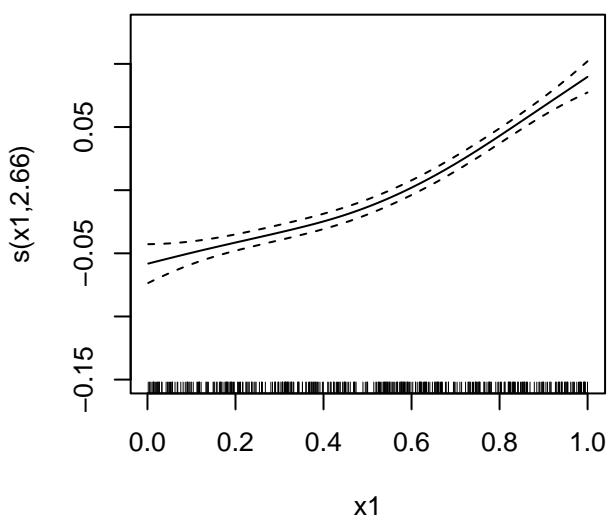
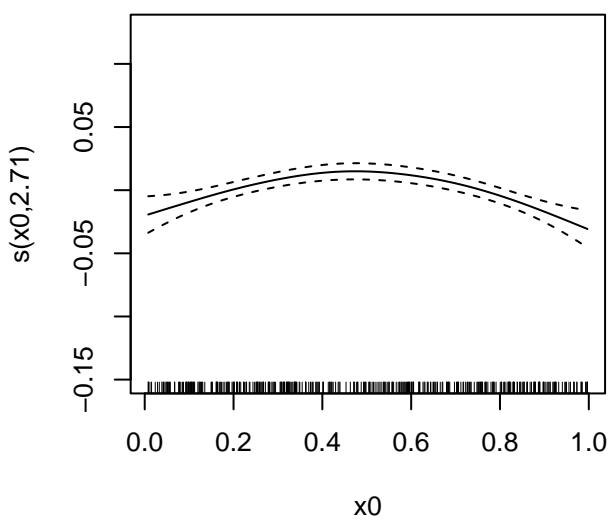
3

fsb[[1]]\$x

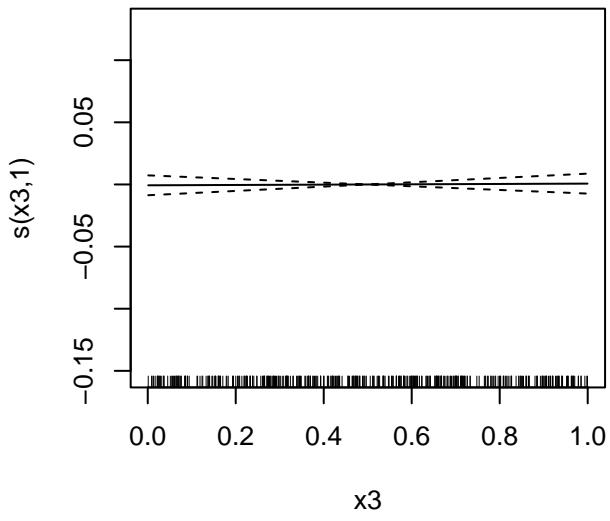
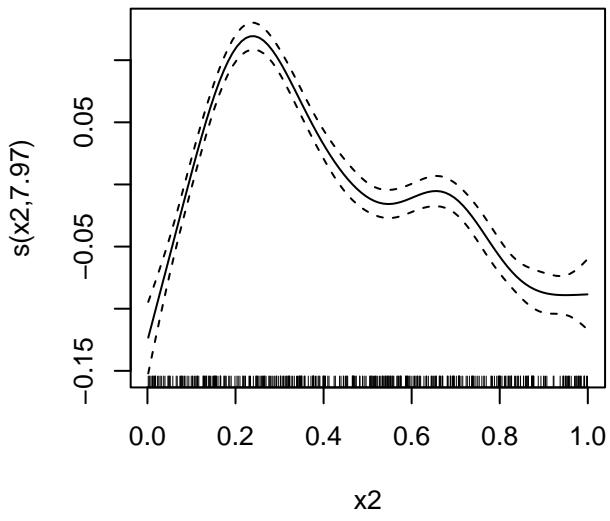
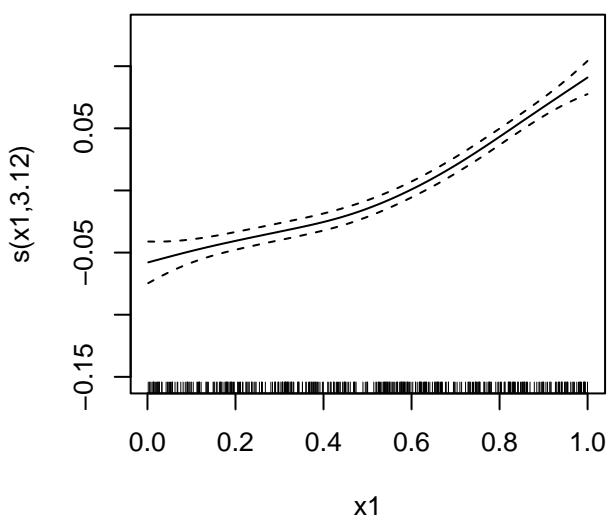
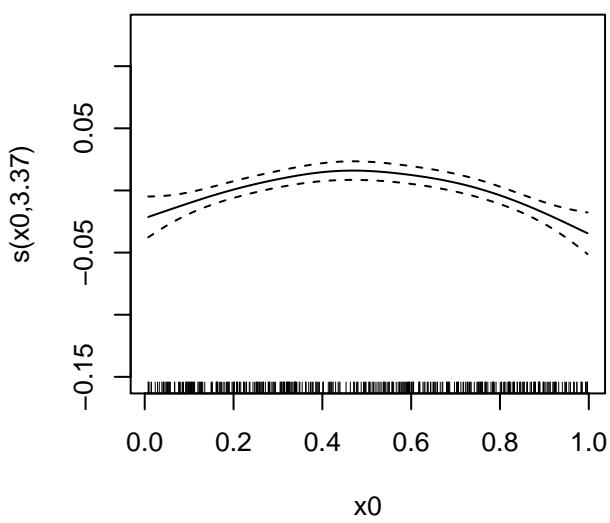
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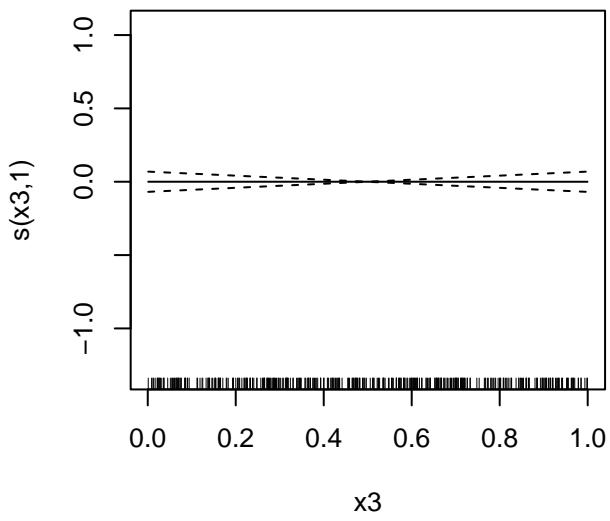
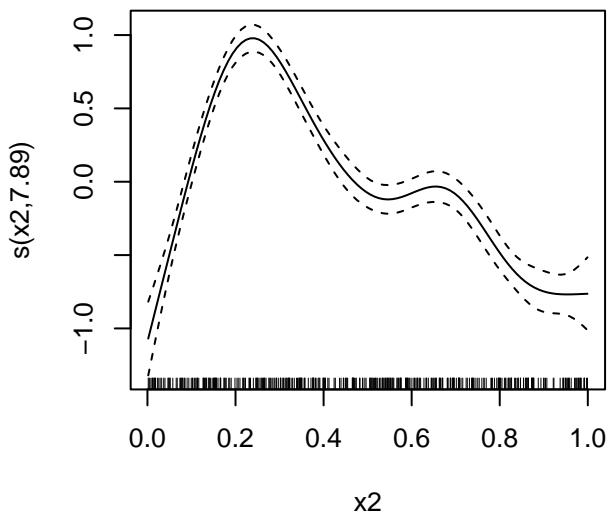
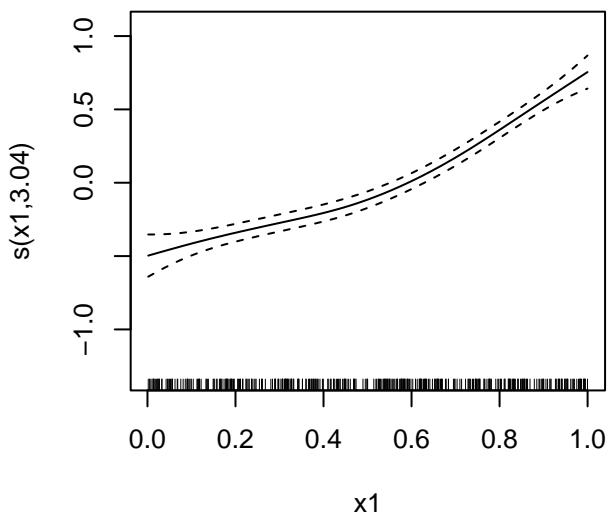
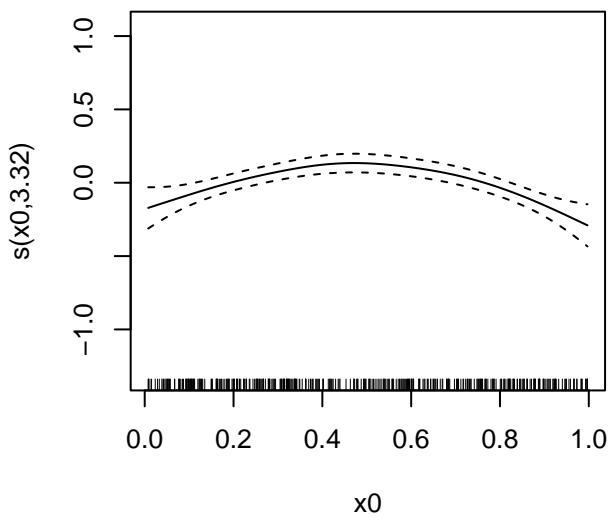




help("Tweedie")



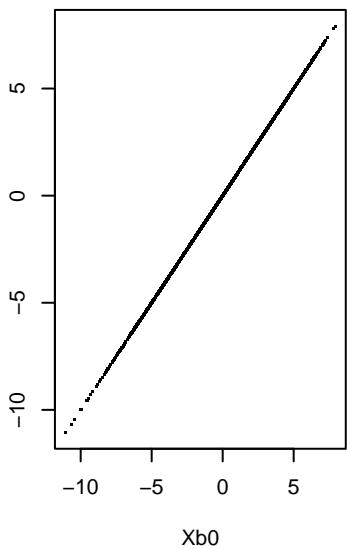
help("Tweedie")



help("Tweedie")

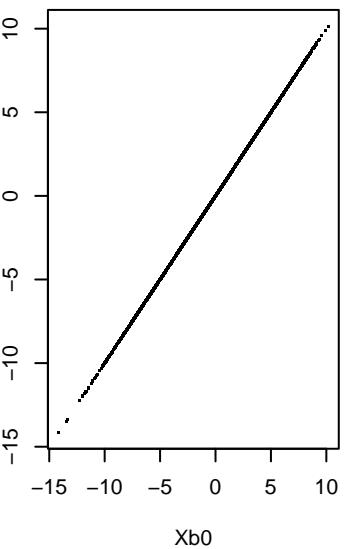
help("XWXd")

Xb1



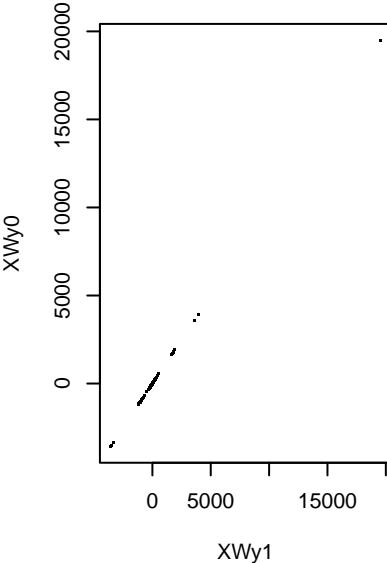
Xb0

Xb1



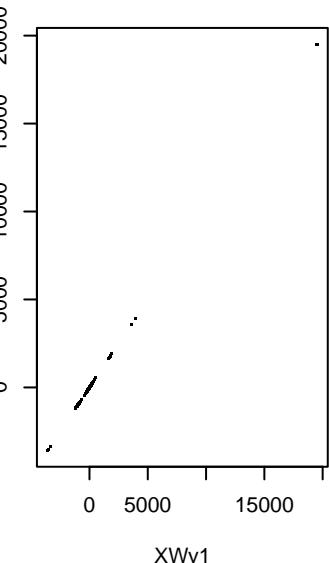
Xb0

XWy0



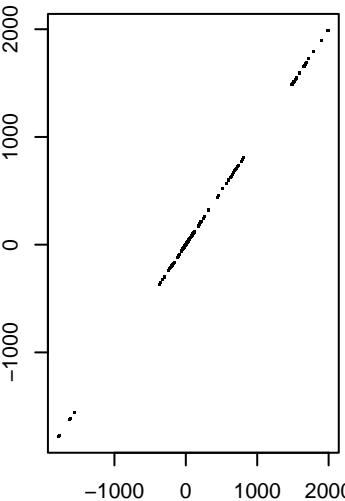
XWy1

XWy0



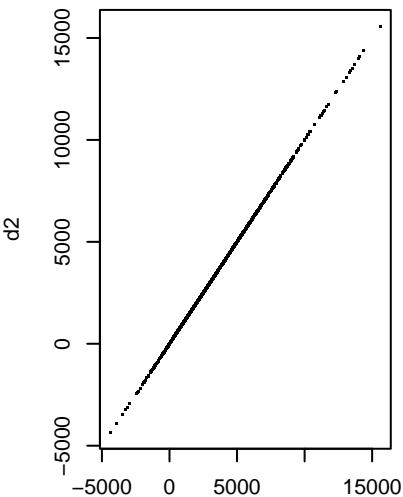
XWy1

B

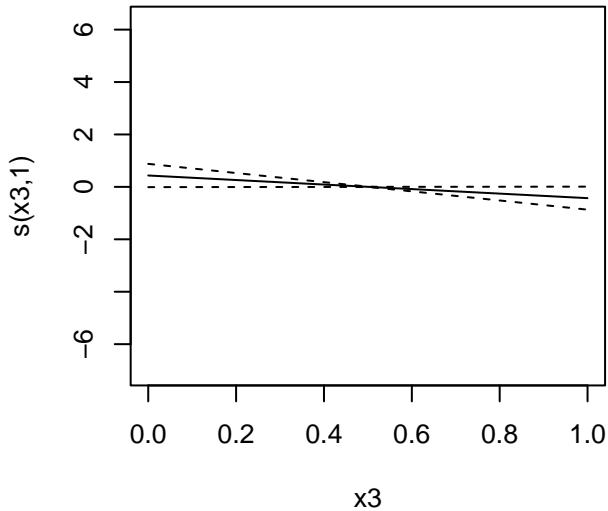
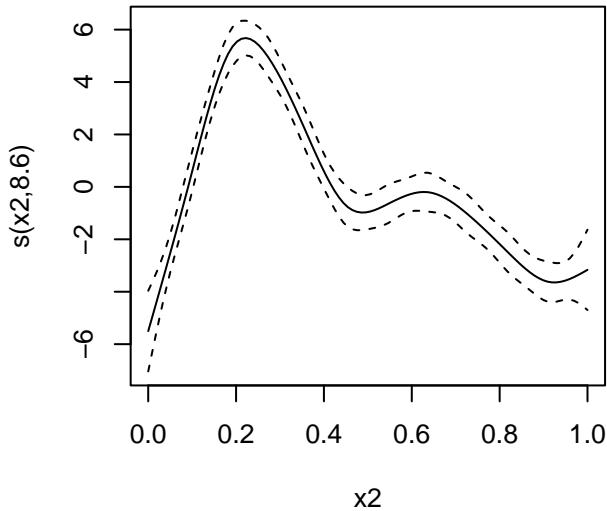
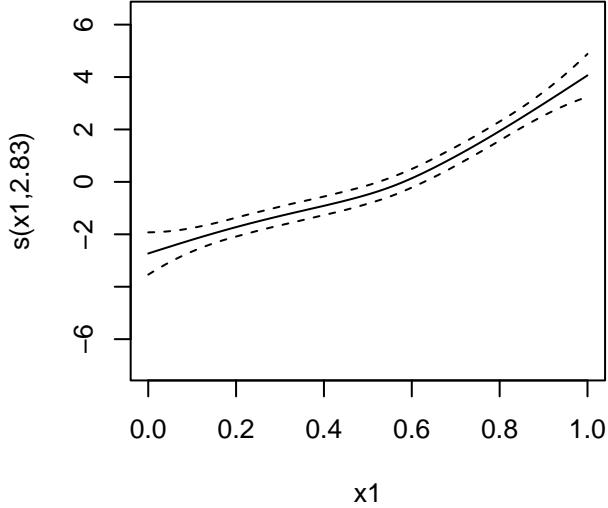
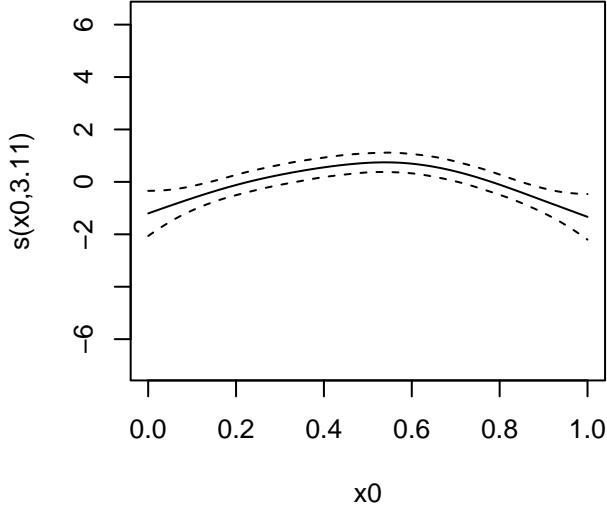


A

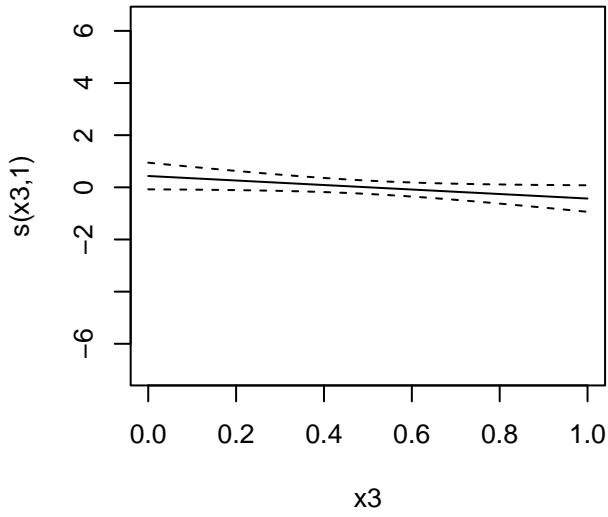
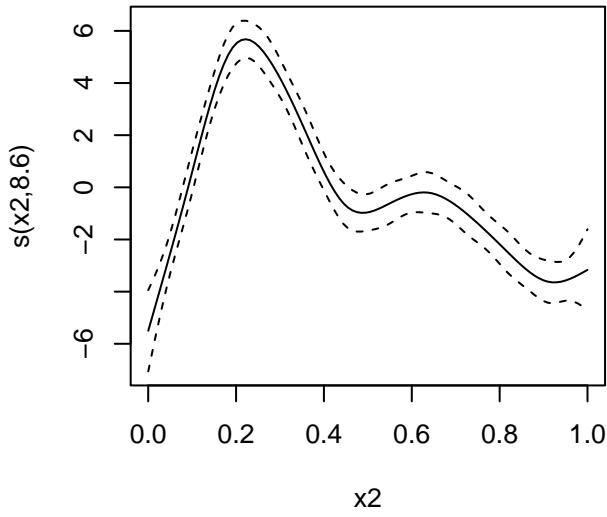
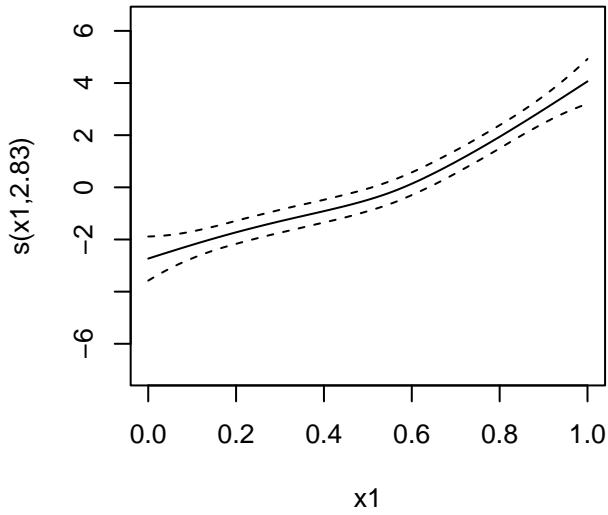
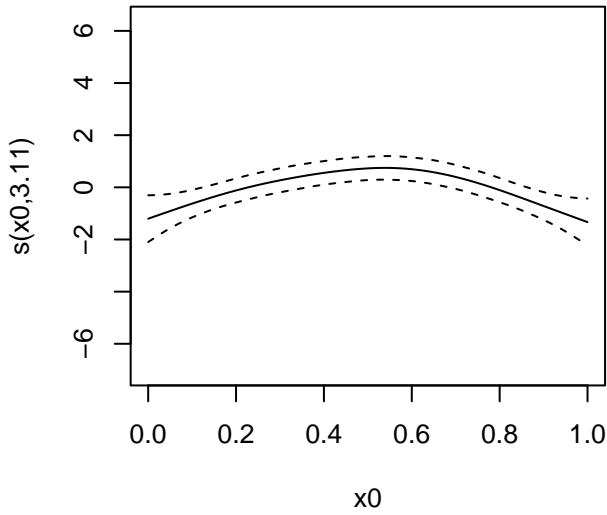
d2



d1

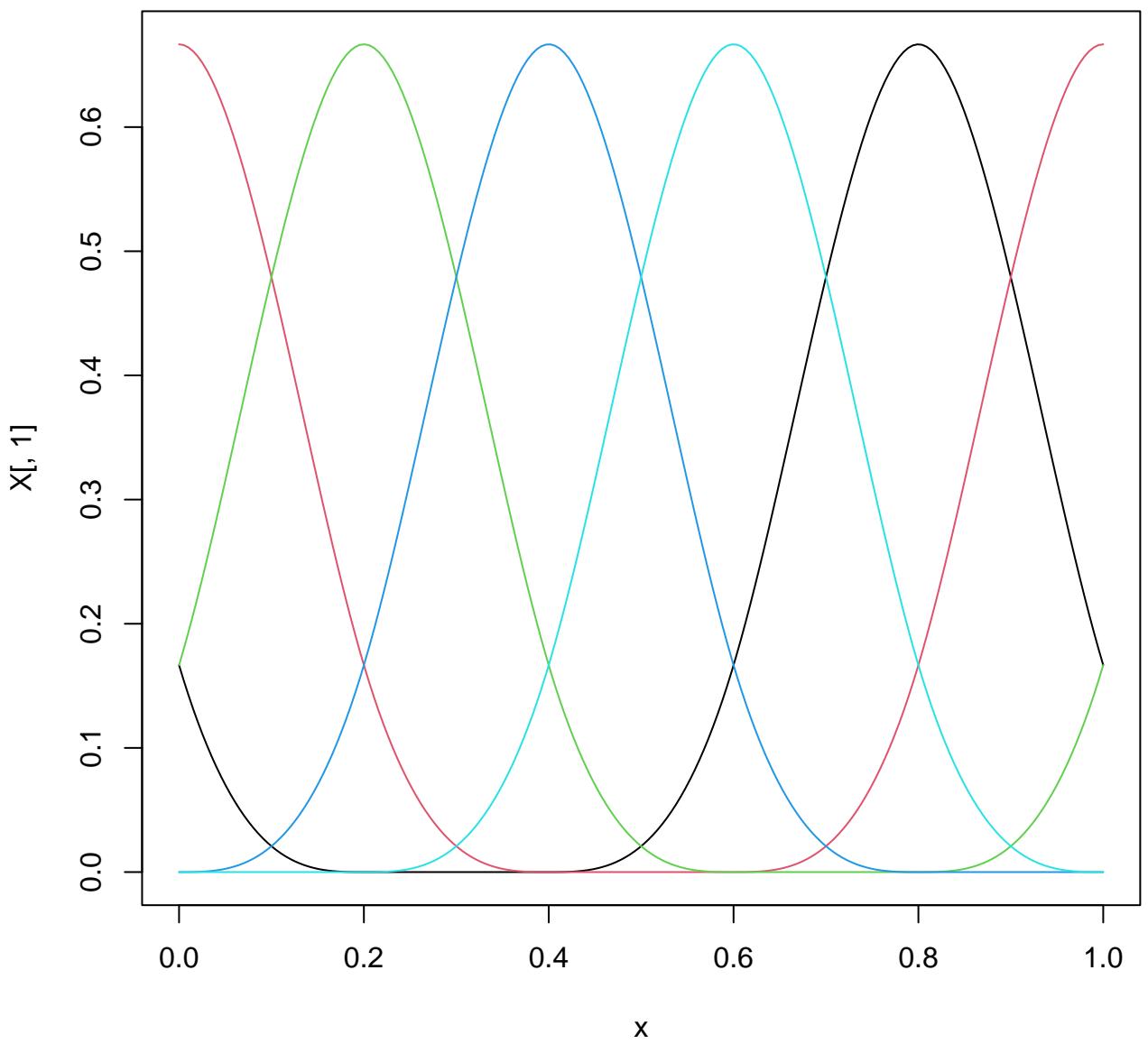


help("bam")

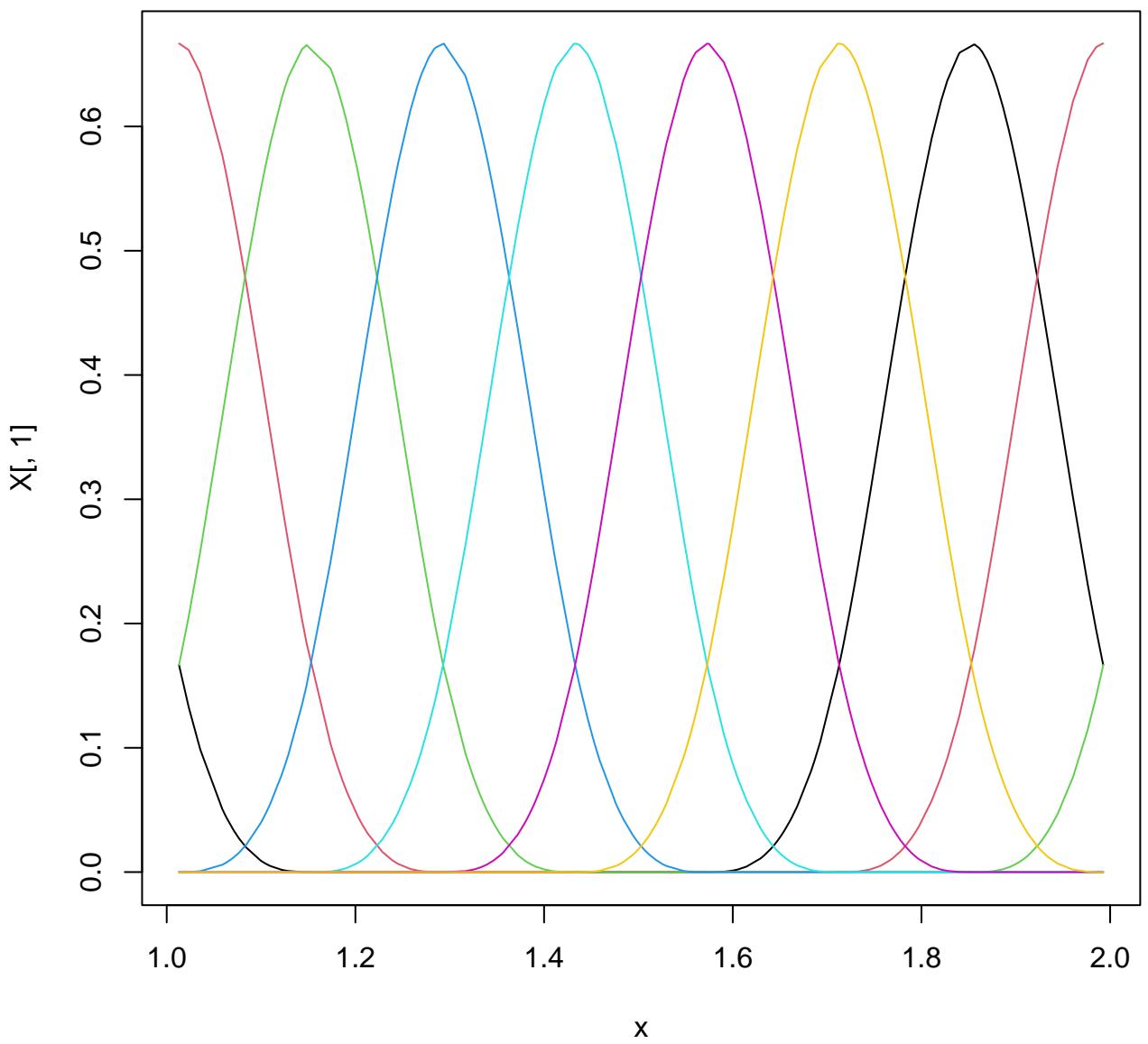


help("bam")

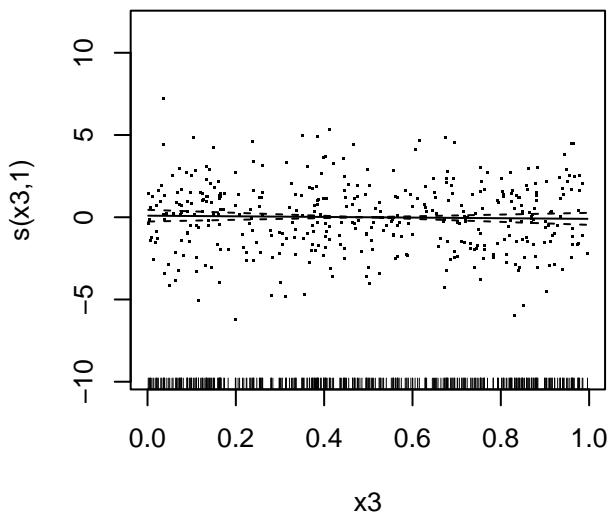
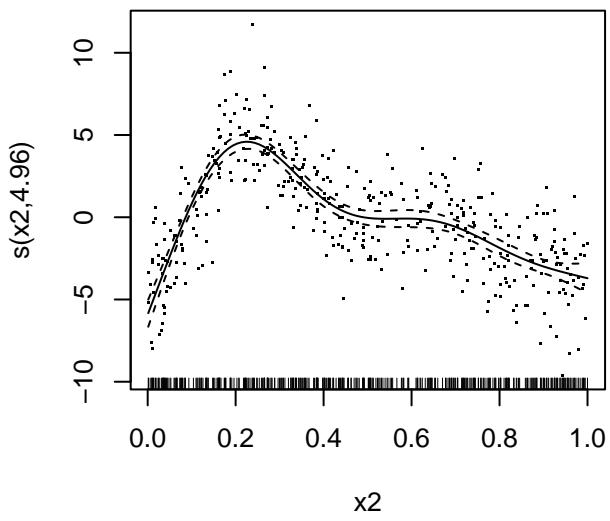
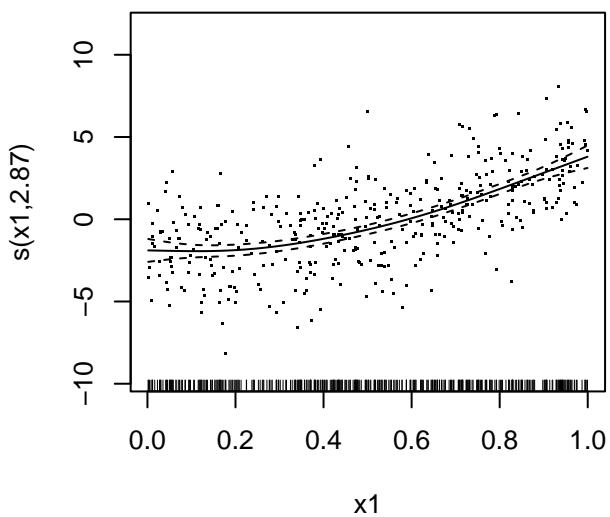
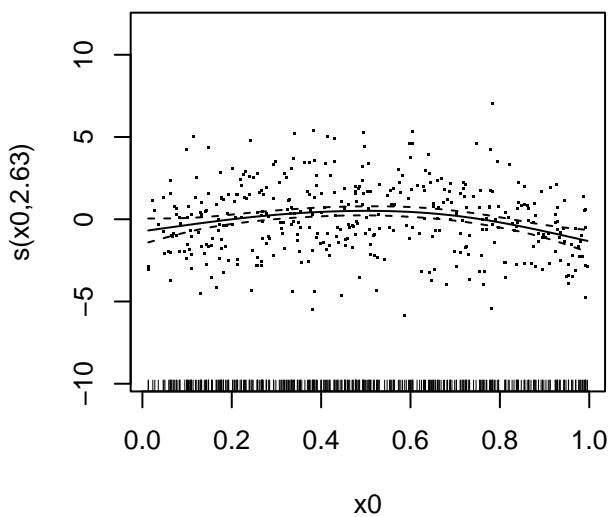
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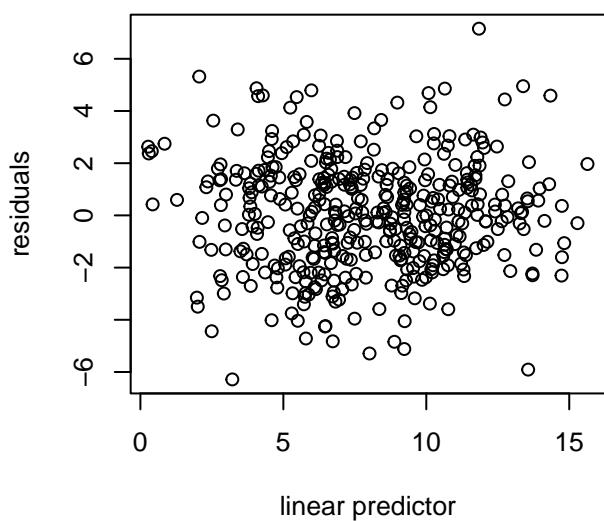
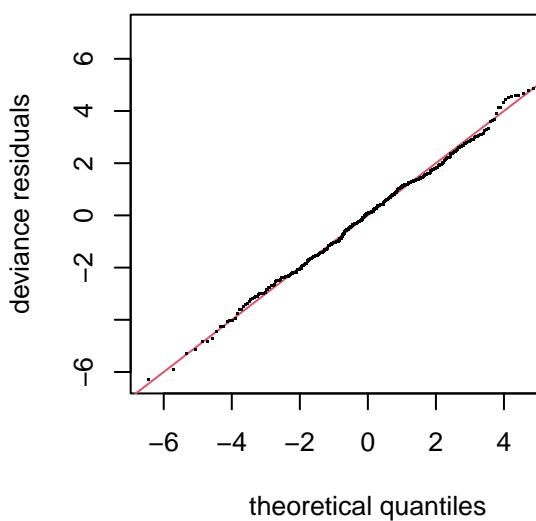
help("cSplinedDes")



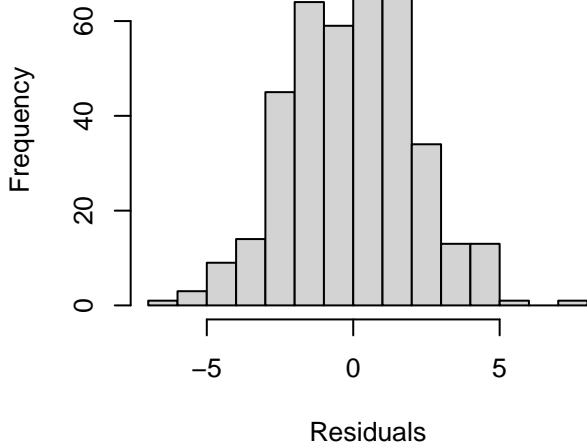
help("choose.k")



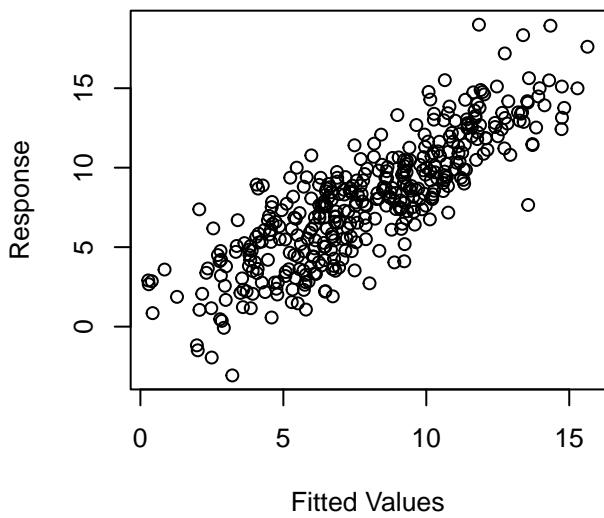
## Resids vs. linear pred.



## Histogram of residuals

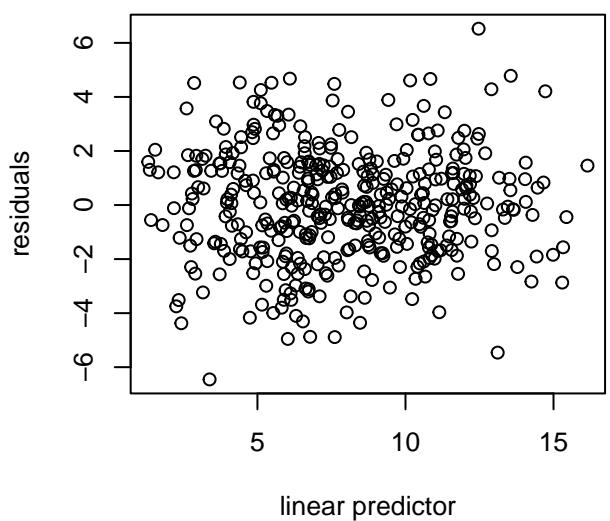
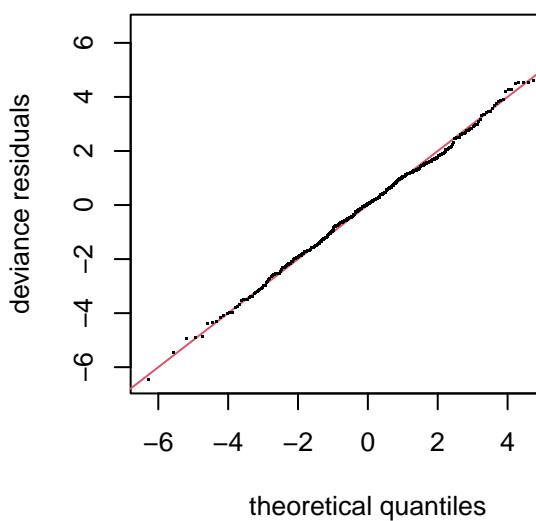


## Response vs. Fitted Values

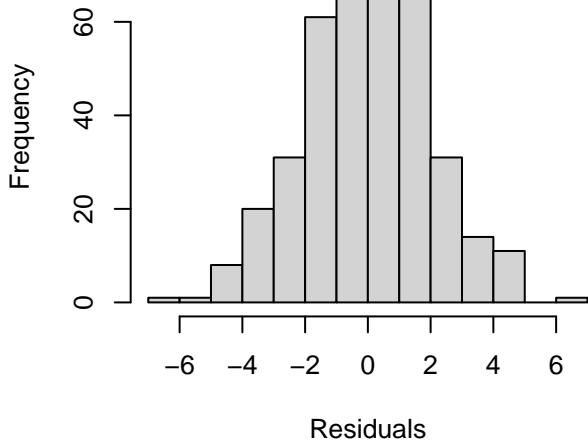


help("choose.k")

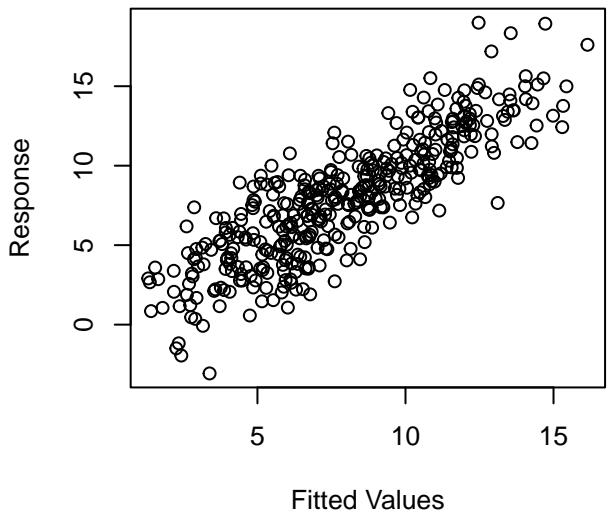
## Resids vs. linear pred.



## Histogram of residuals

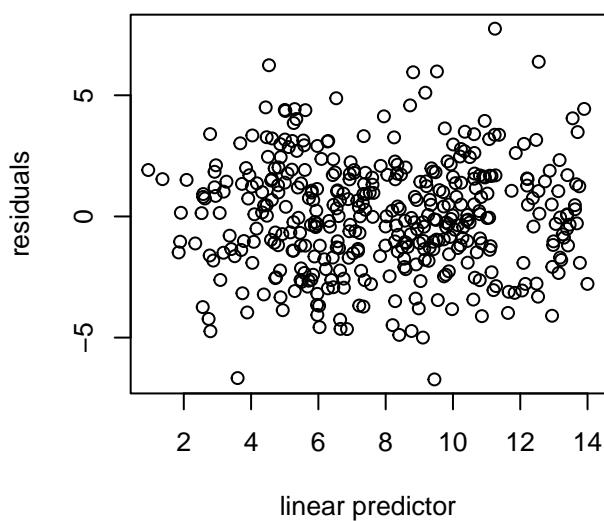
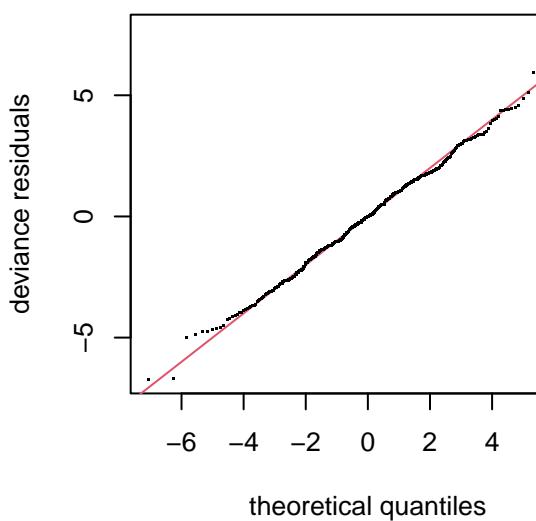


## Response vs. Fitted Values

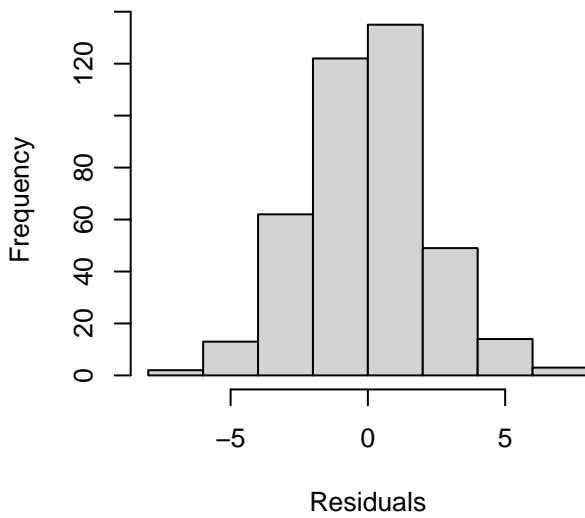


help("choose.k")

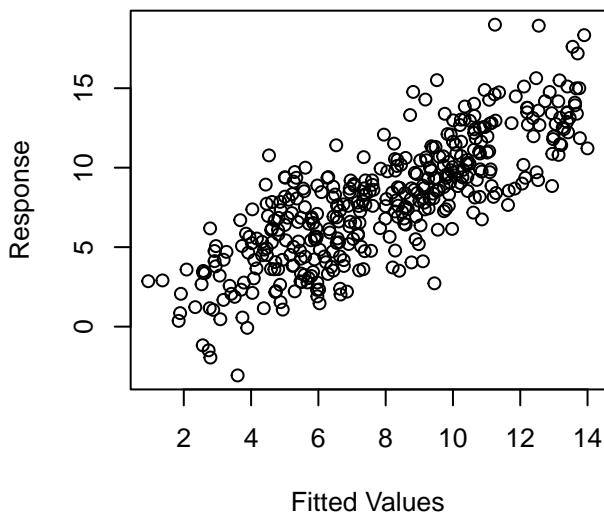
## Resids vs. linear pred.



## Histogram of residuals

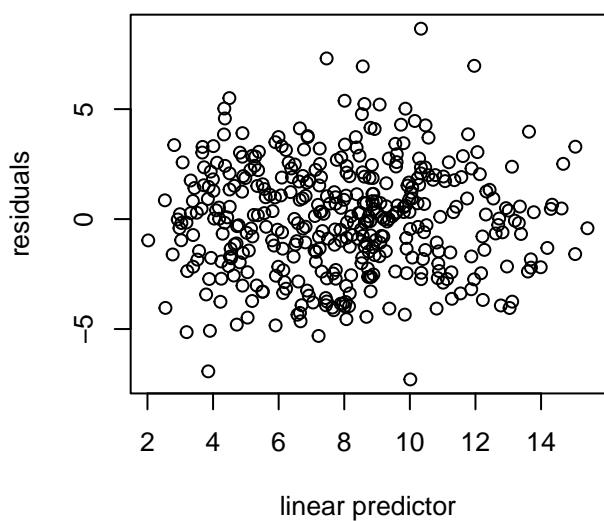
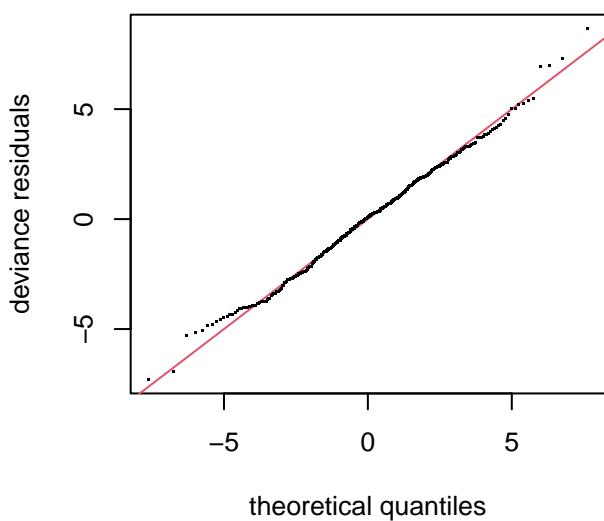


## Response vs. Fitted Values

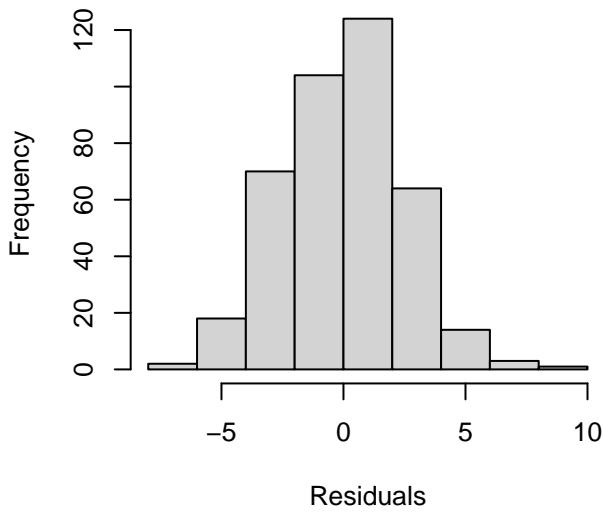


help("choose.k")

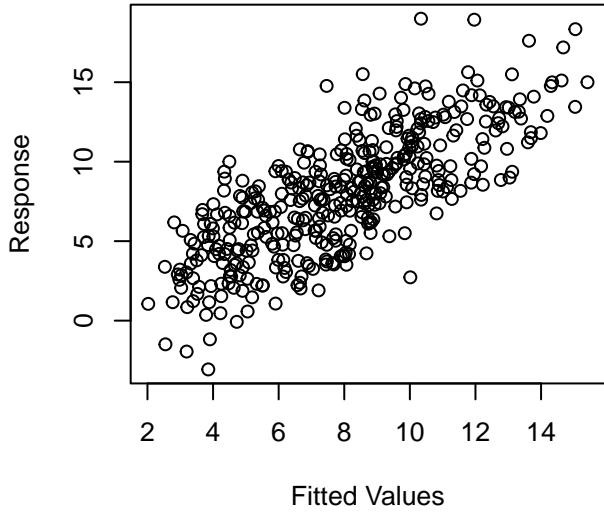
### Resids vs. linear pred.



### Histogram of residuals

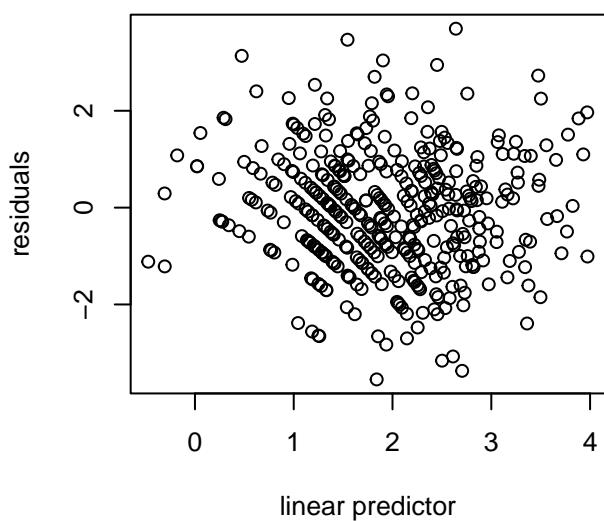
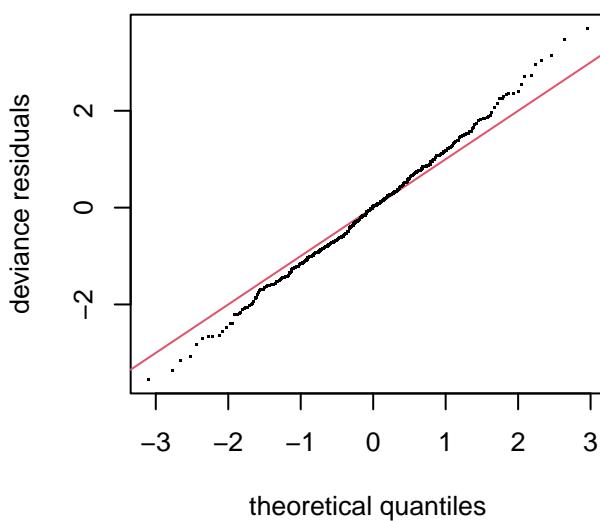


### Response vs. Fitted Values

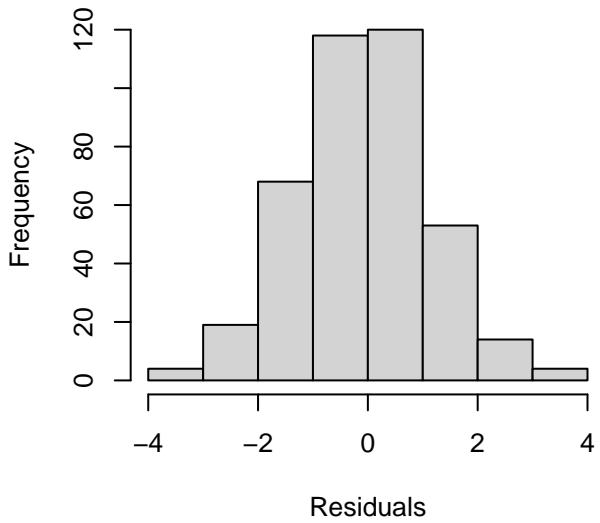


help("choose.k")

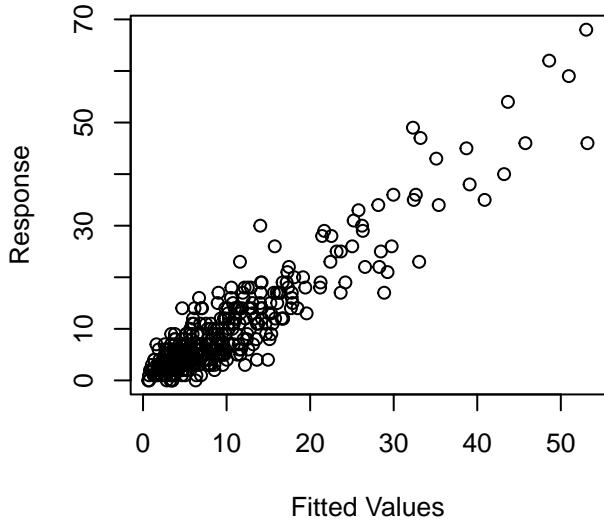
## Resids vs. linear pred.



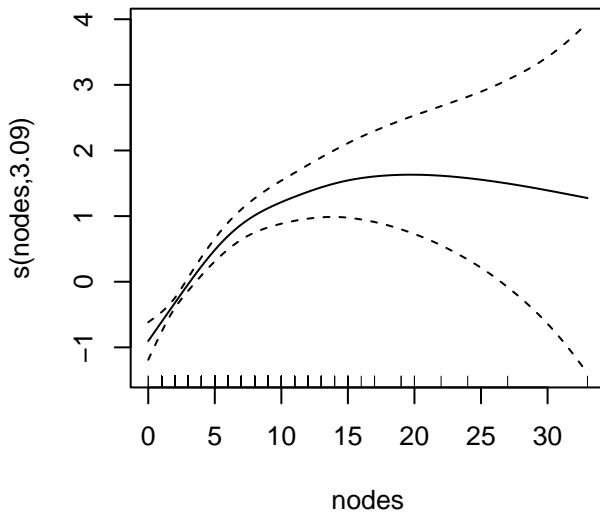
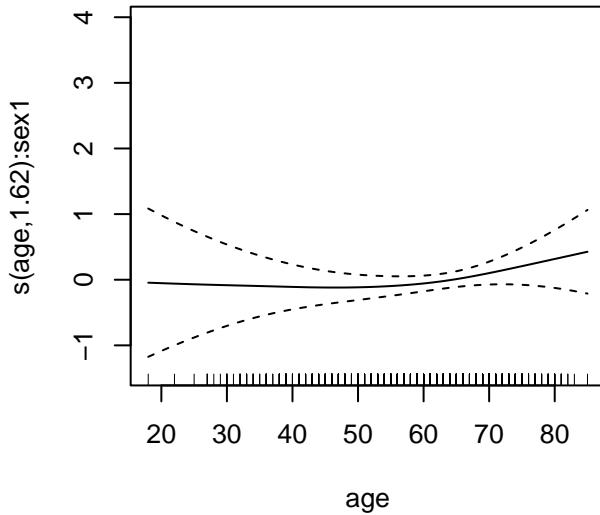
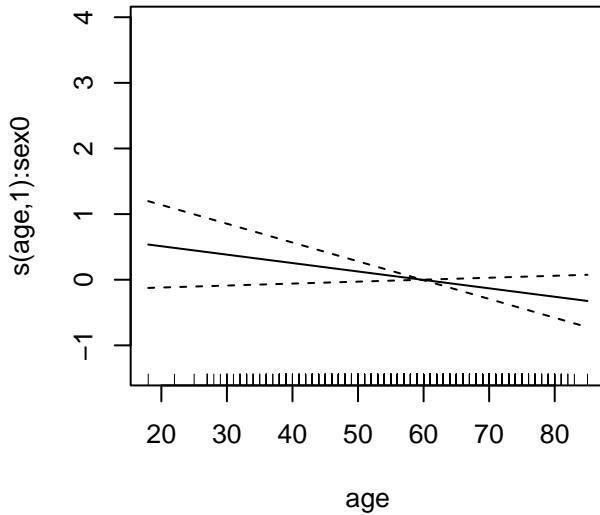
## Histogram of residuals



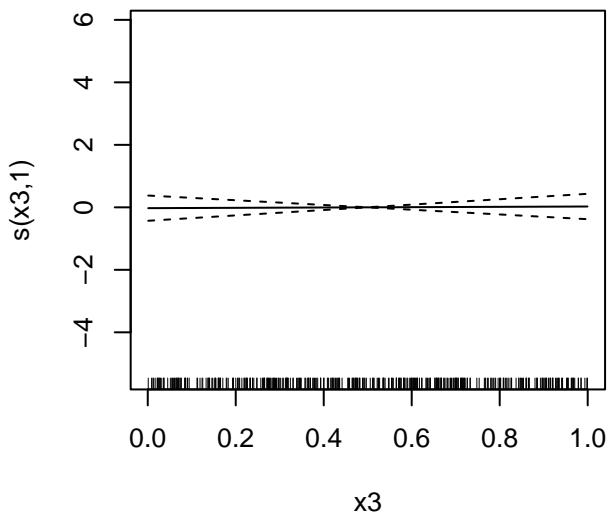
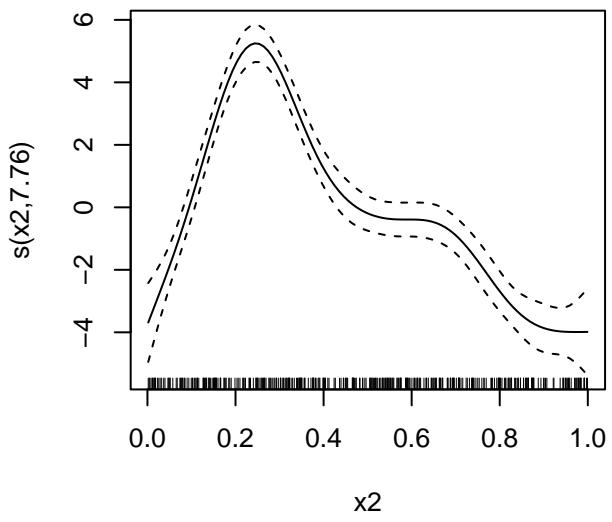
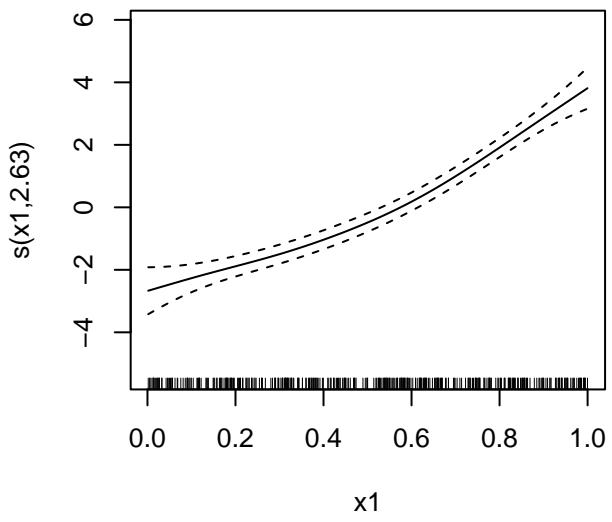
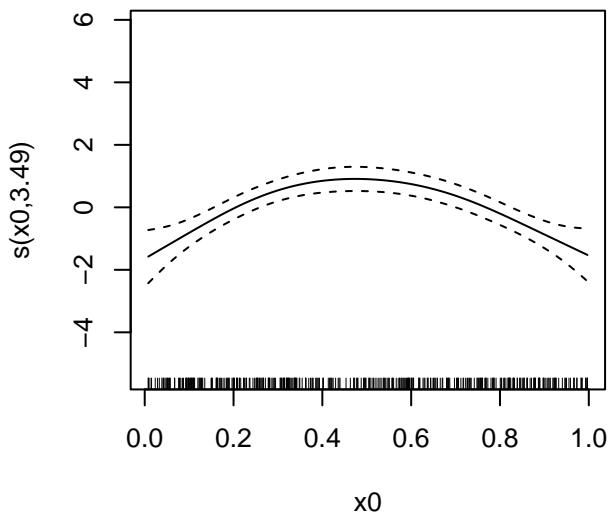
## Response vs. Fitted Values



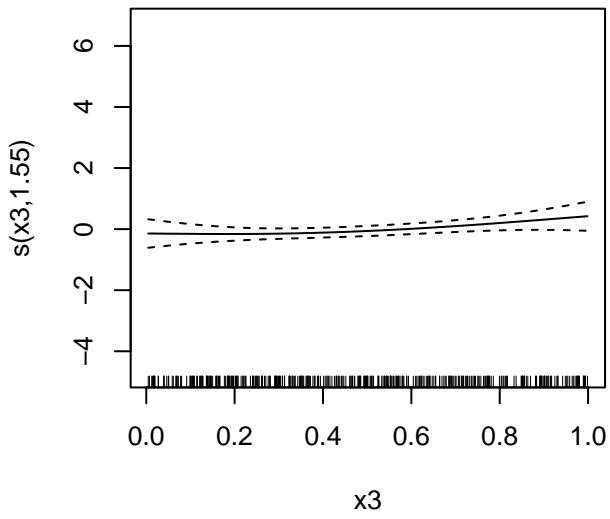
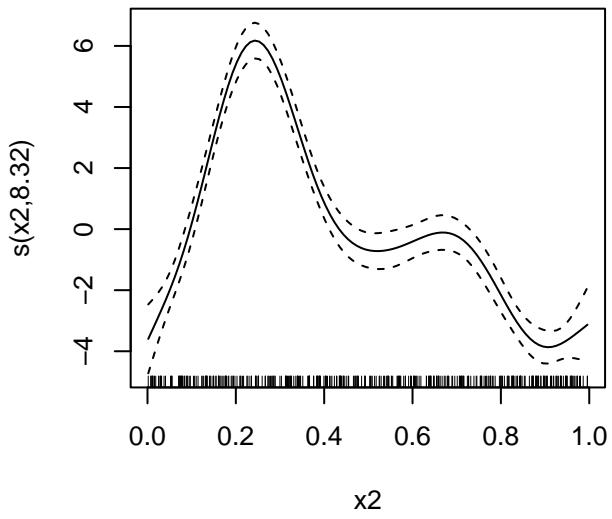
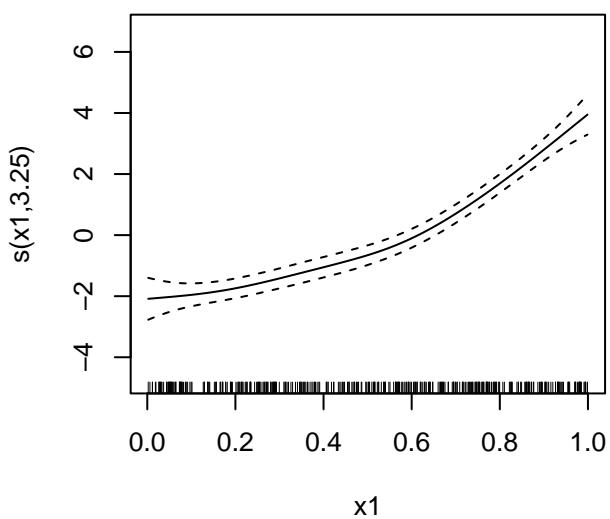
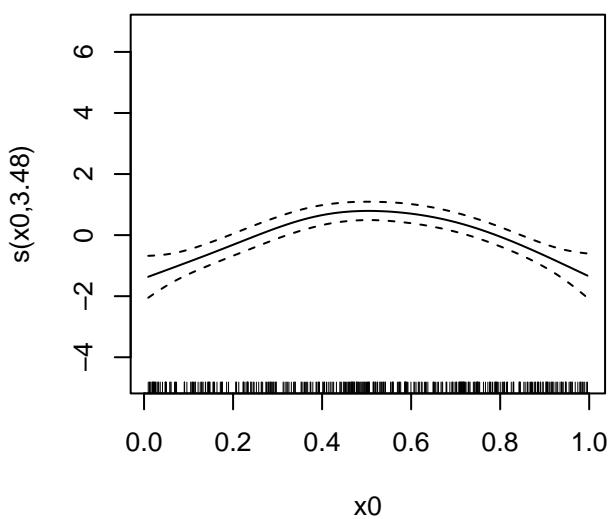
help("choose.k")



help("cnorm")

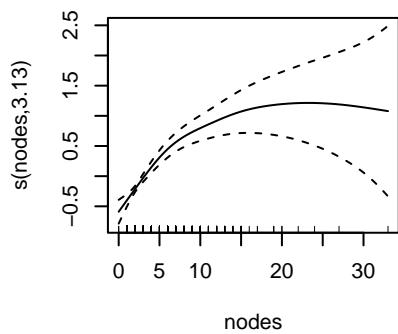
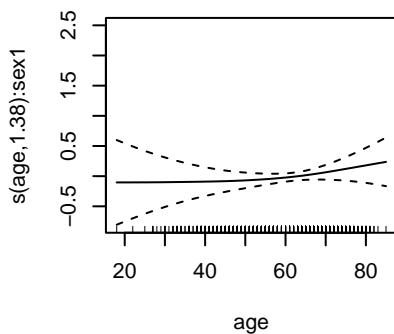
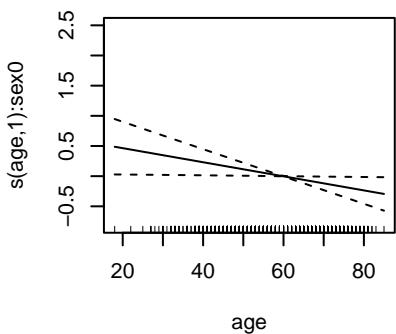


help("cnorm")

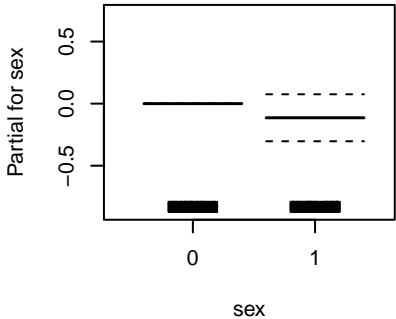


help("cnorm")

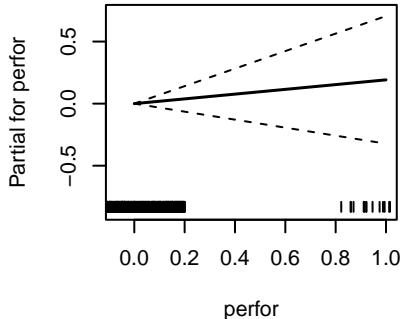
help("coxph")



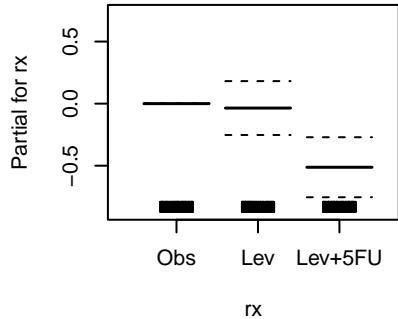
**sex**



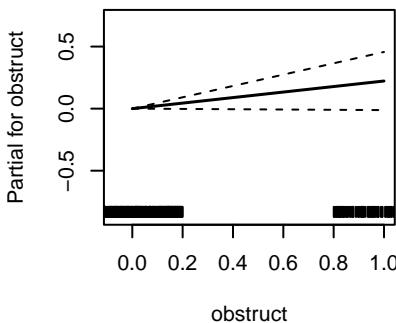
**perfor**



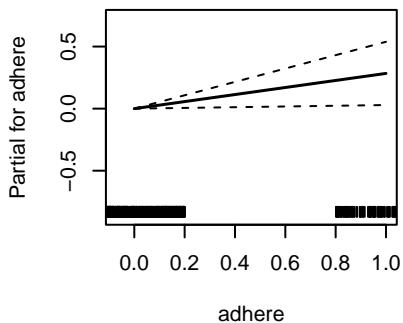
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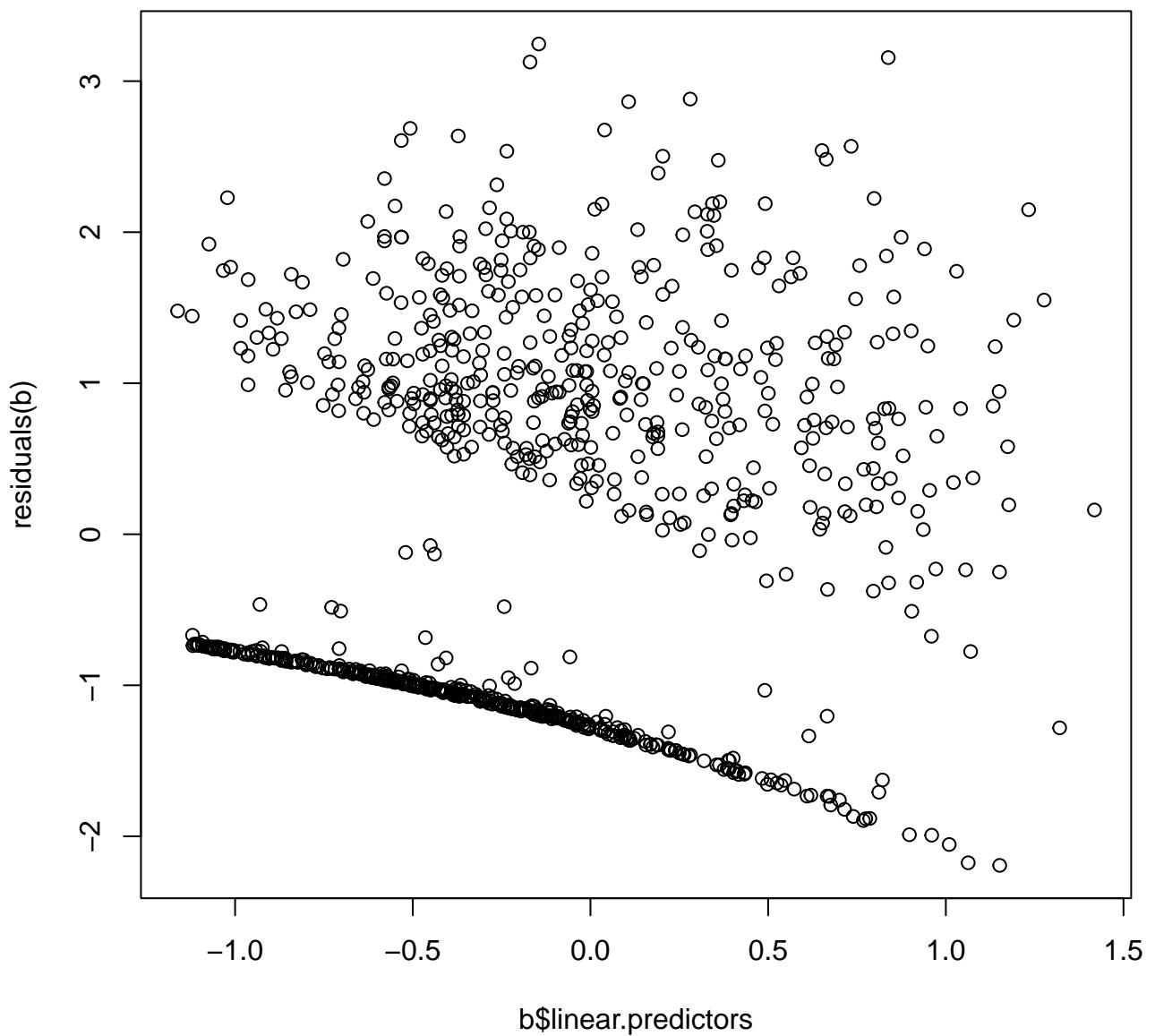
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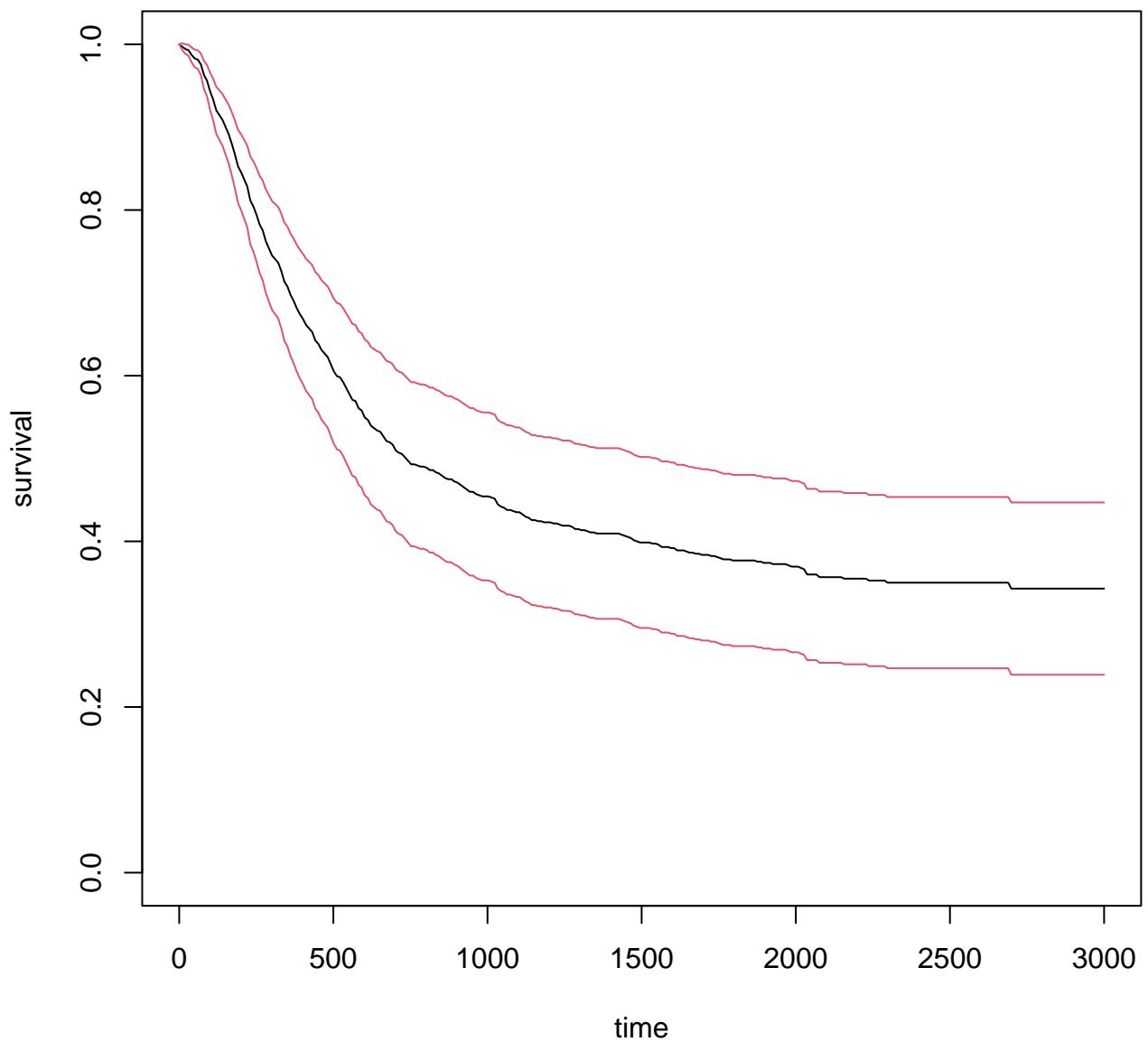
**adhere**



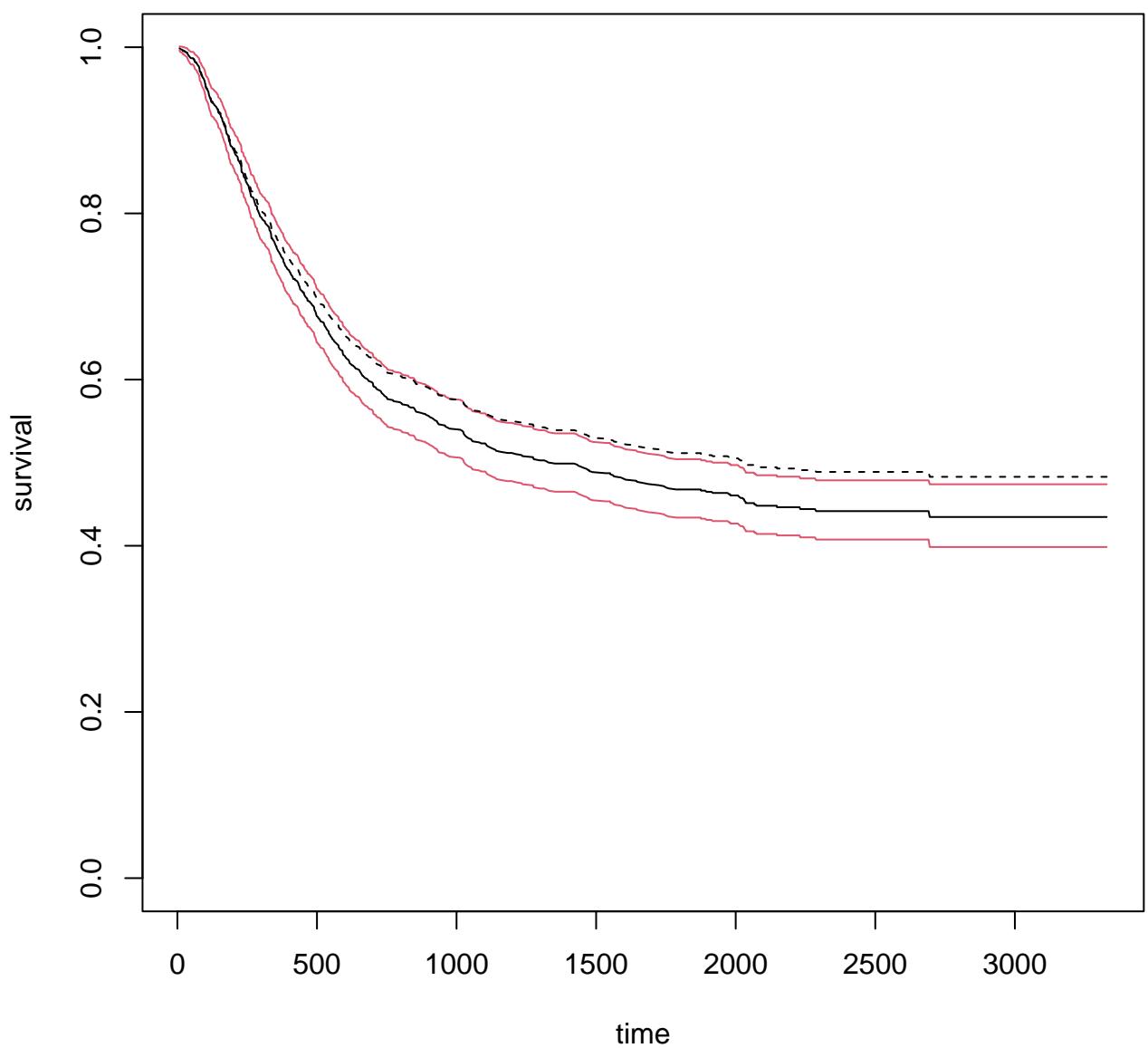
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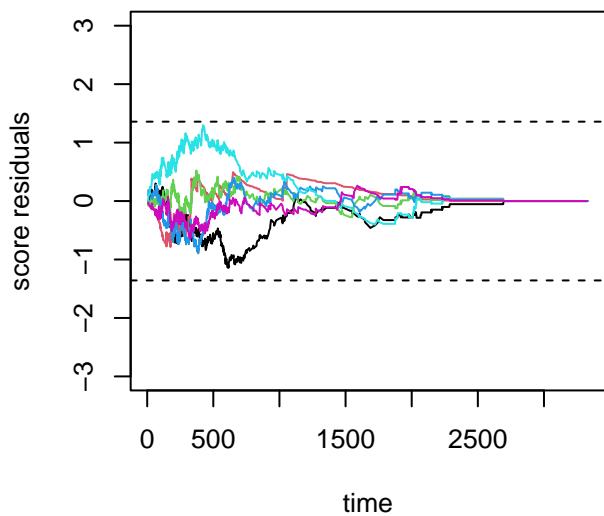
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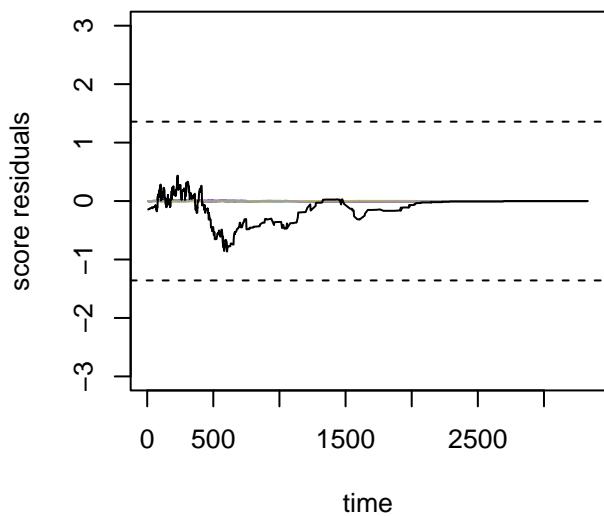
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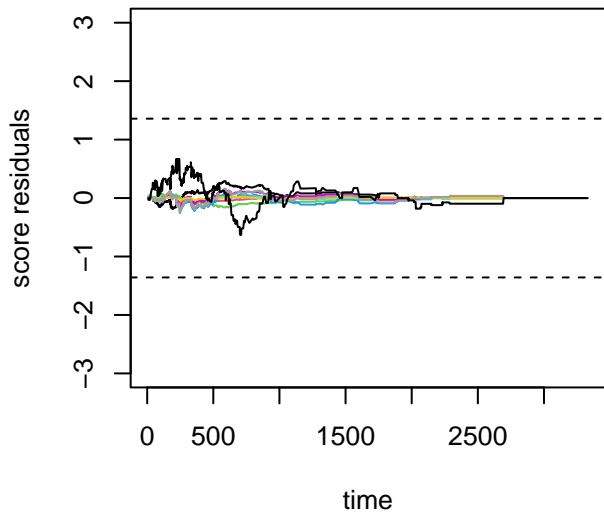
**parametric**



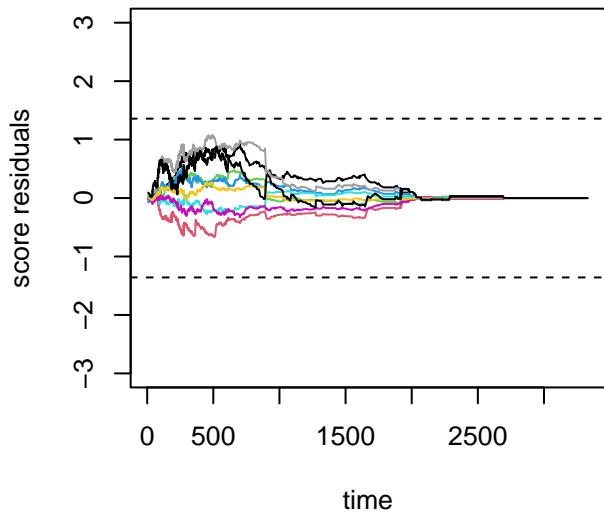
**s(age):sex0**



**s(age):sex1**

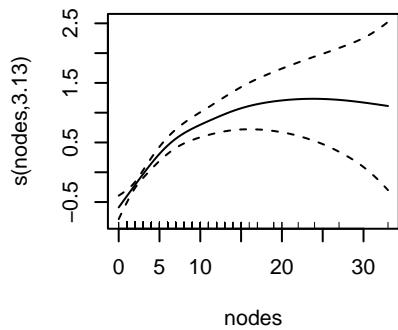
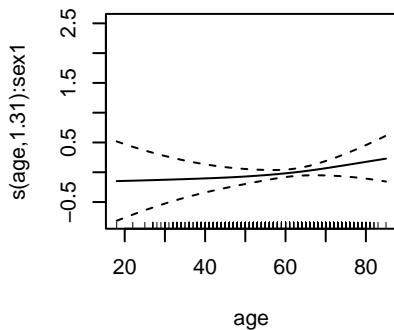
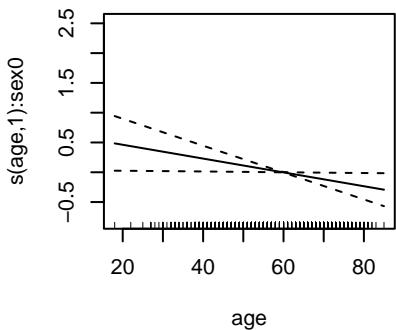


**s(nodes)**

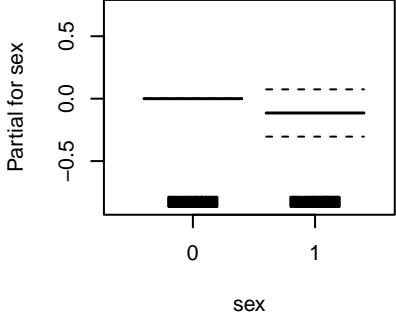


help("coxph")

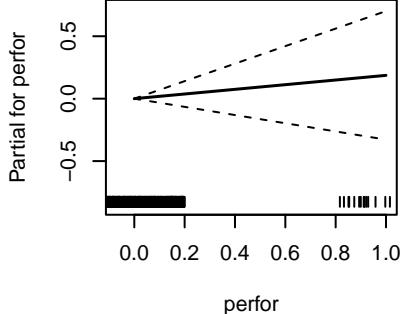
help("coxph")



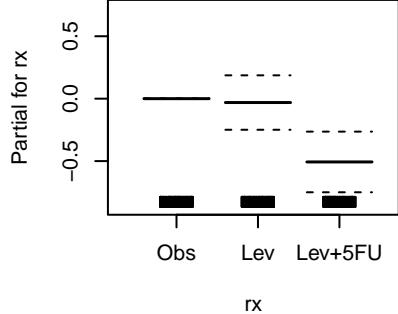
**sex**



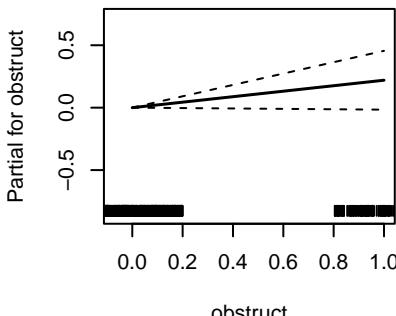
**perfor**



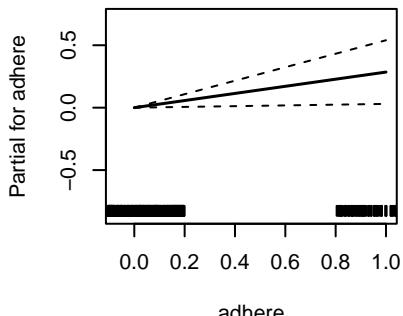
**rx**

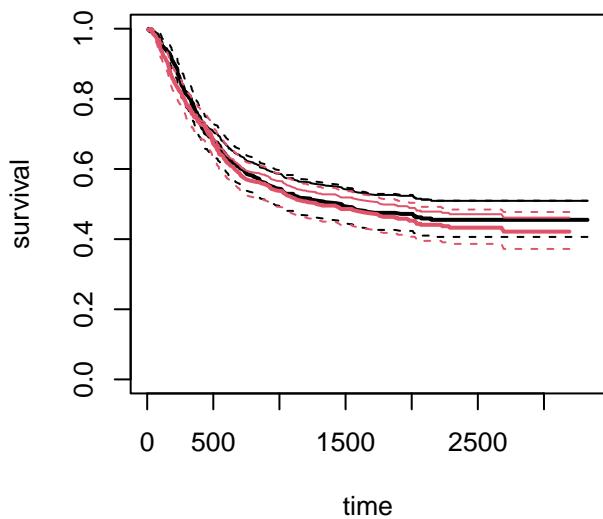


**obstruct**

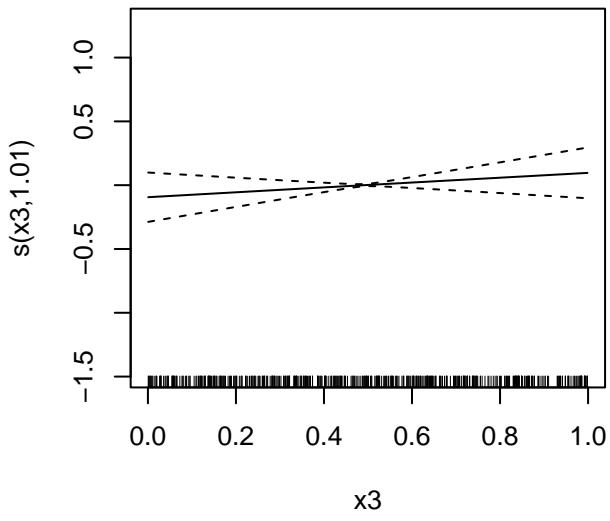
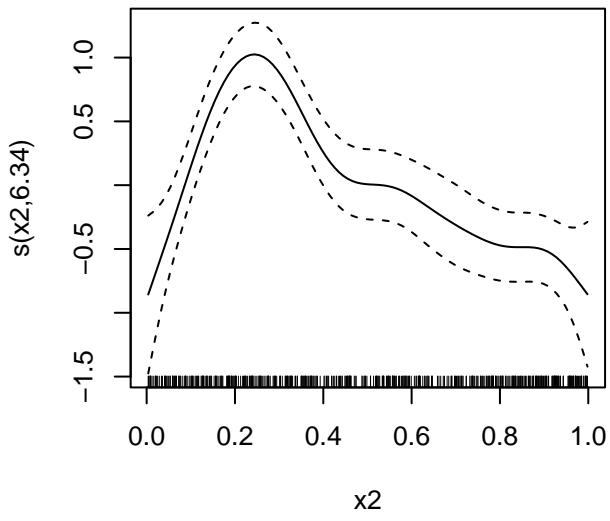
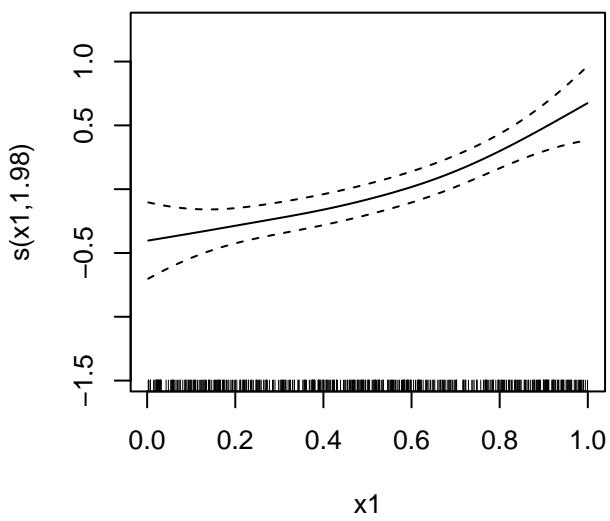
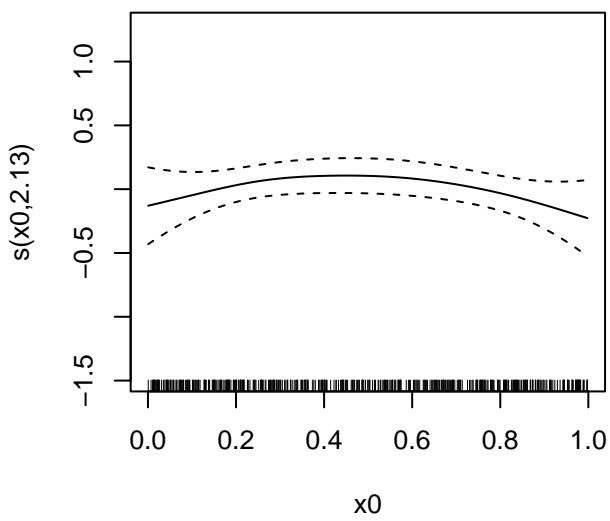


**adhere**

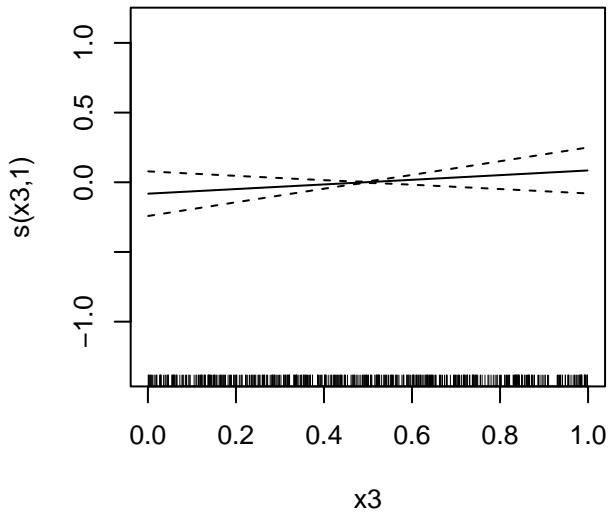
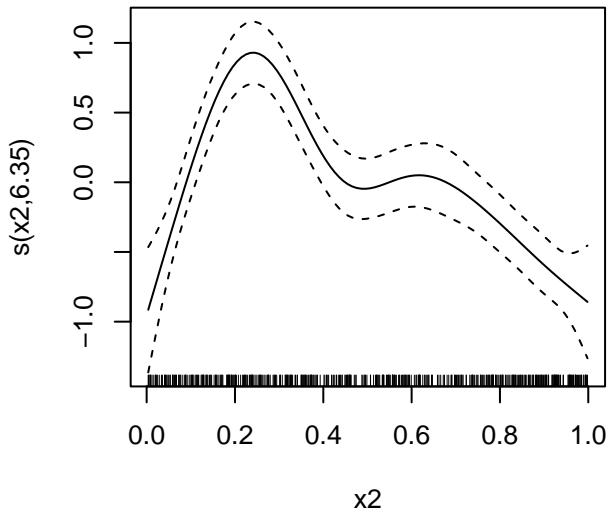
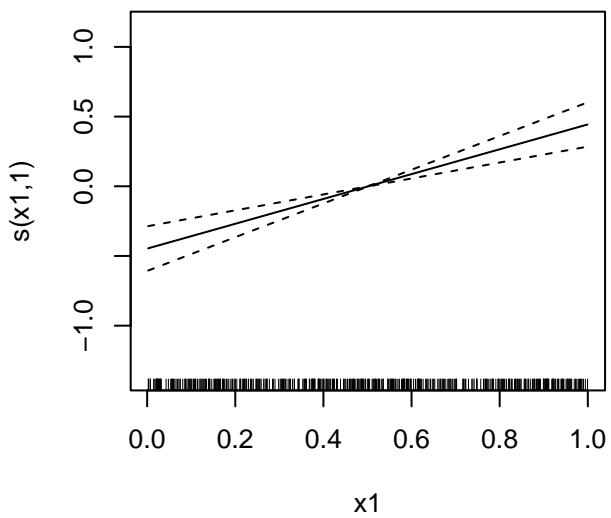
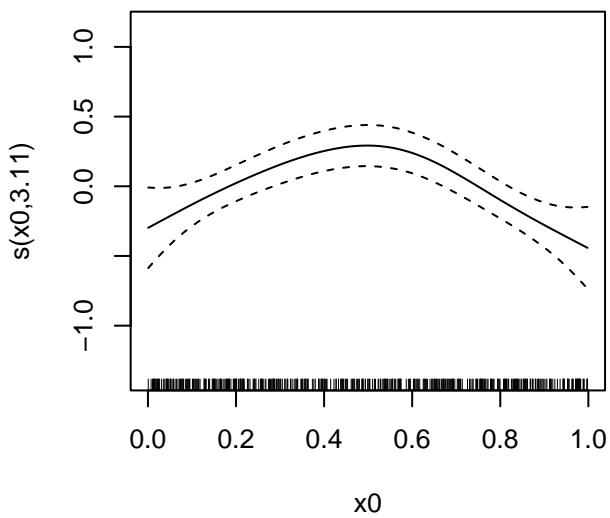




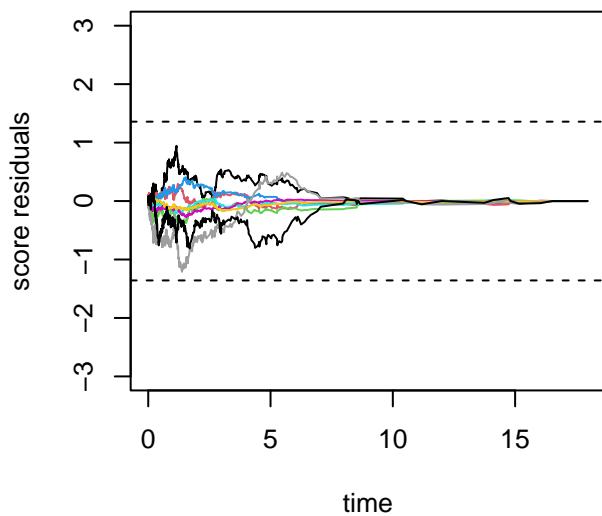
help("coxph")



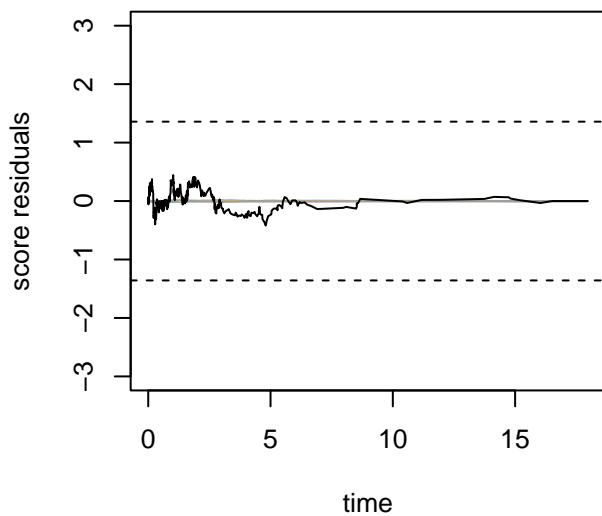
help("coxph")



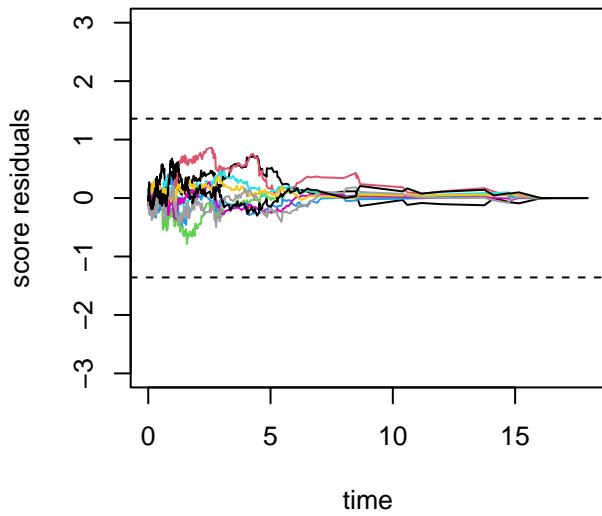
$s(x_0)$



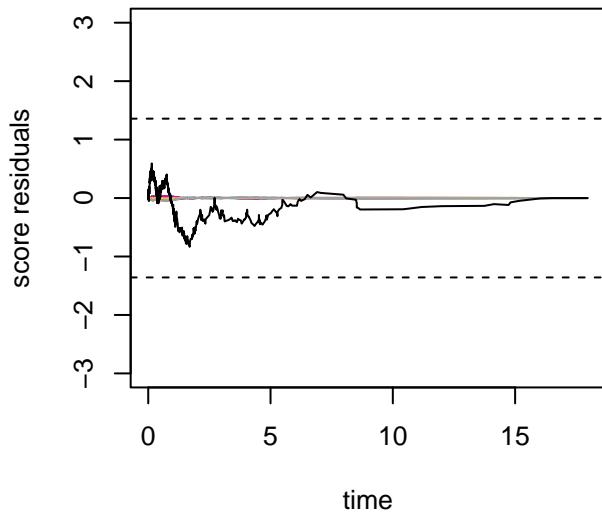
$s(x_1)$



$s(x_2)$

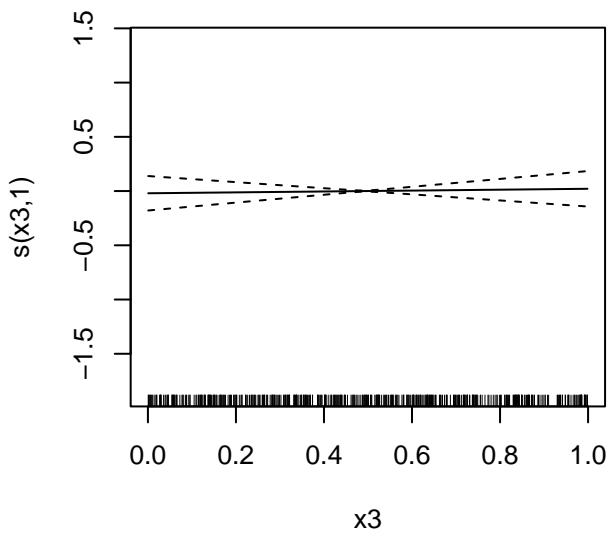
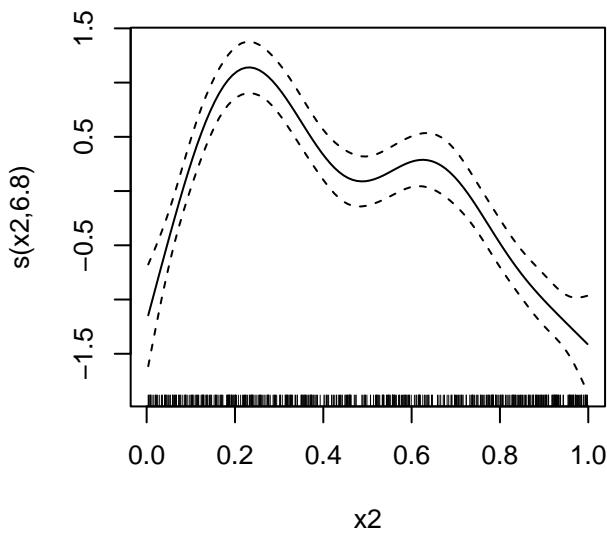
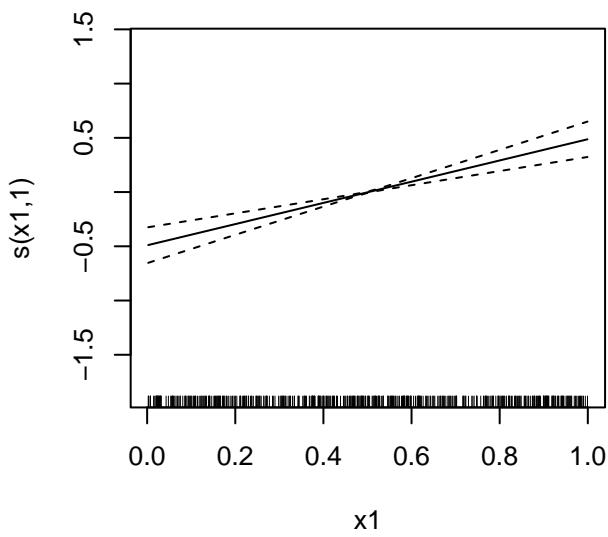
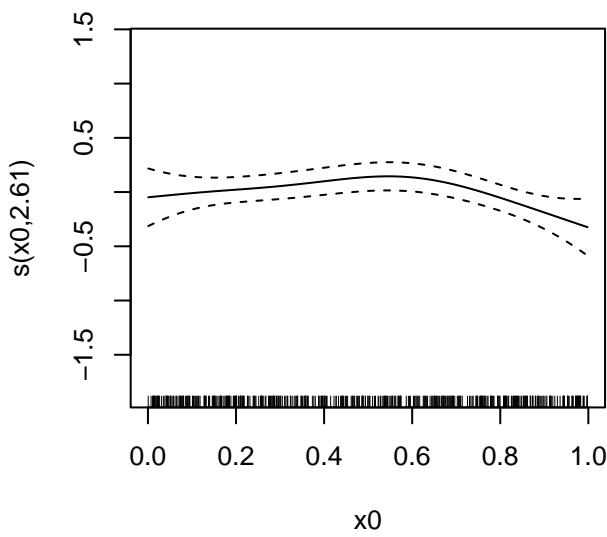


$s(x_3)$

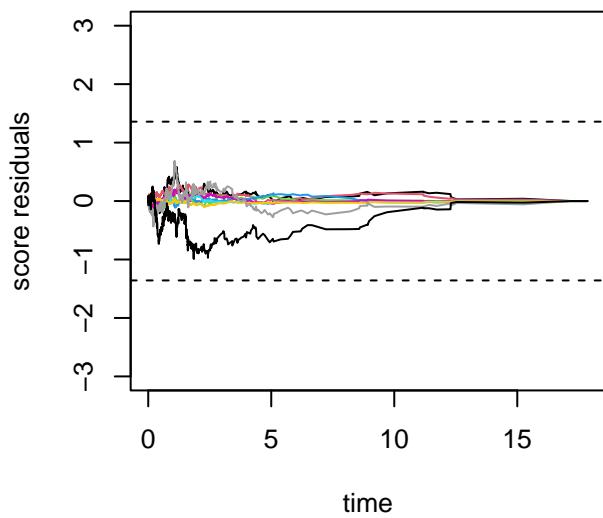


help("coxph")

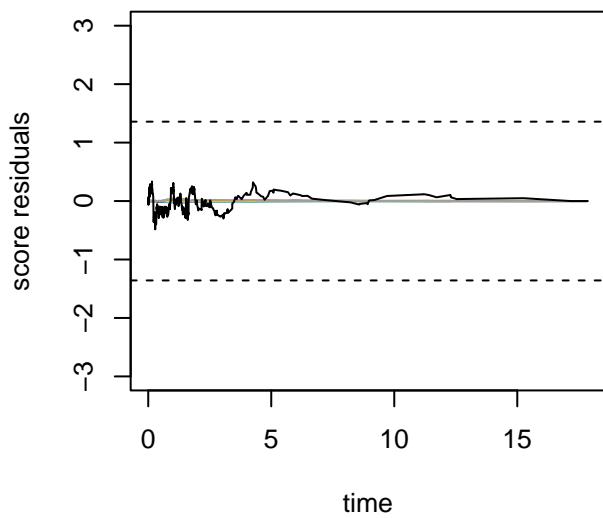
help("coxph")



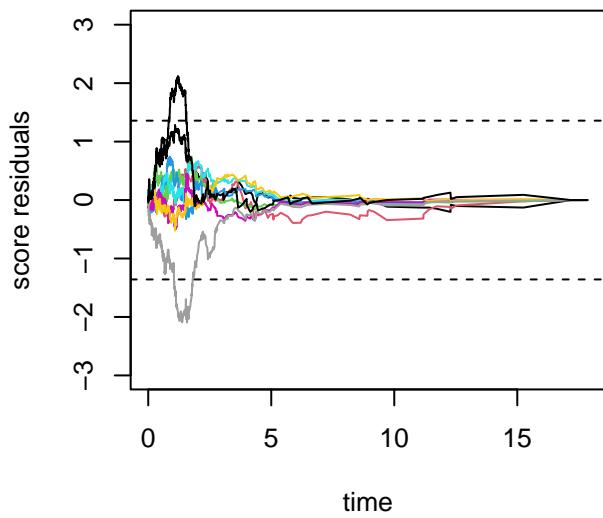
$s(x_0)$



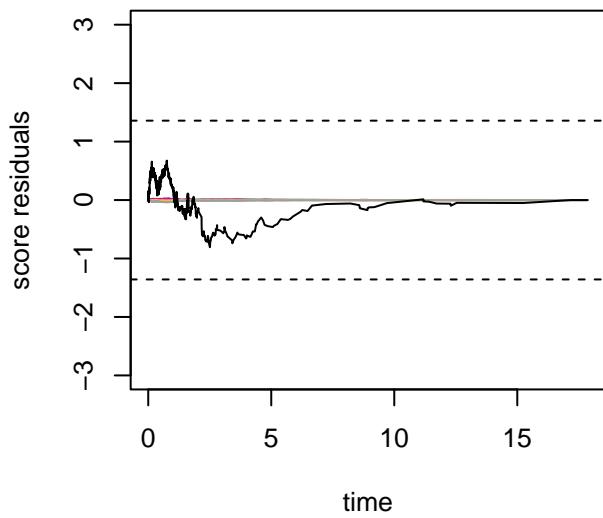
$s(x_1)$



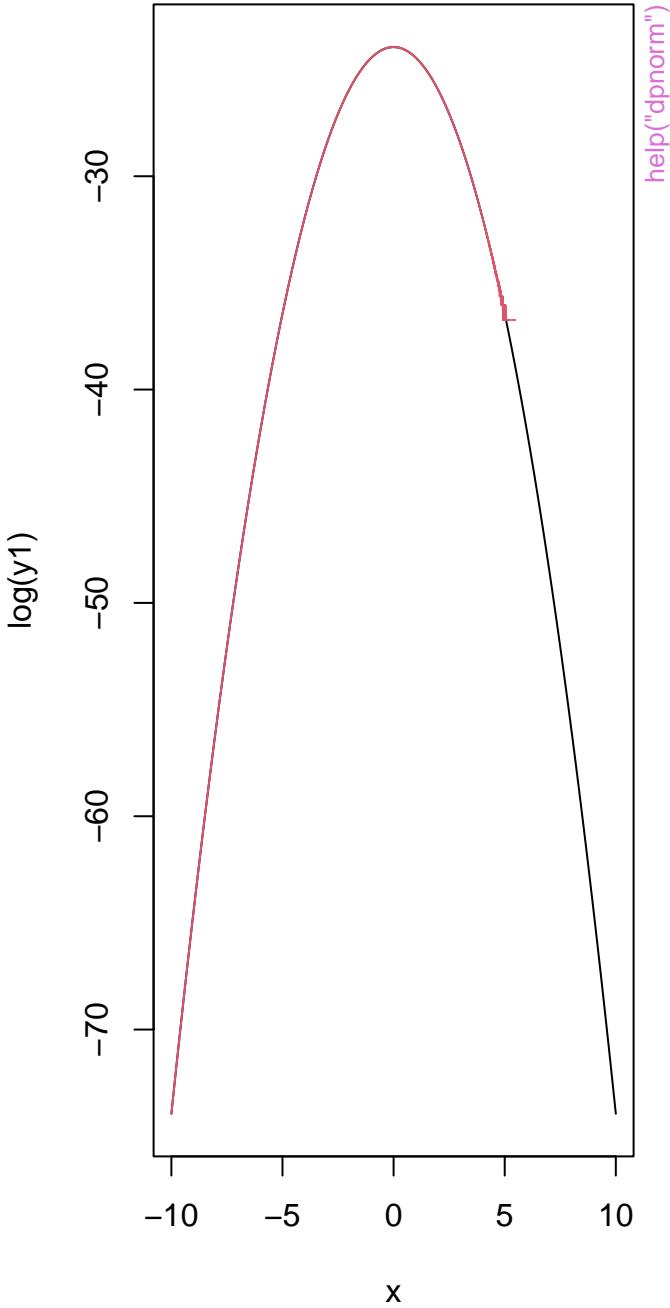
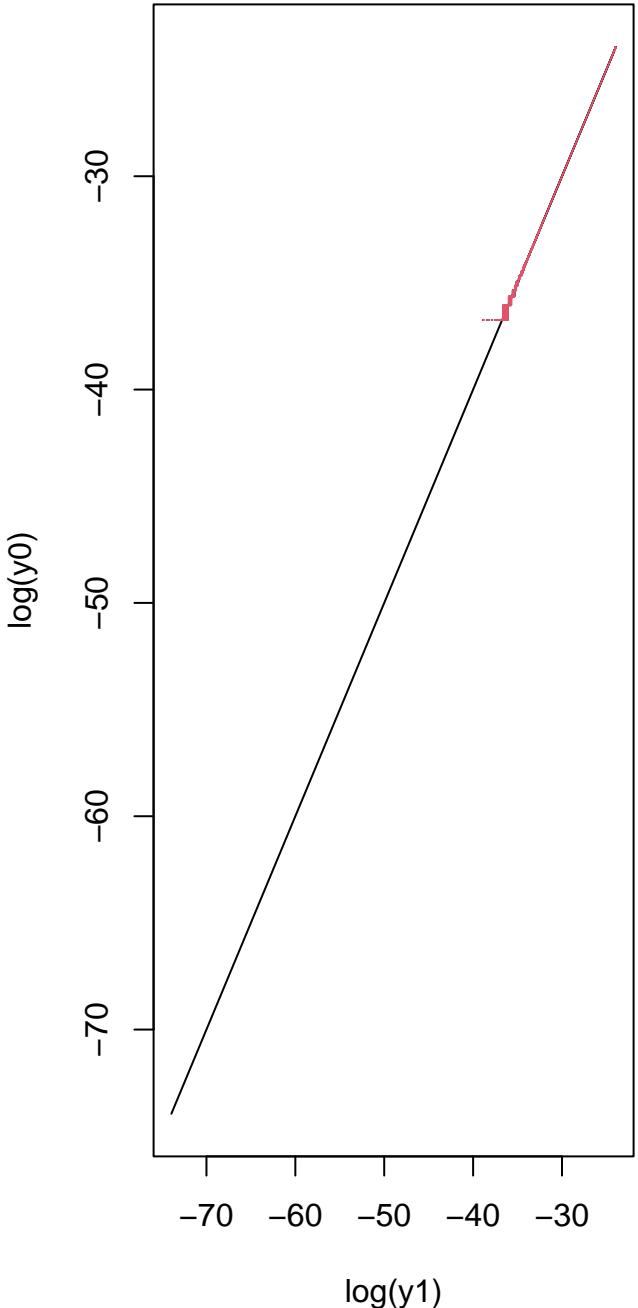
$s(x_2)$



$s(x_3)$



help("coxph")



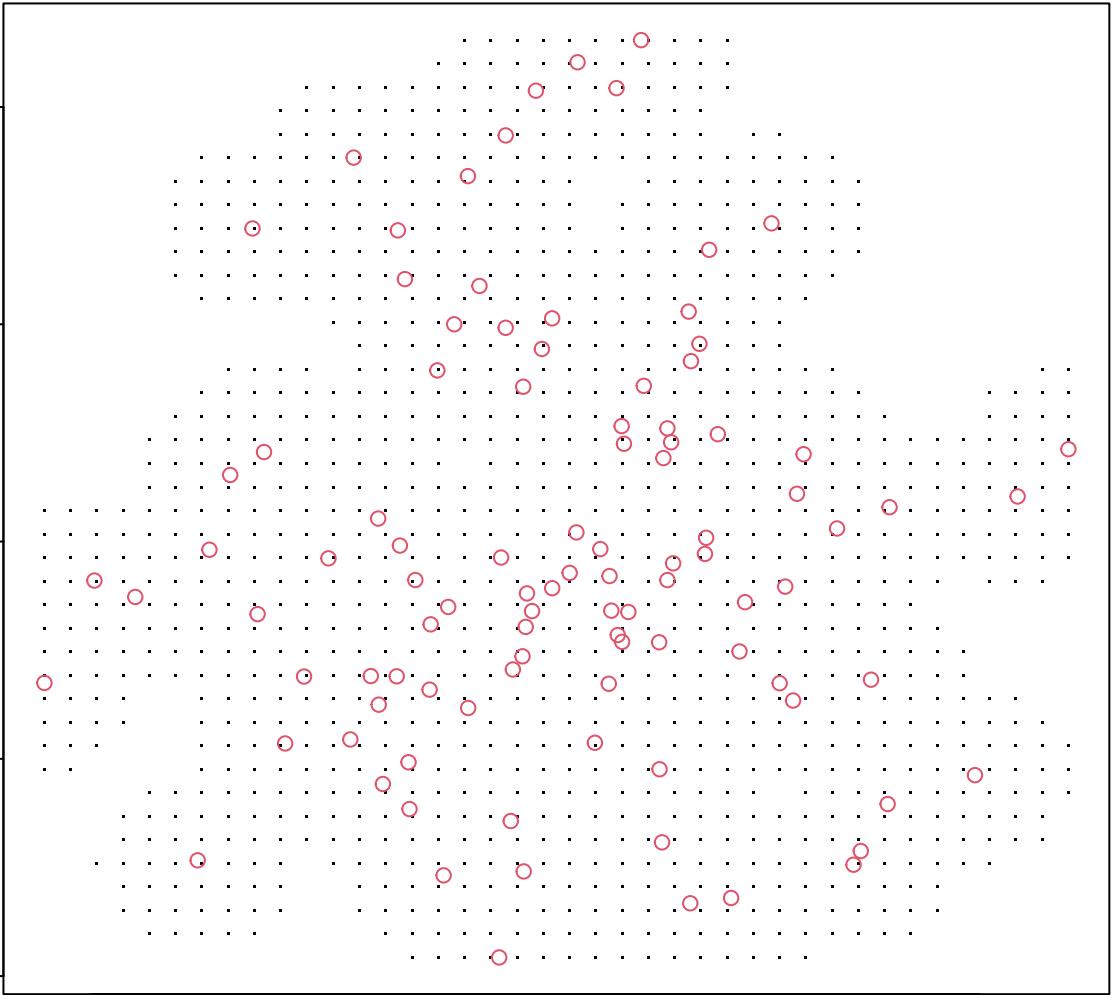
gy[!tf]

2  
1  
0  
-1  
-2

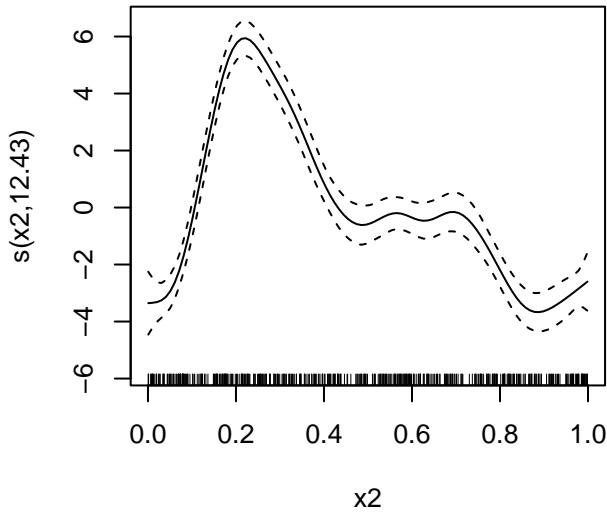
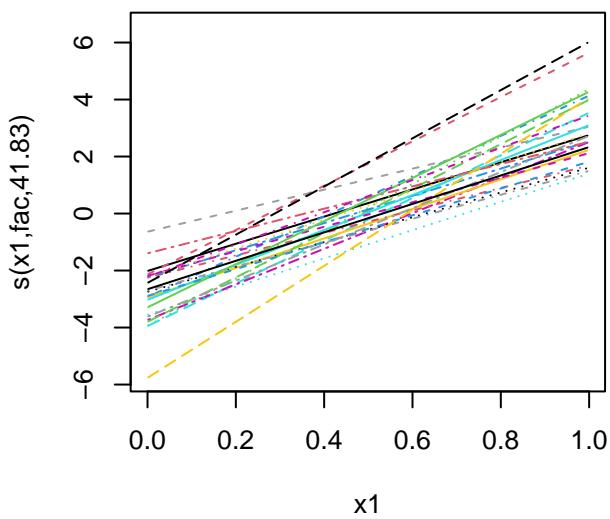
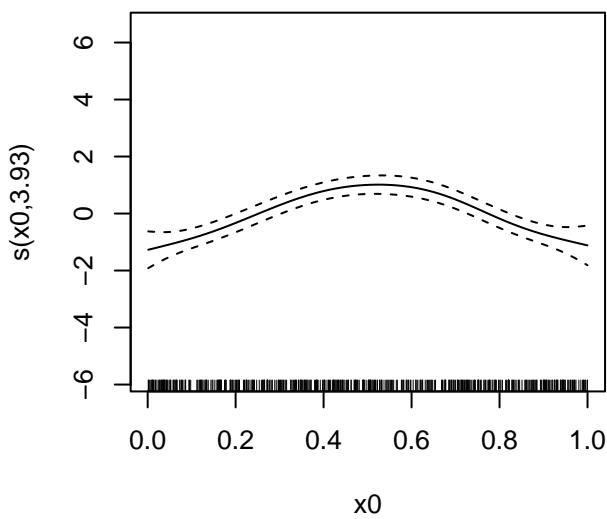
-2 -1 0 1 2

gx[!tf]

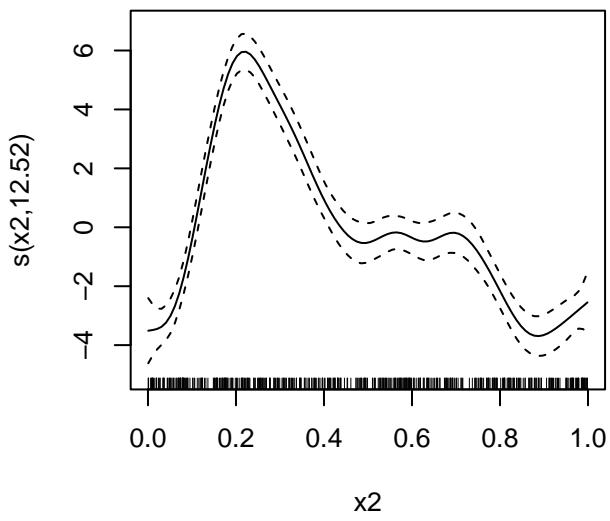
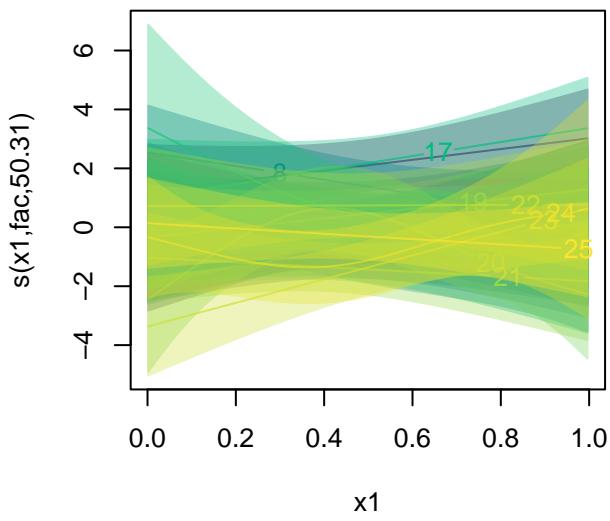
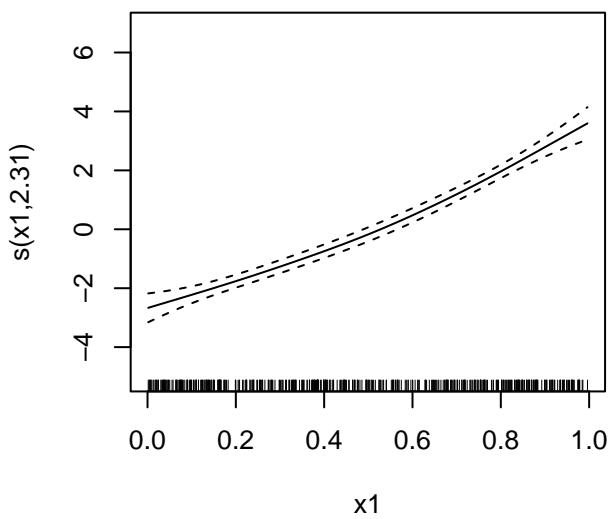
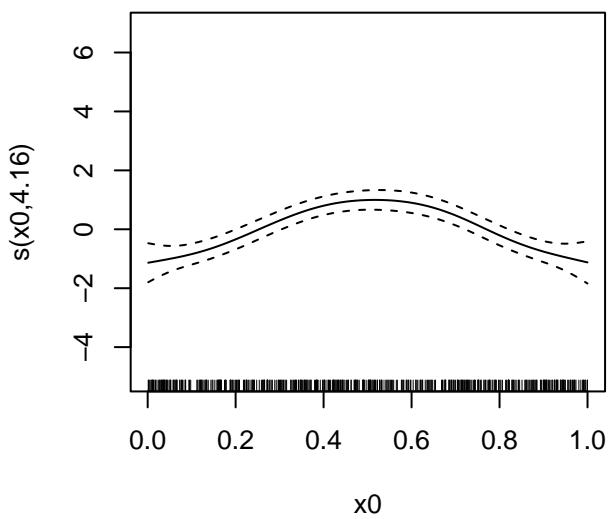
help("exclude.too.far")



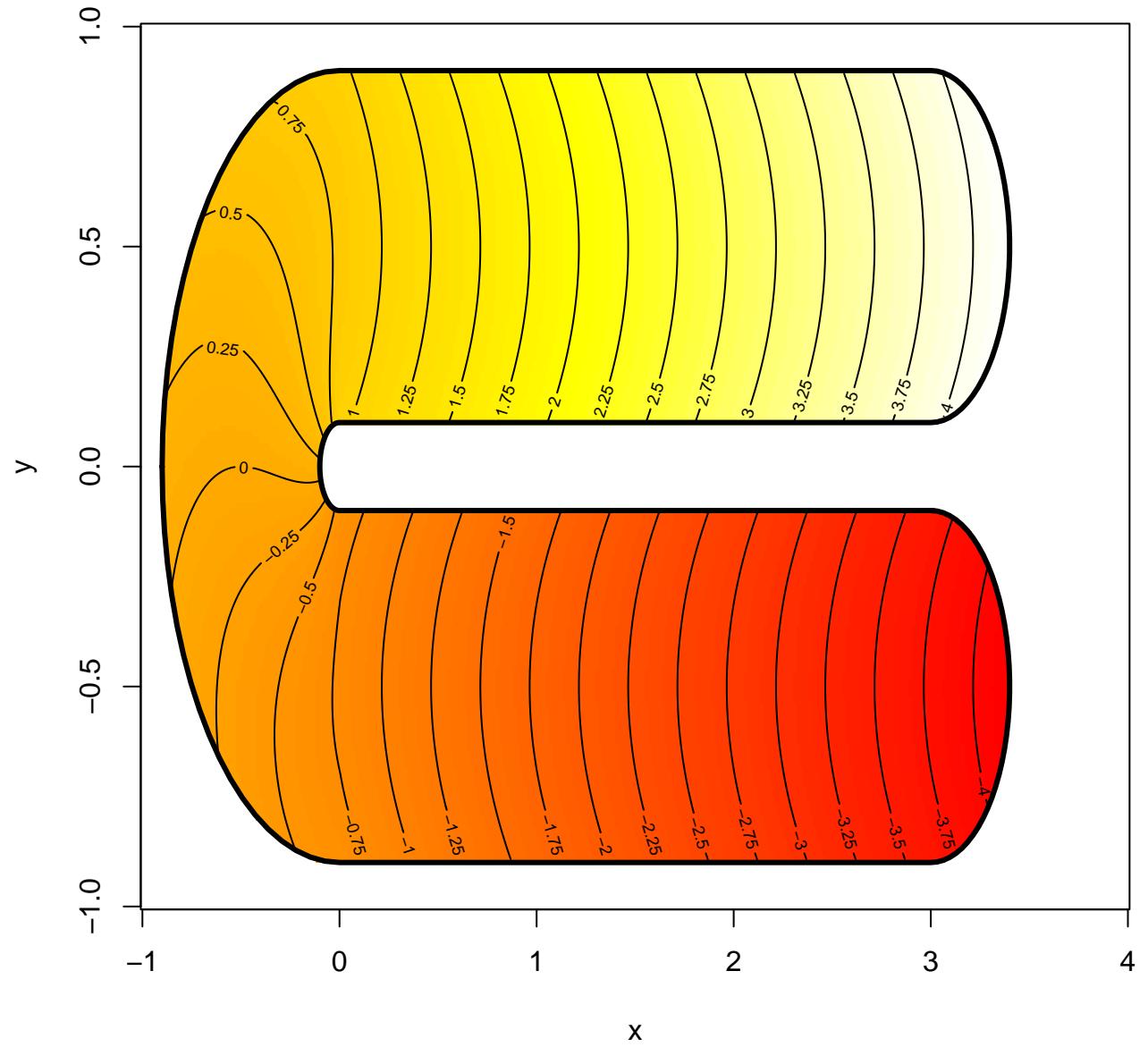
help("factor.smooth")

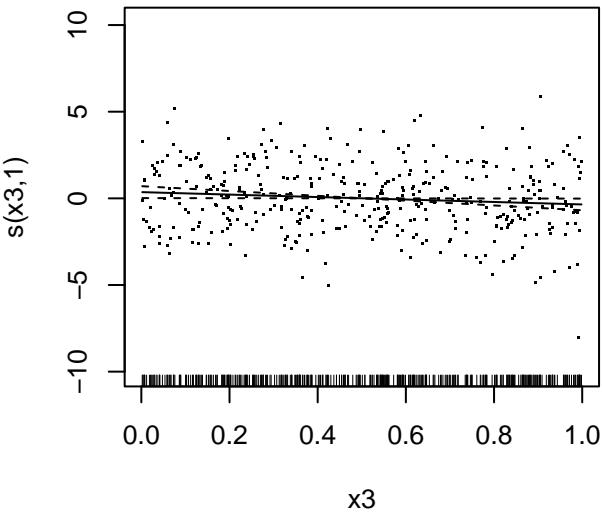
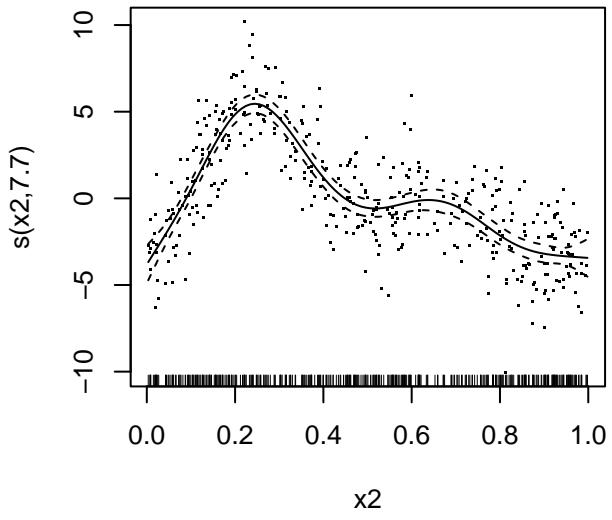
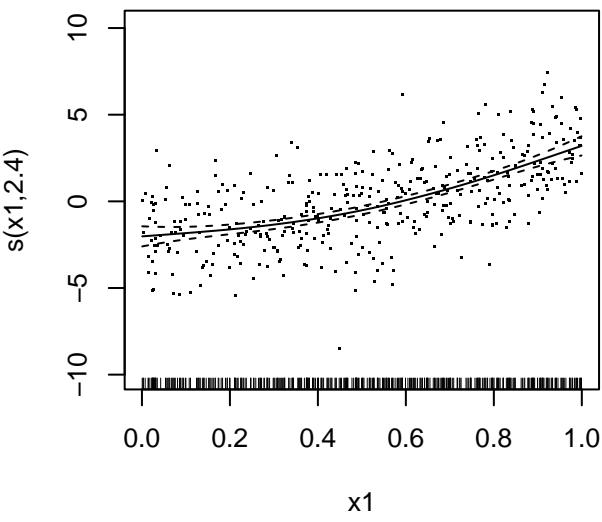
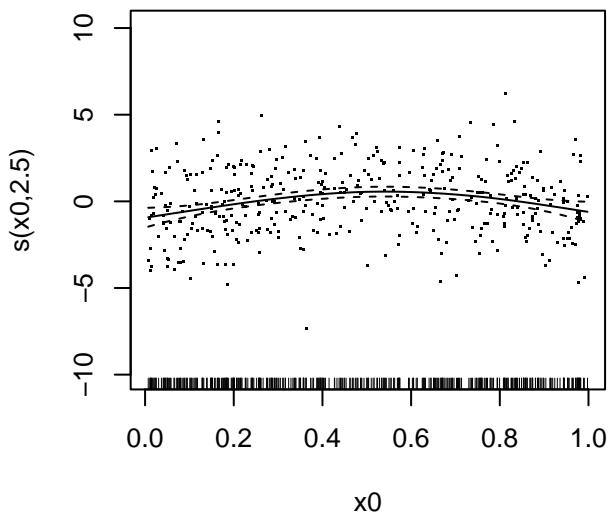


help("factor.smooth")

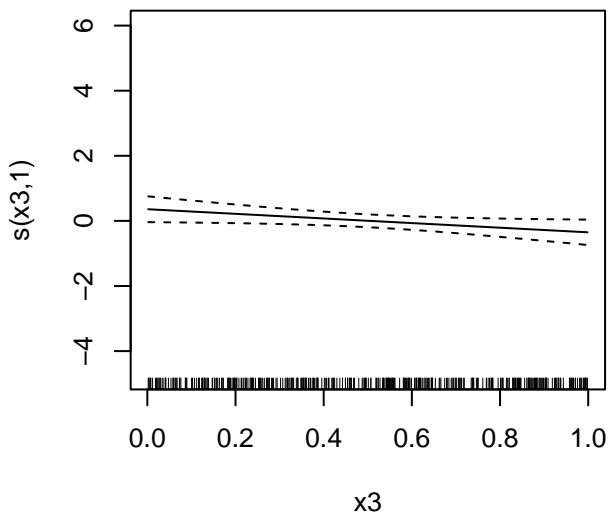
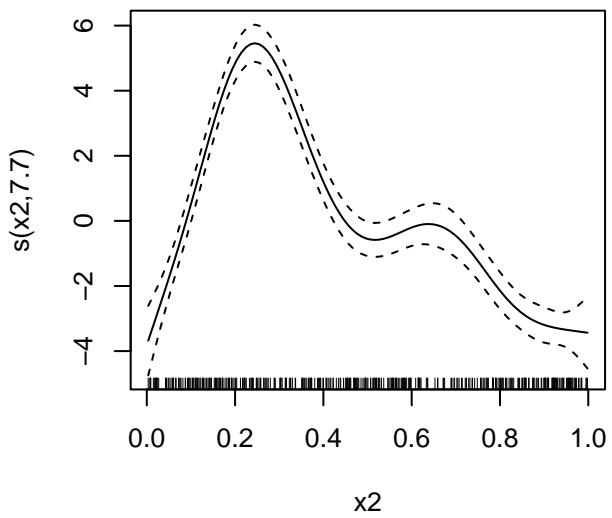
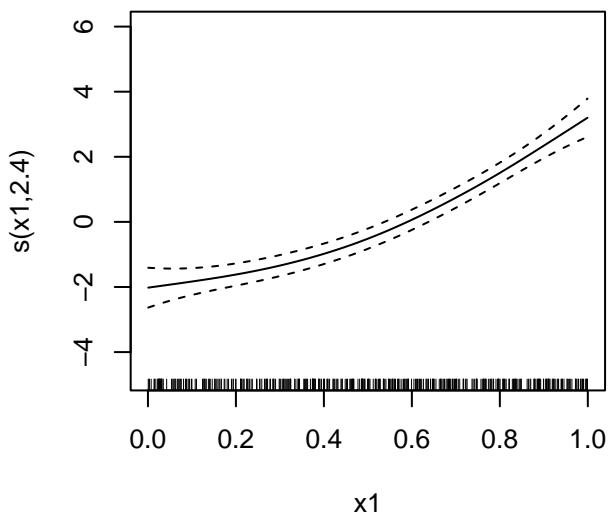
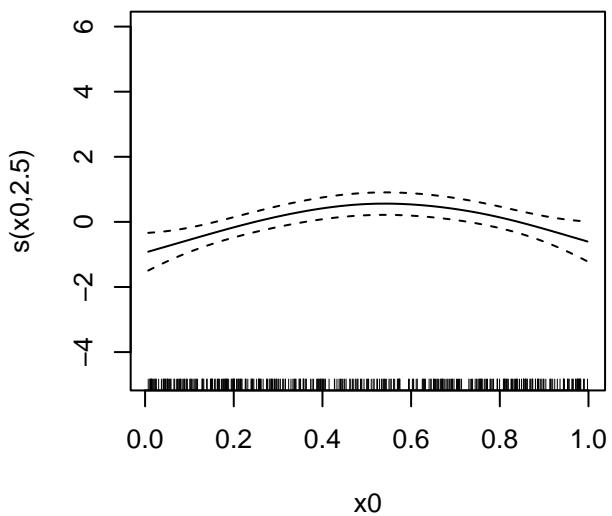


help("fs.test")



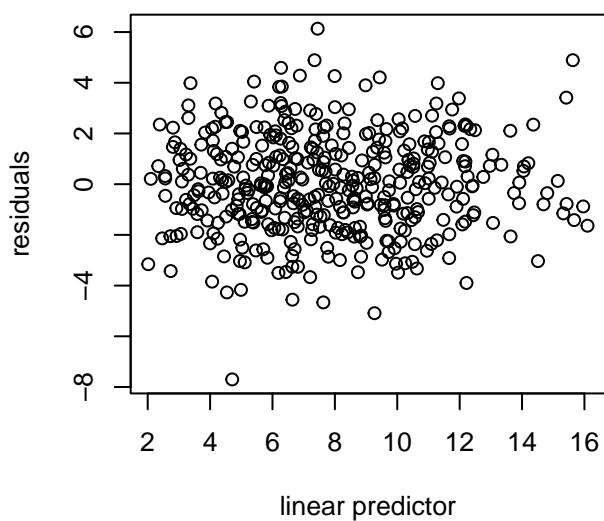
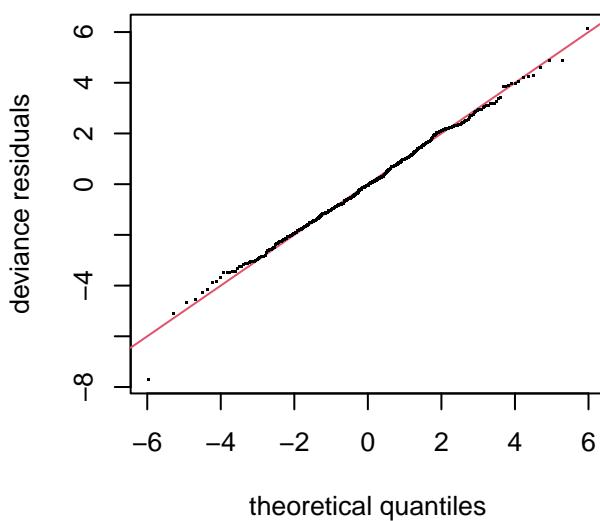


help("gam")

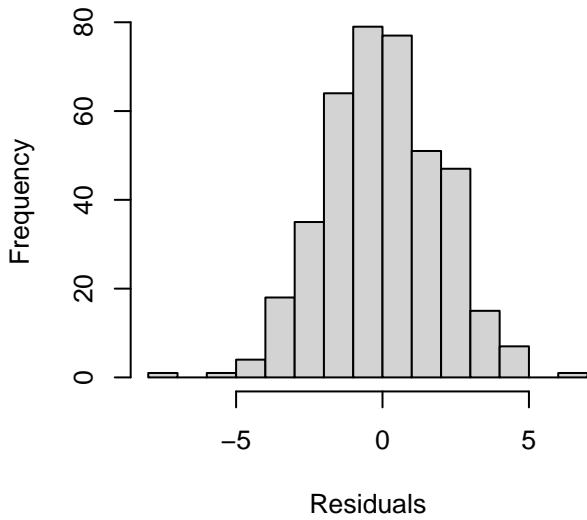


help("gam")

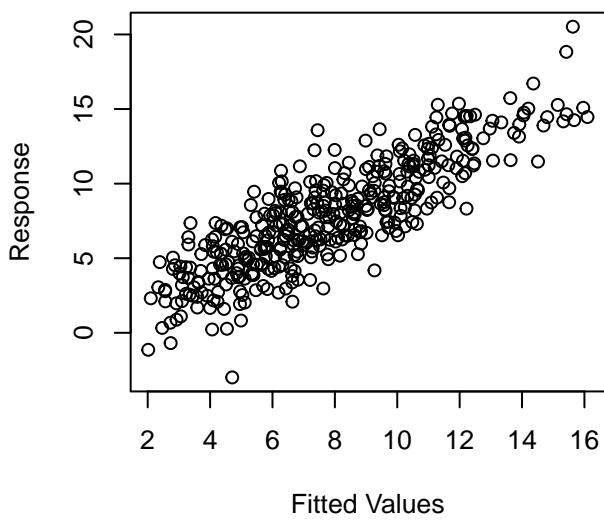
## Resids vs. linear pred.



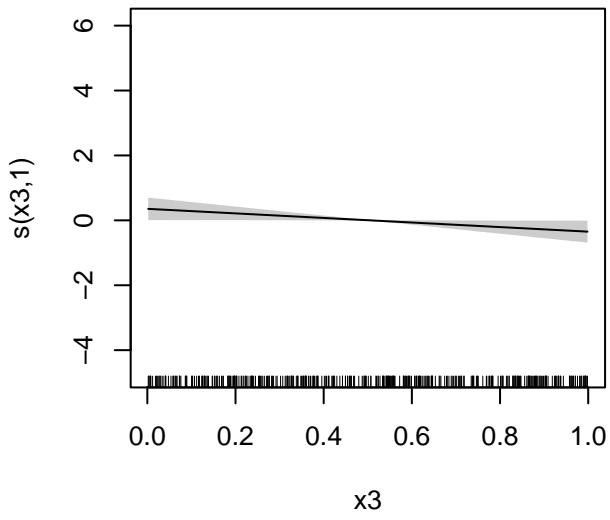
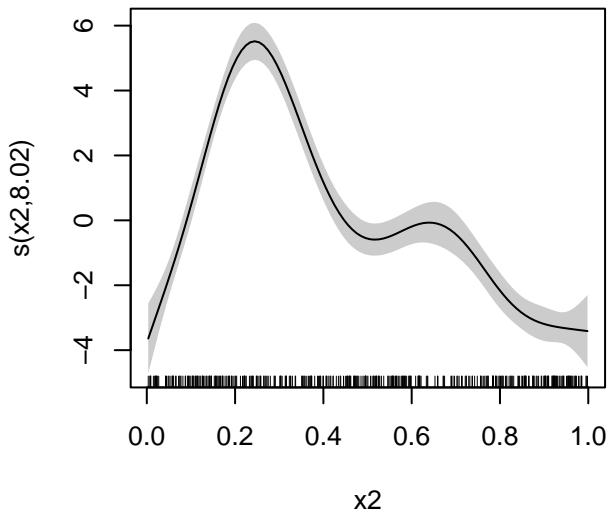
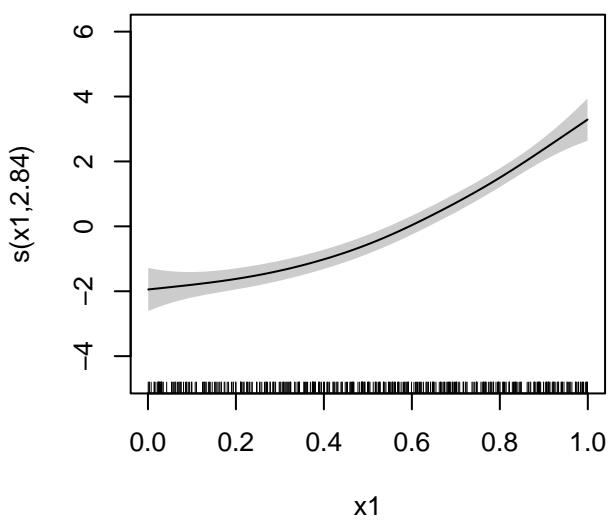
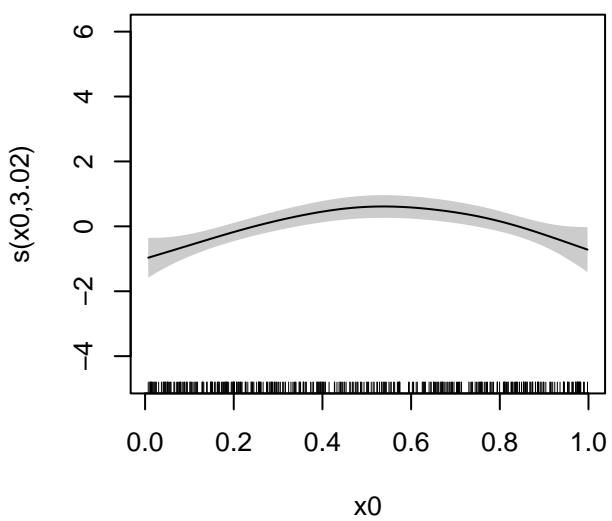
## Histogram of residuals



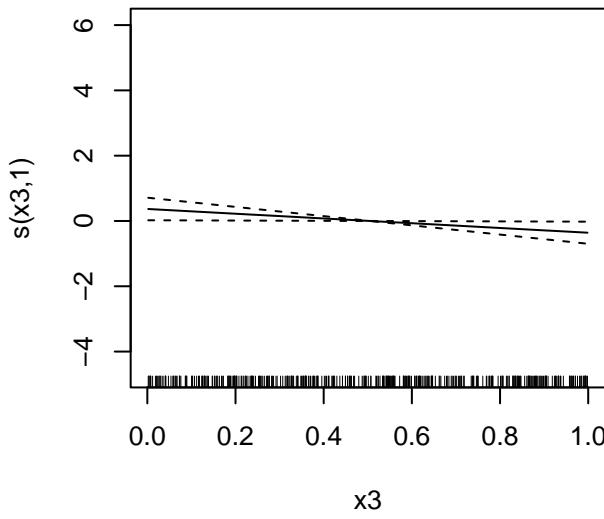
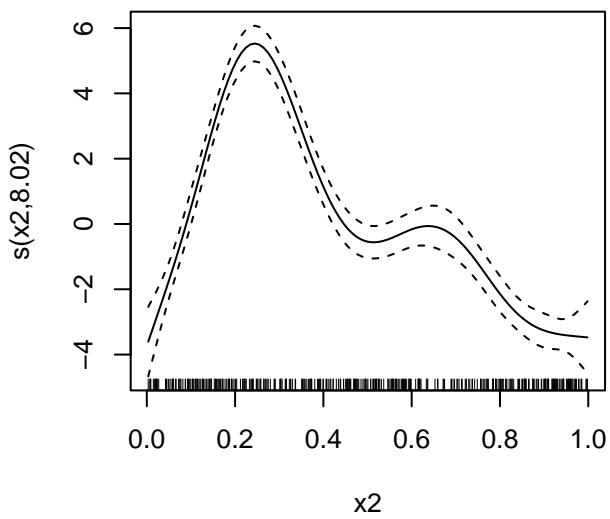
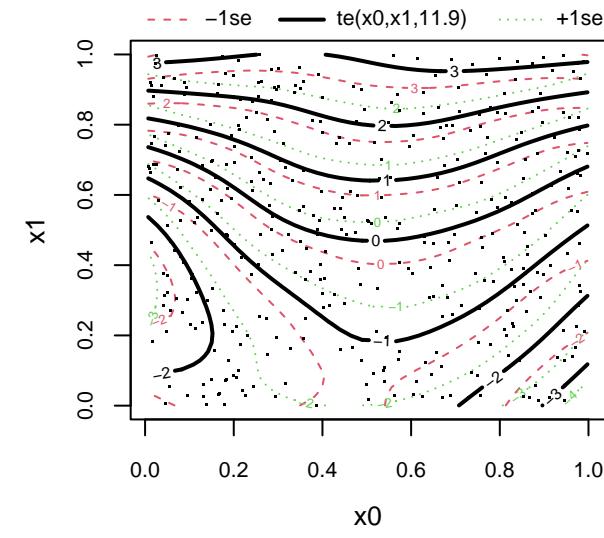
## Response vs. Fitted Values



help("gam")

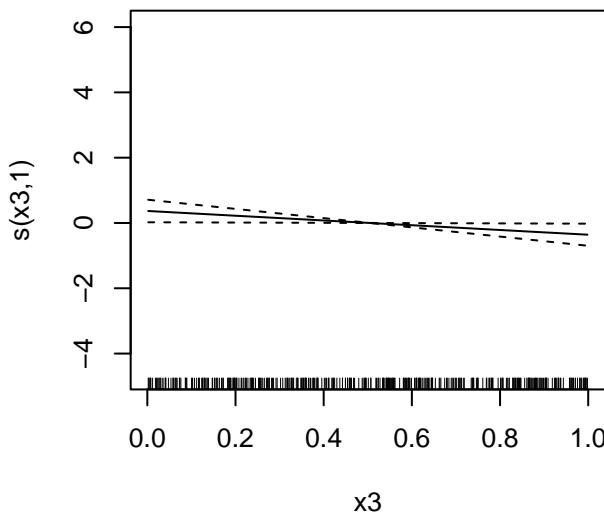
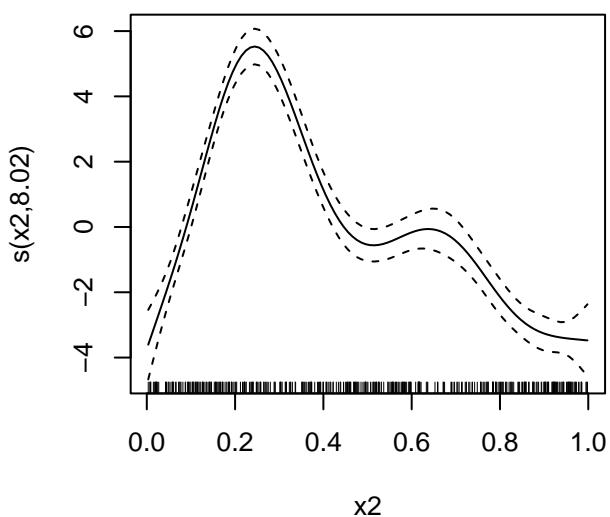
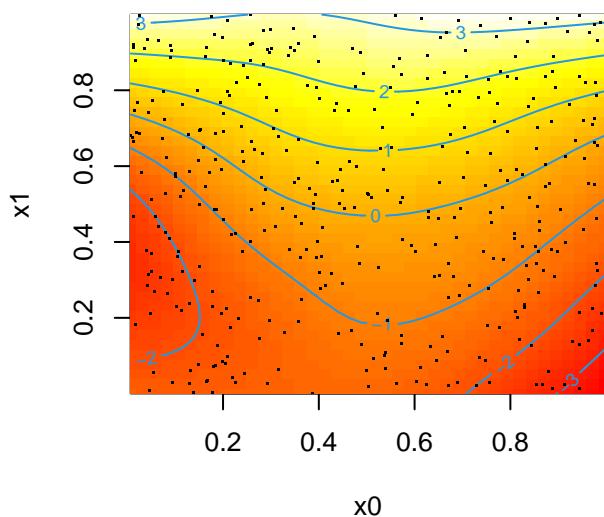


help("gam")

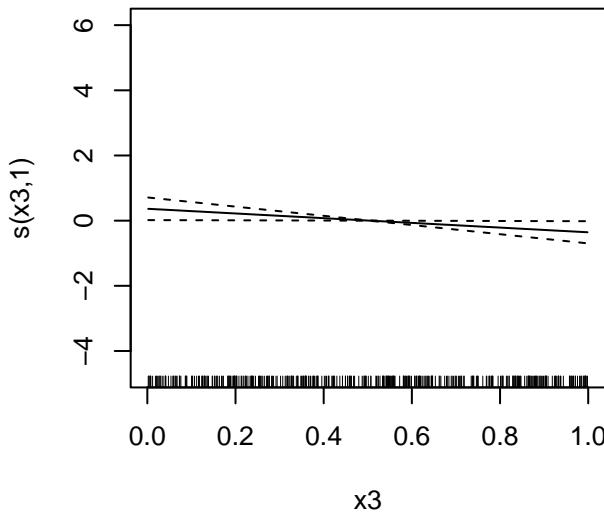
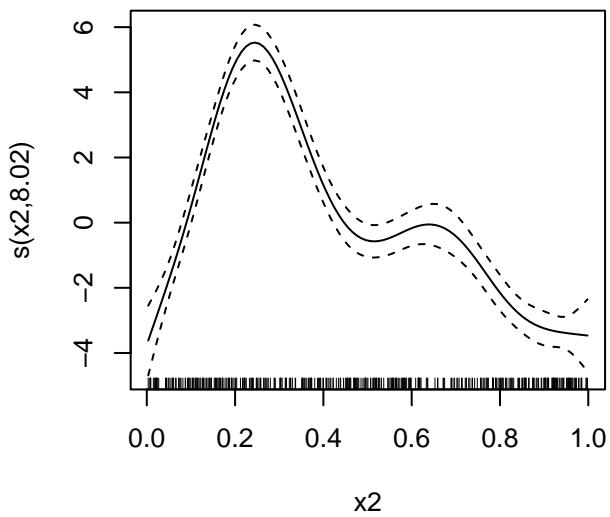
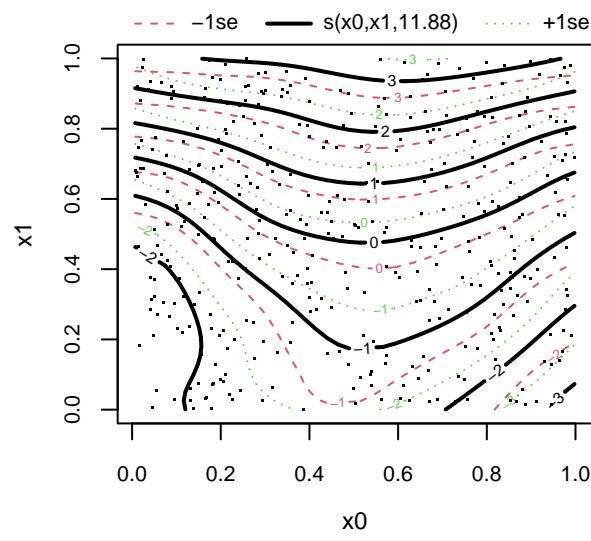


help("gam")

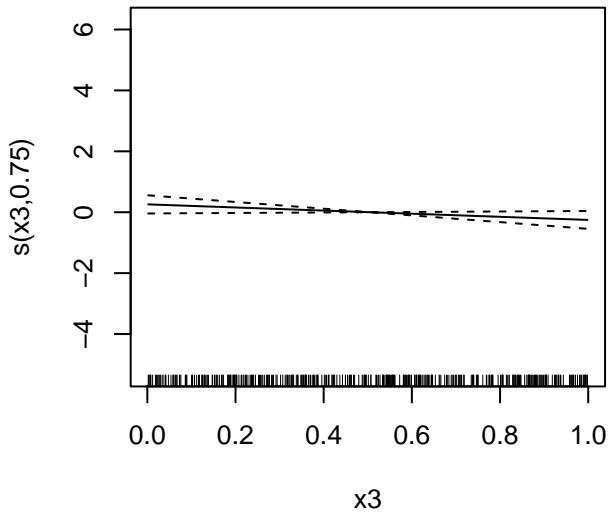
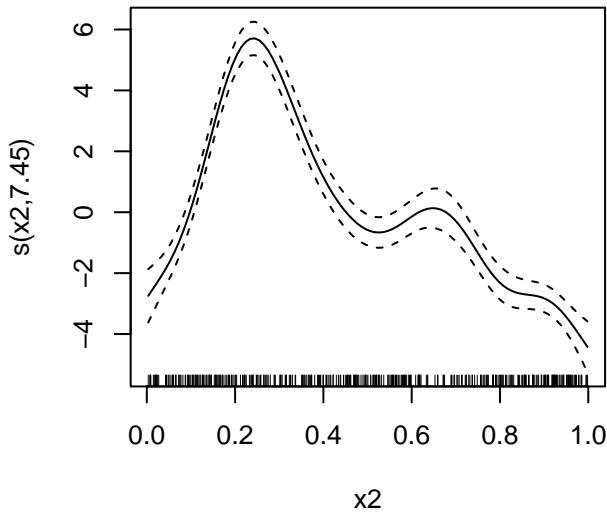
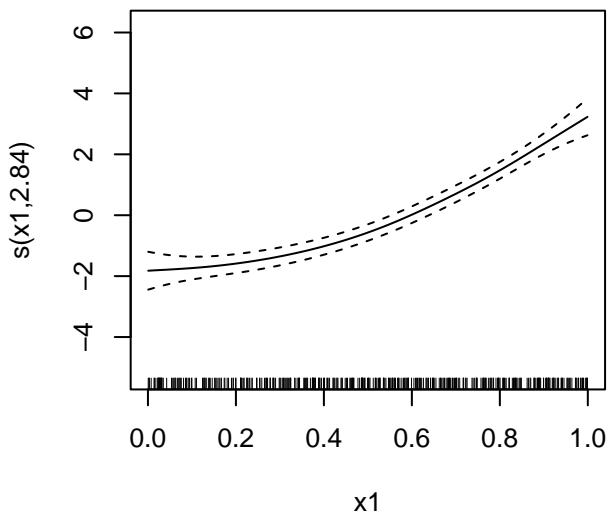
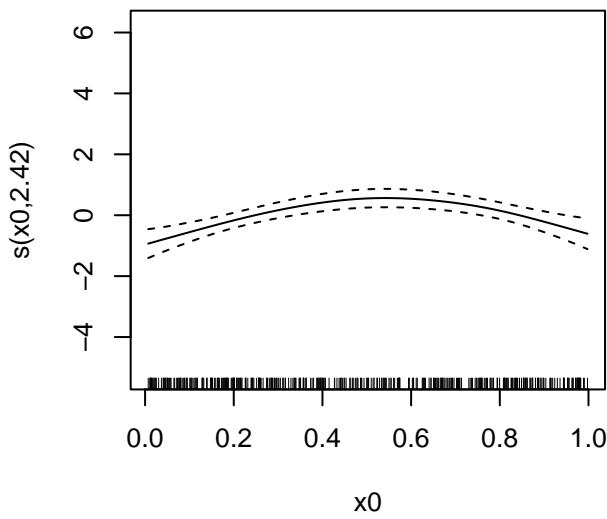
$te(x_0, x_1, 11.9)$



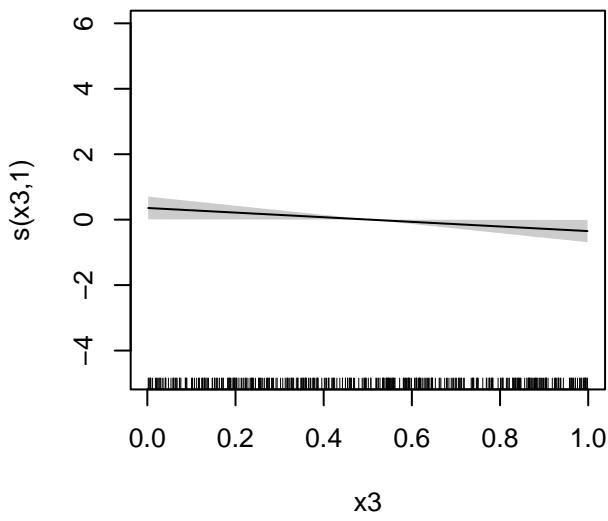
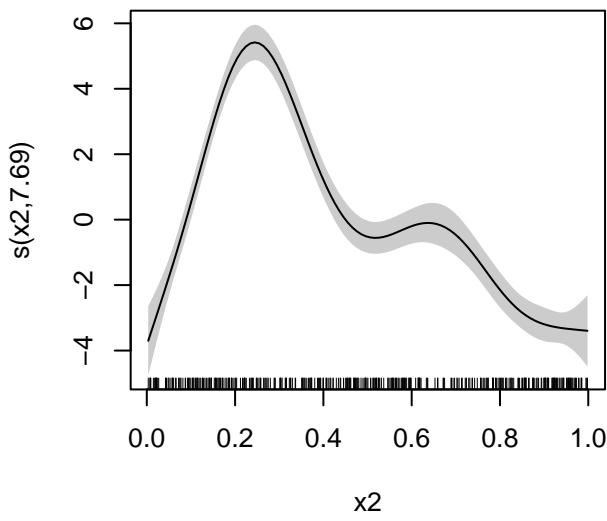
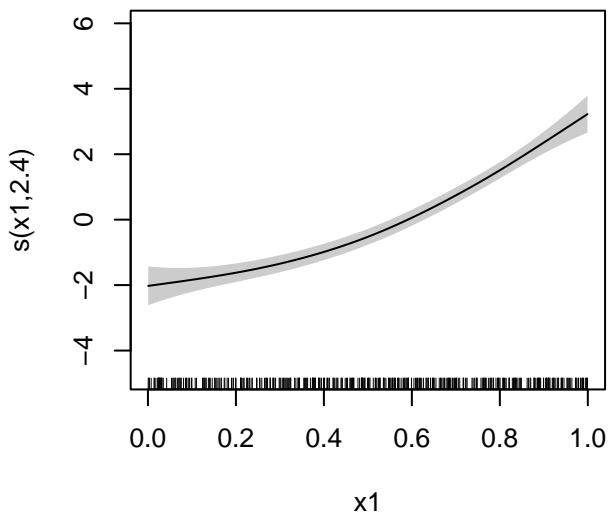
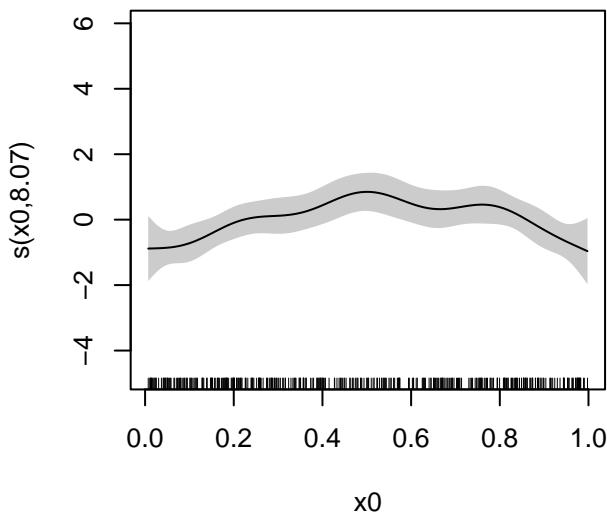
help("gam")



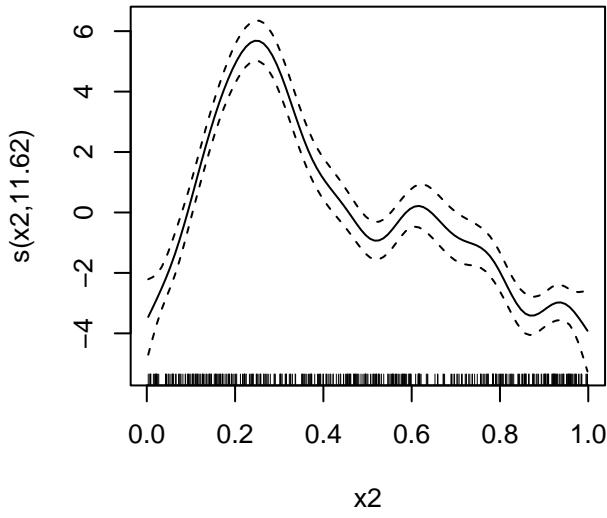
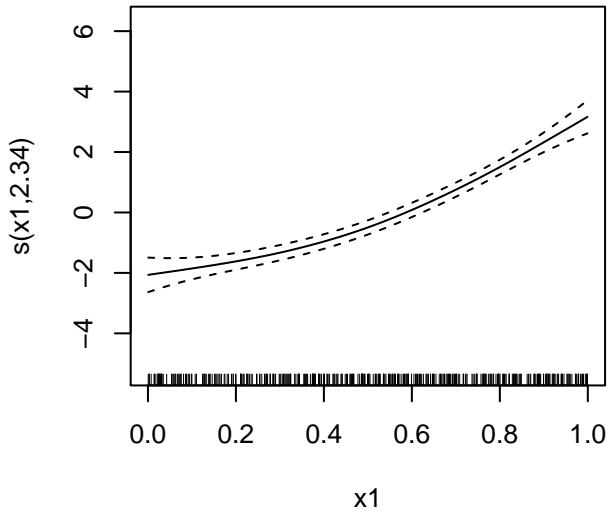
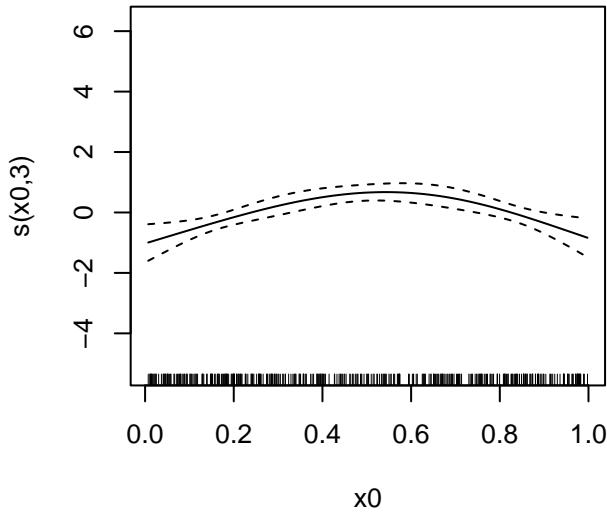
help("gam")



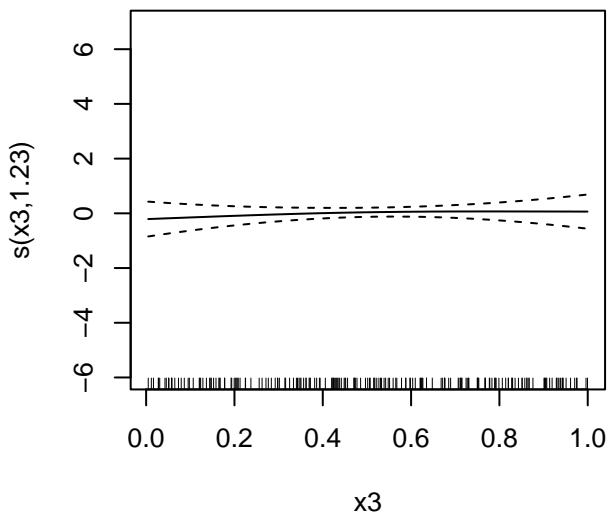
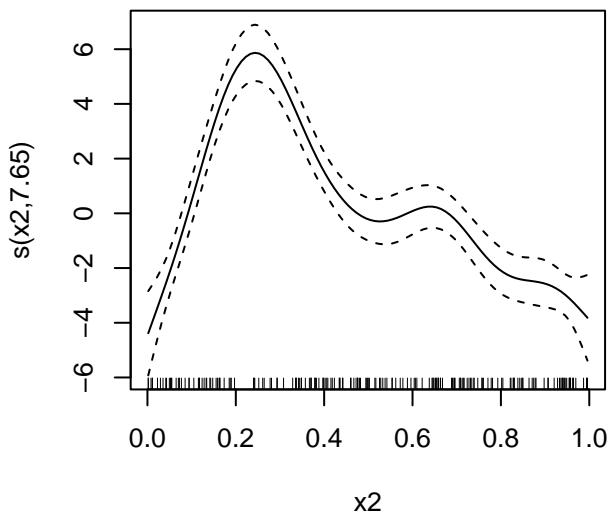
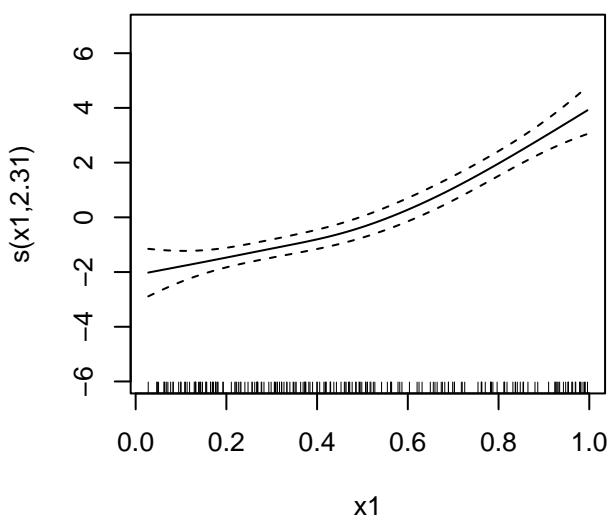
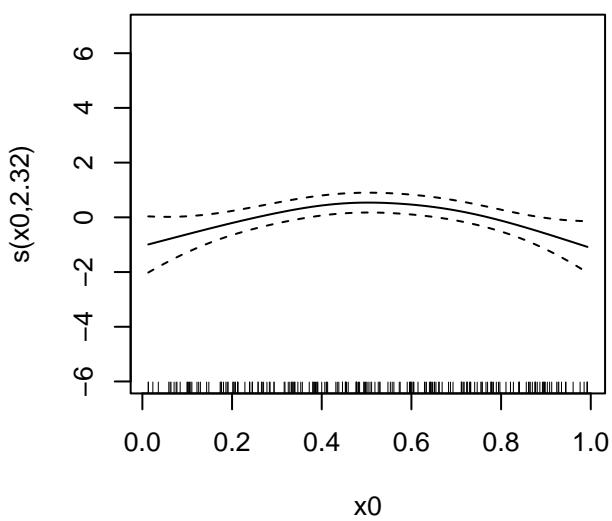
help("gam")



help("gam")

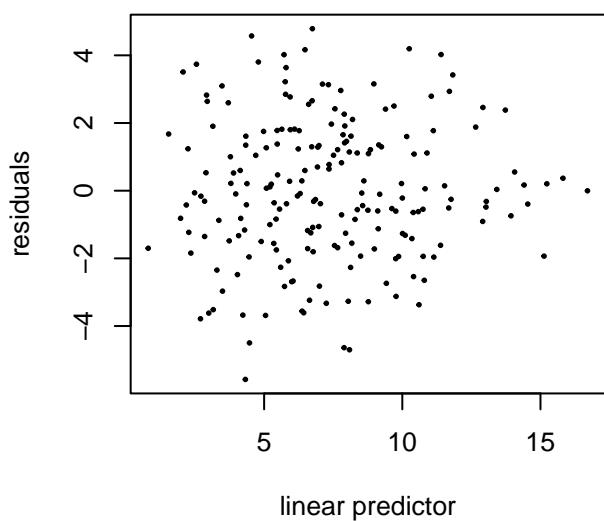
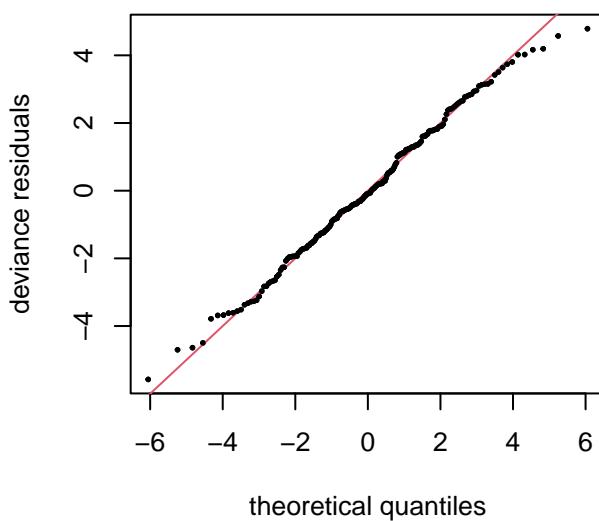


help("gam")



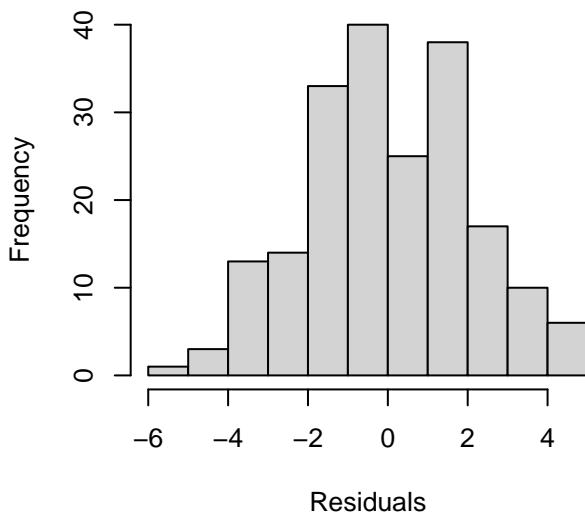
help("gam.check")

## Resids vs. linear pred.

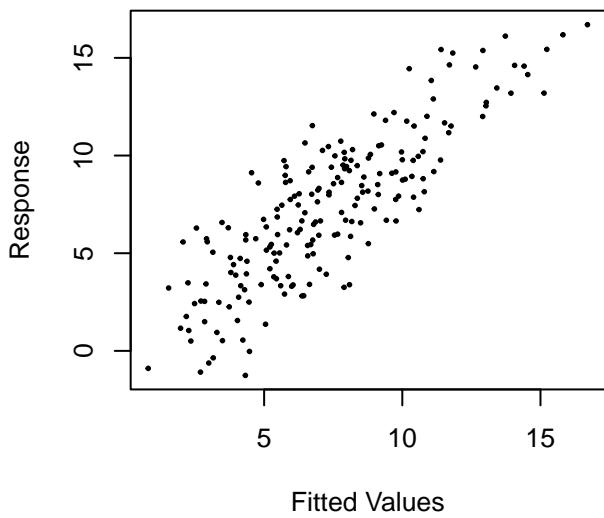


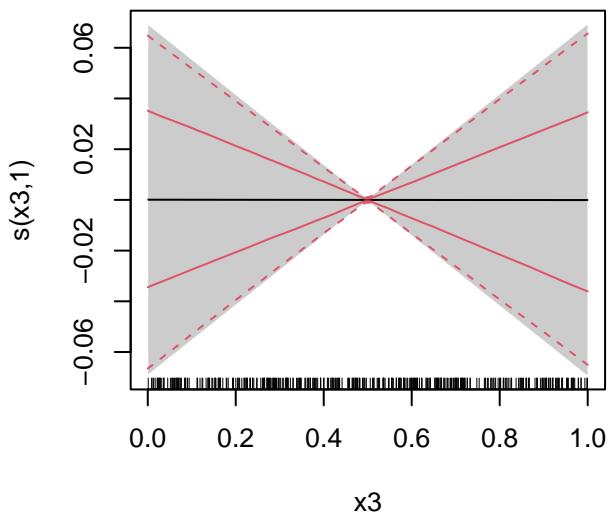
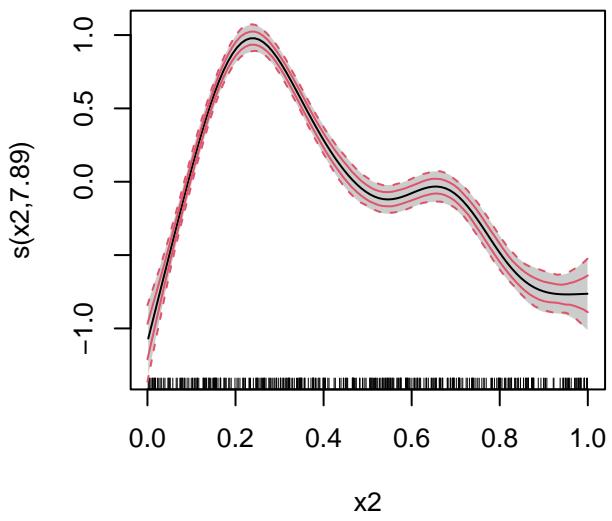
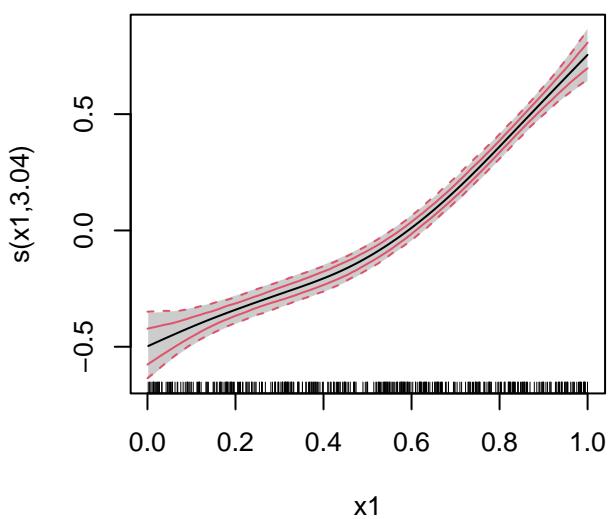
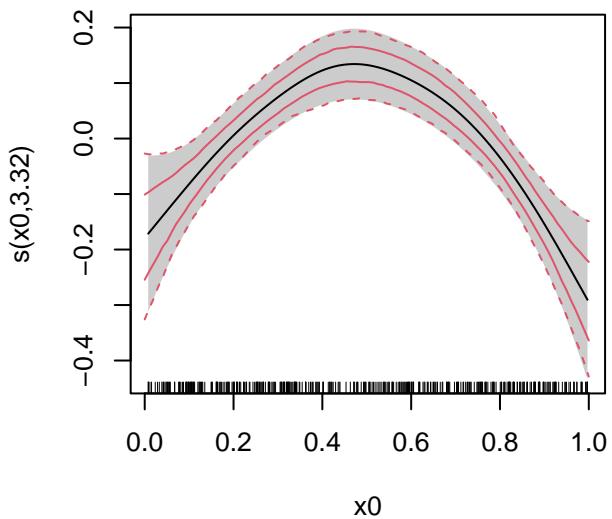
help("gam.check")

## Histogram of residuals



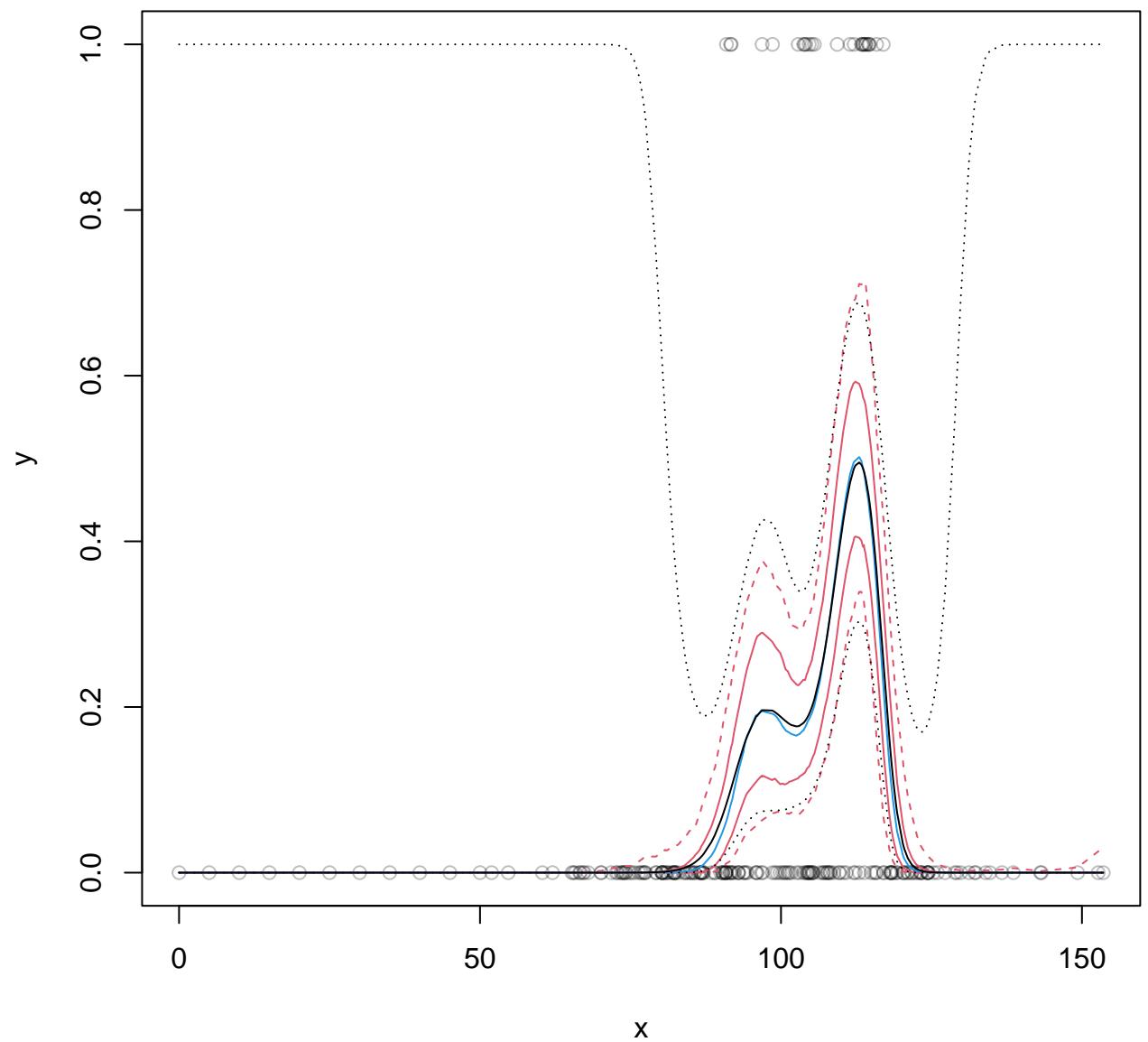
## Response vs. Fitted Values



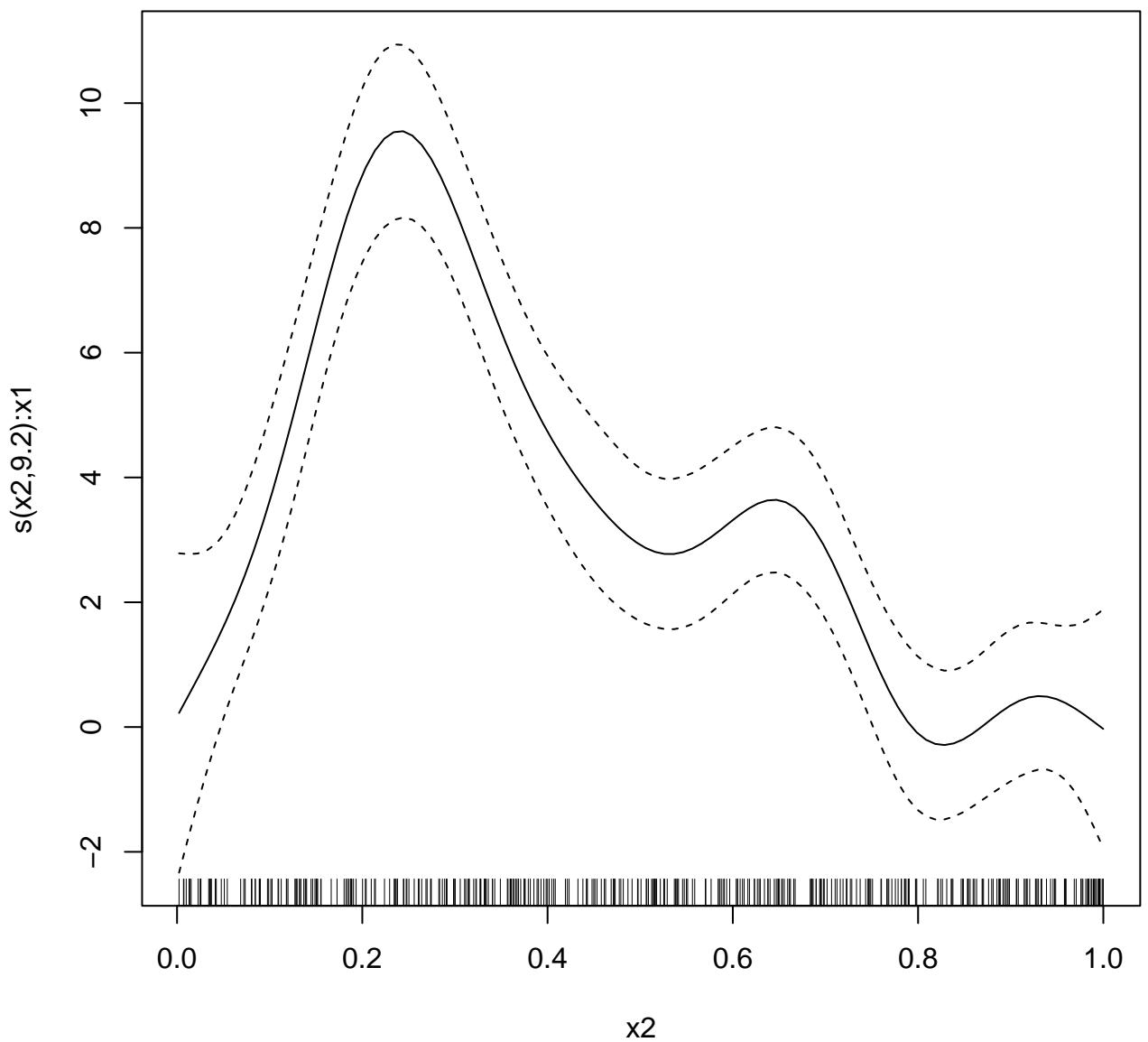


help("gam.mh")

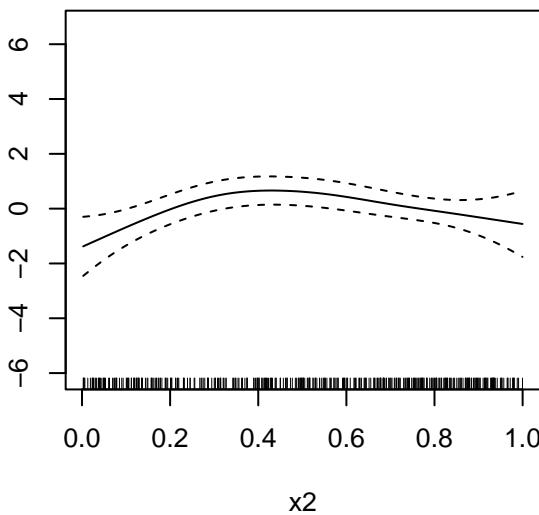
help("gam.mh")



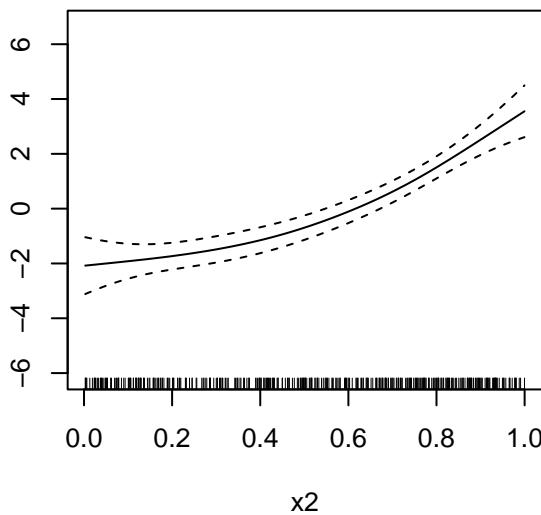
help("gam.models")



s(x2,2.58):fac1

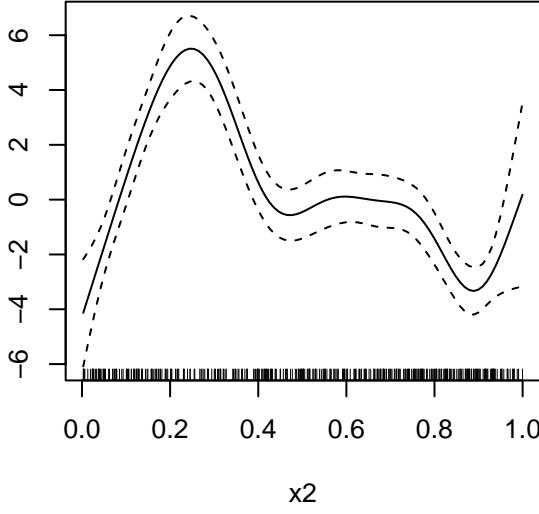


s(x2,2.22):fac2

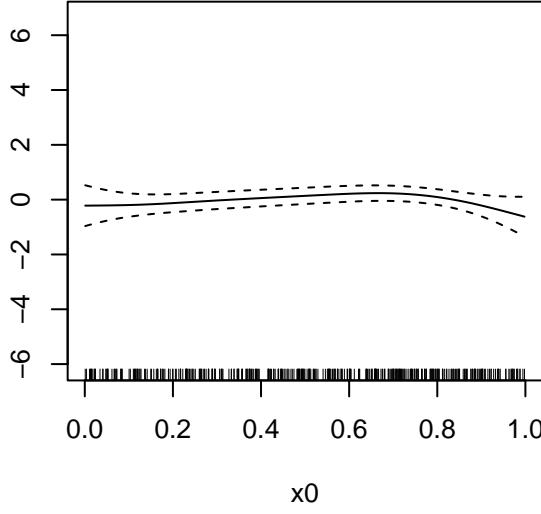


help("gam.models")

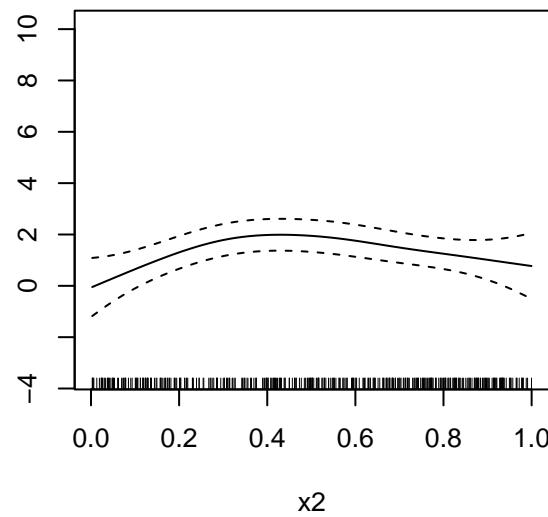
s(x2,7.88):fac3



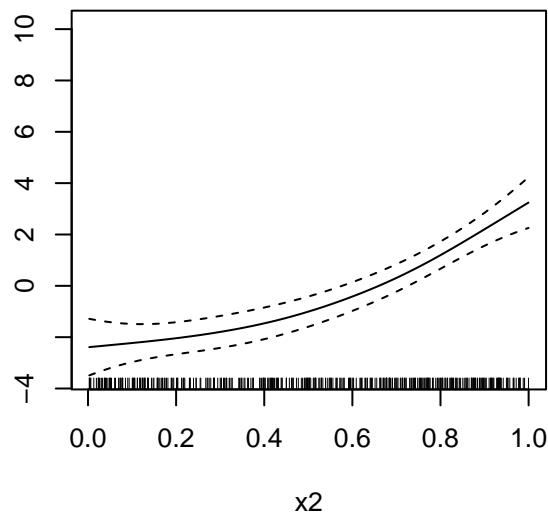
s(x0,2.88)



`s(x2,3.58):as.numeric(fac == 1)`

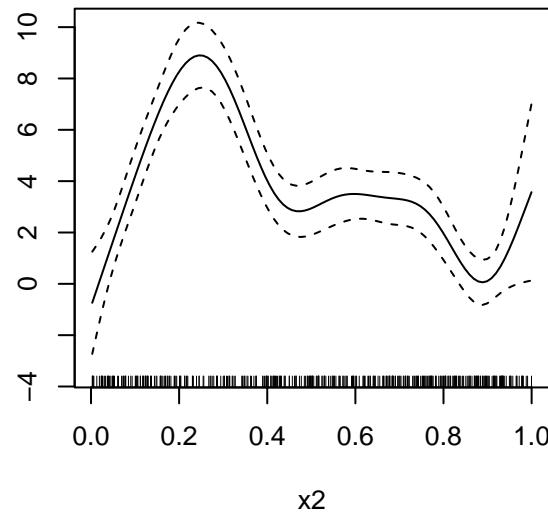


`s(x2,3.22):as.numeric(fac == 2)`

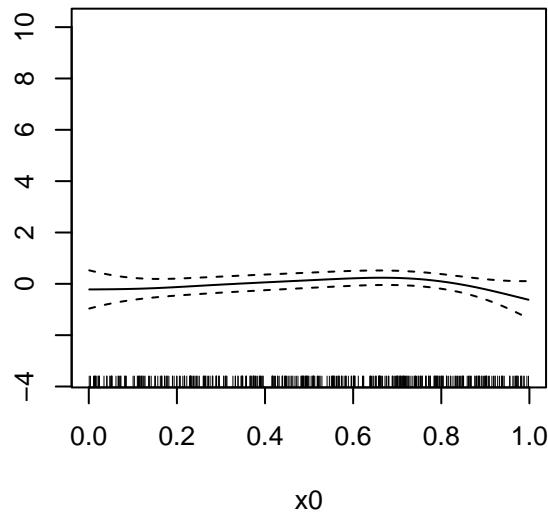


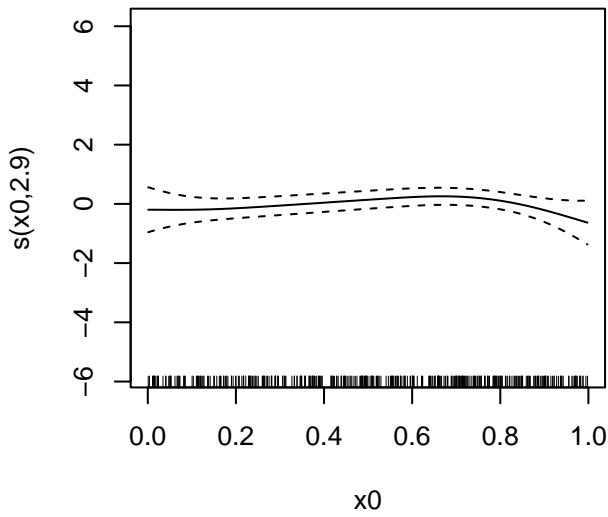
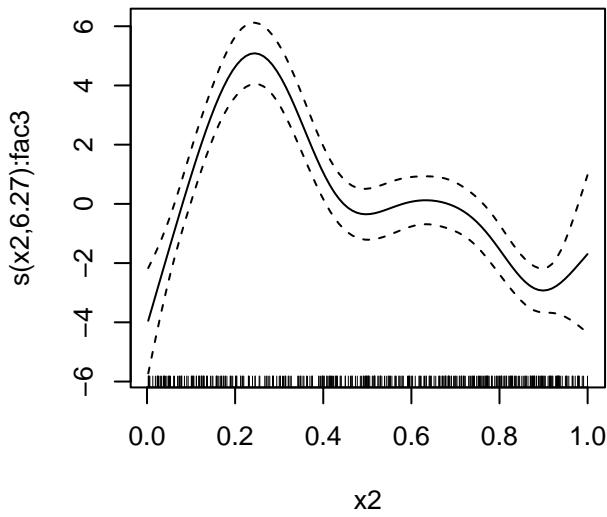
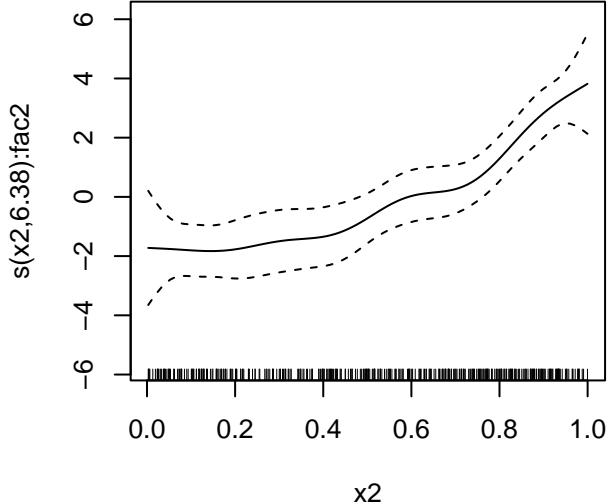
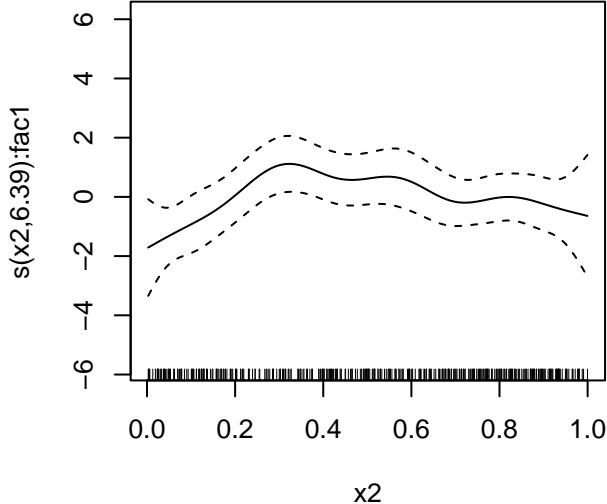
`help("gam.models")`

`s(x2,8.85):as.numeric(fac == 3)`

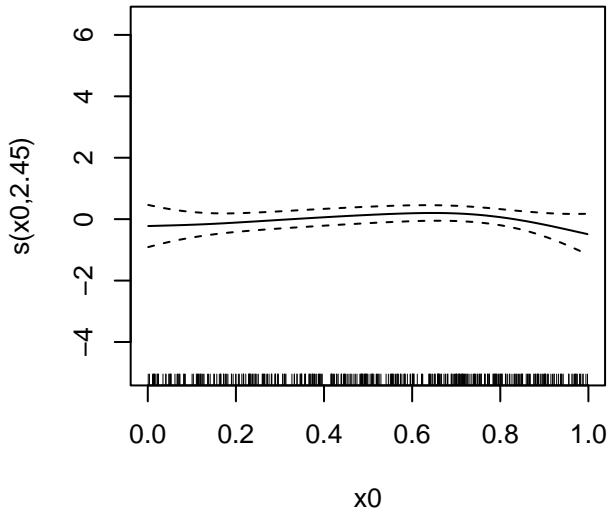
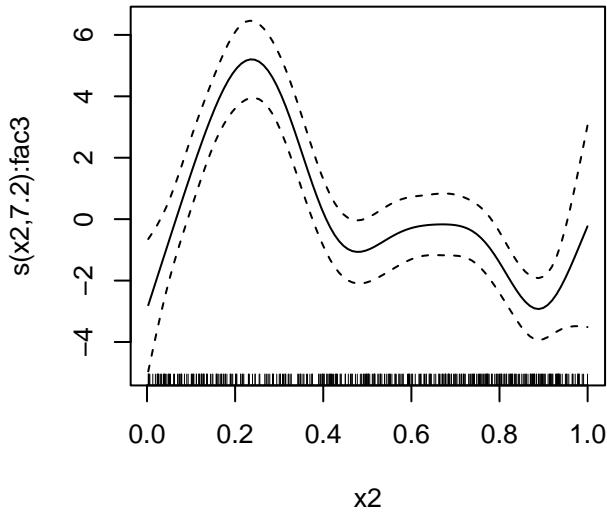
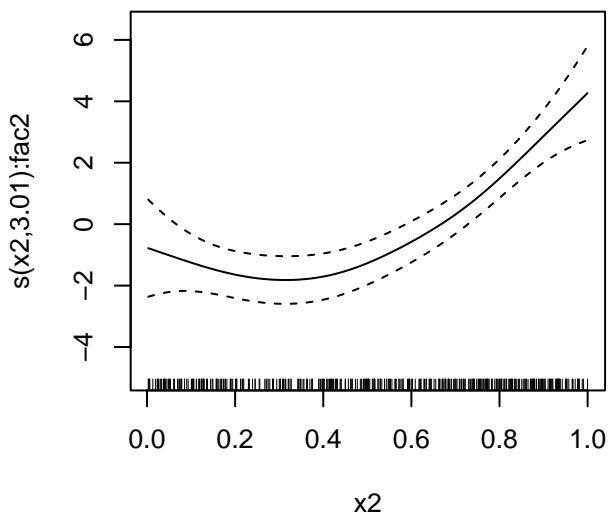
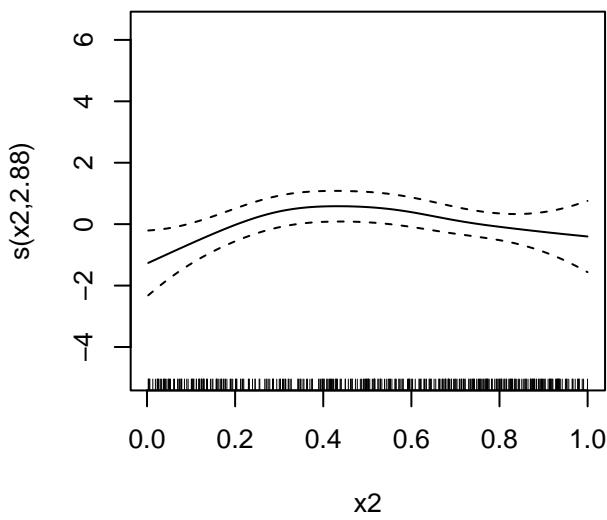


`s(x0,2.88)`

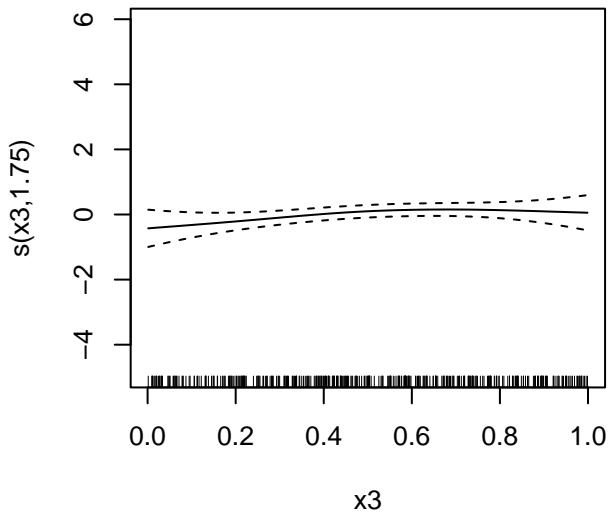
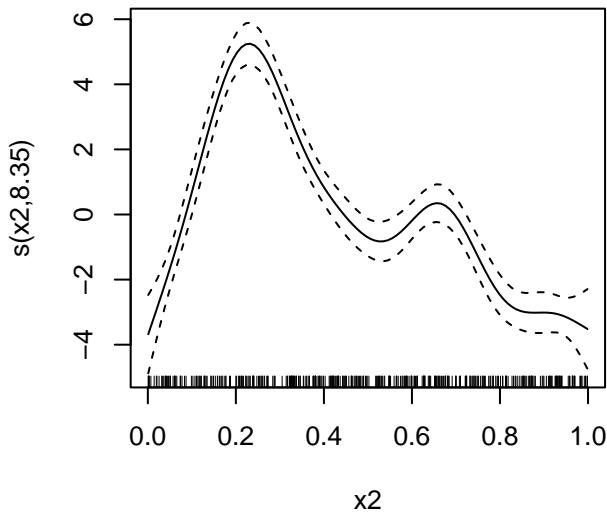
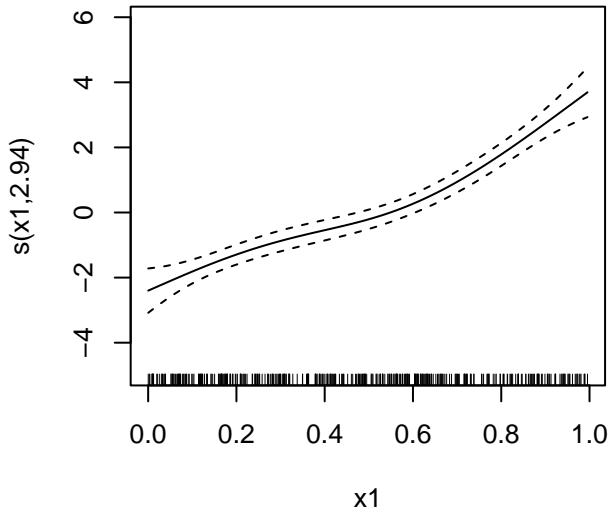
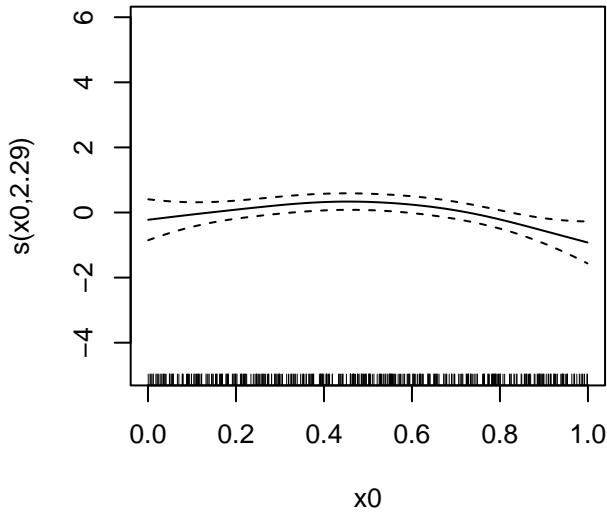




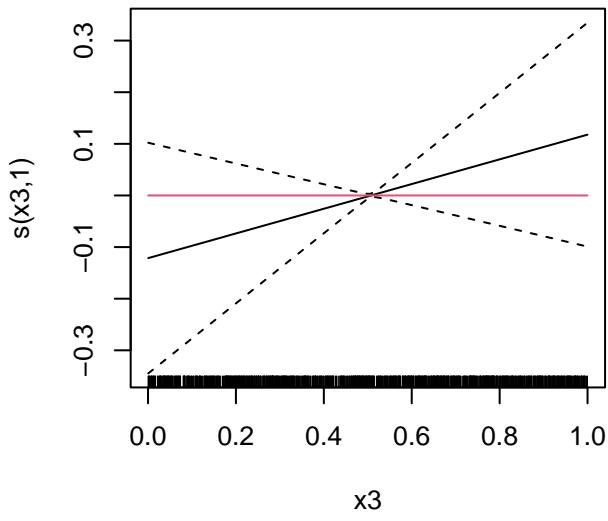
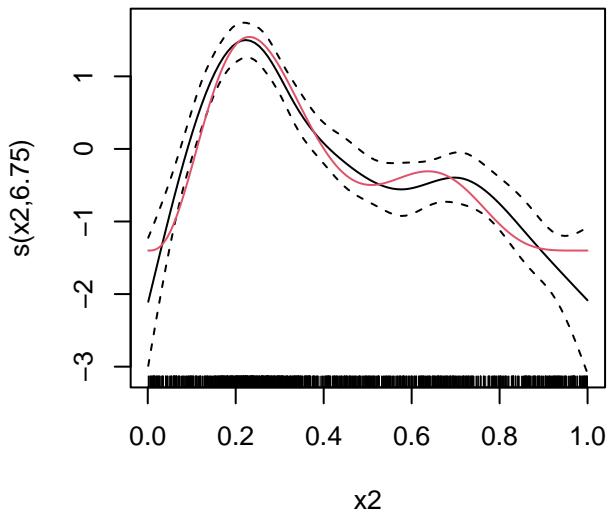
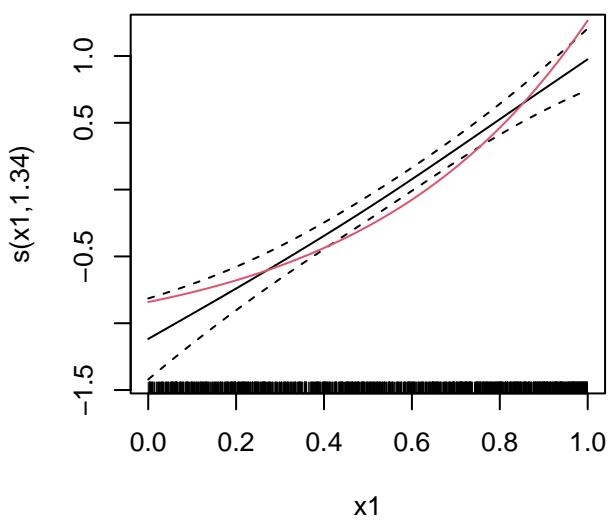
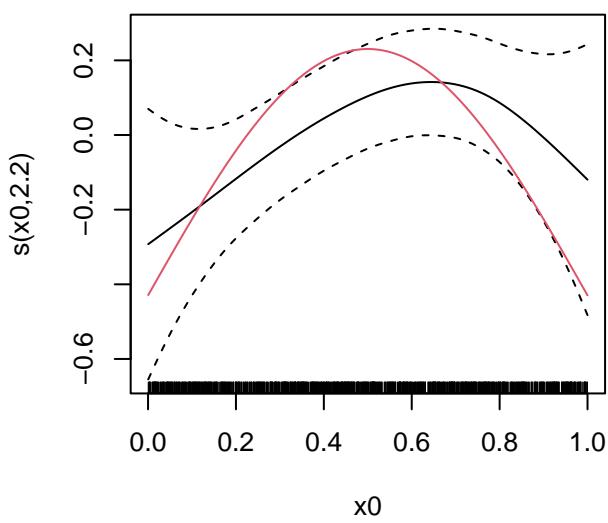
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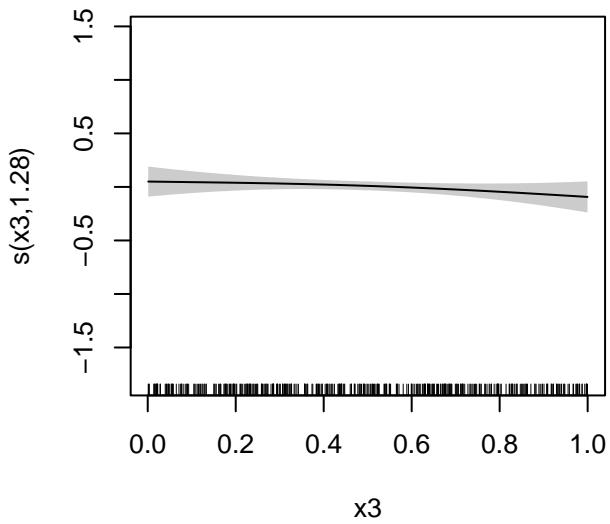
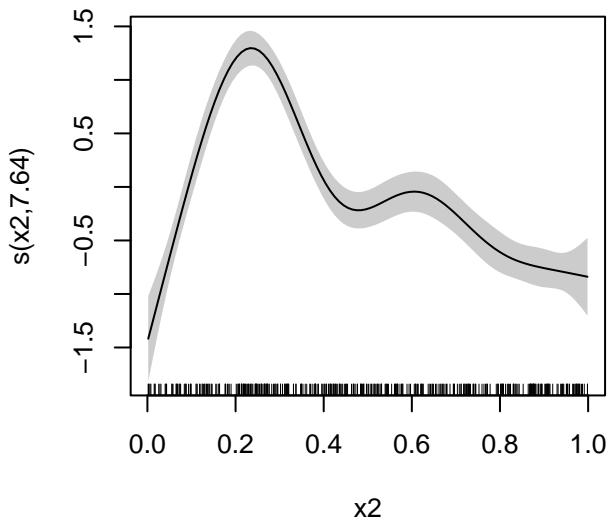
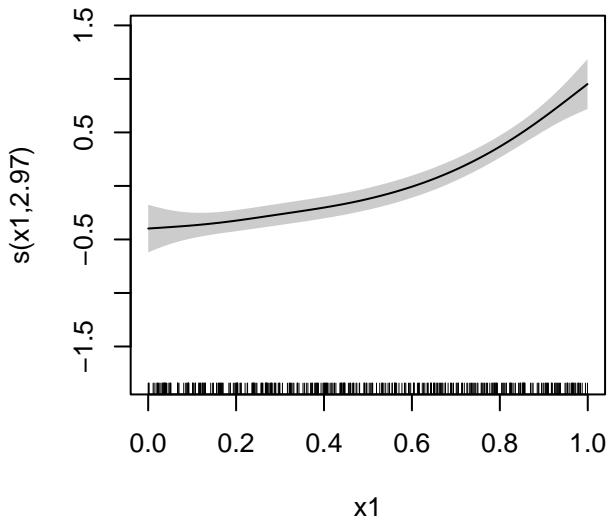
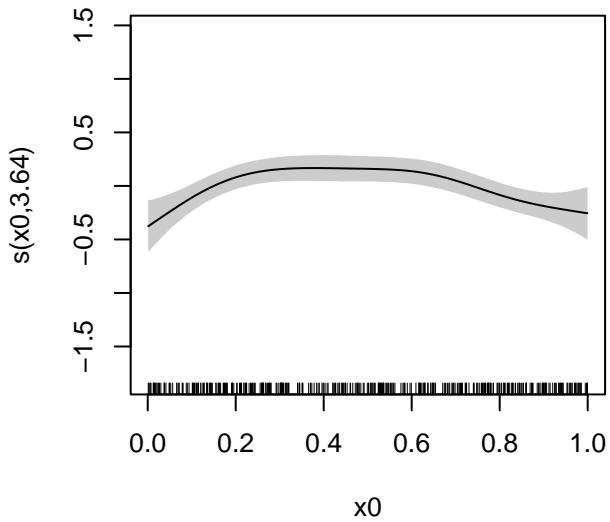
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help("gam.models")

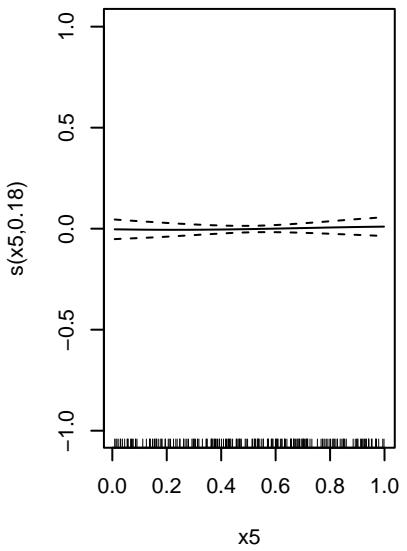
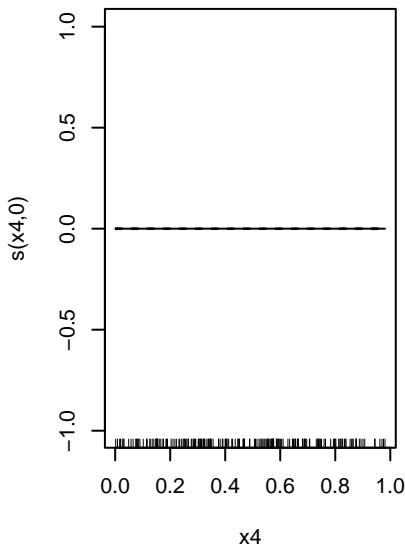
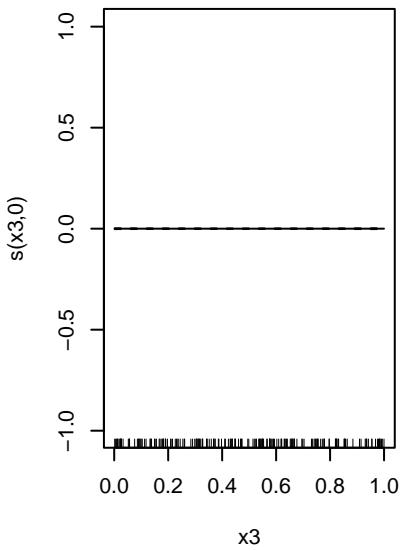
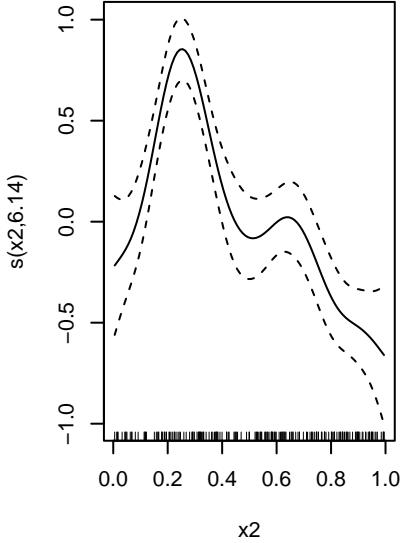
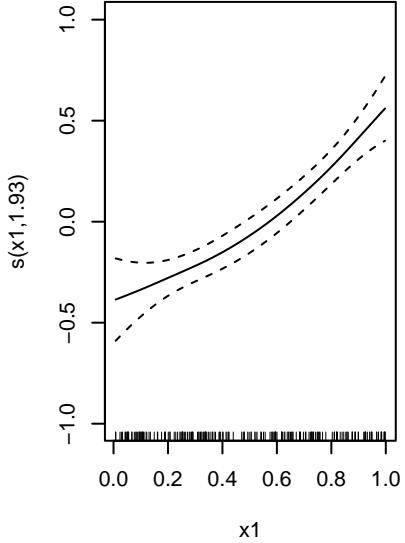
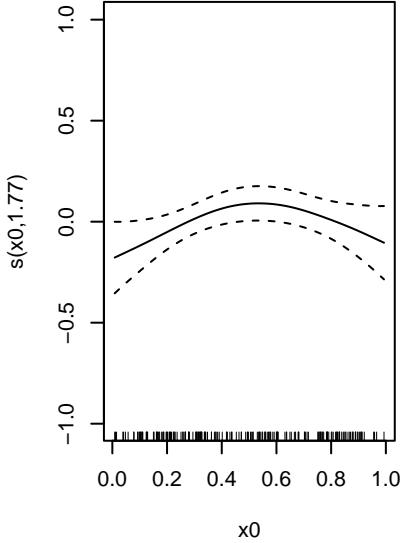


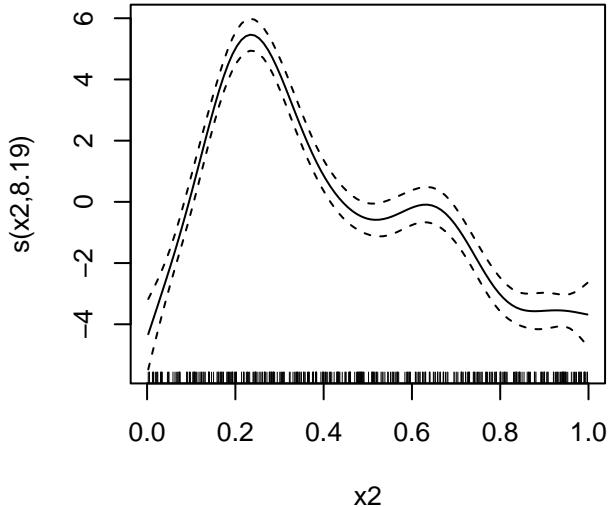
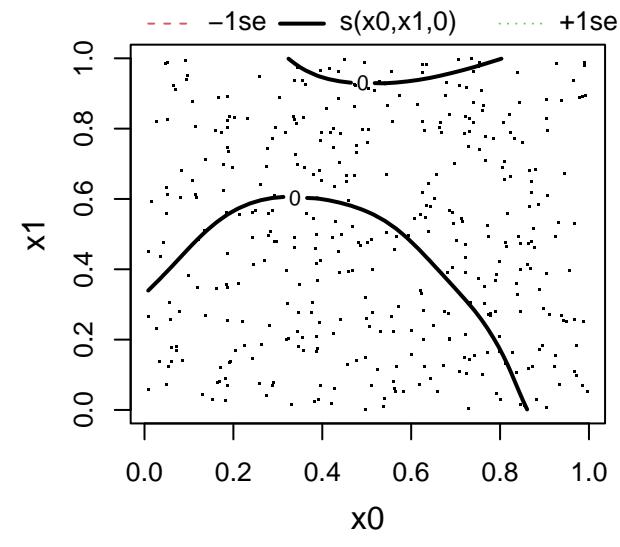
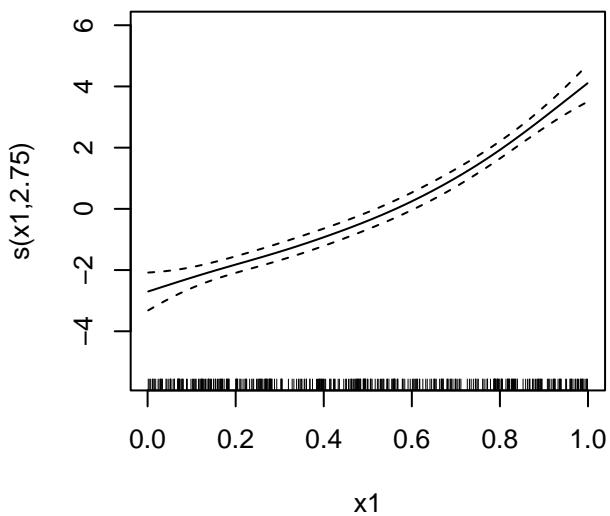
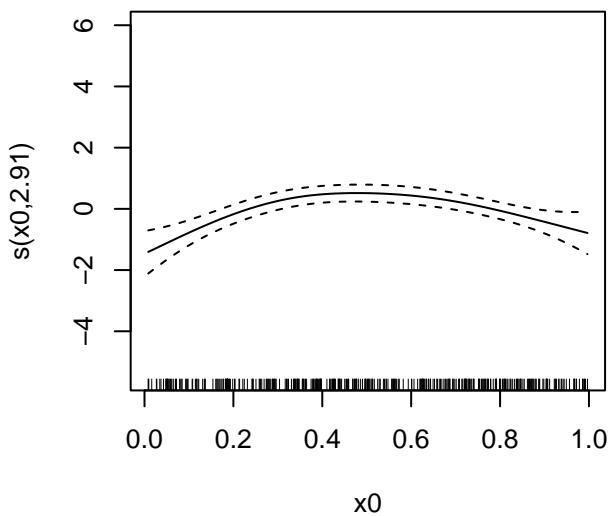
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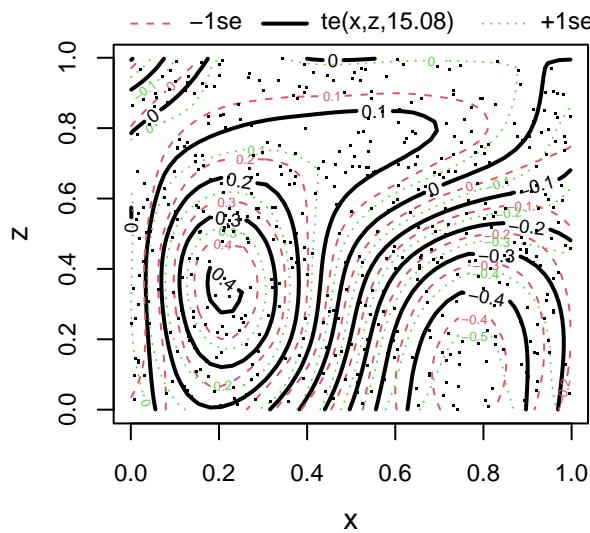
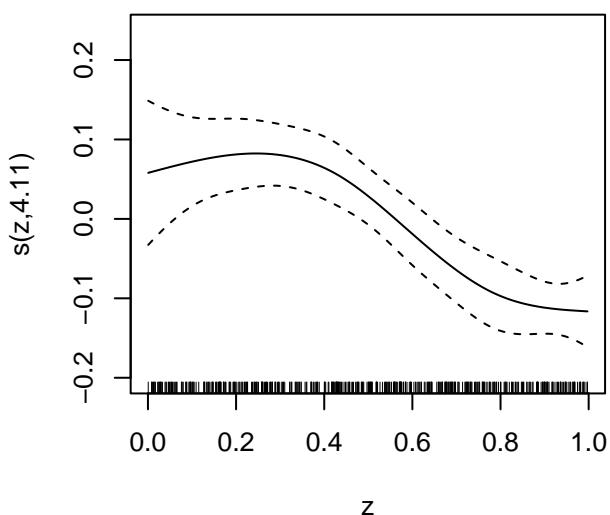
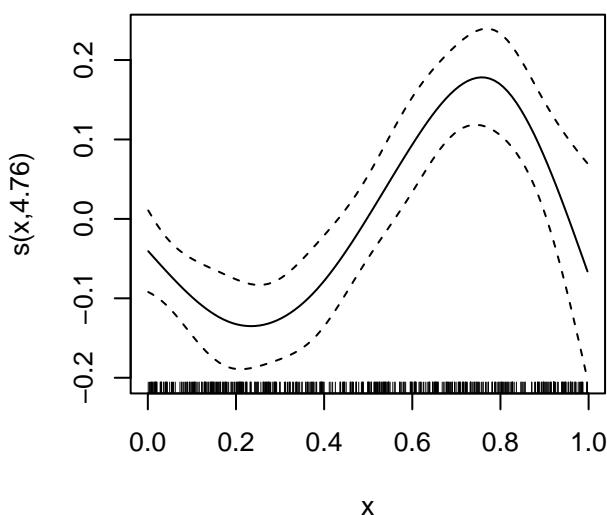
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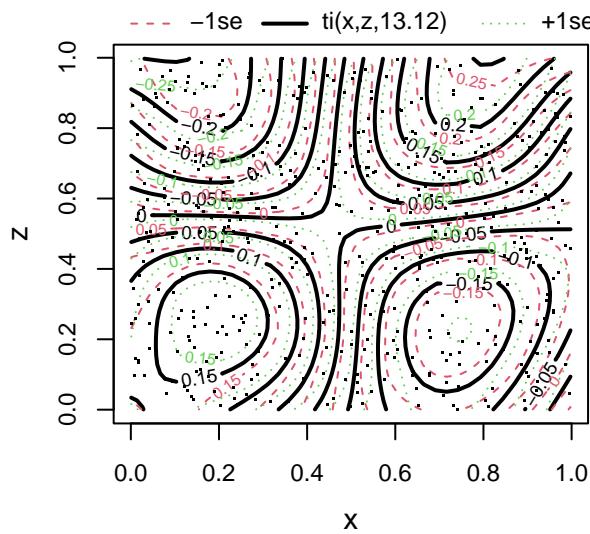
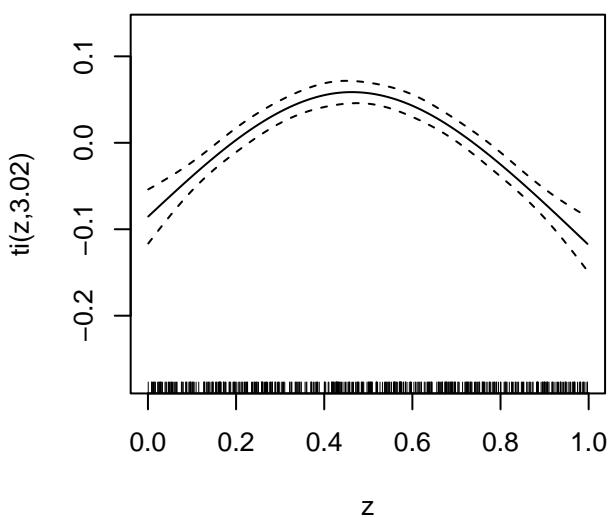
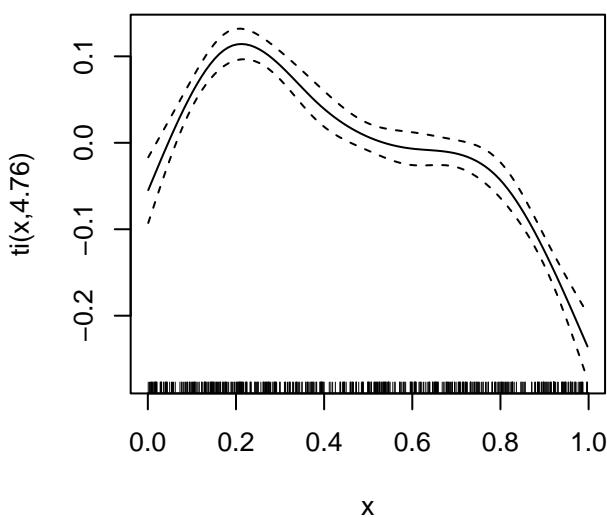




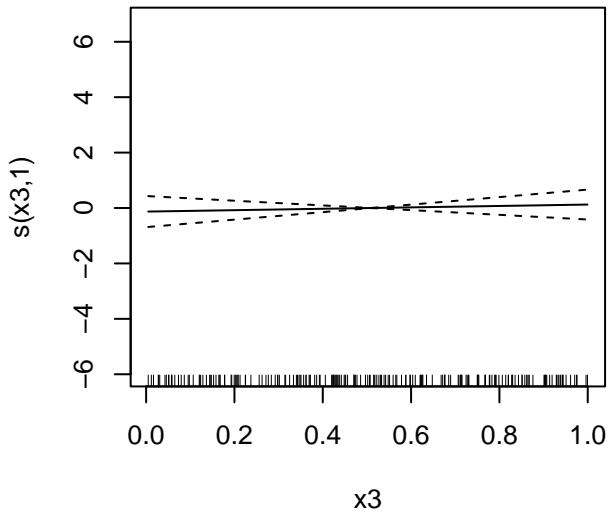
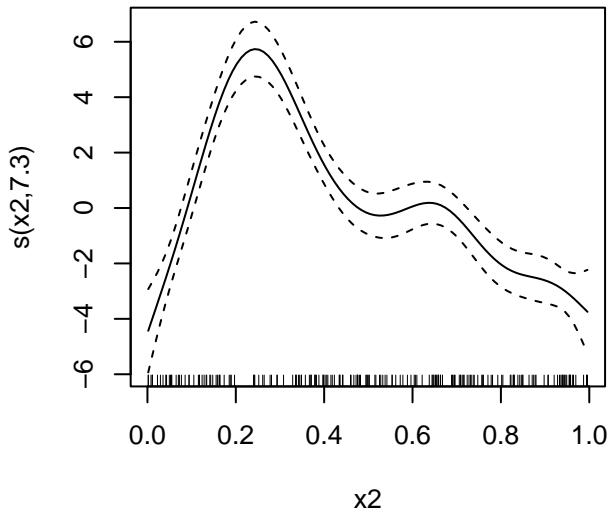
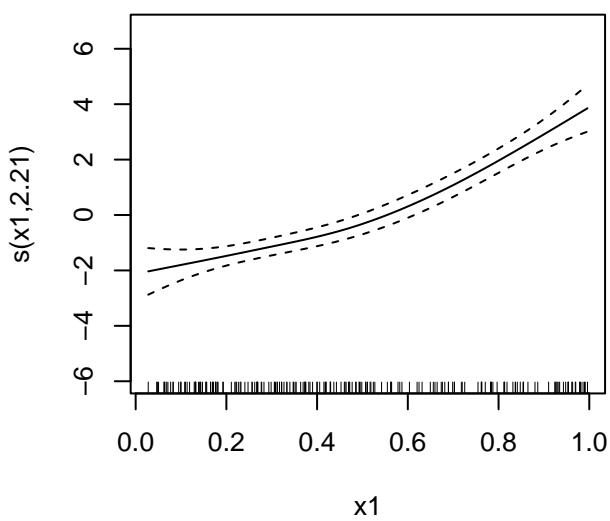
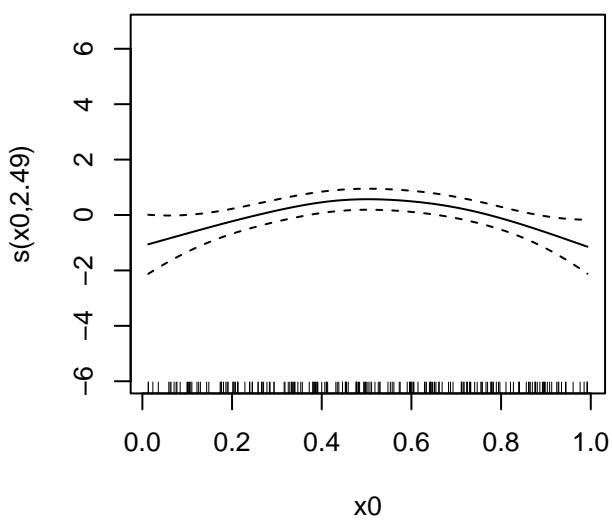
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help("gam.side")

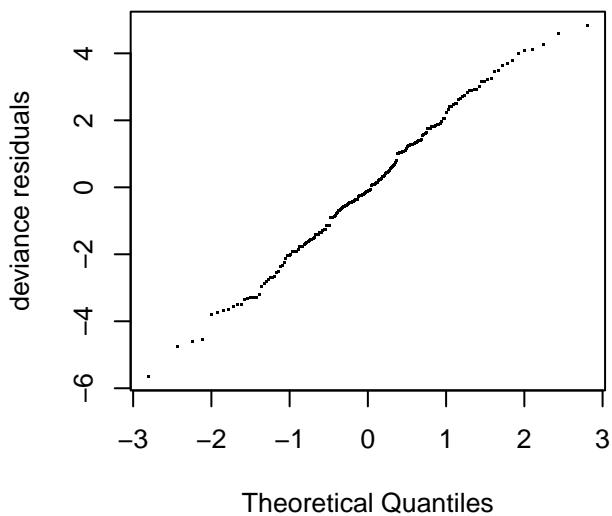


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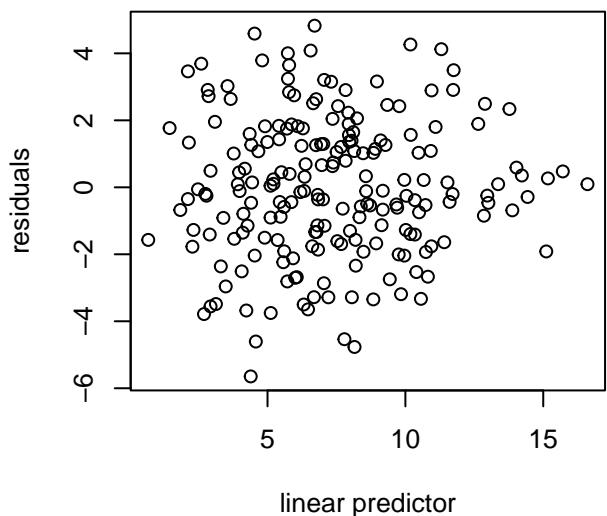


help("gamm")

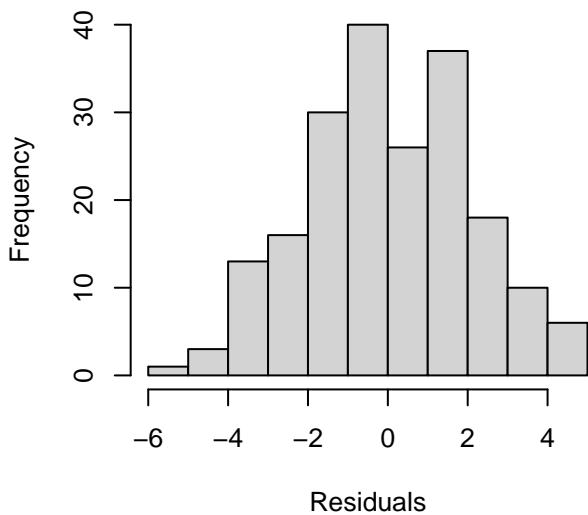
### Normal Q–Q Plot



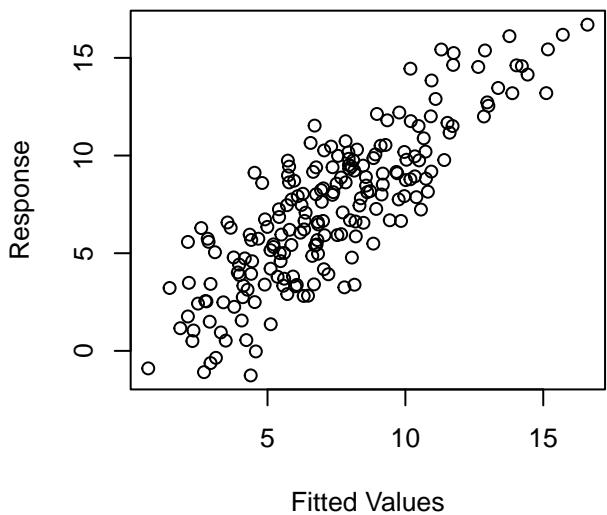
### Resids vs. linear pred.



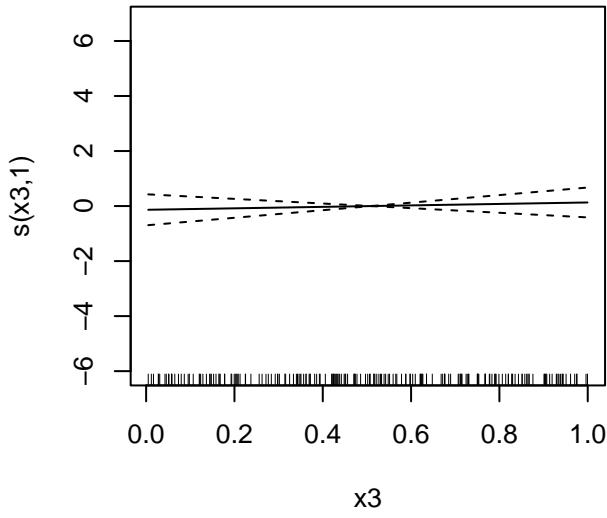
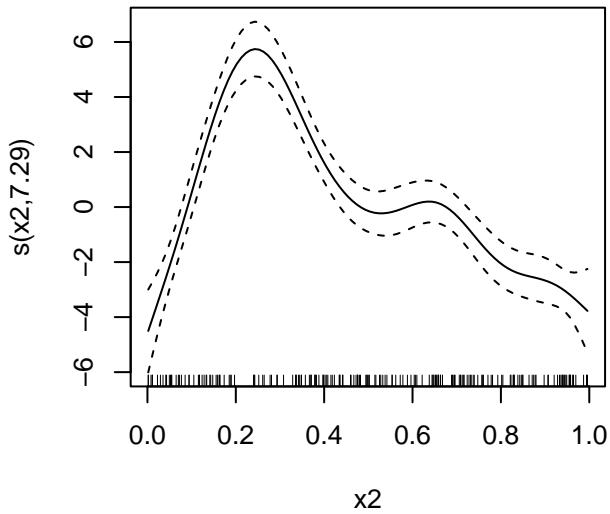
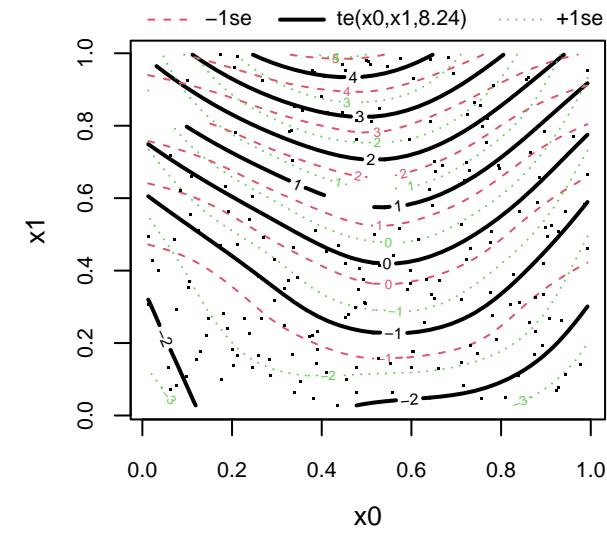
### Histogram of residuals



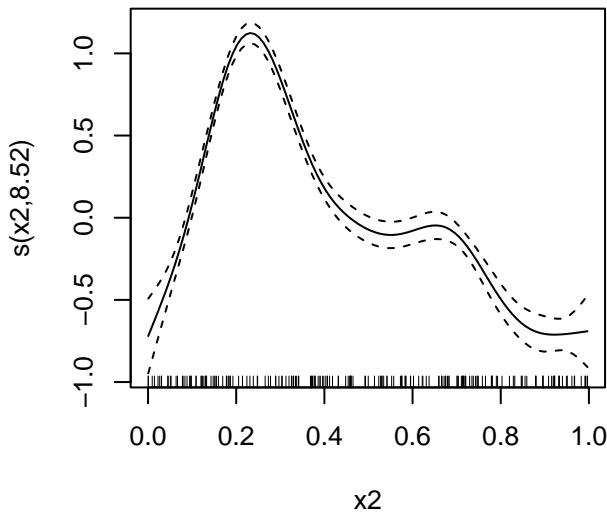
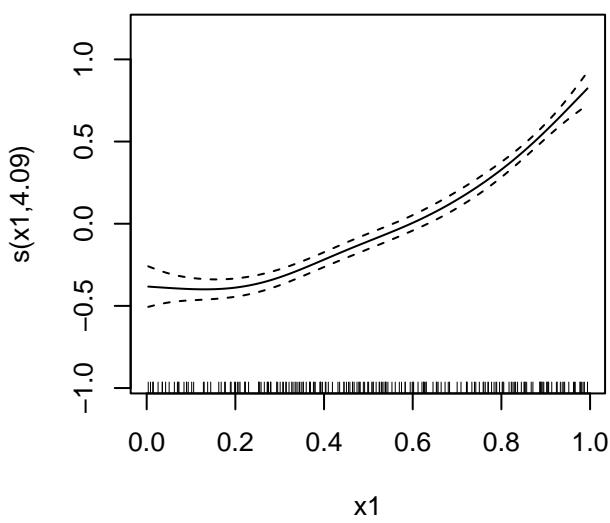
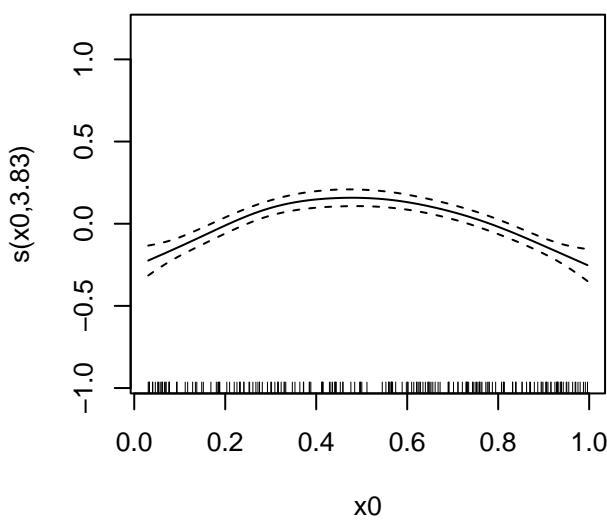
### Response vs. Fitted Values



help("gamm")

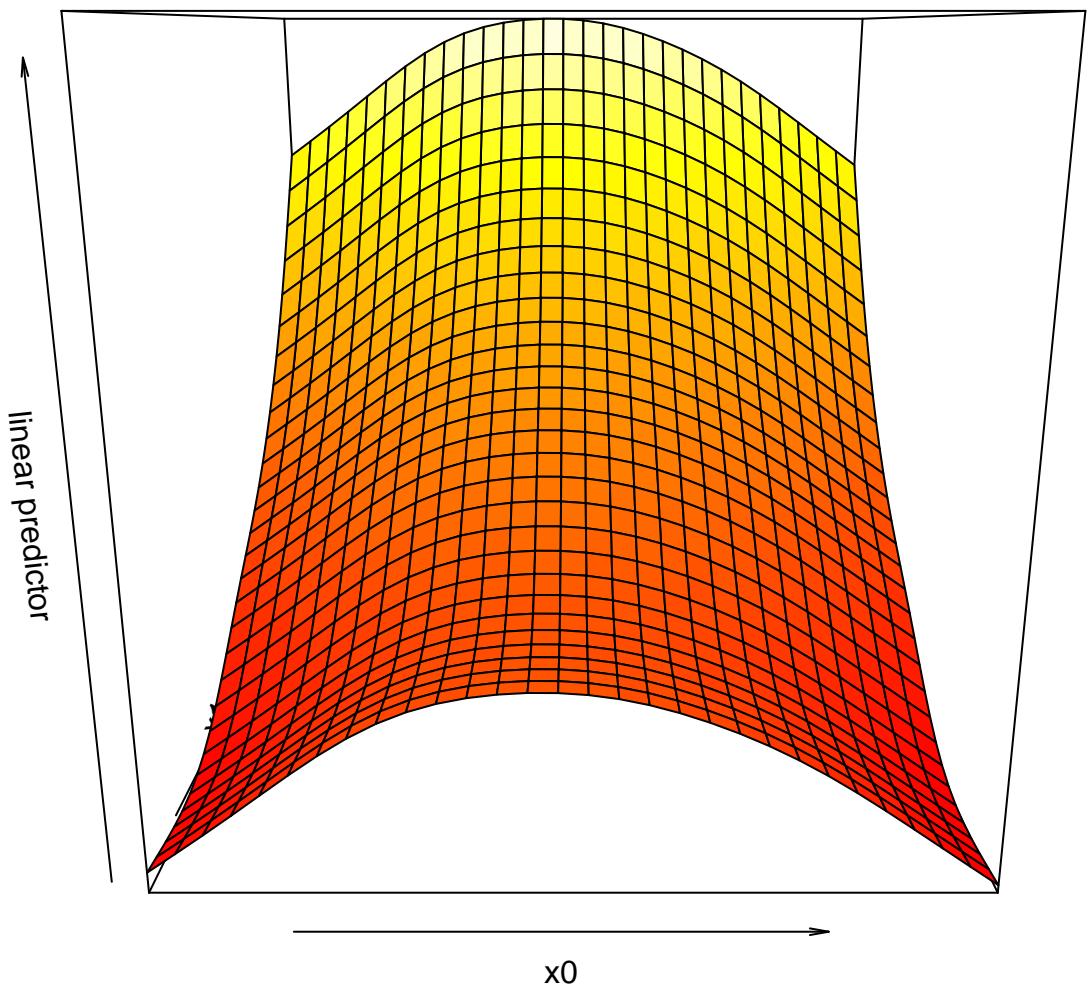


help("gamm")

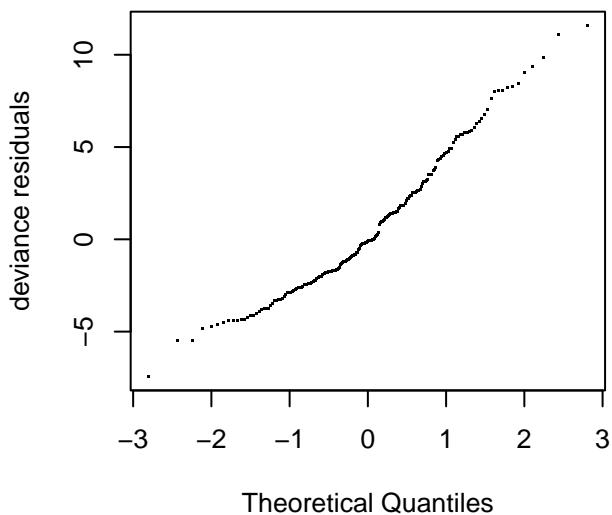


help("gamm")

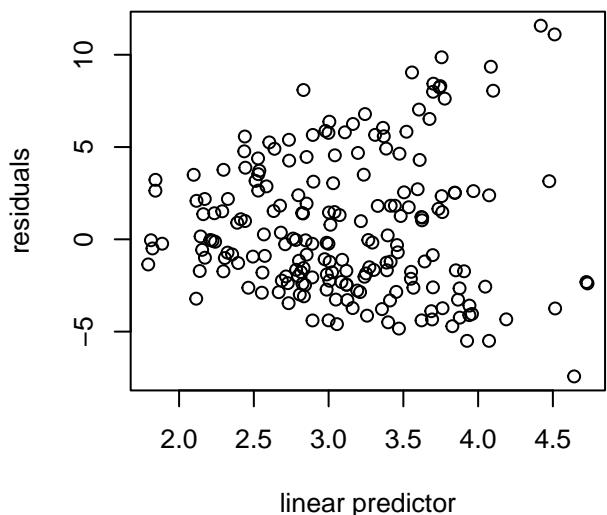
(„պարզ”)



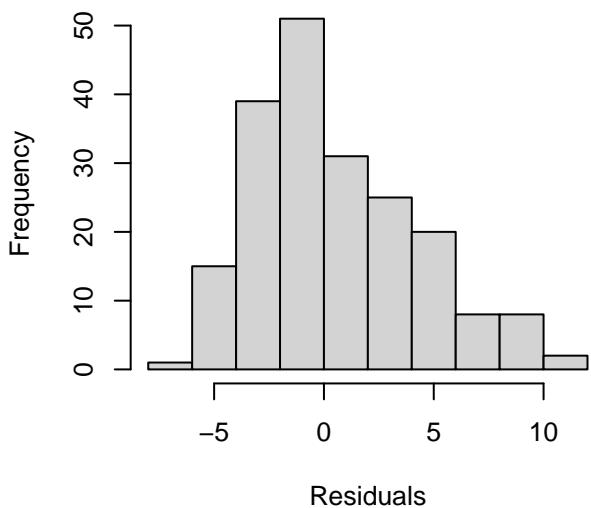
### Normal Q–Q Plot



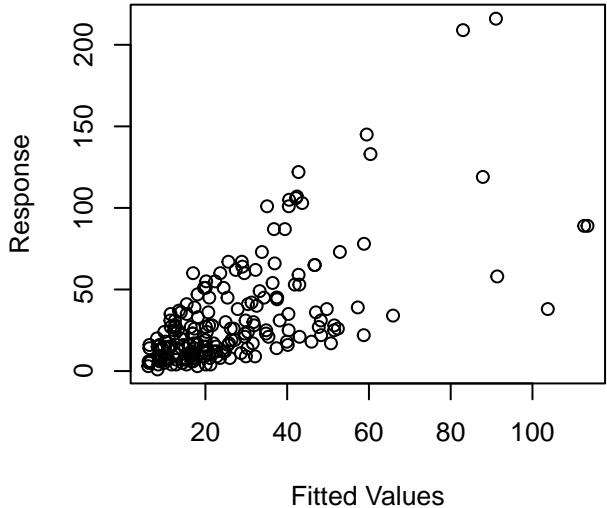
### Resids vs. linear pred.



### Histogram of residuals

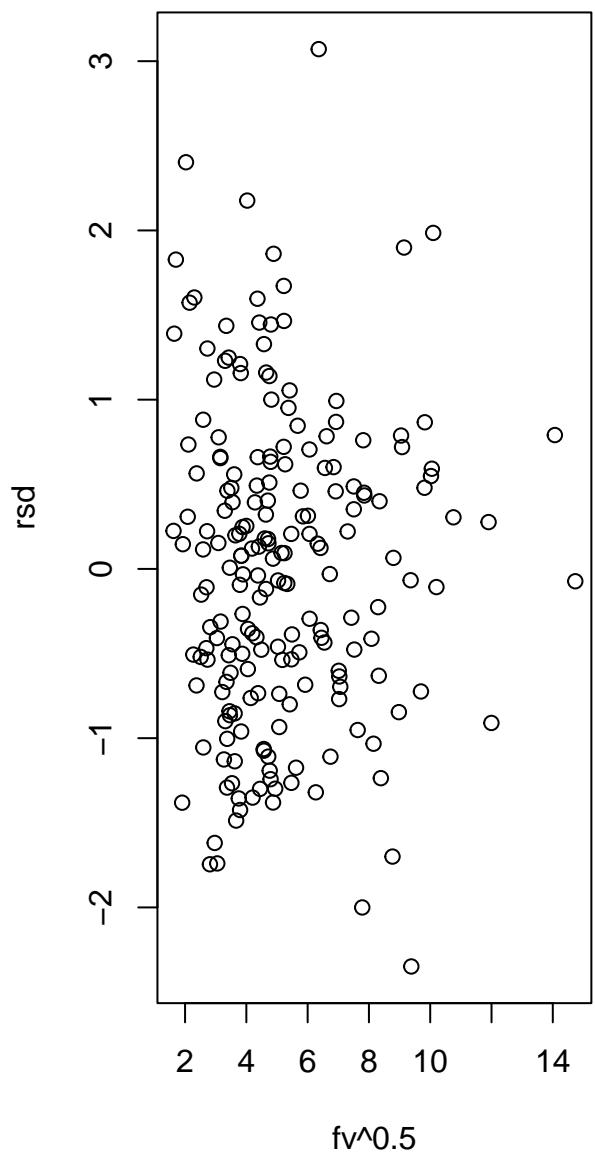
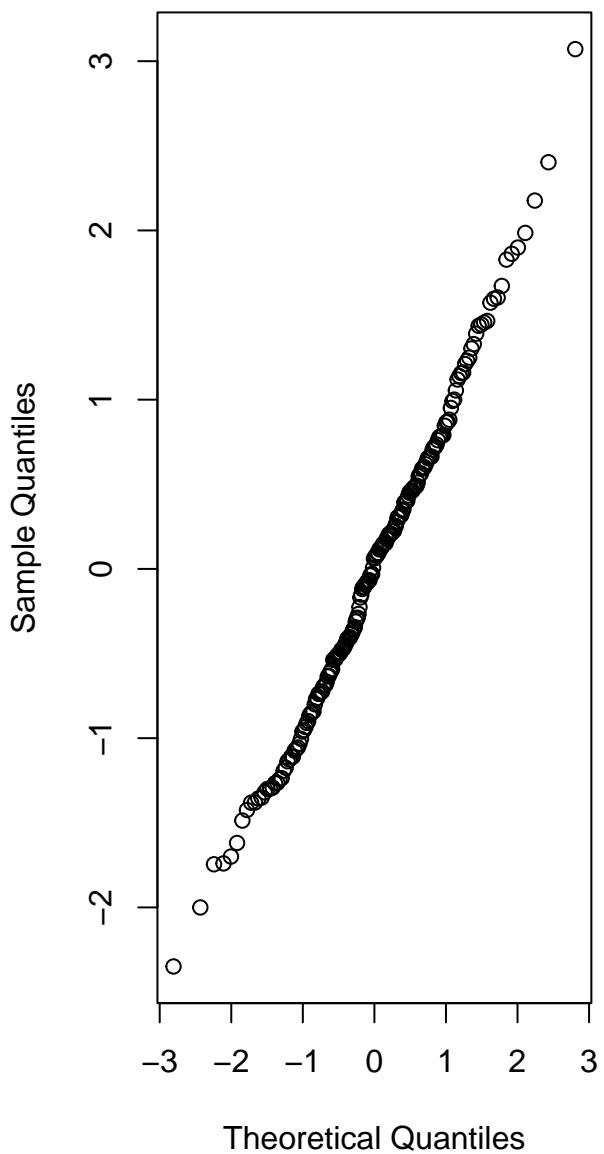


### Response vs. Fitted Values



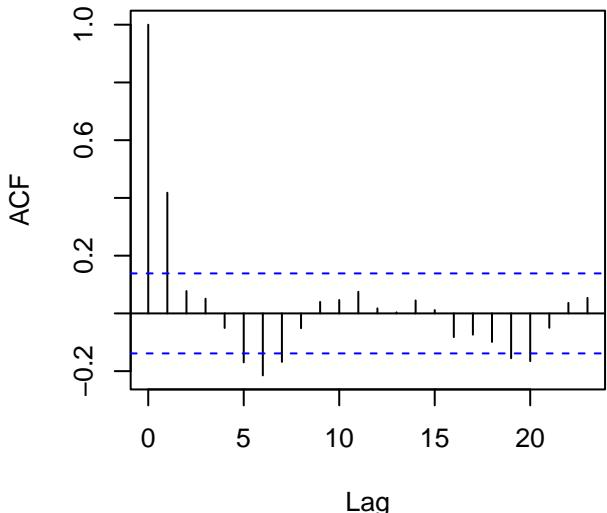
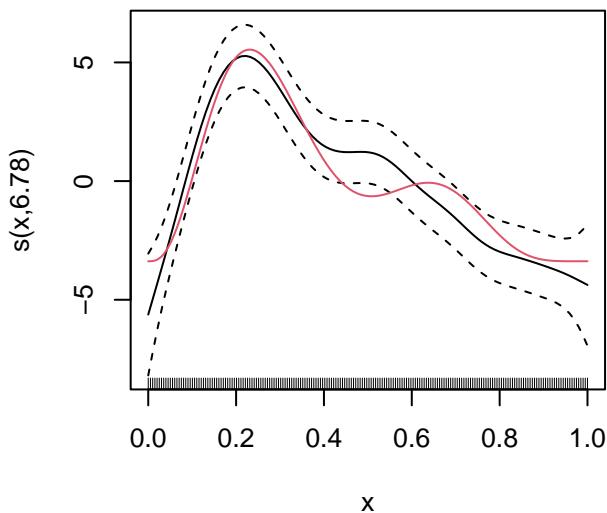
help("gamm")

## Normal Q-Q Plot

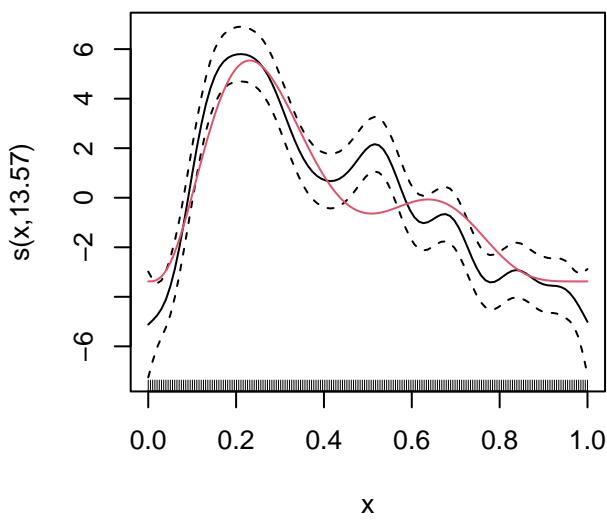
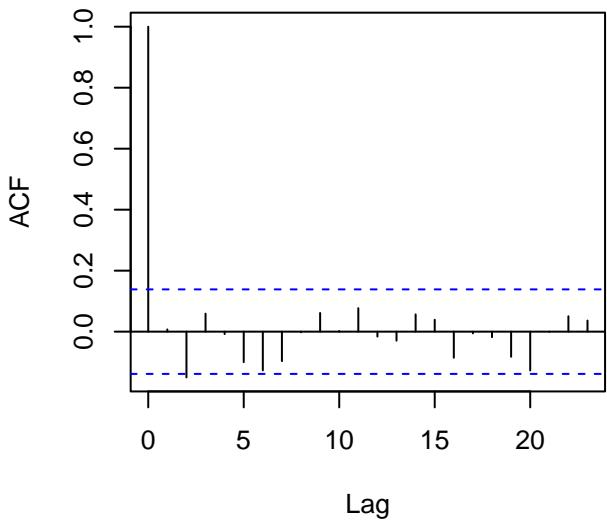


help("gamm")

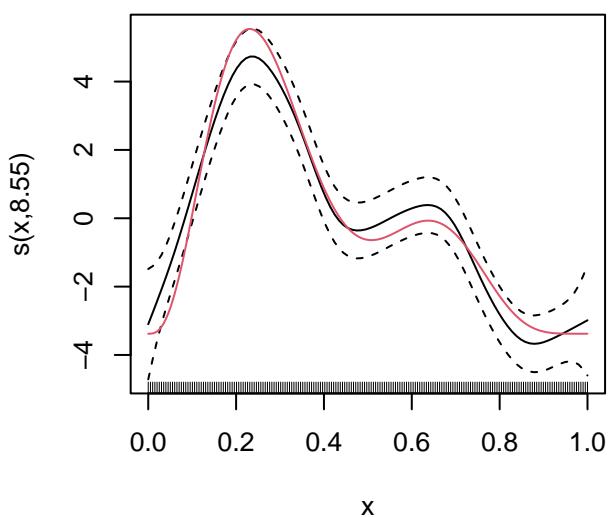
### raw residual ACF

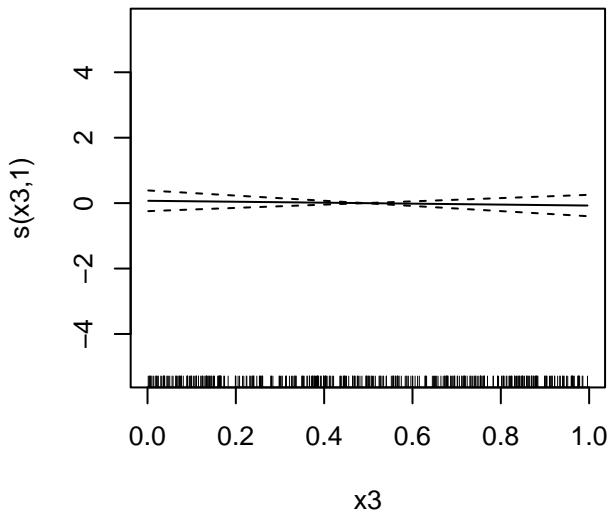
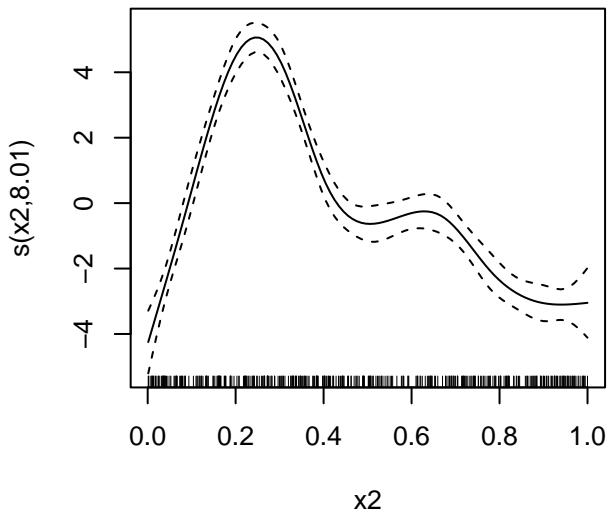
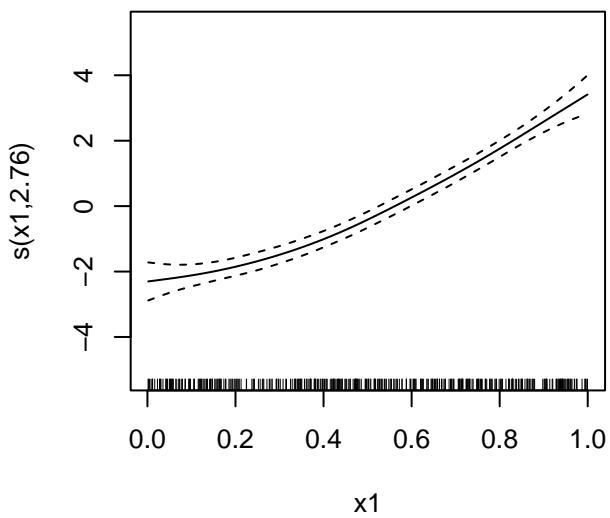
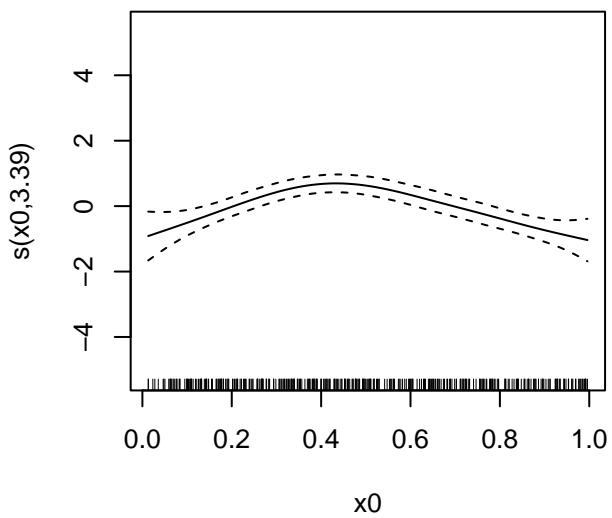


### standardized residual ACF



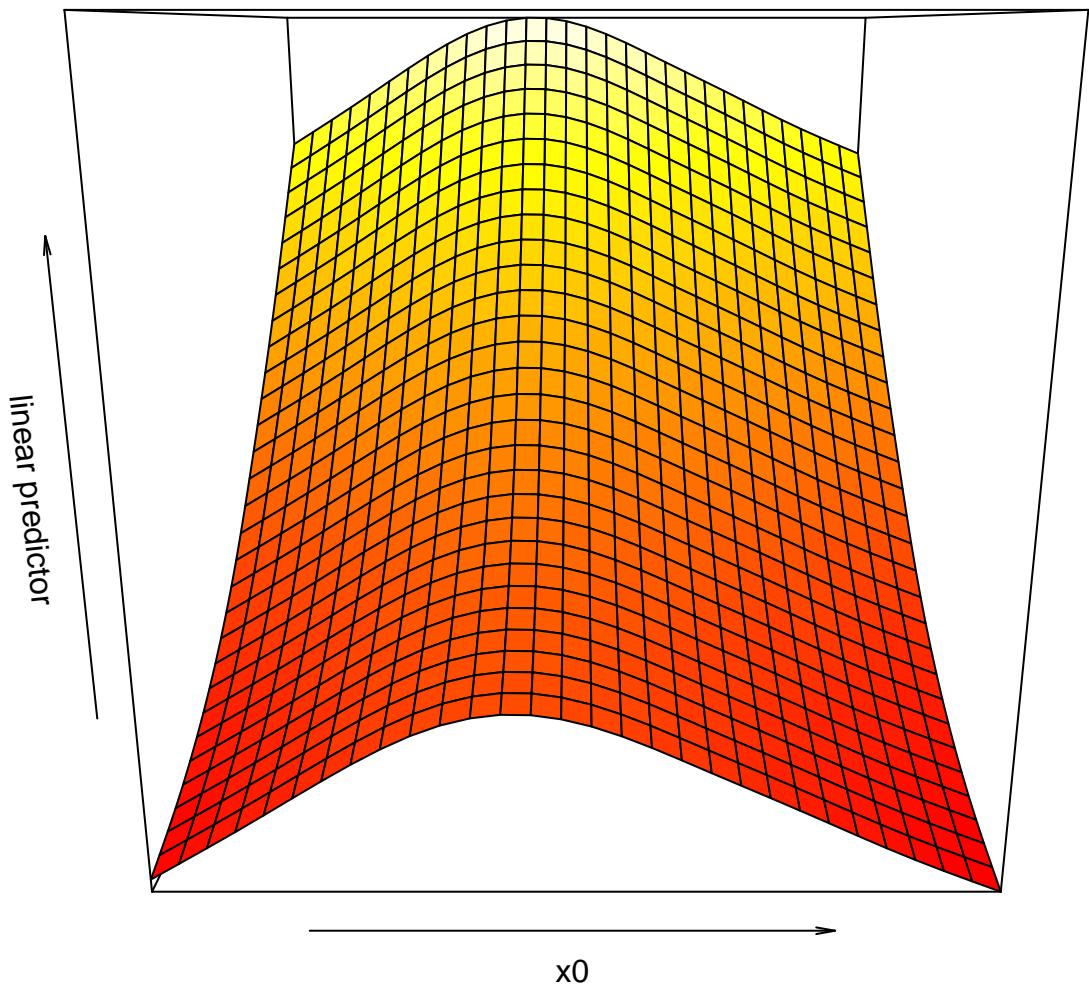
help("gamm")

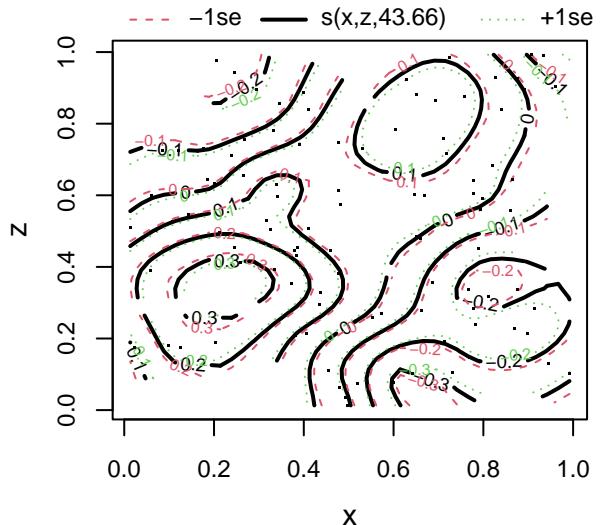
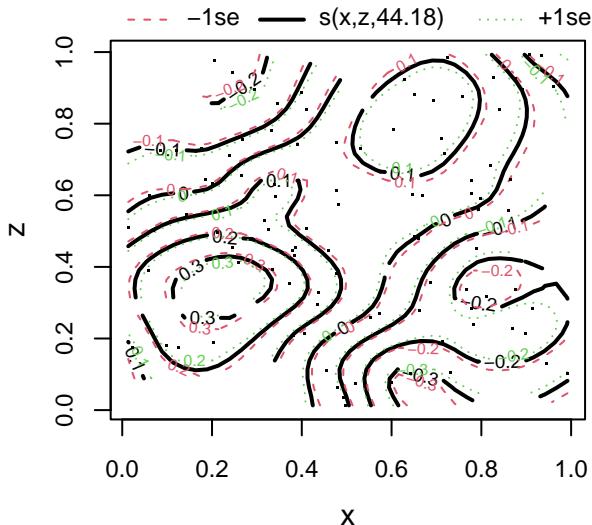
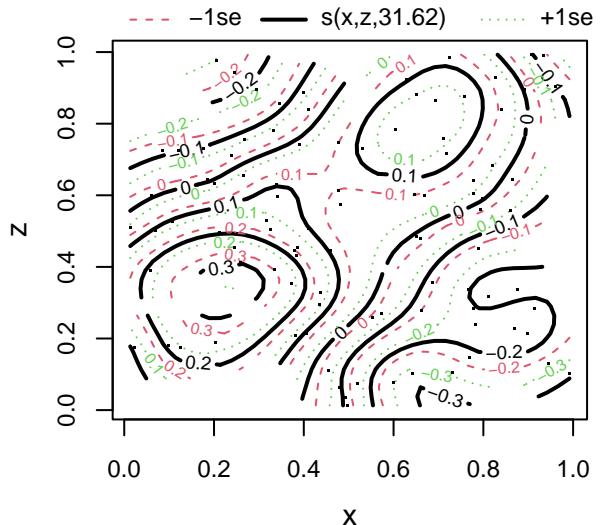
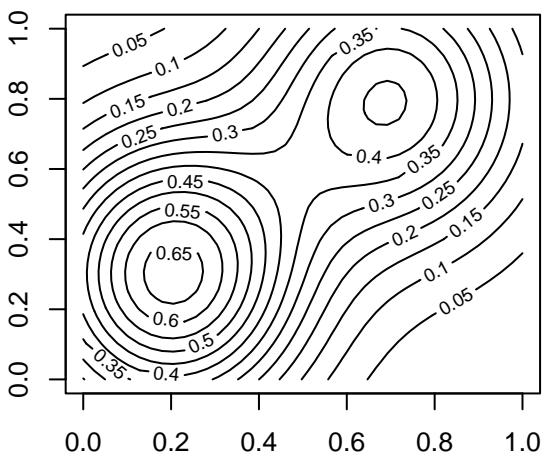




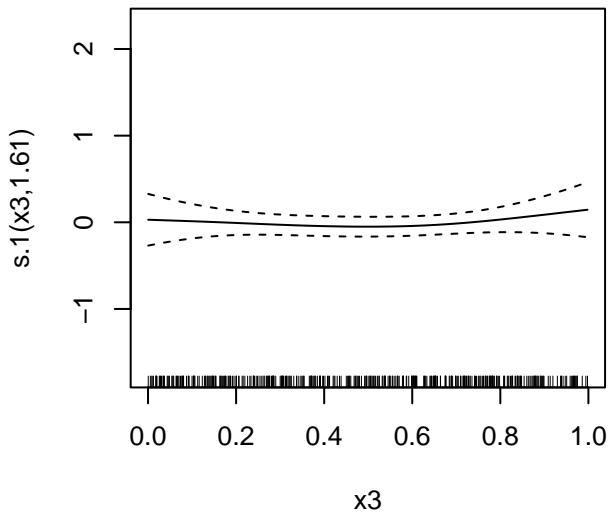
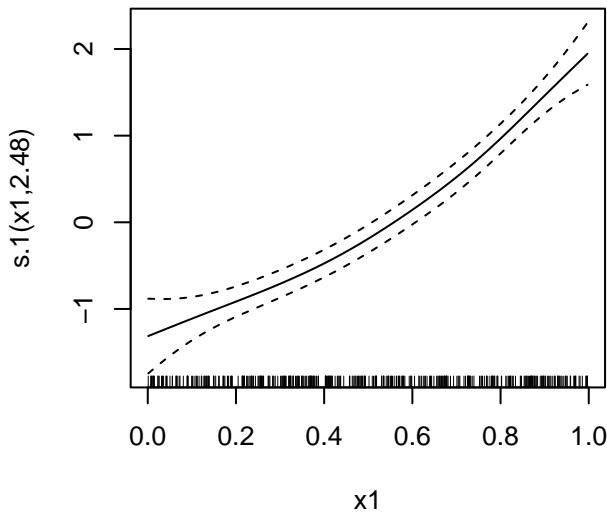
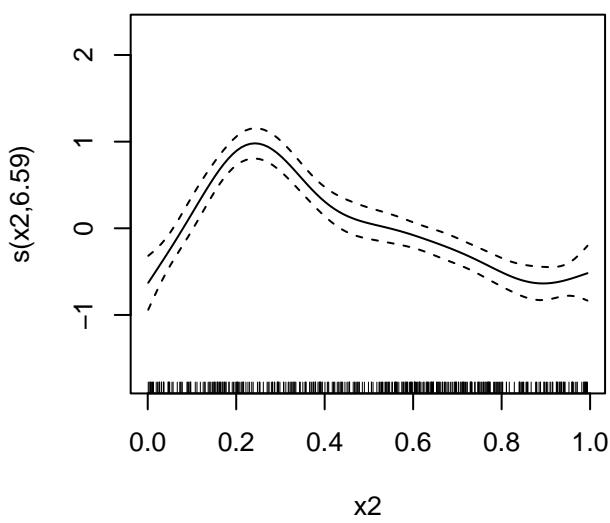
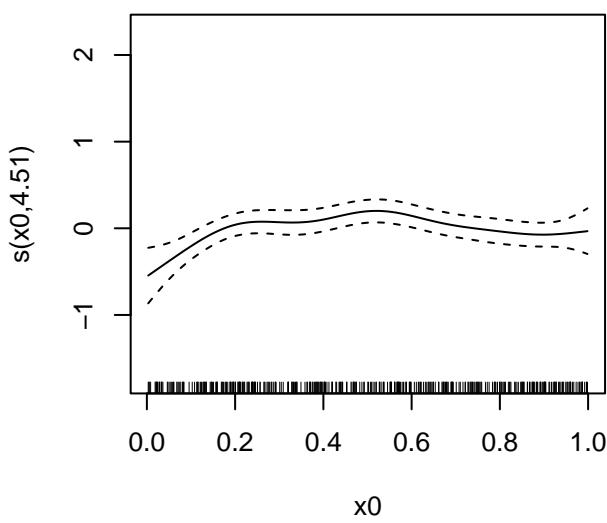
help("gamm")

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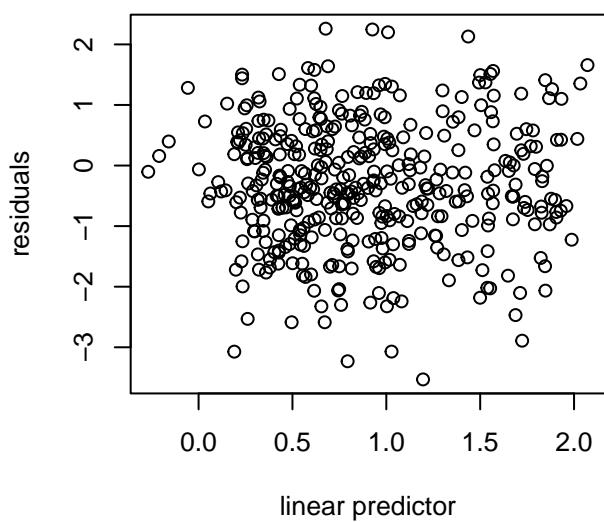
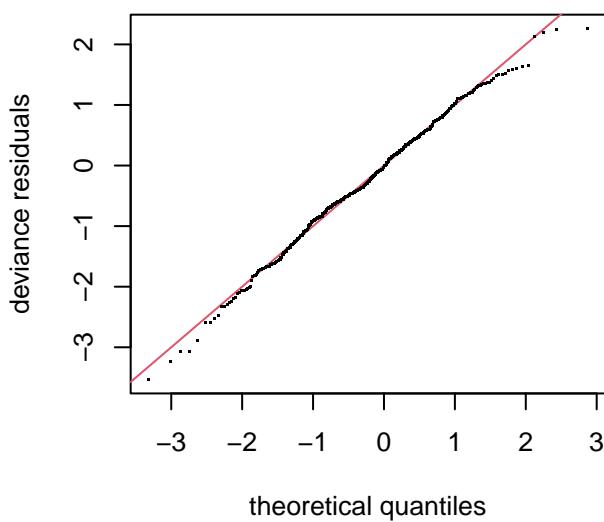


`help("gamm")`

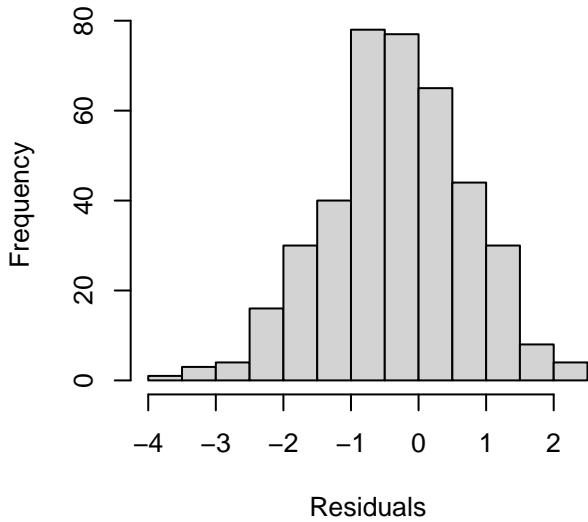


help("gammals")

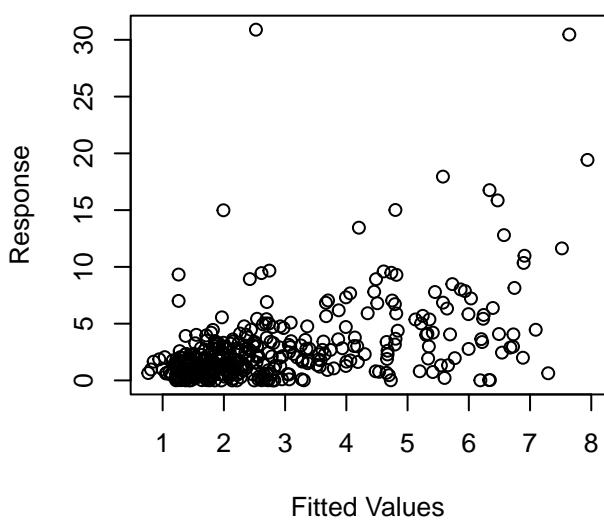
## Resids vs. linear pred.



## Histogram of residuals



## Response vs. Fitted Values



help("gammals")

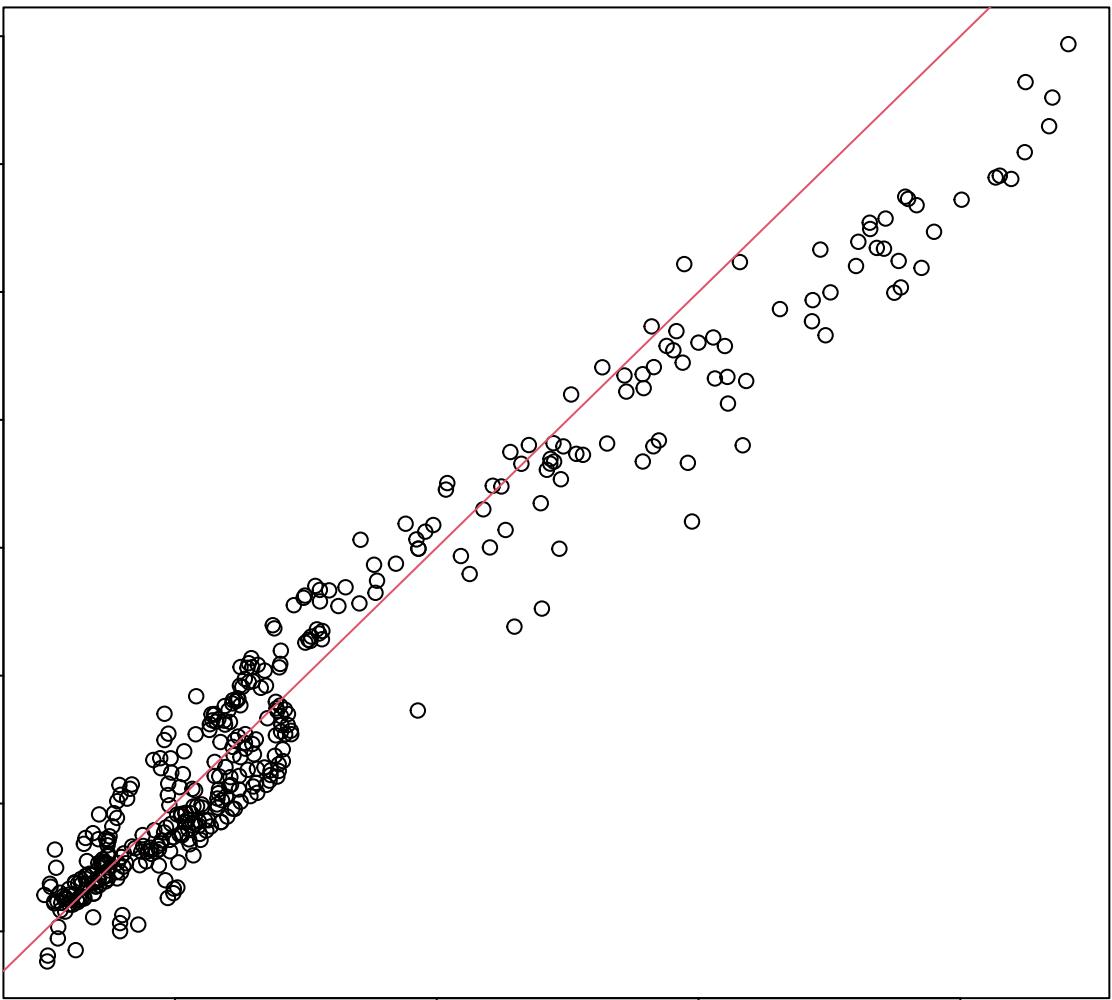
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8  
7  
6  
5  
4  
3  
2  
1

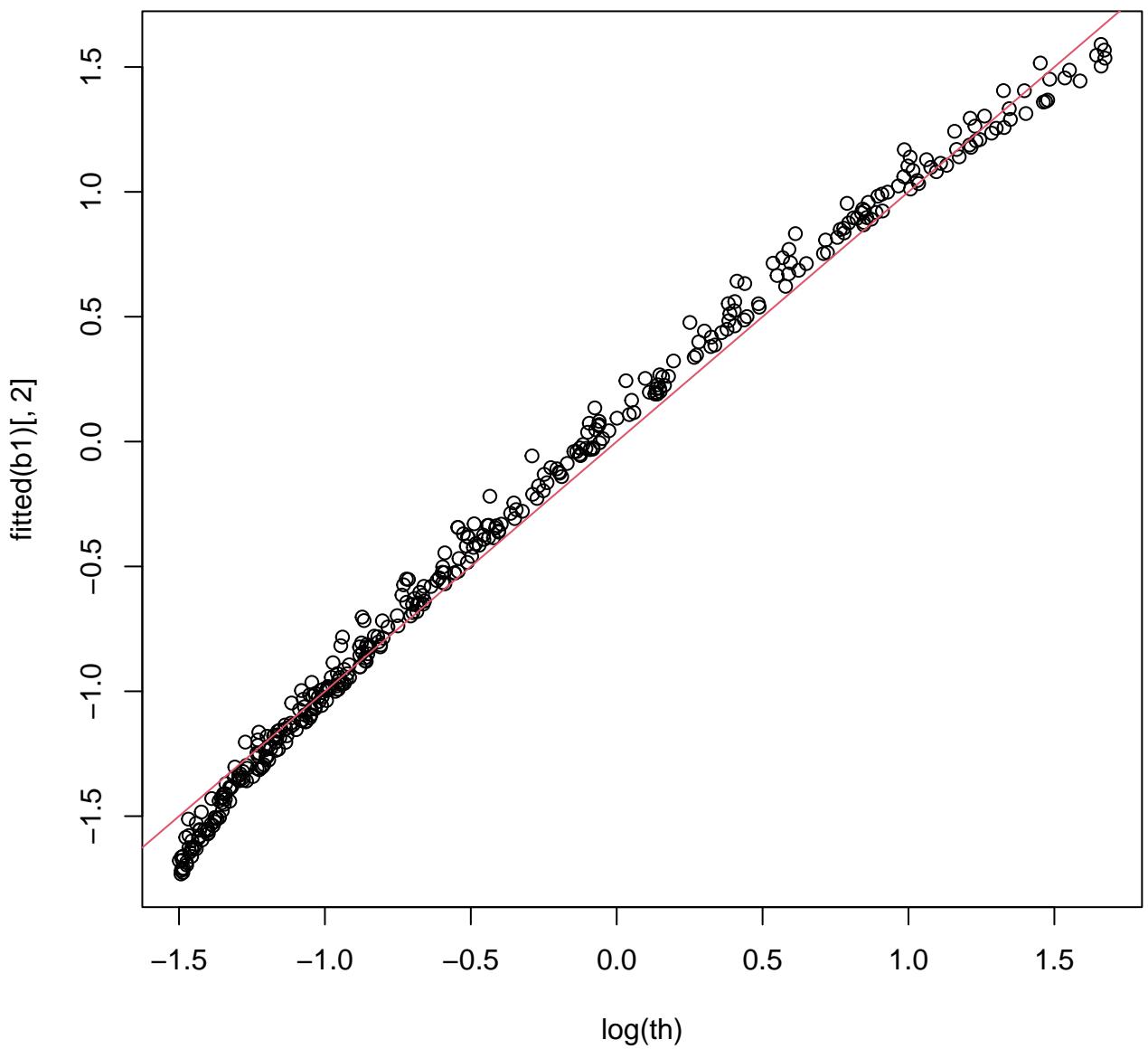
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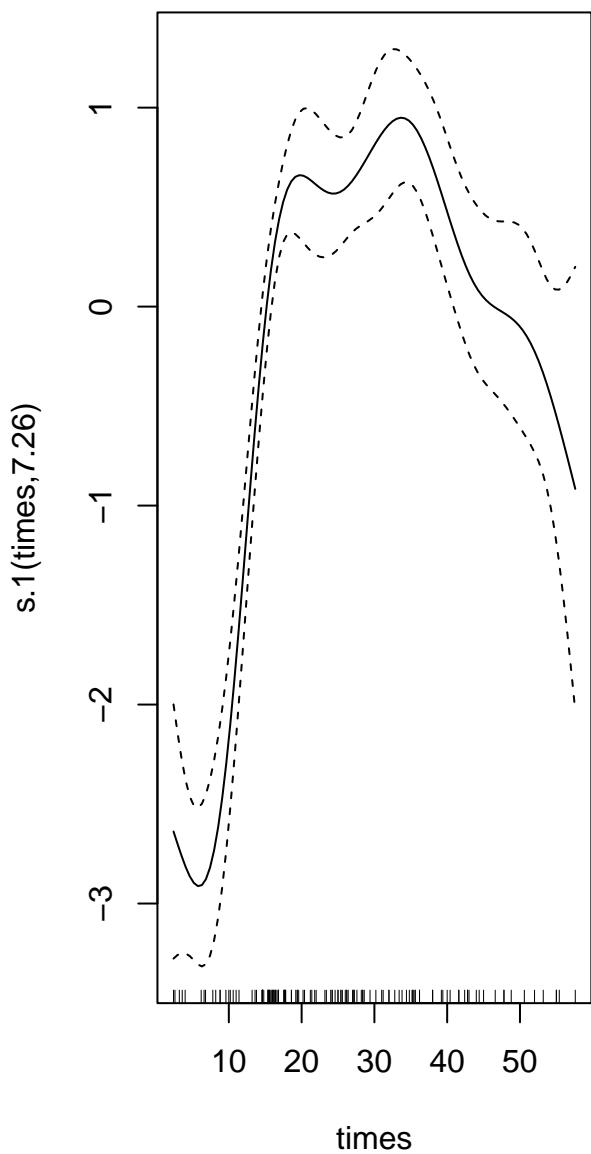
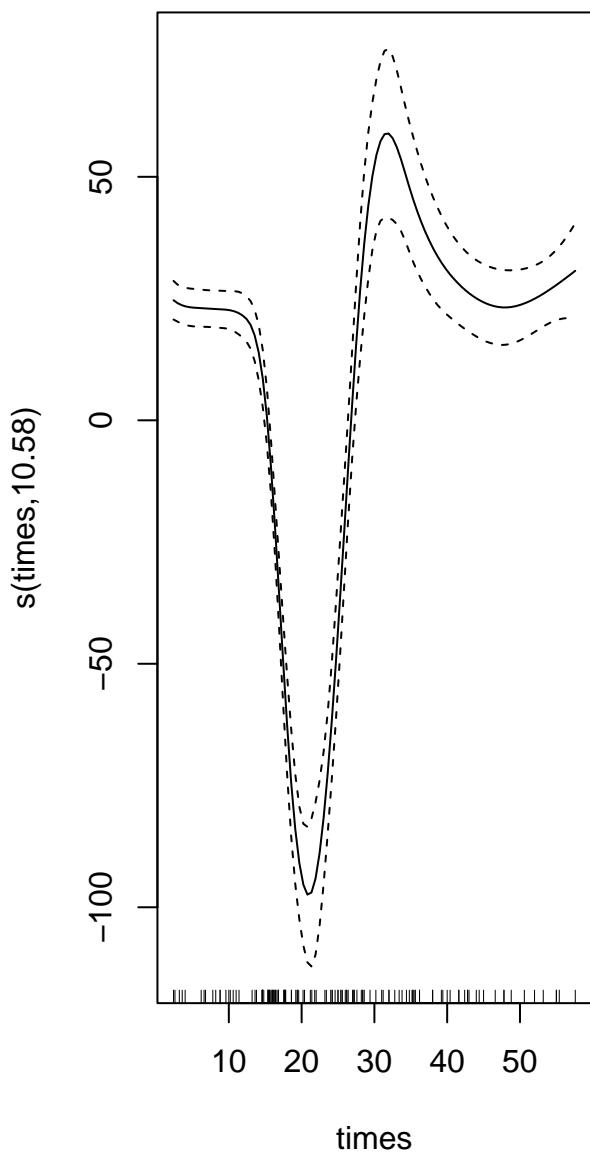
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help("gammals")

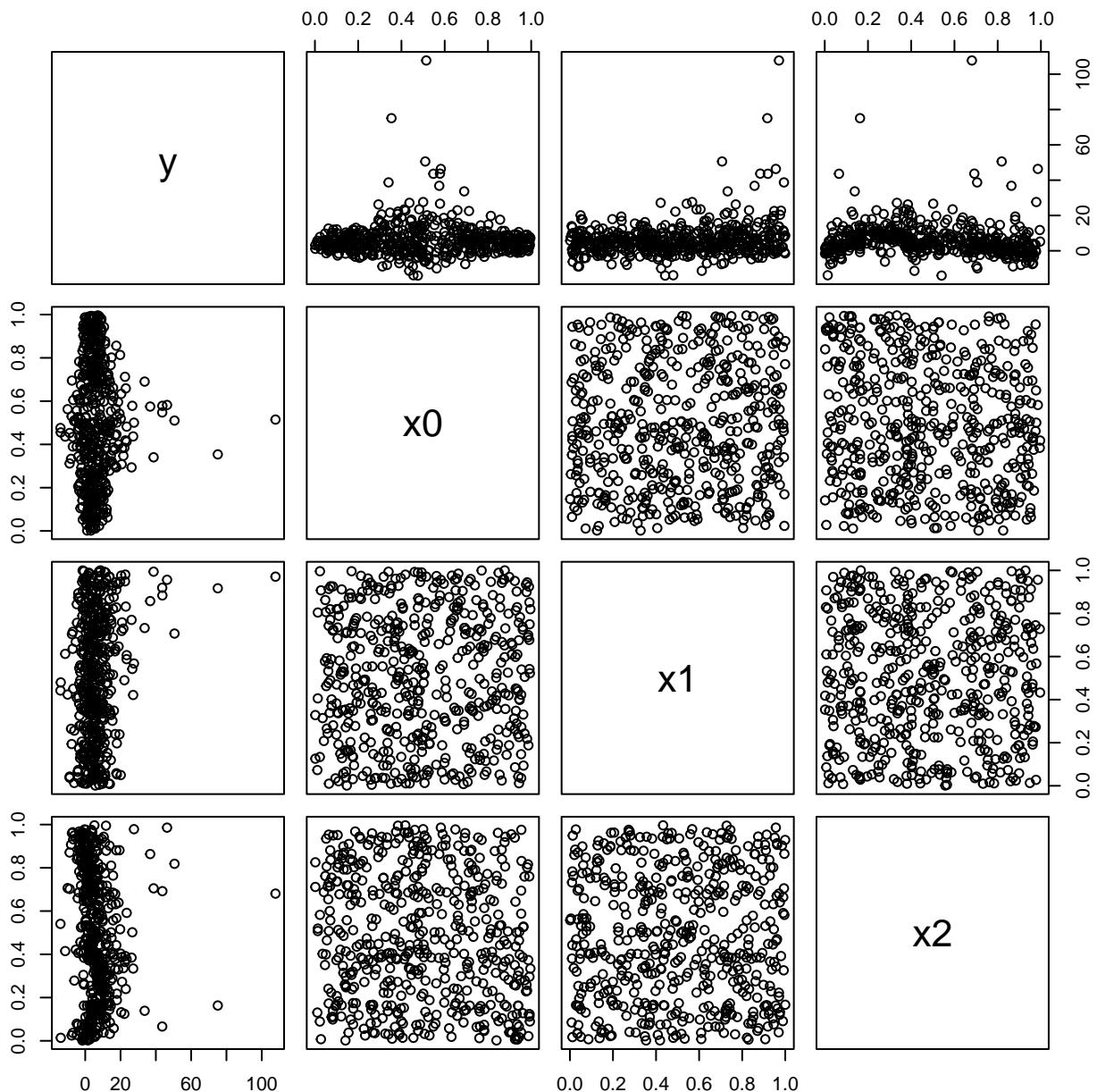


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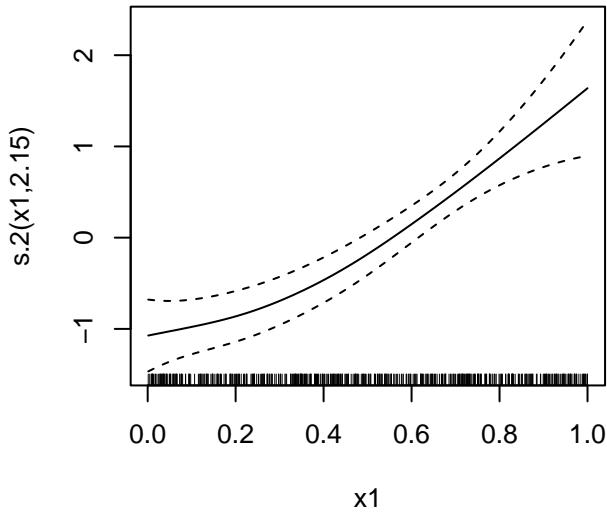
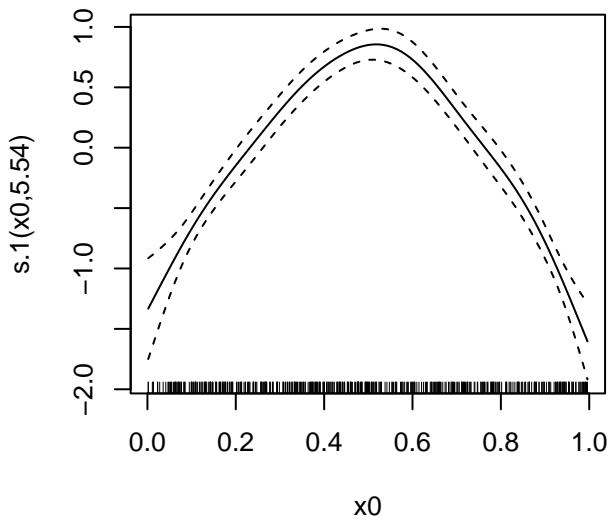
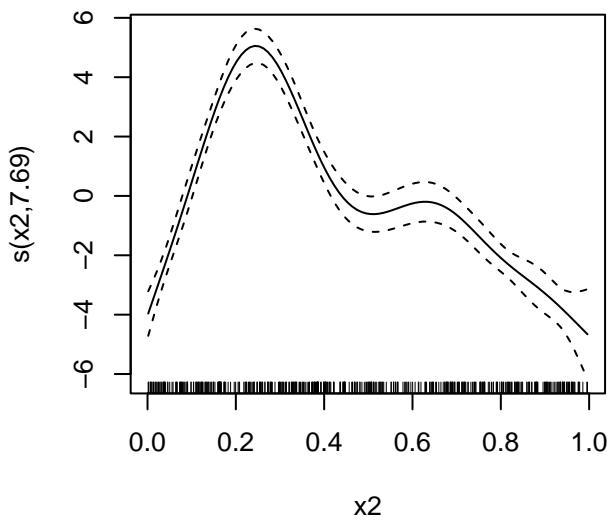




help("gauss")

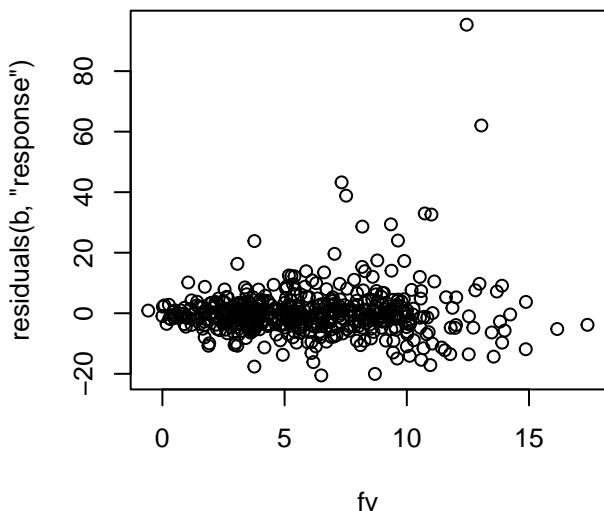
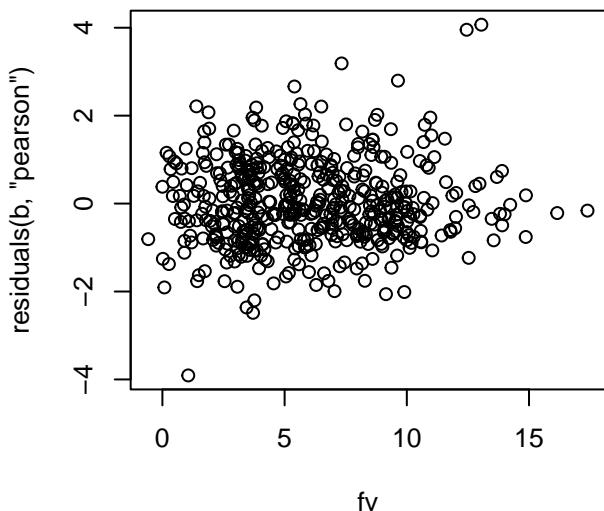
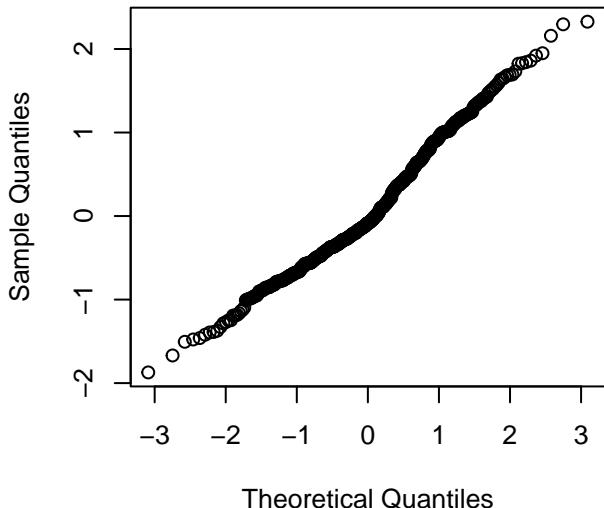
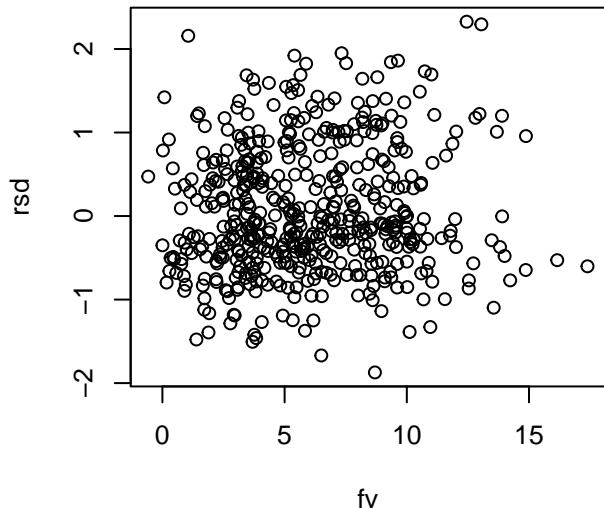


help("geviss")



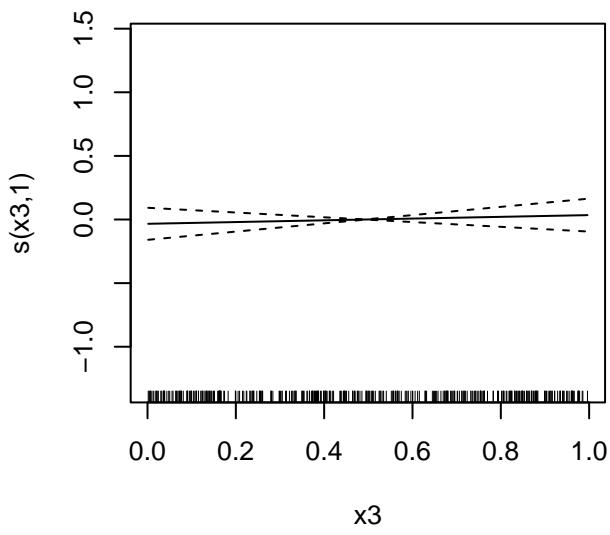
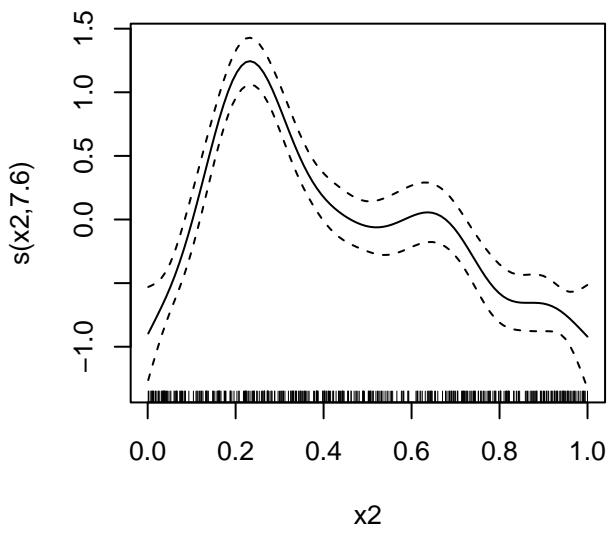
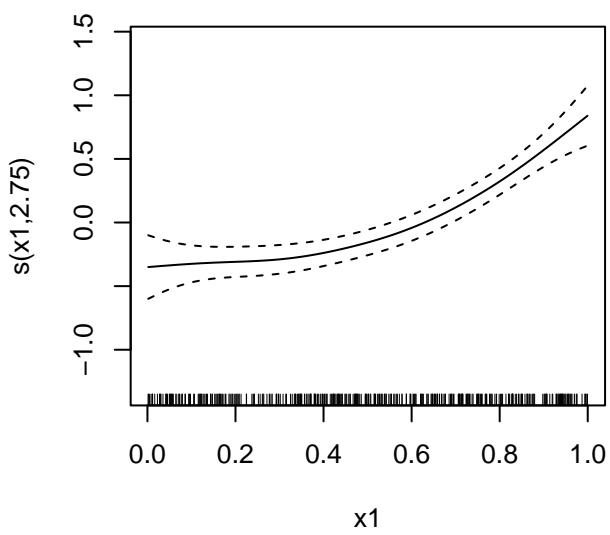
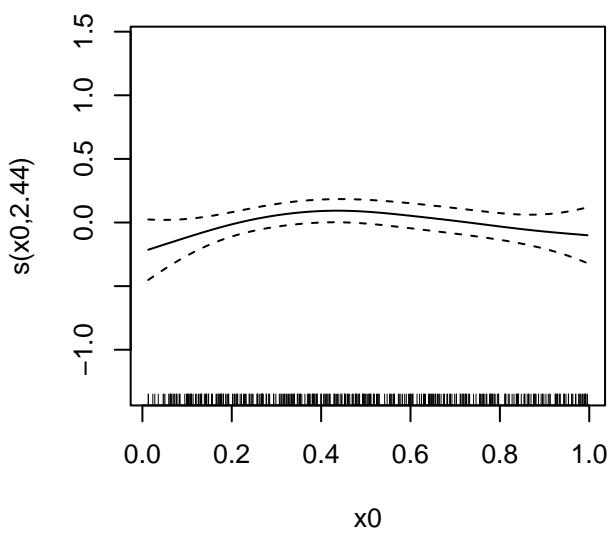
help("geviss")

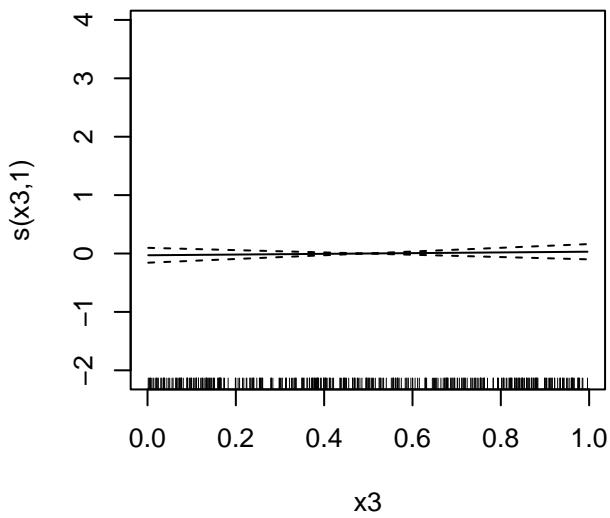
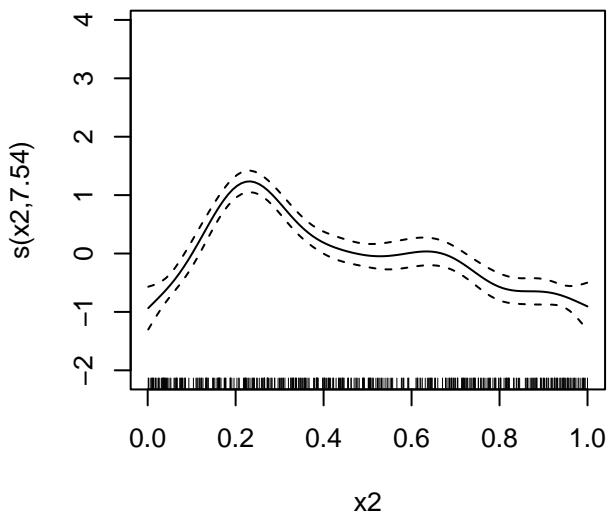
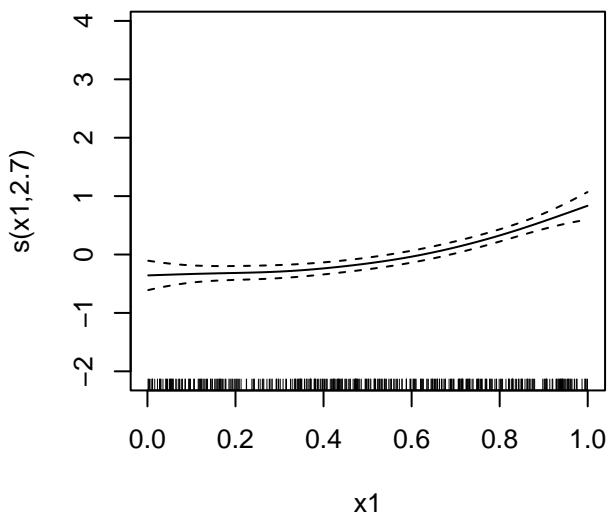
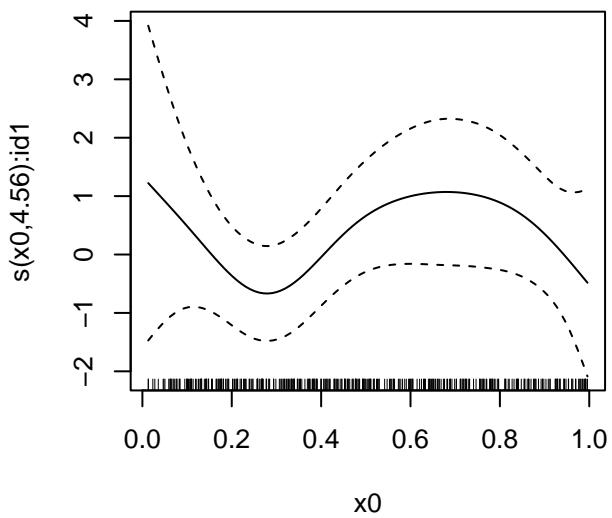
## Normal Q-Q Plot



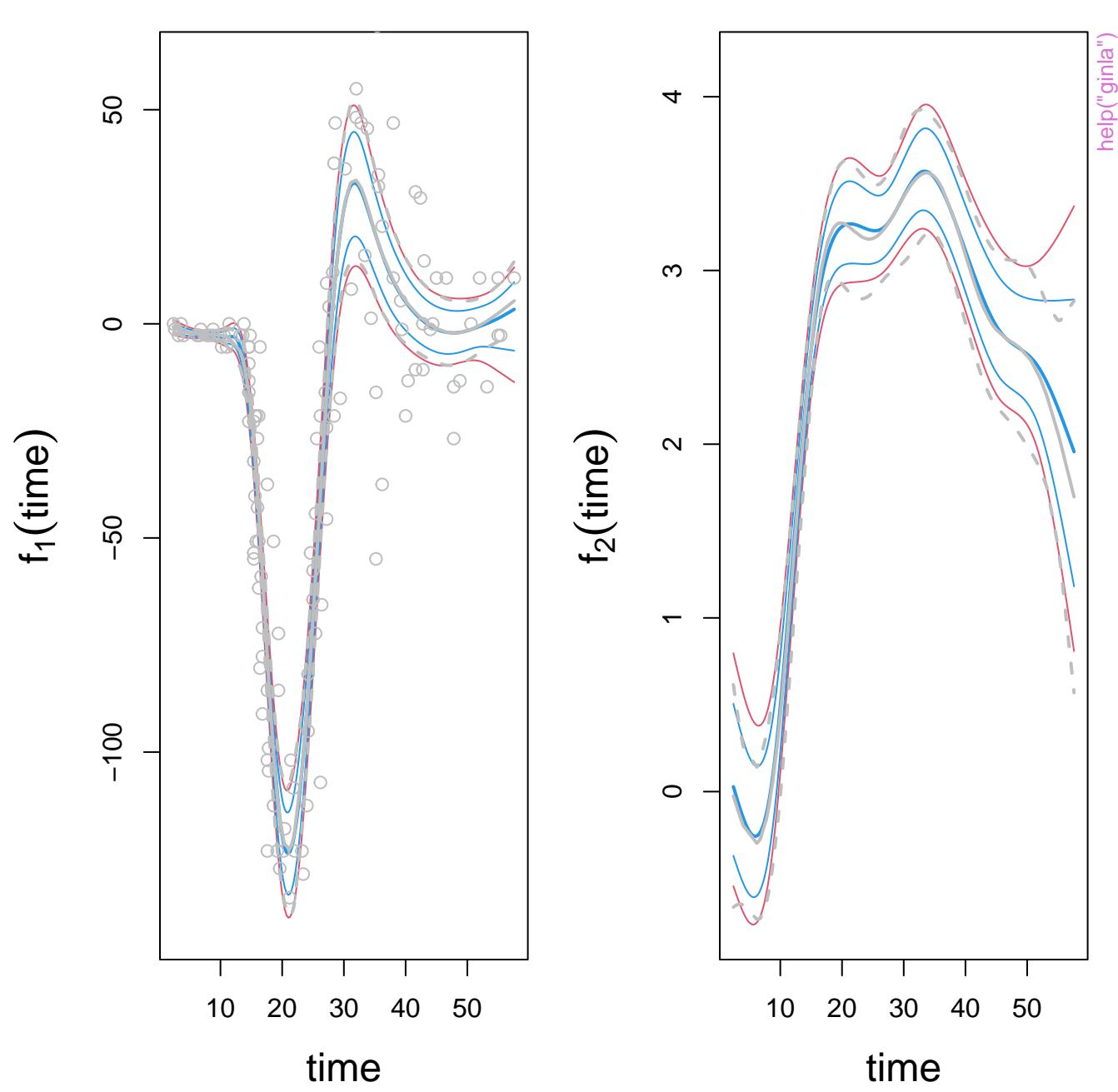
help("geviss")

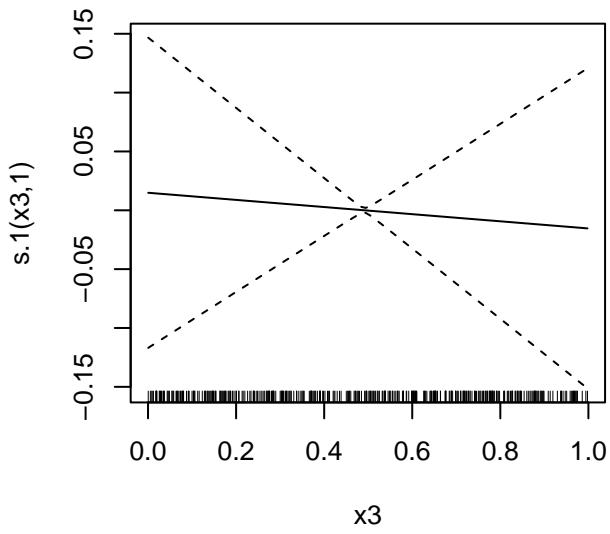
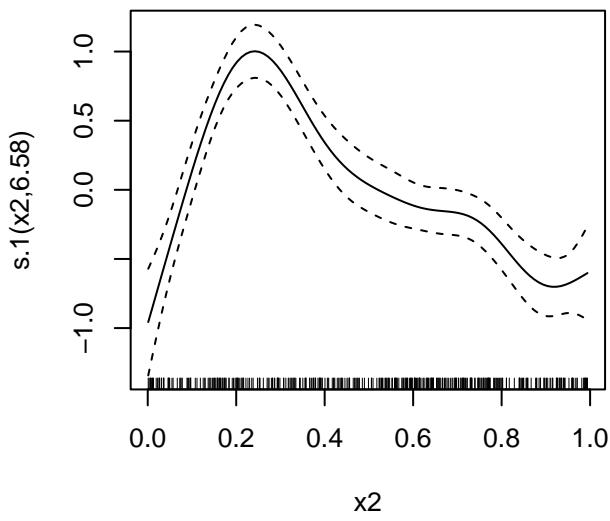
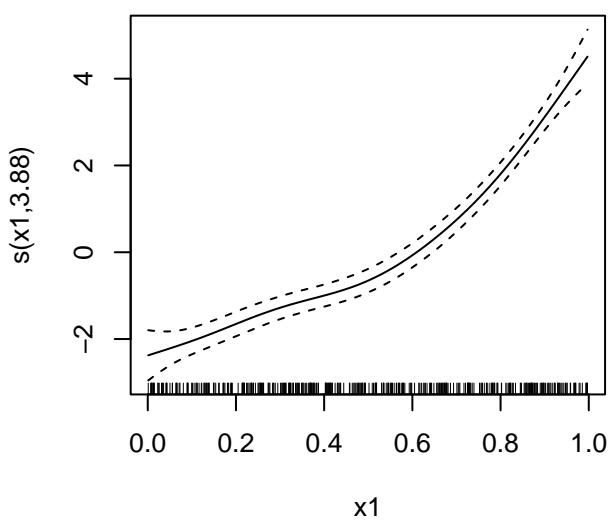
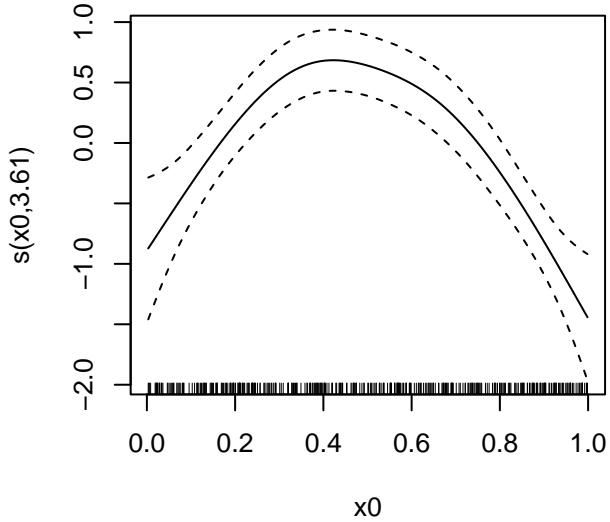
help("gfam")





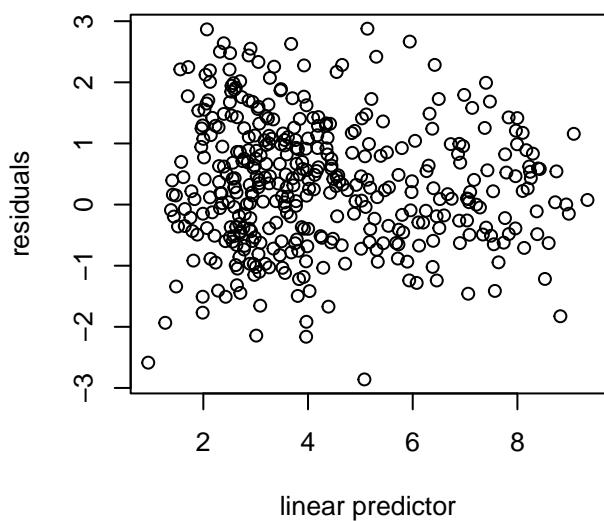
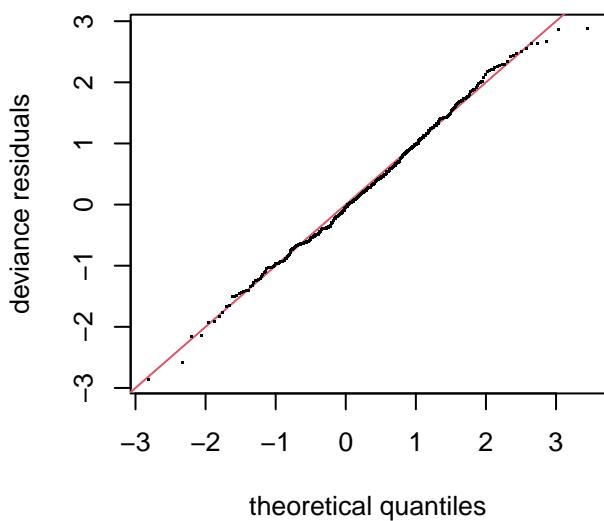
help("gfam")



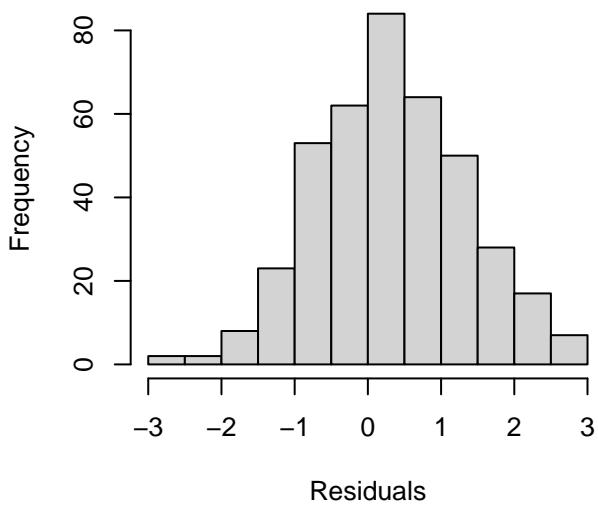


help("gumbels")

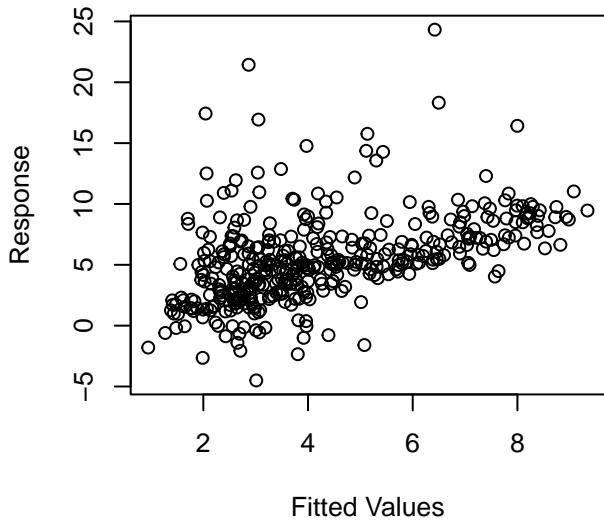
## Resids vs. linear pred.



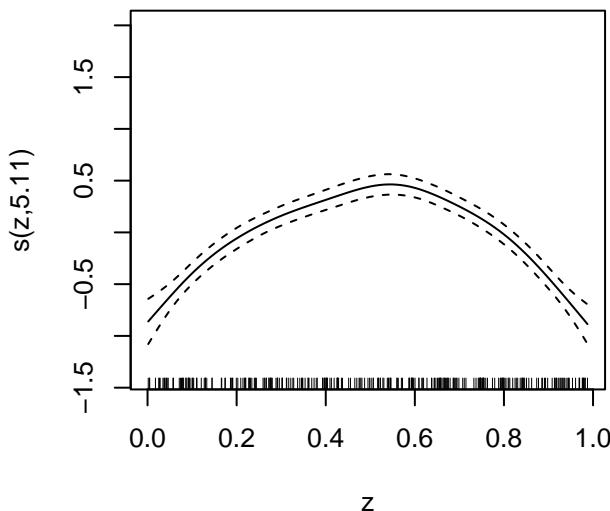
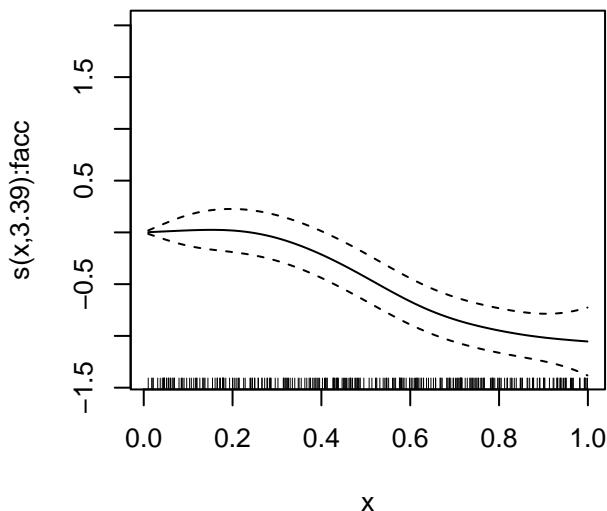
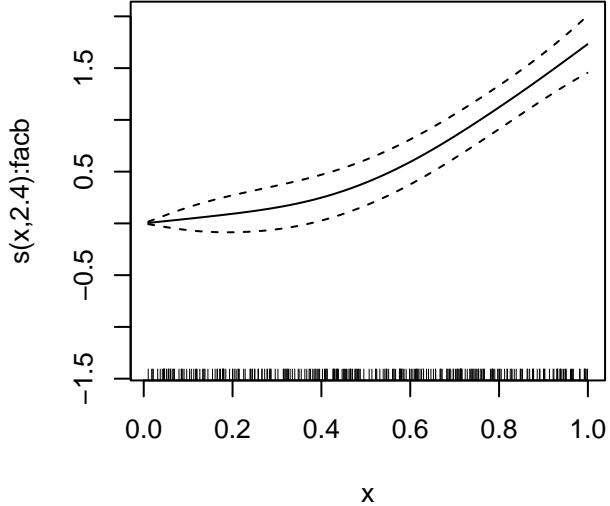
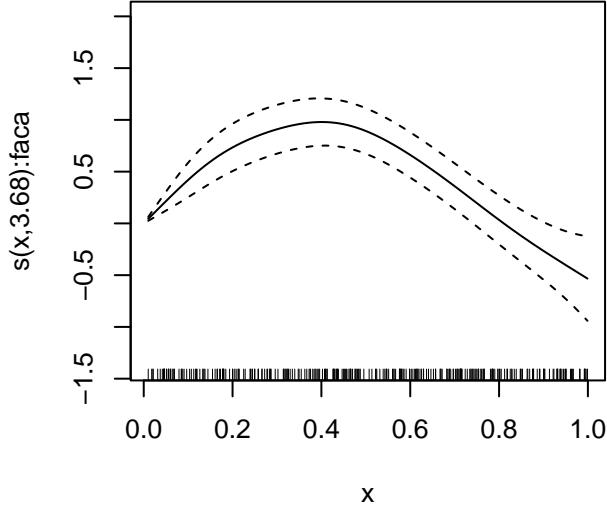
## Histogram of residuals



## Response vs. Fitted Values

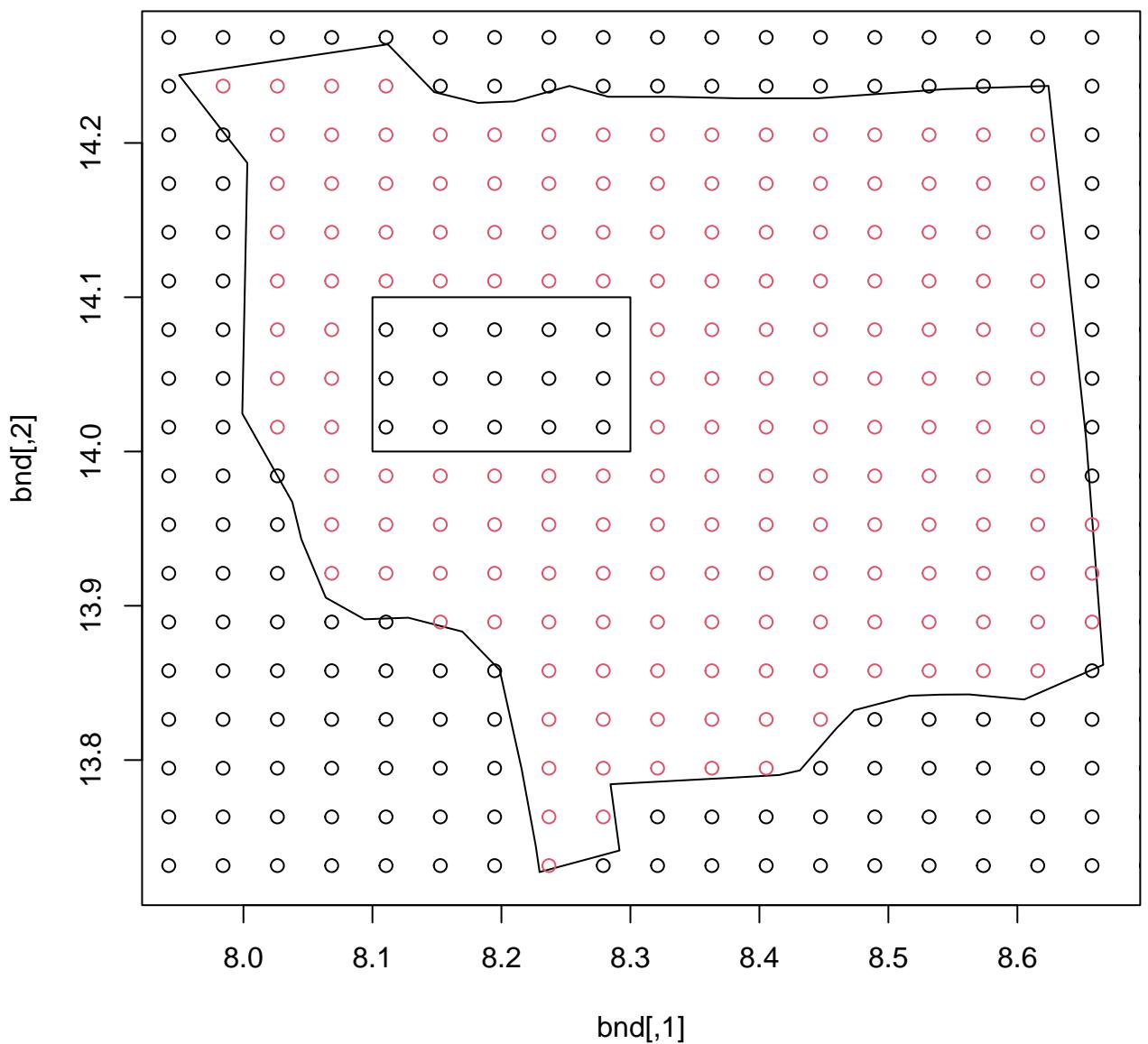


help("gumbels")

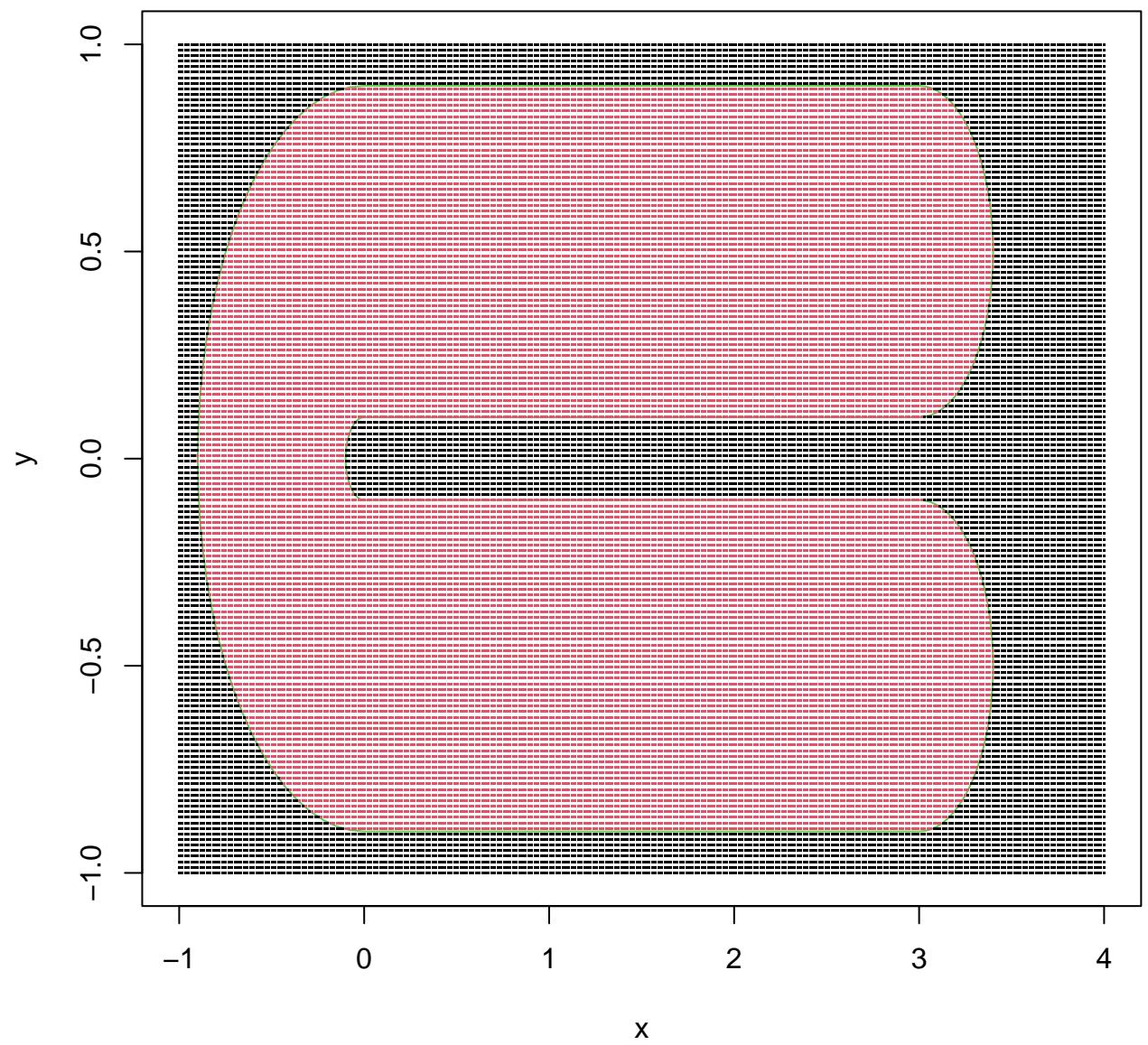


help("identifiability")

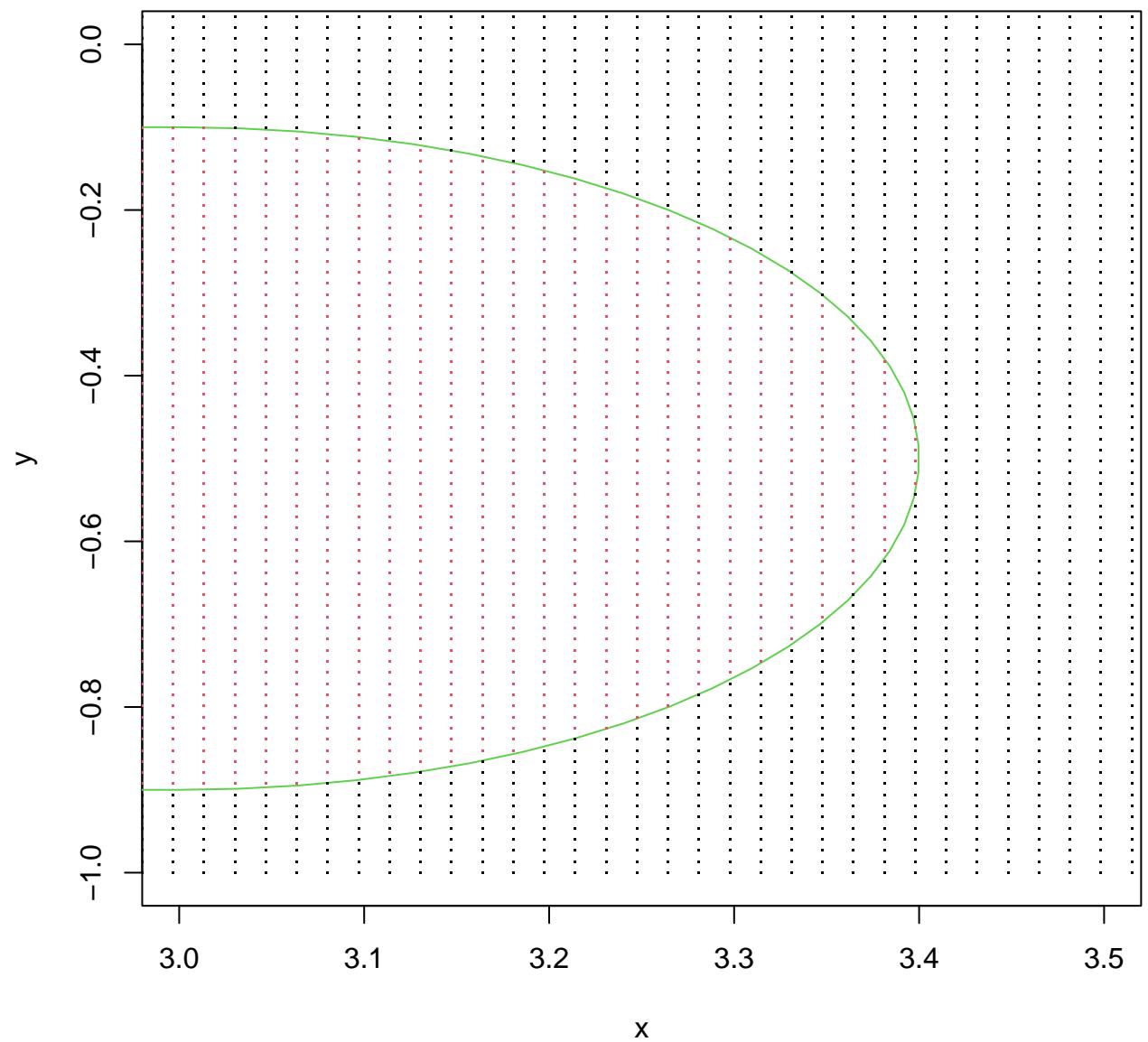
help("in.out")

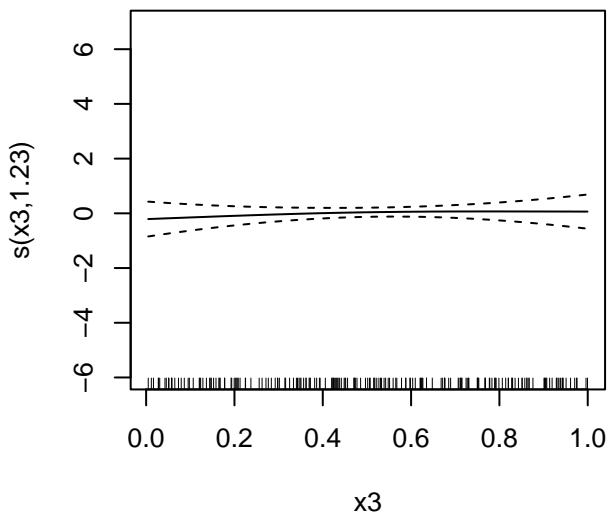
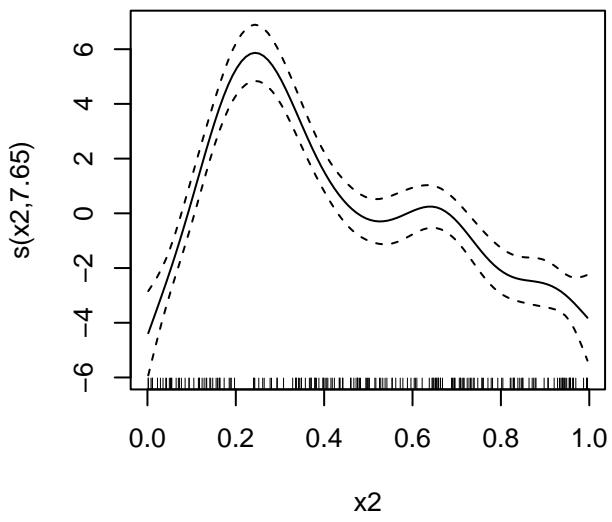
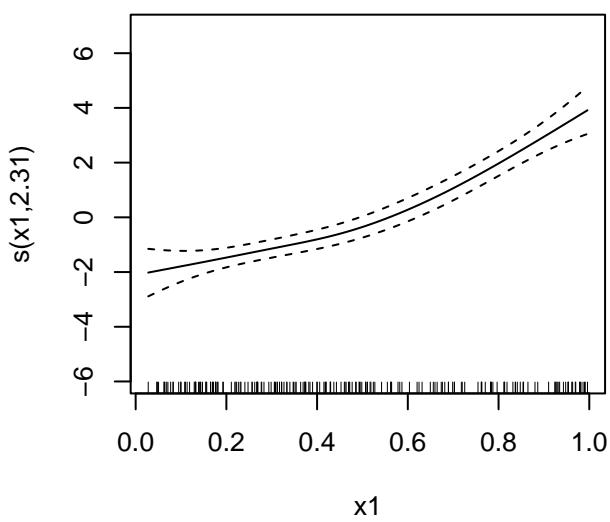
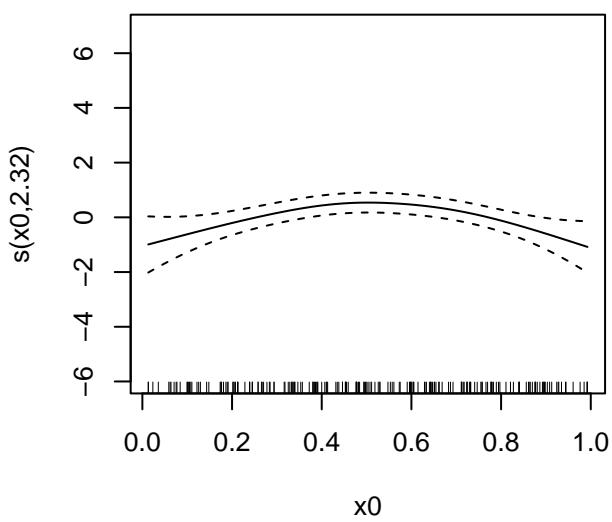


help("inSide")



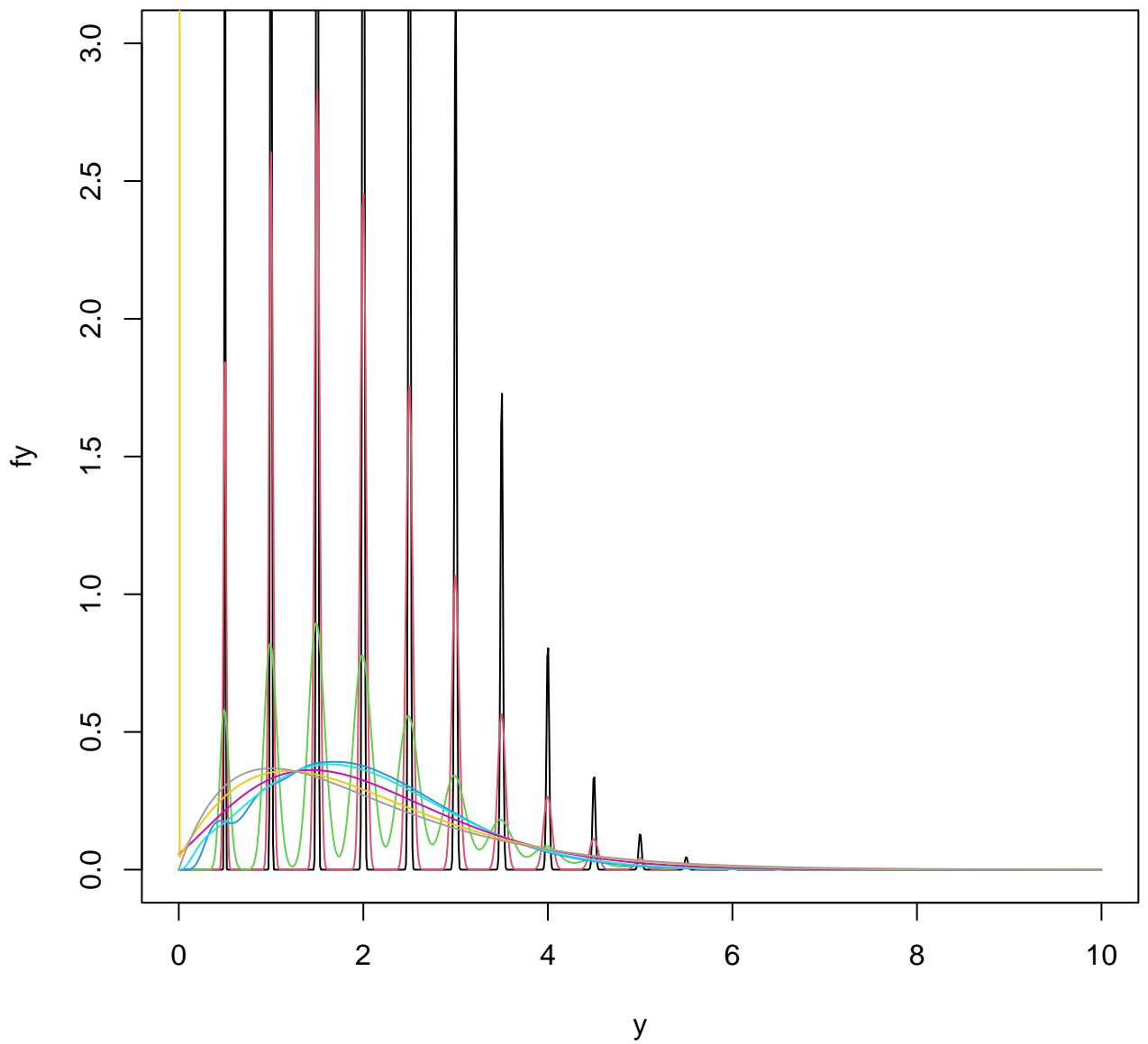
help("inSide")





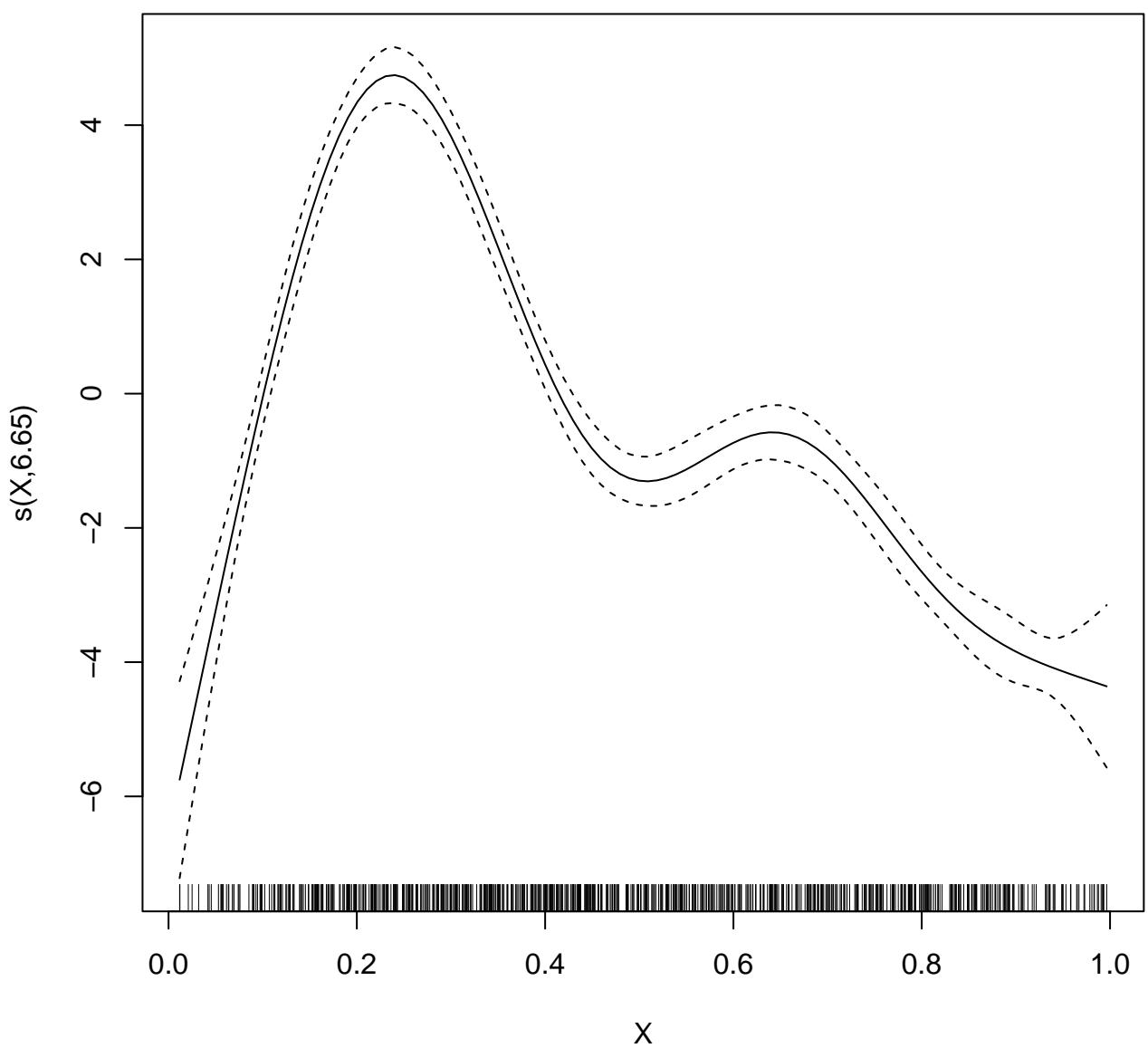
help("k.check")

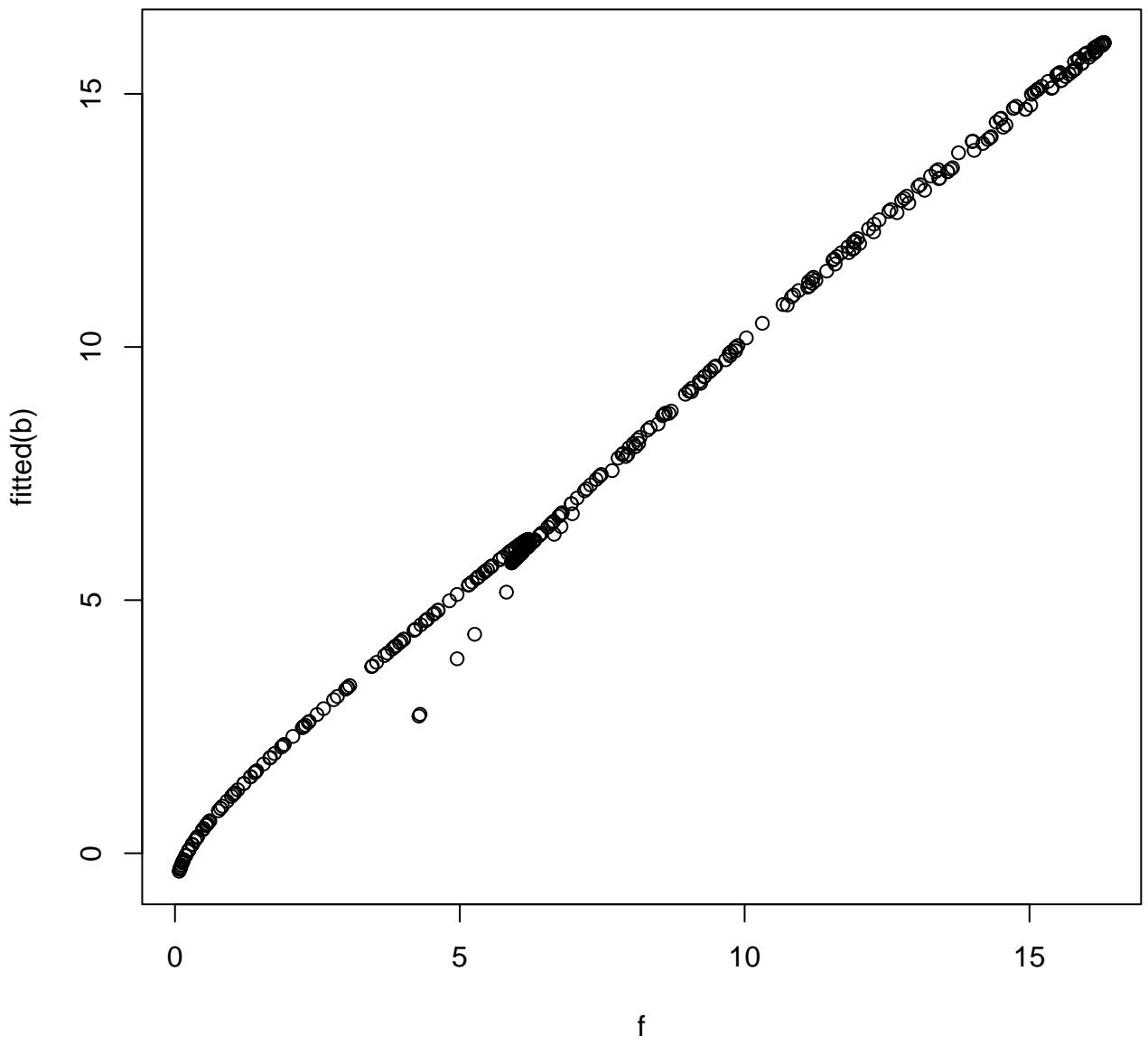
## Tweedie density as p changes



help("ldTweedie")

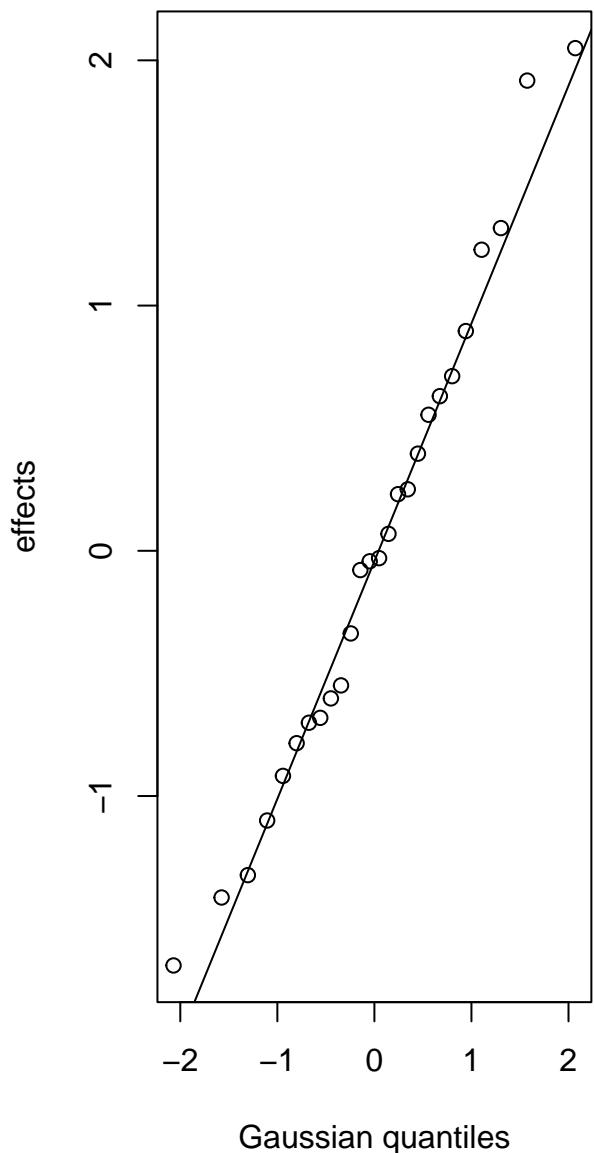
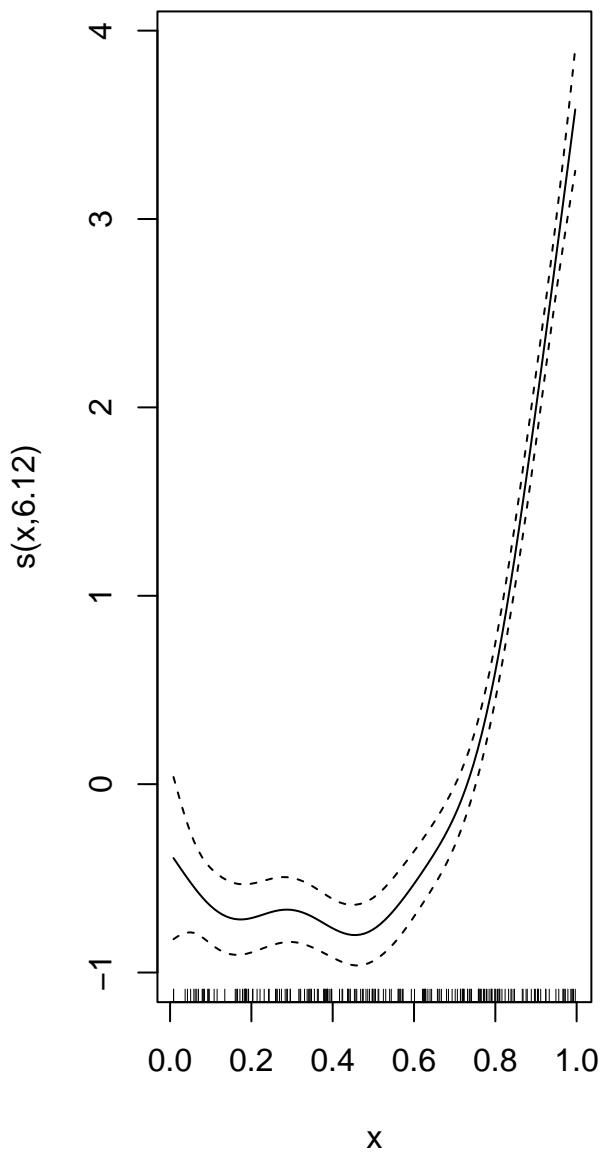
help("linear.functional.terms")



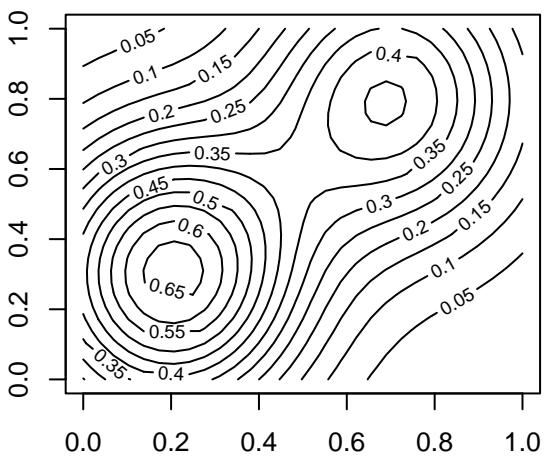


help("linear.functional.terms")

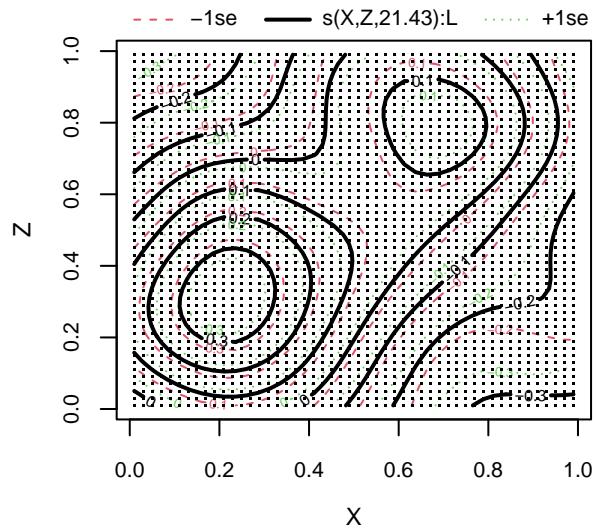
**s(fac,24.54):L**



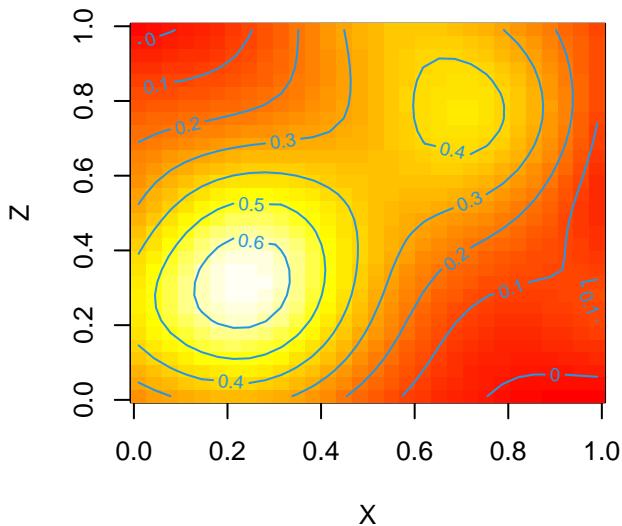
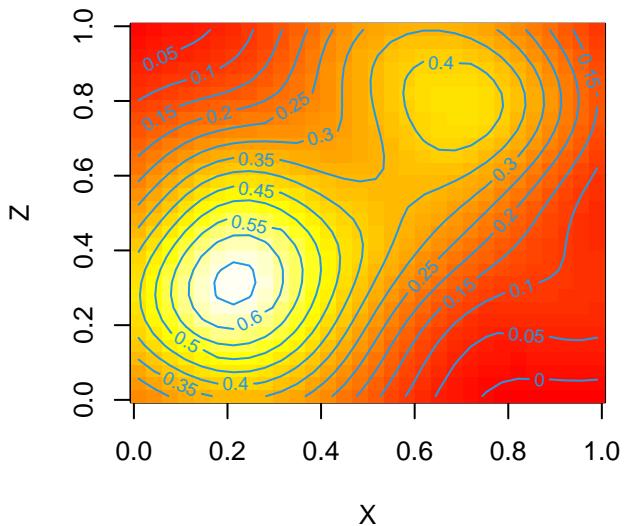
help("linear.functional.terms")



**linear predictor**



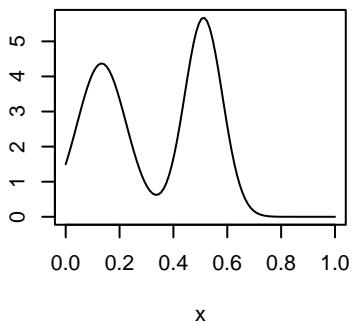
**linear predictor**



`help("linear.functional.terms")`

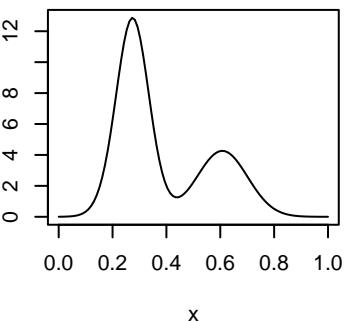
help("linear.functional.terms")

ff(x)



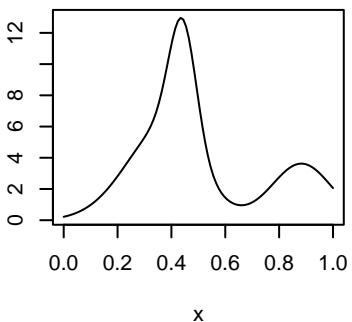
$x$

ff(x)



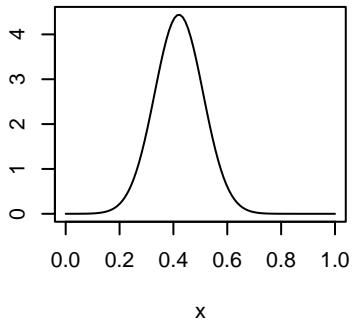
$x$

ff(x)



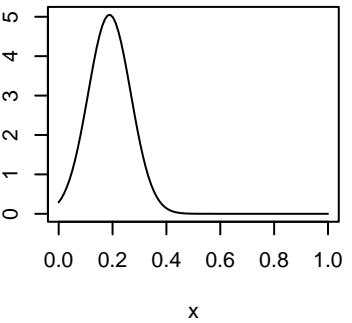
$x$

ff(x)



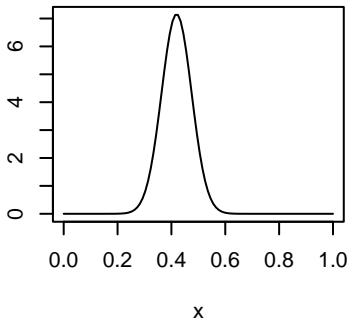
$x$

ff(x)



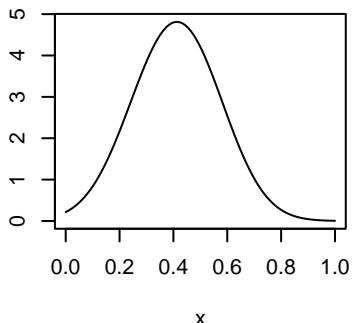
$x$

ff(x)



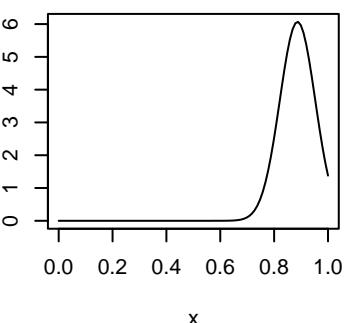
$x$

ff(x)



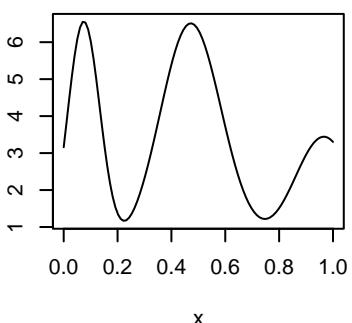
$x$

ff(x)



$x$

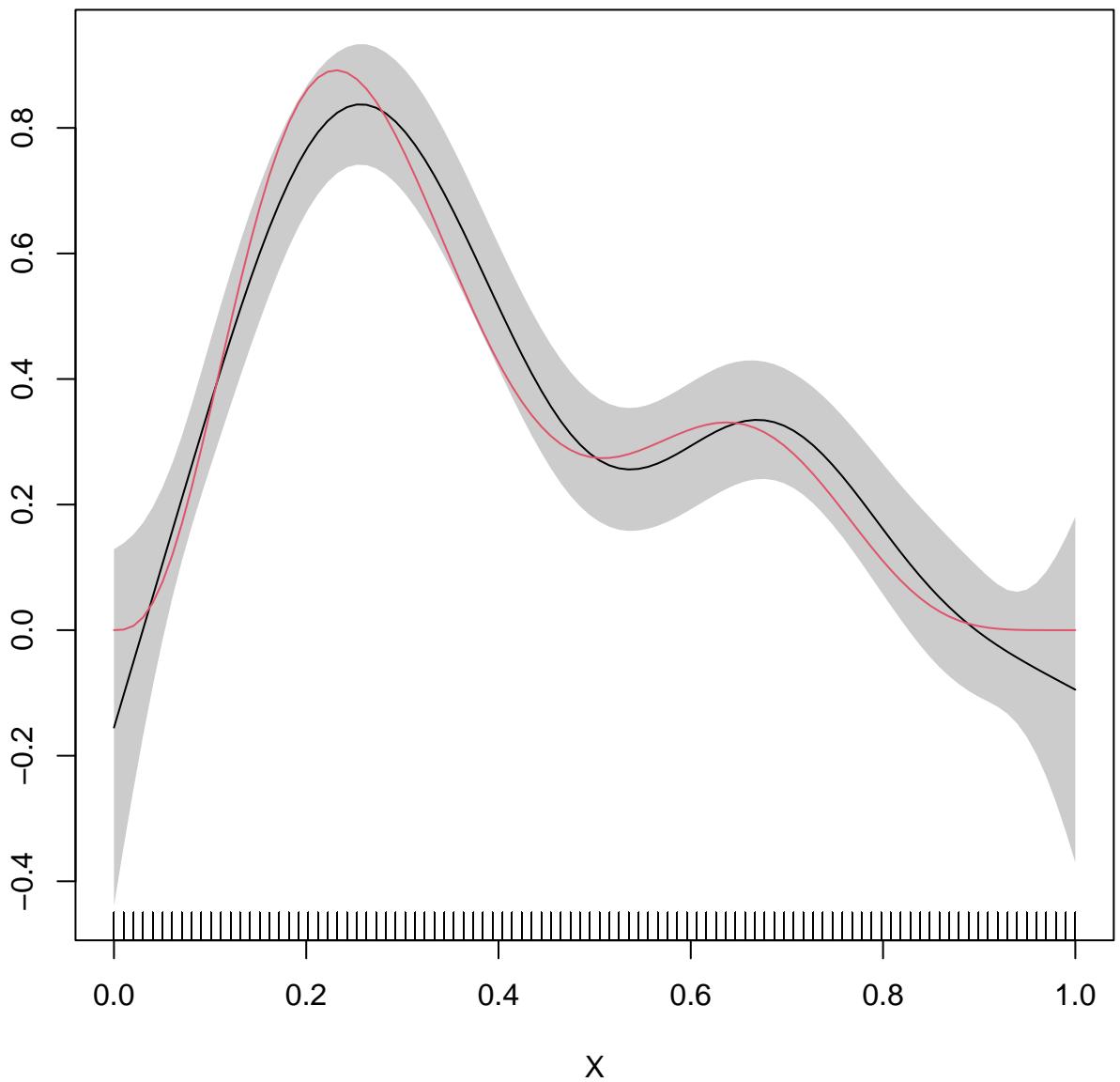
ff(x)



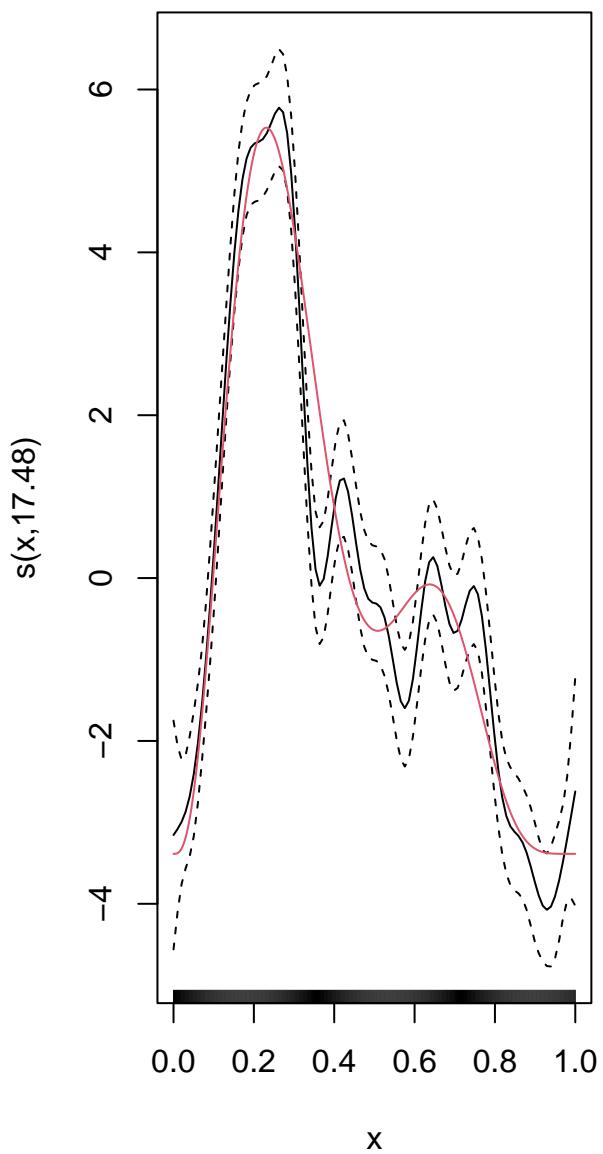
$x$

help("linear.functional.terms")

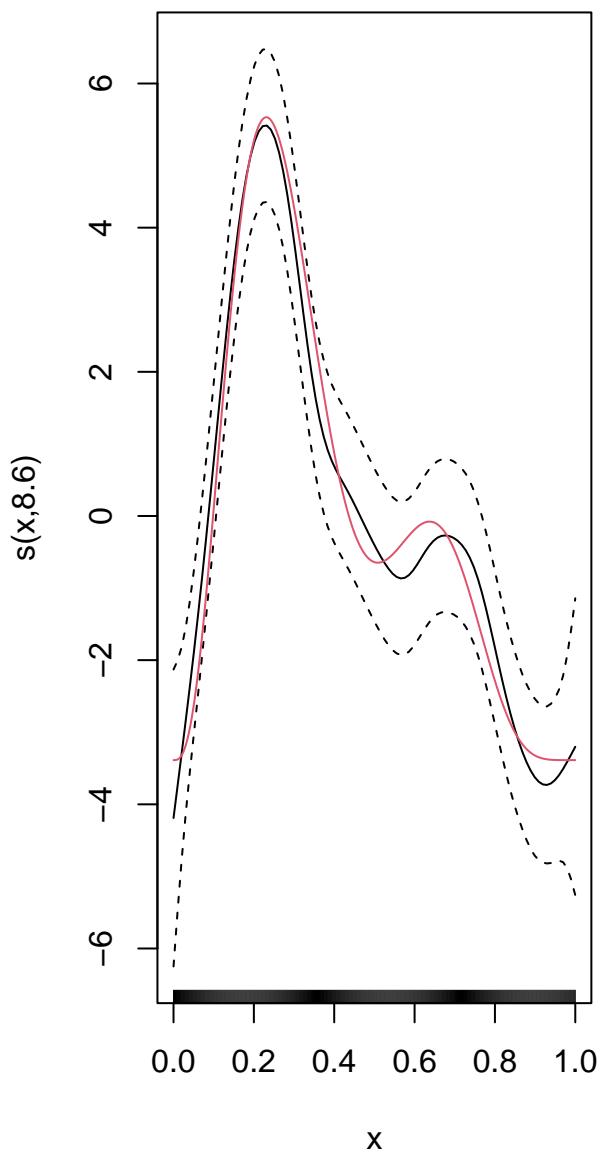
$s(X, 6.59):L$



## Ignoring correlation

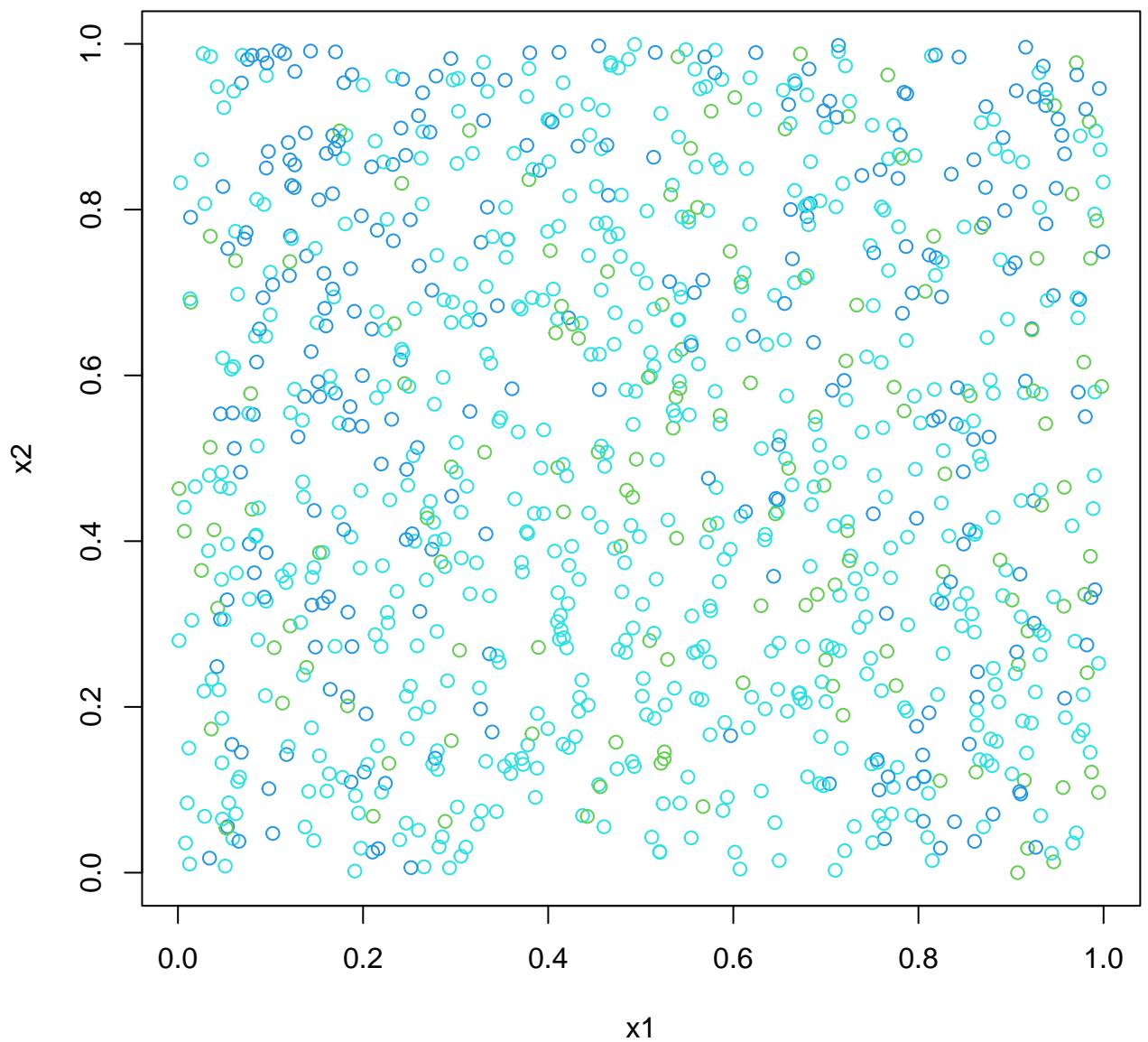


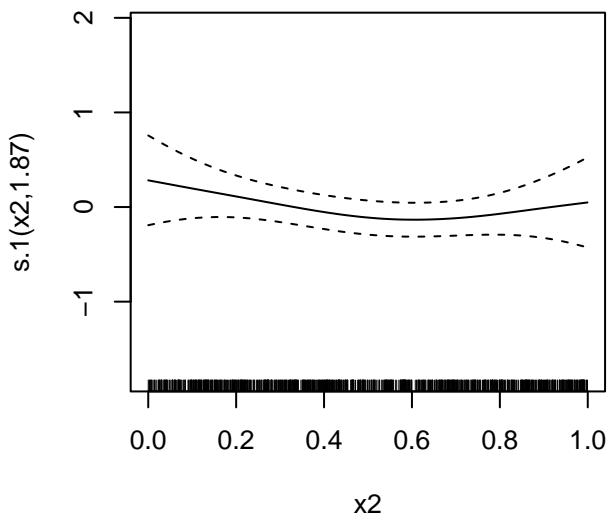
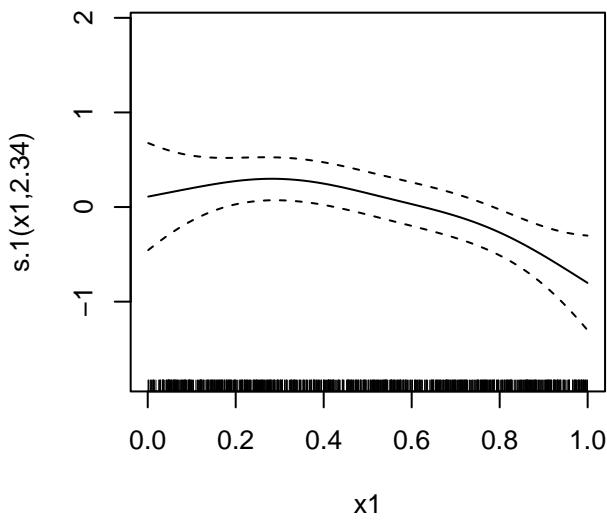
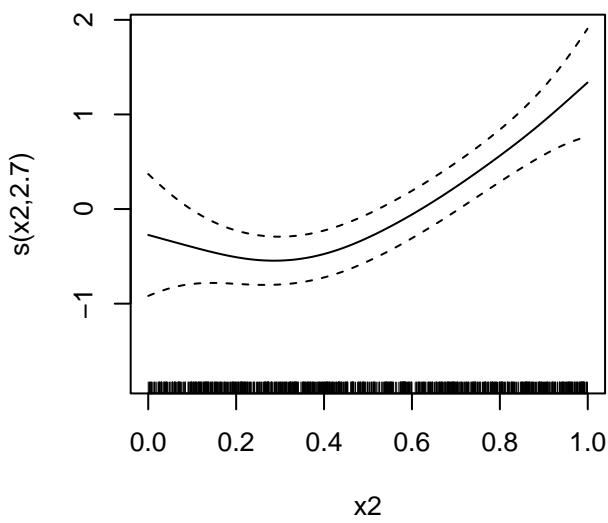
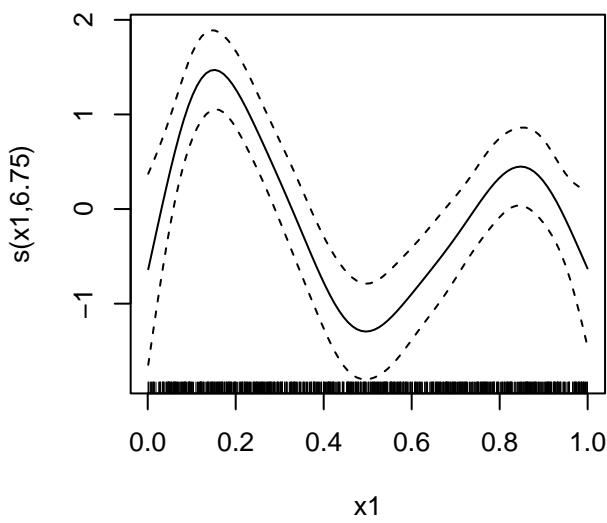
## Known correlation



help("magic")

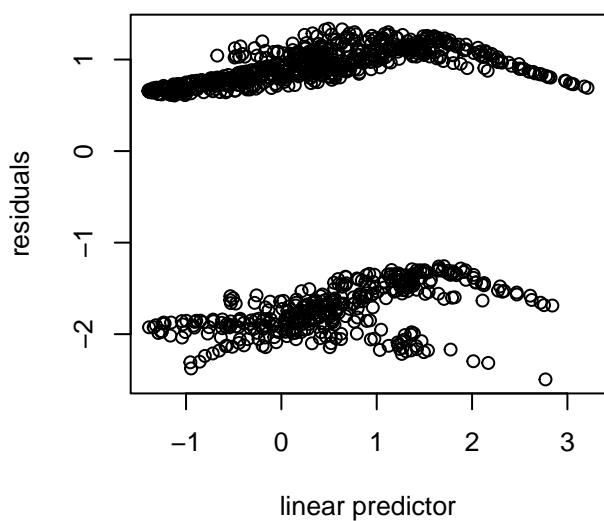
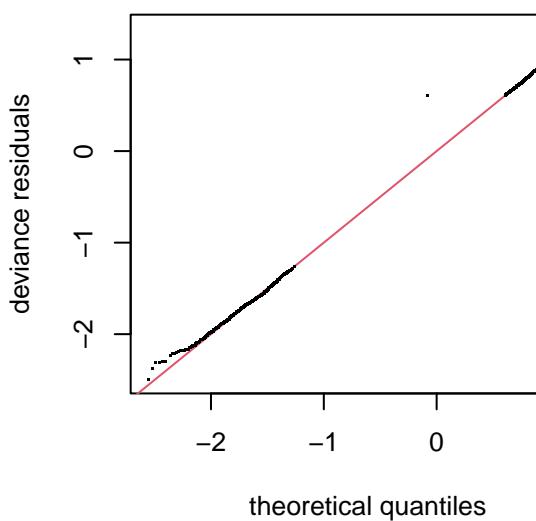
help("multinom")



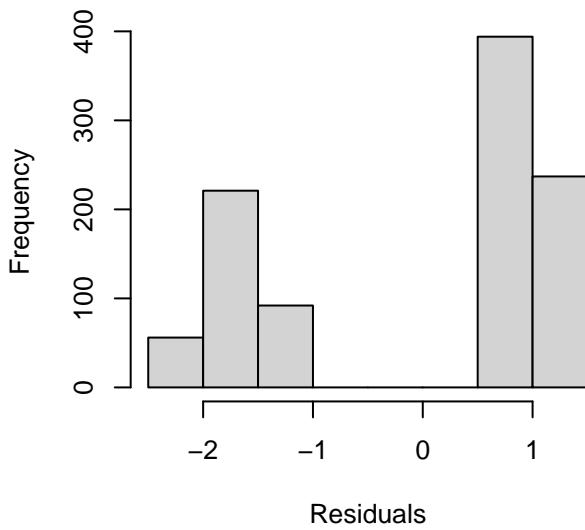


help("multinom")

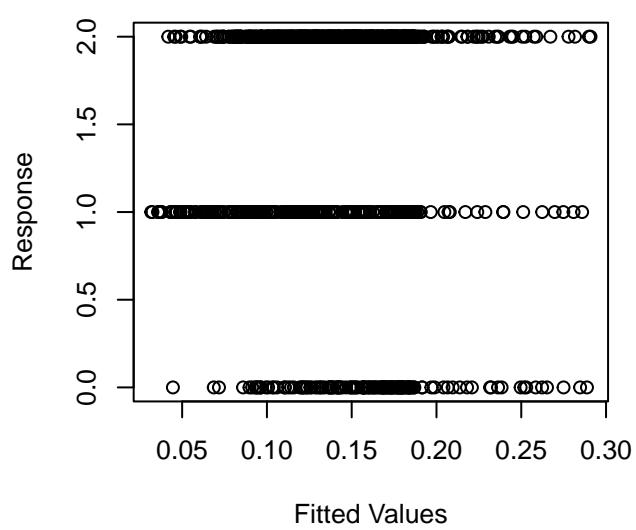
### Resids vs. linear pred.



### Histogram of residuals

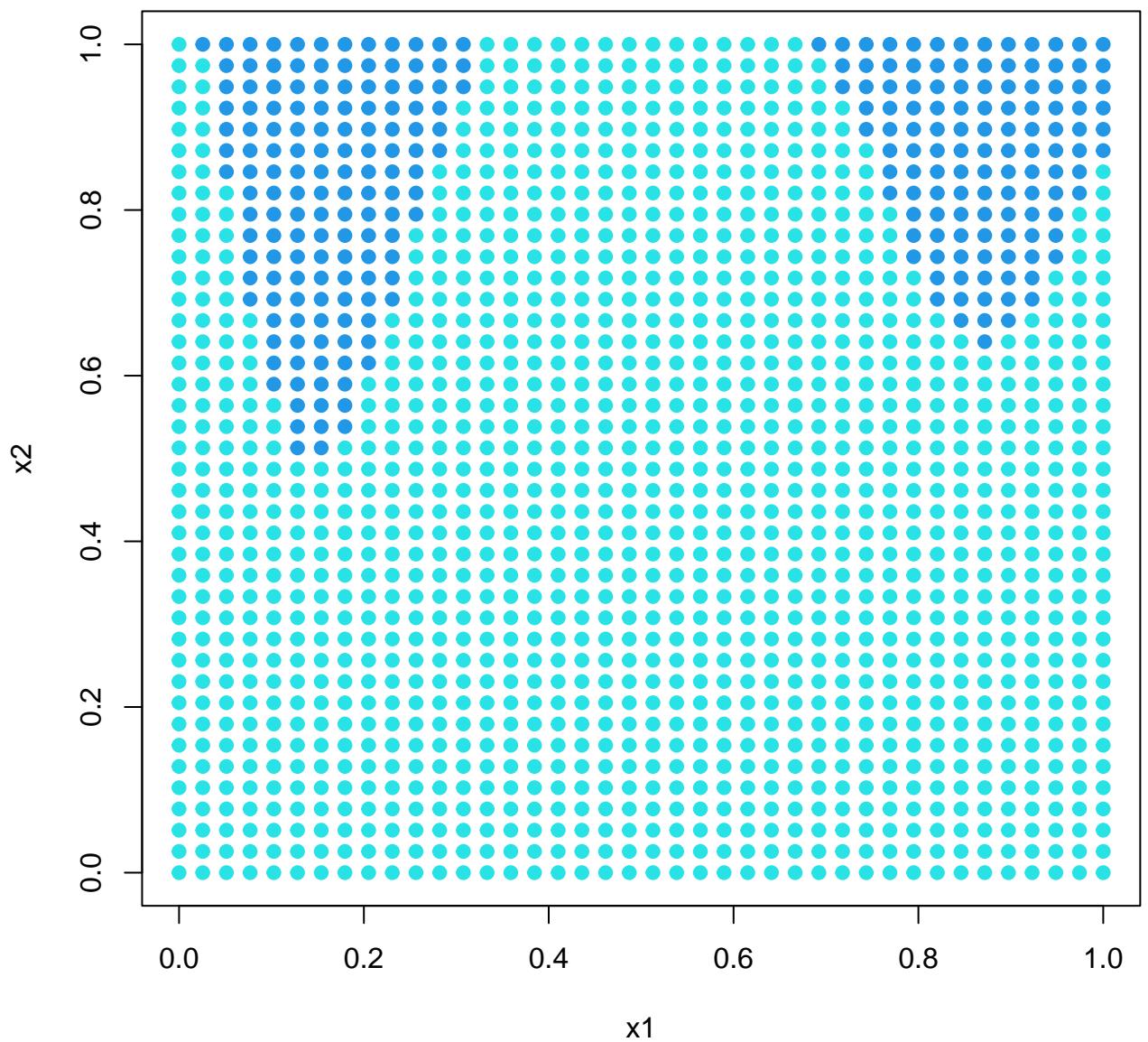


### Response vs. Fitted Values

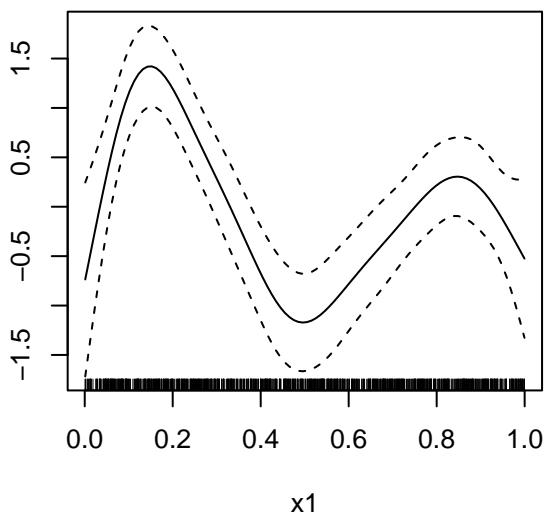


help("multinom")

help("multinom")

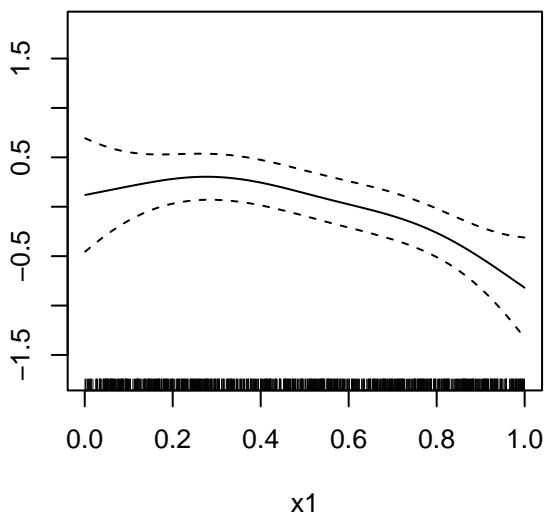


s(x1,6.76)



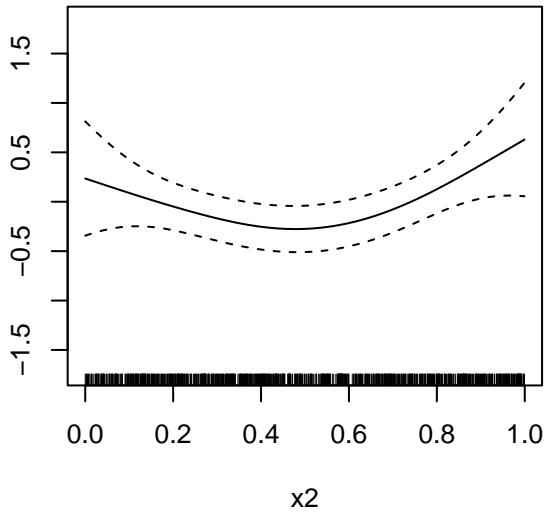
$x_1$

s.1(x1,2.41)



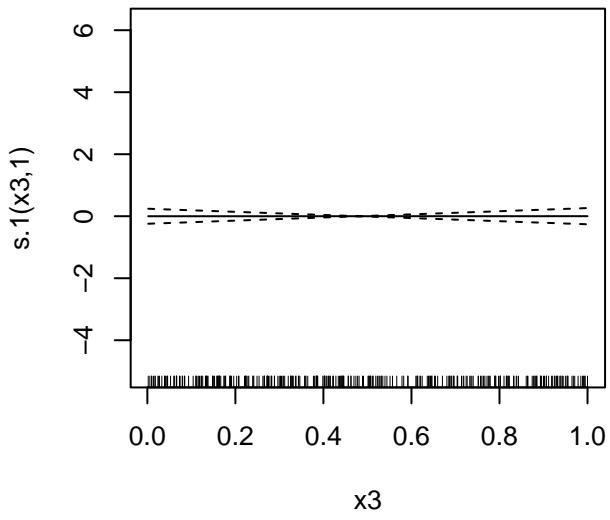
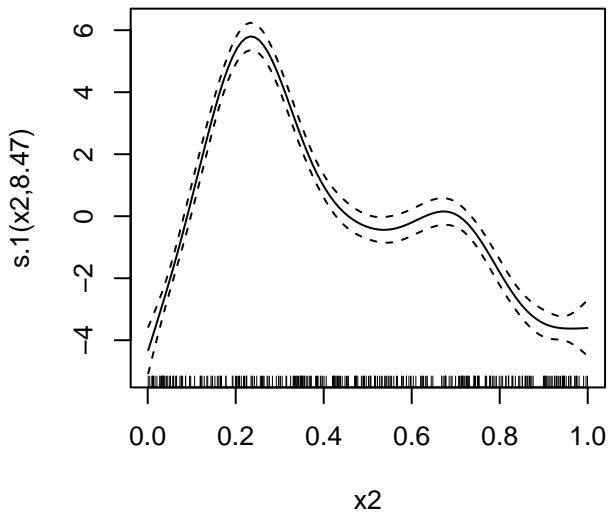
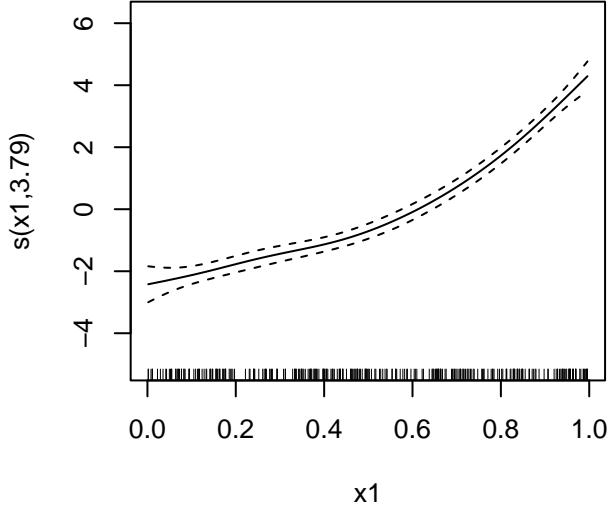
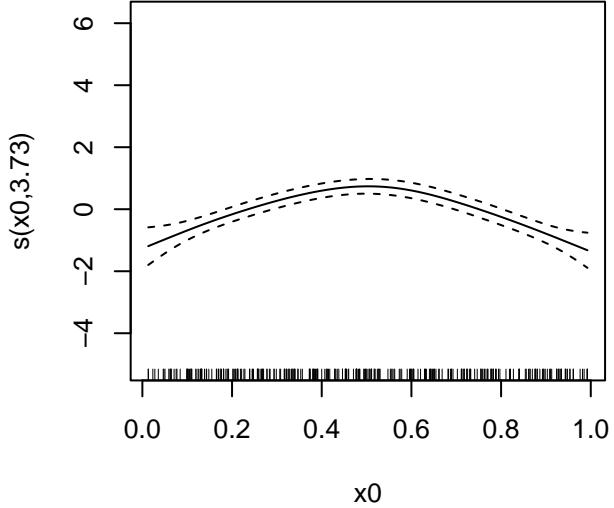
$x_1$

s.2(x2,2.39)

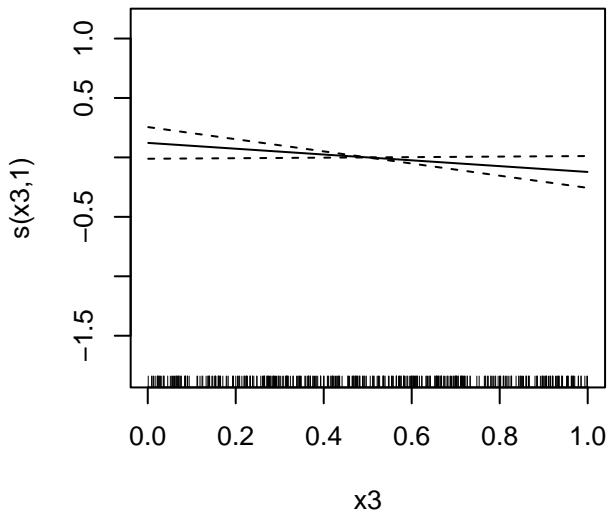
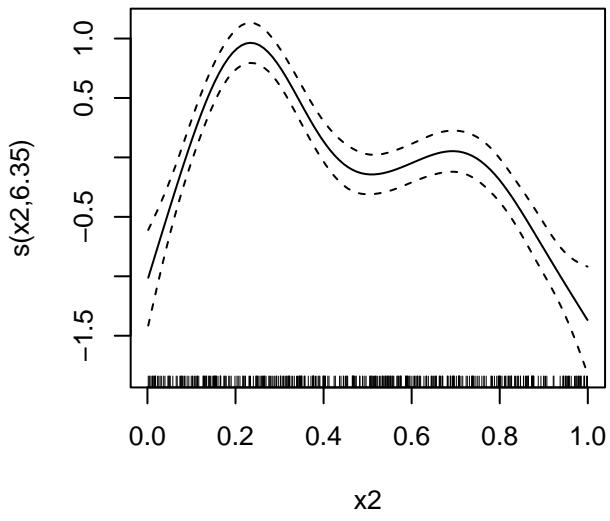
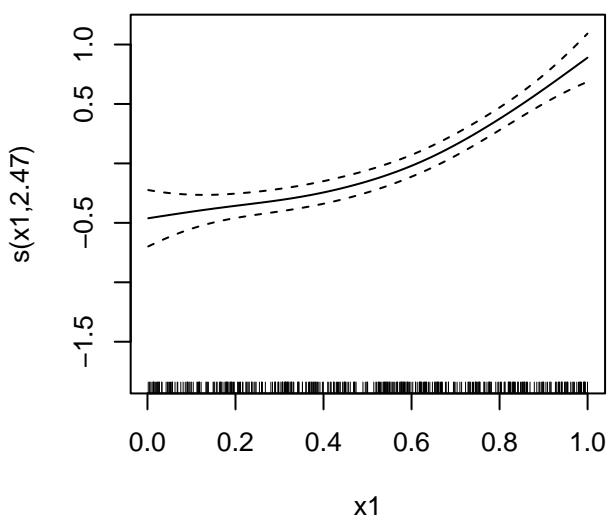
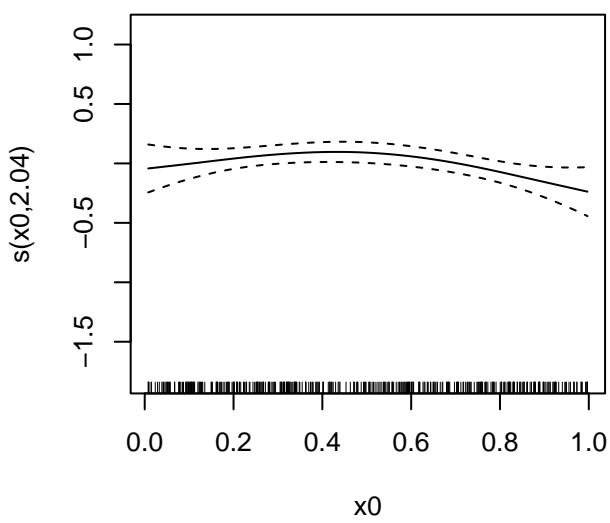


$x_2$

help("multinom")

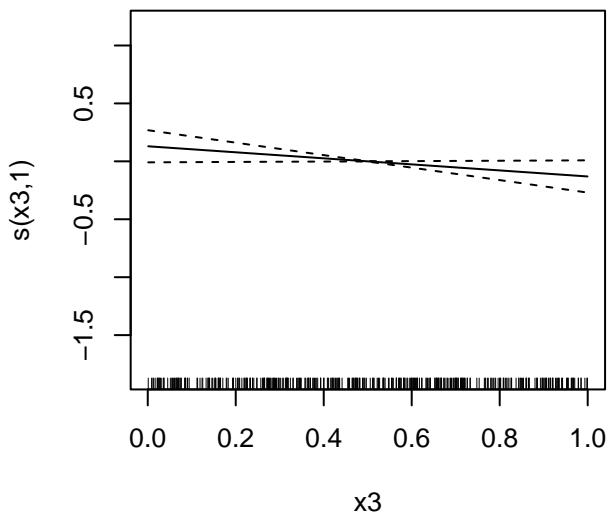
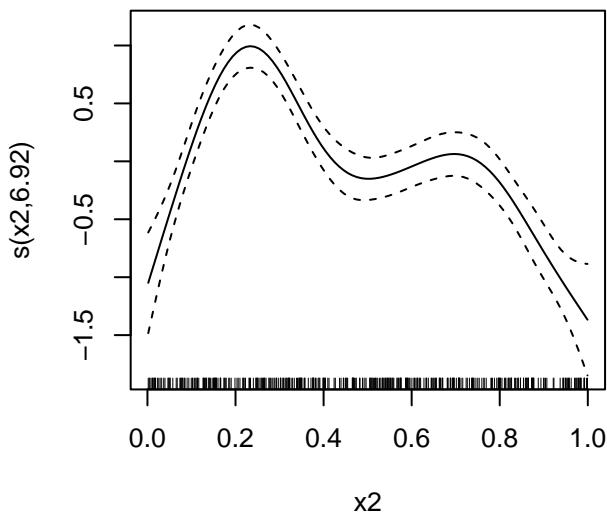
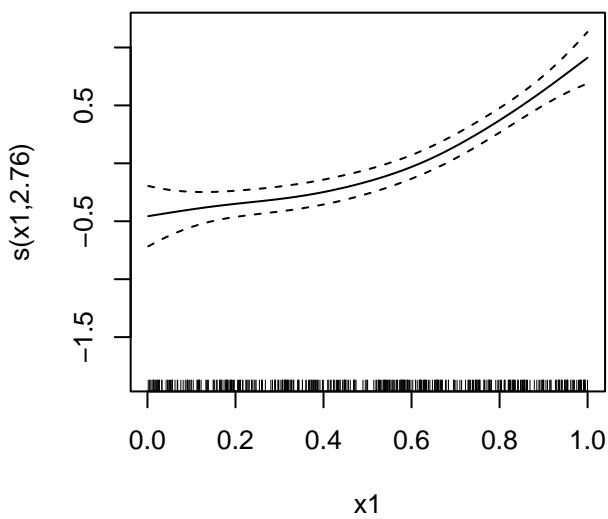
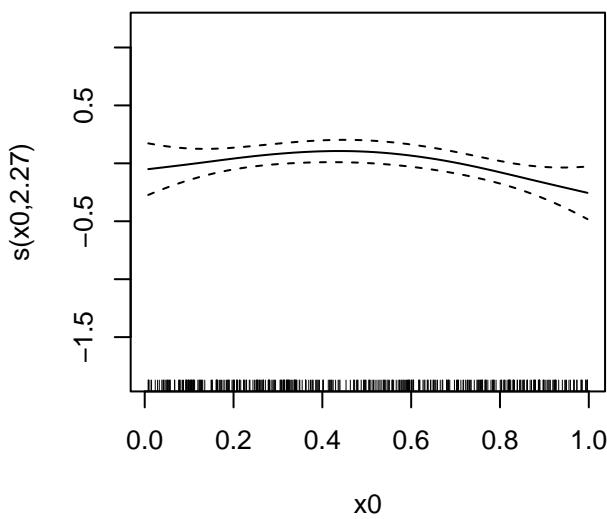


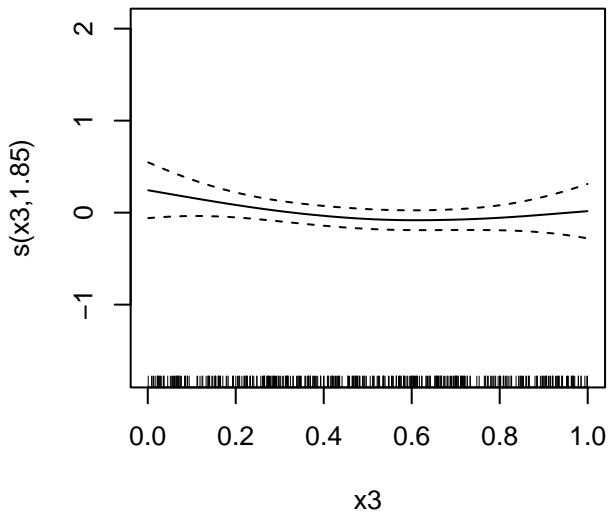
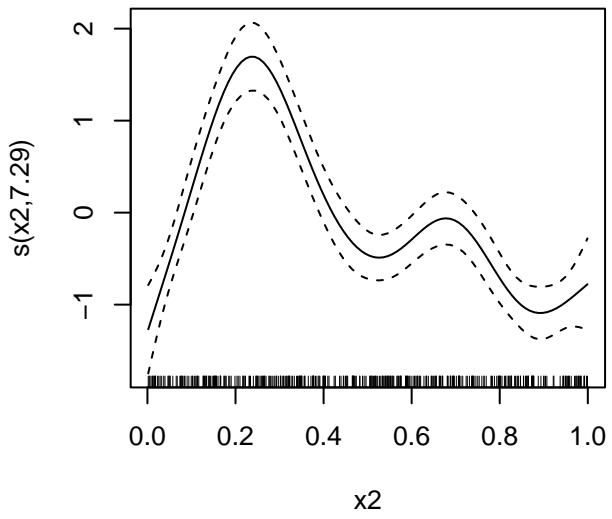
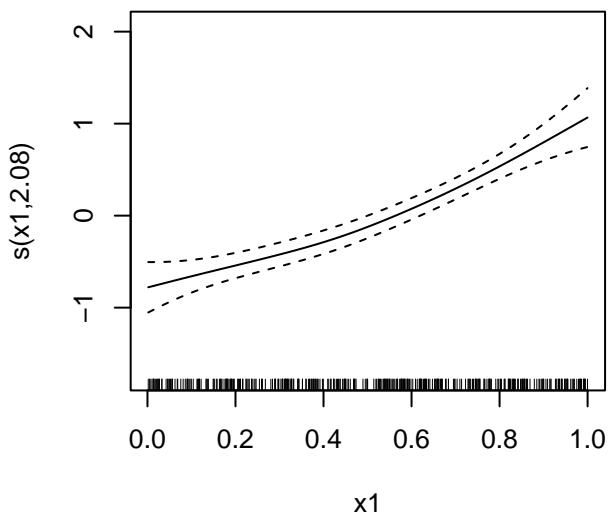
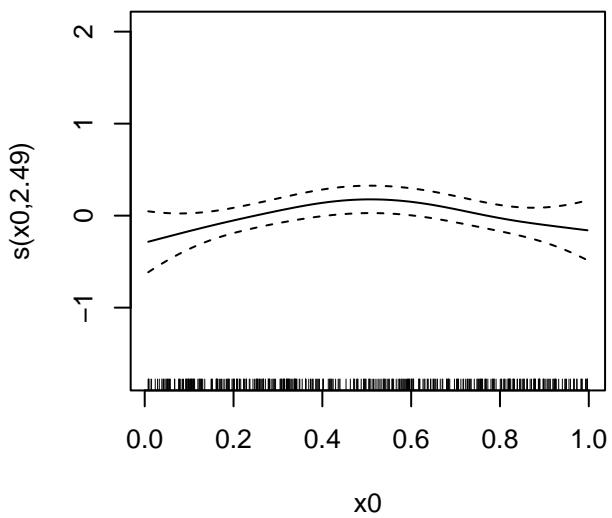
help("mvn")



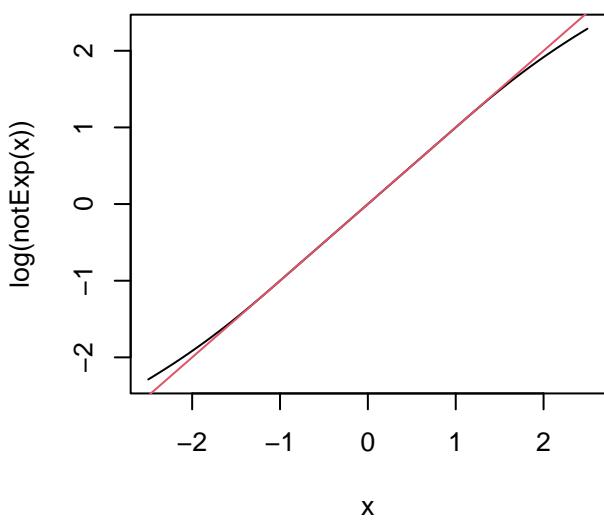
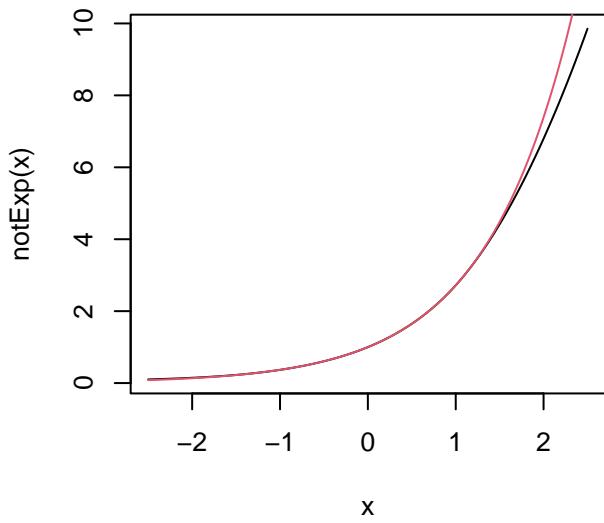
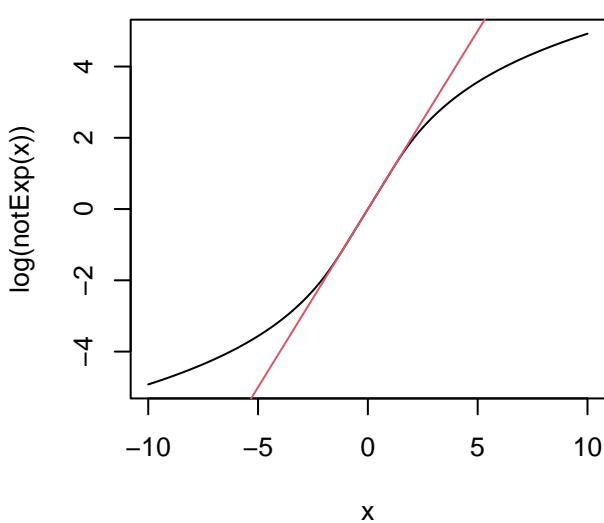
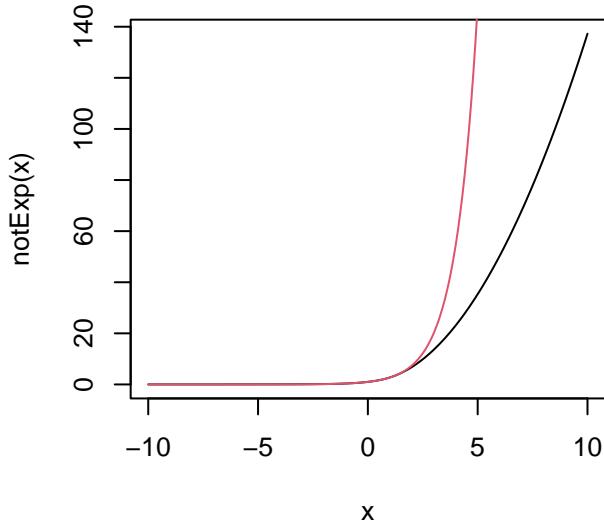
help("negbin")

help("negbin")

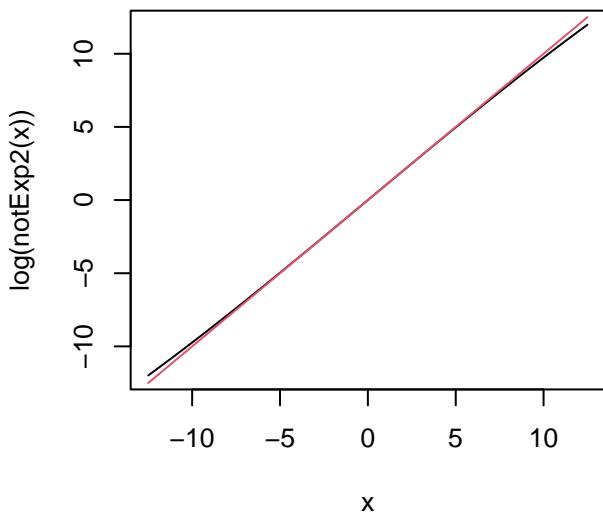
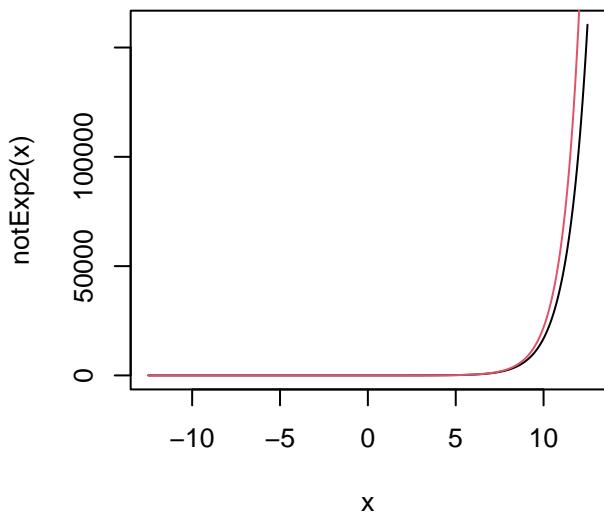
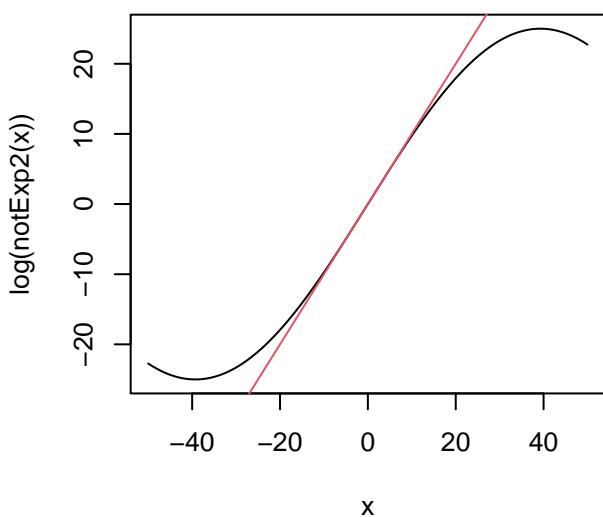
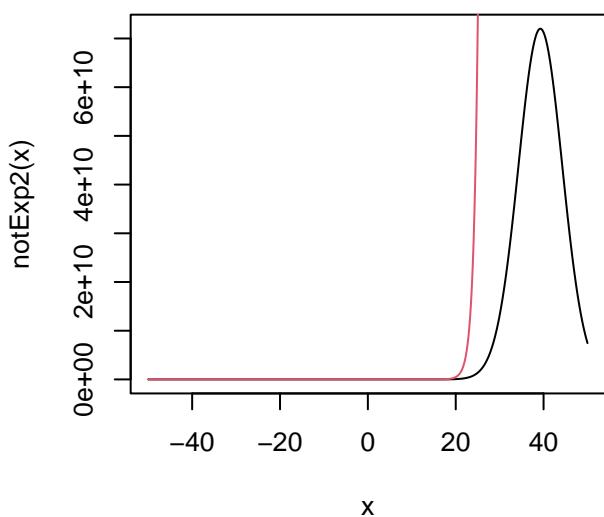




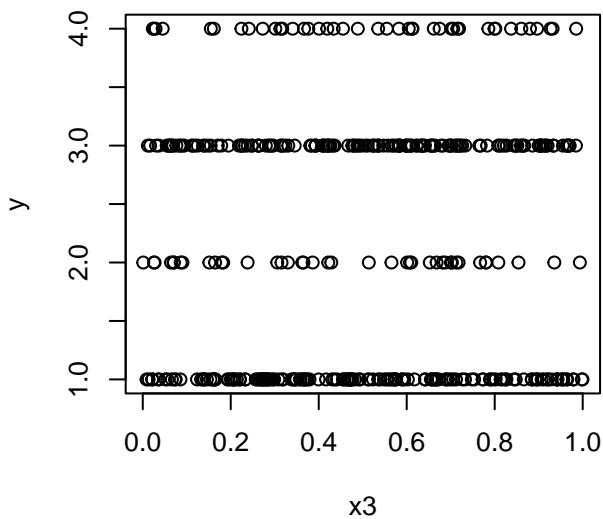
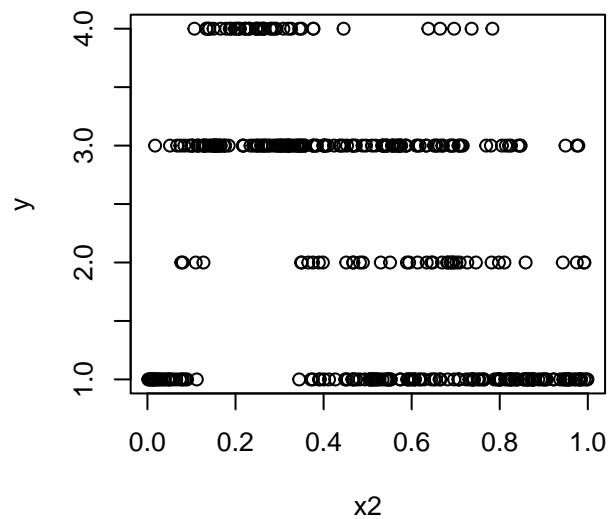
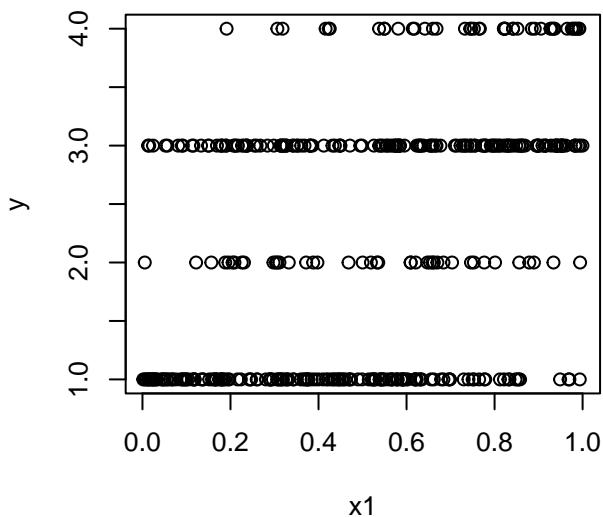
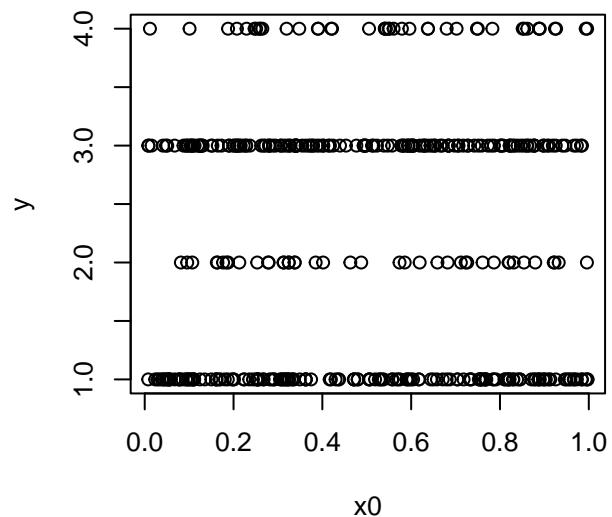
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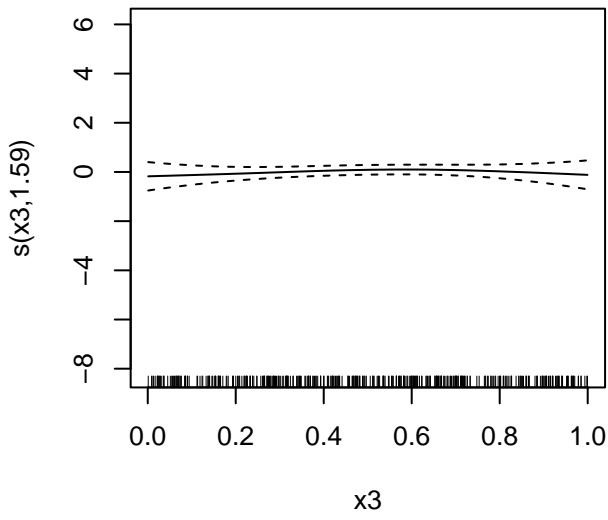
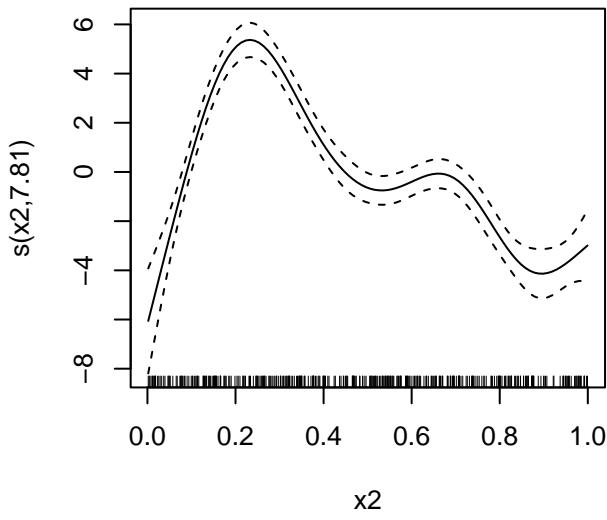
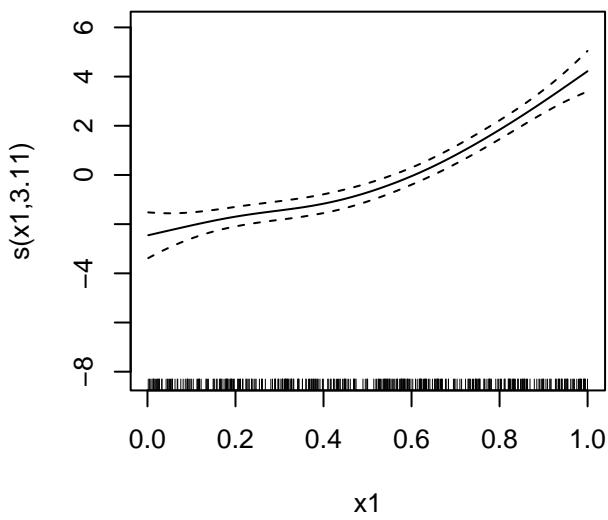
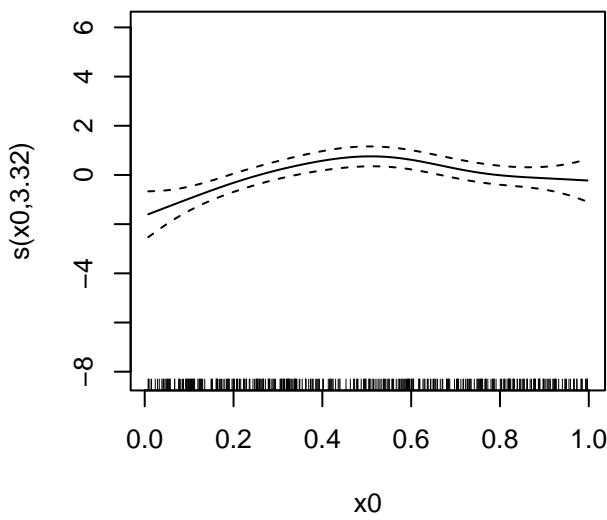
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help("notExp2")

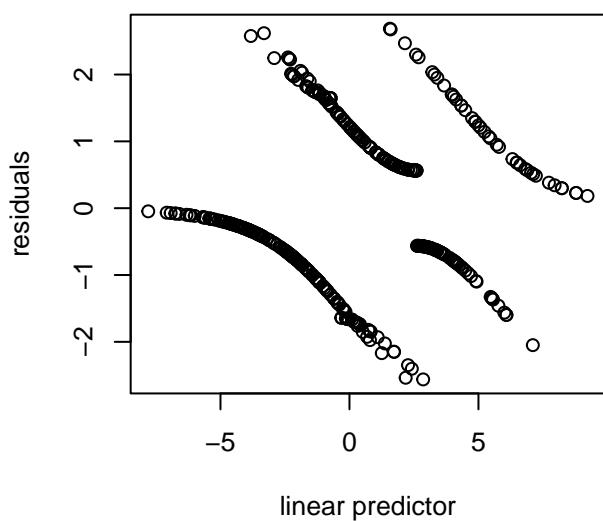
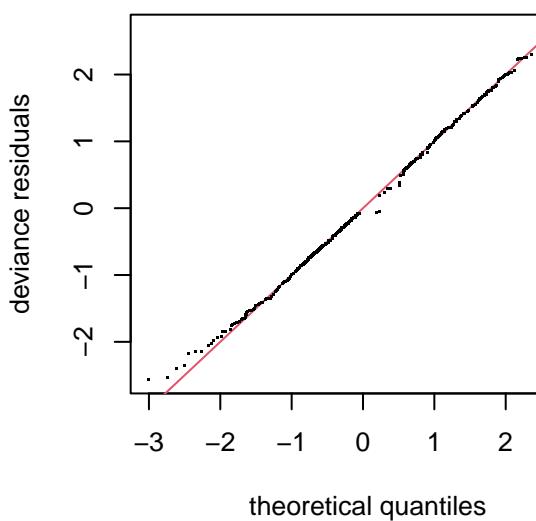


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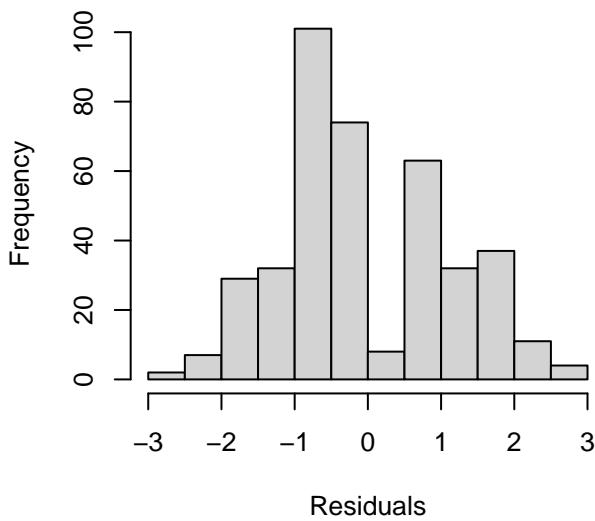


help("ocat")

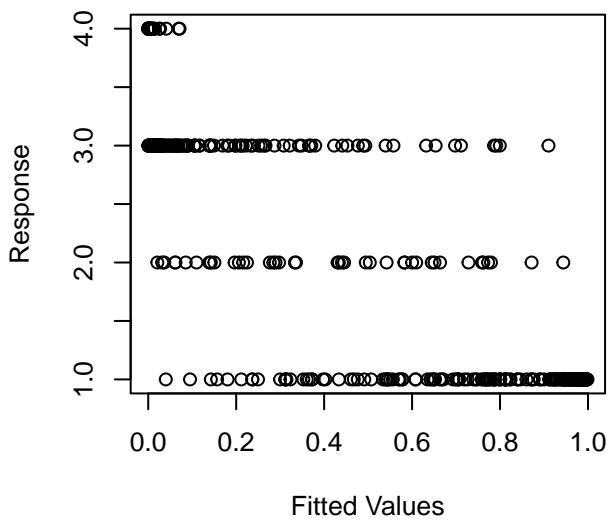
## Resids vs. linear pred.



## Histogram of residuals

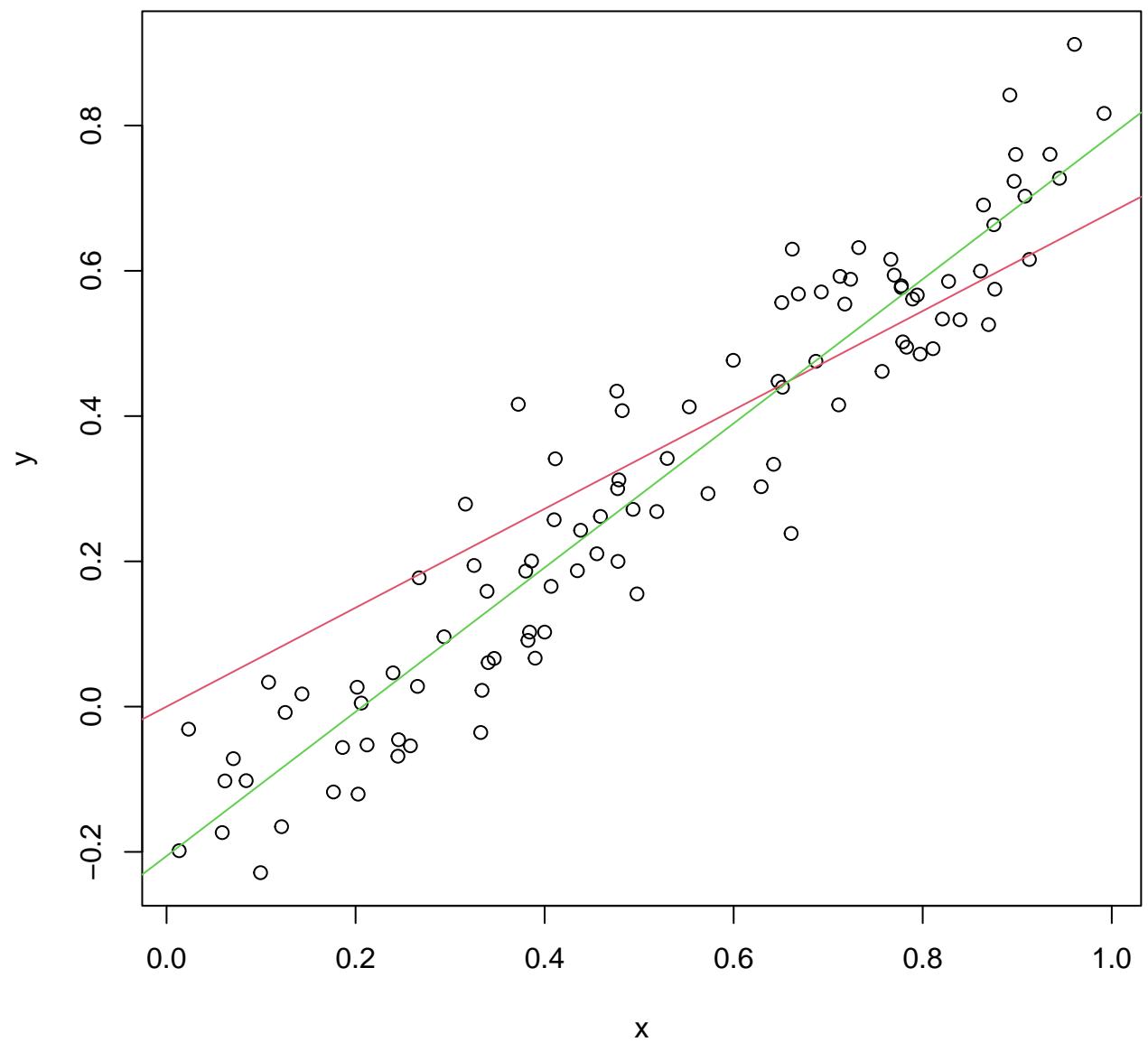


## Response vs. Fitted Values

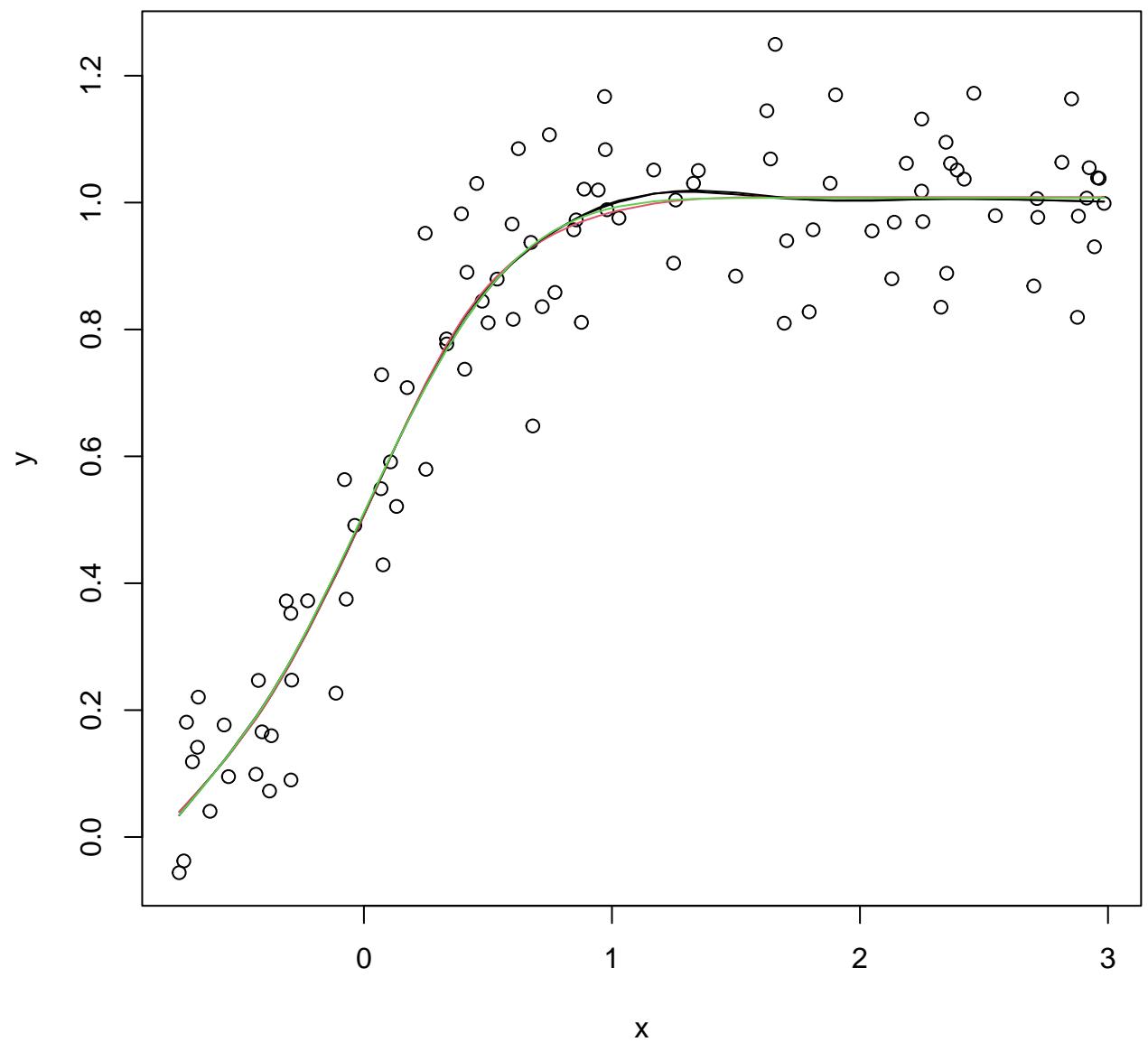


help("ocat")

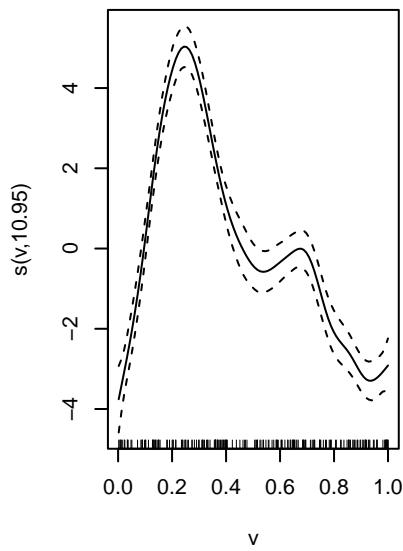
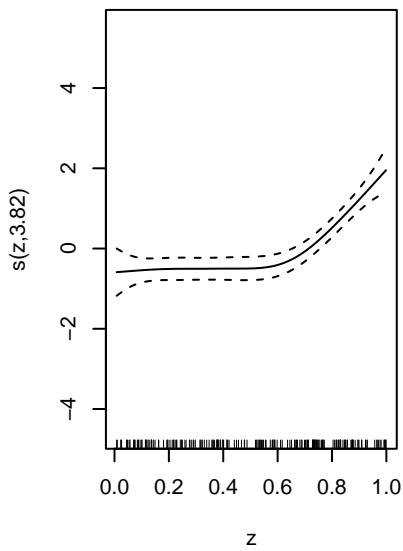
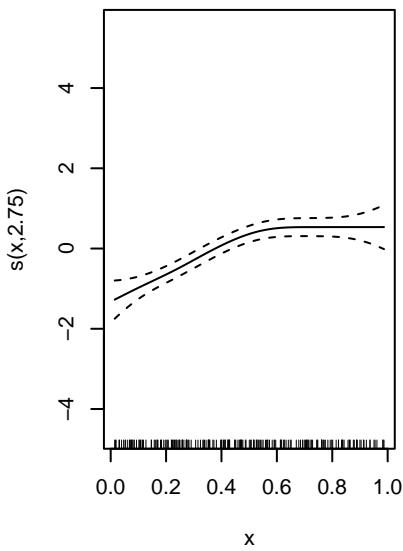
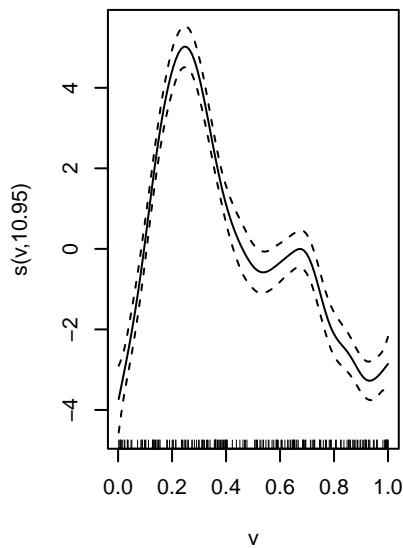
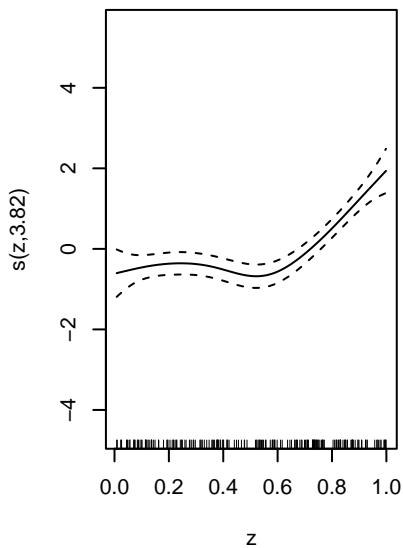
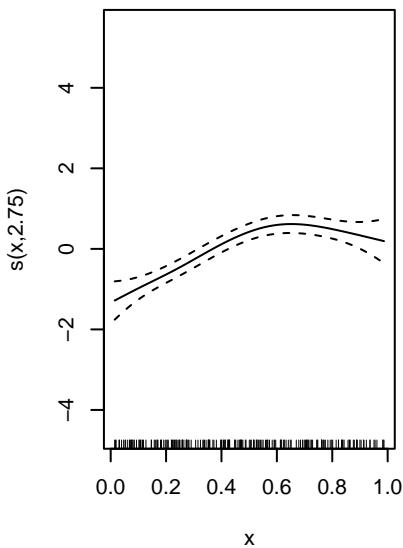
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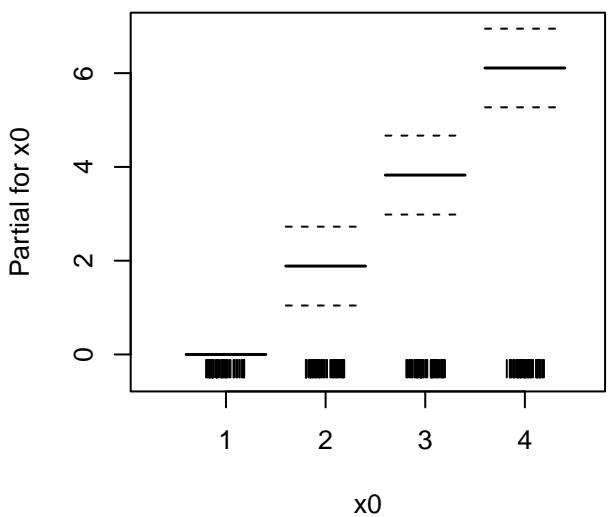
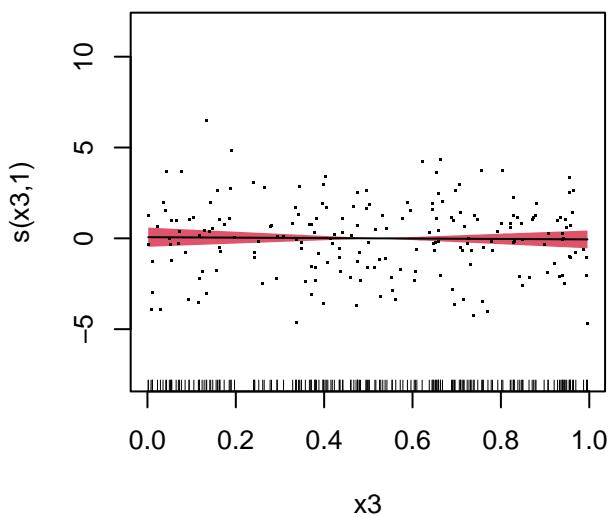
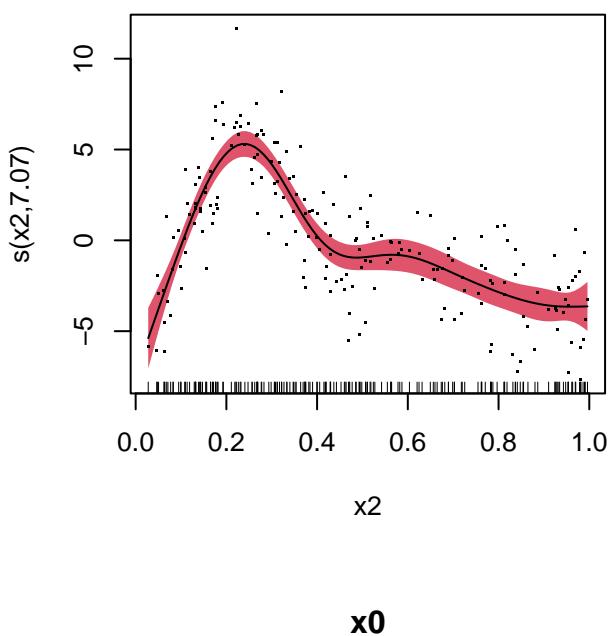
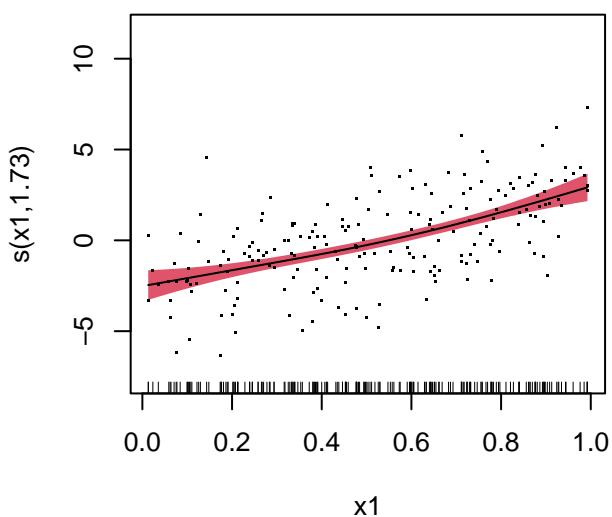


help("pcl")



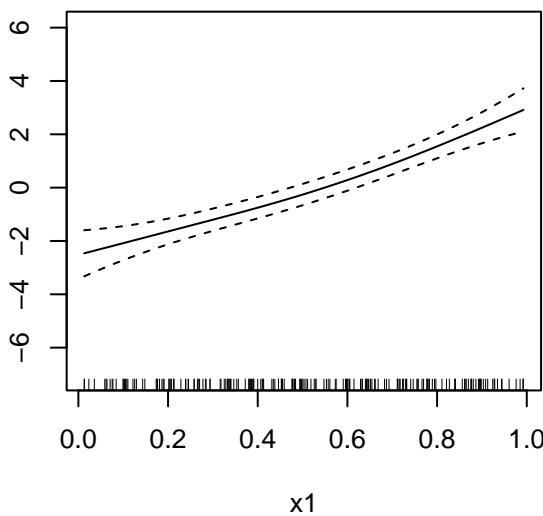
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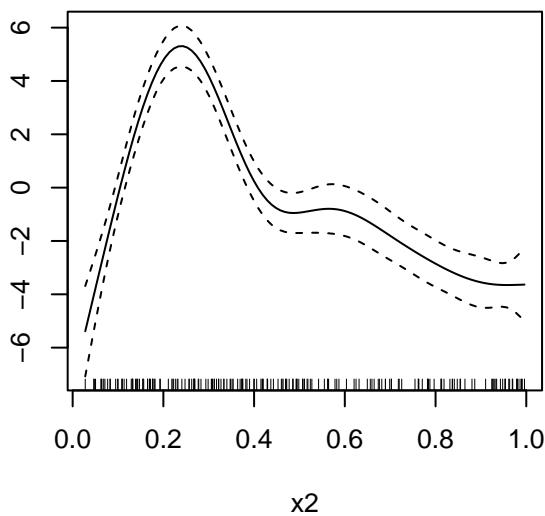
help("plot.gam")

$s(x_1, 1.73)$



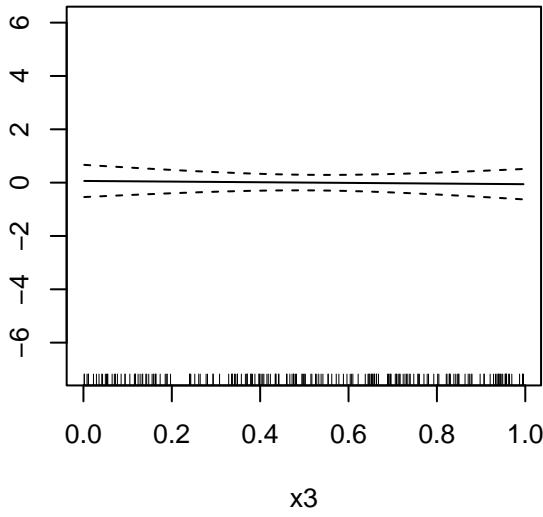
$x_1$

$s(x_2, 7.07)$



$x_2$

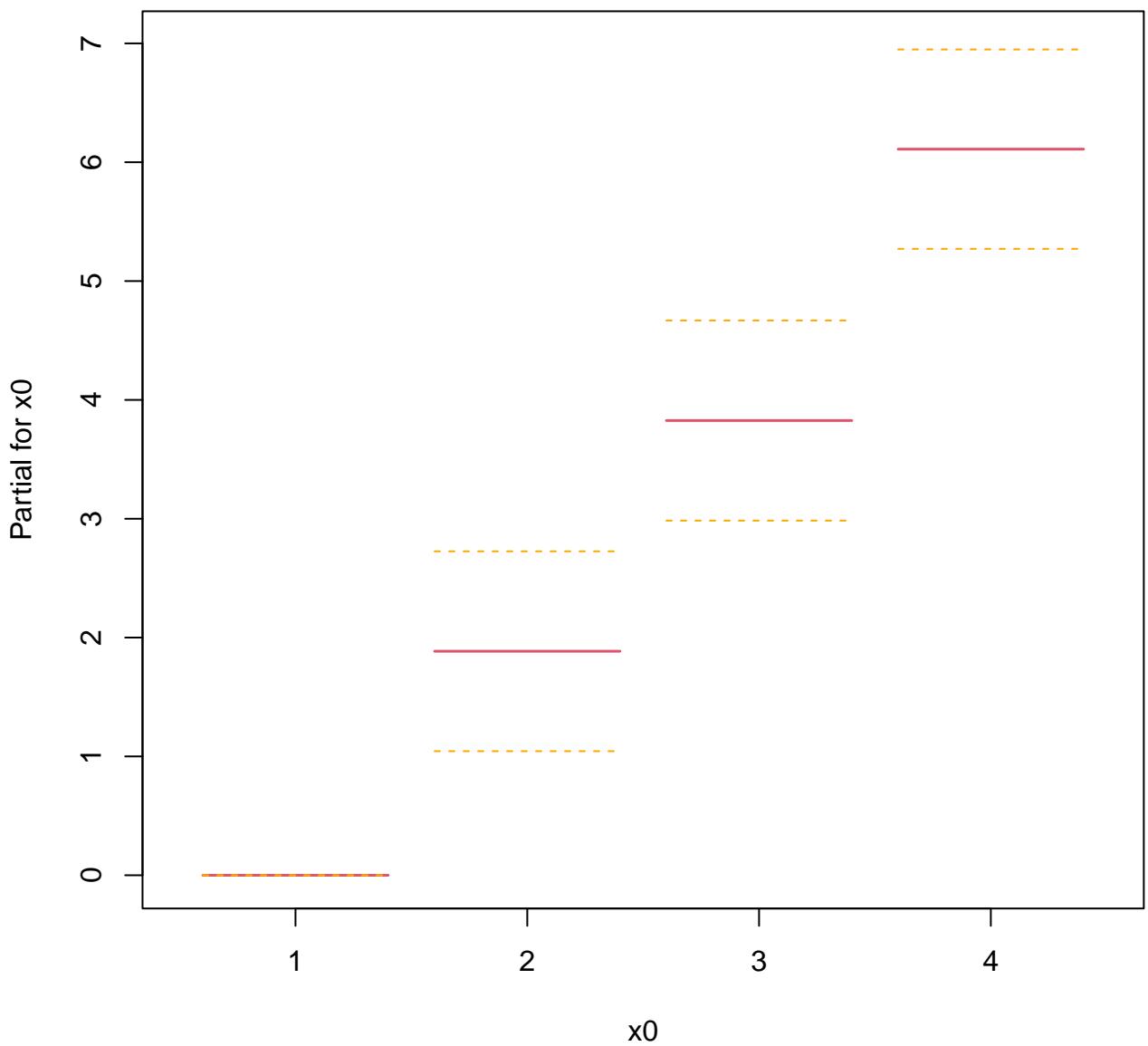
$s(x_3, 1)$

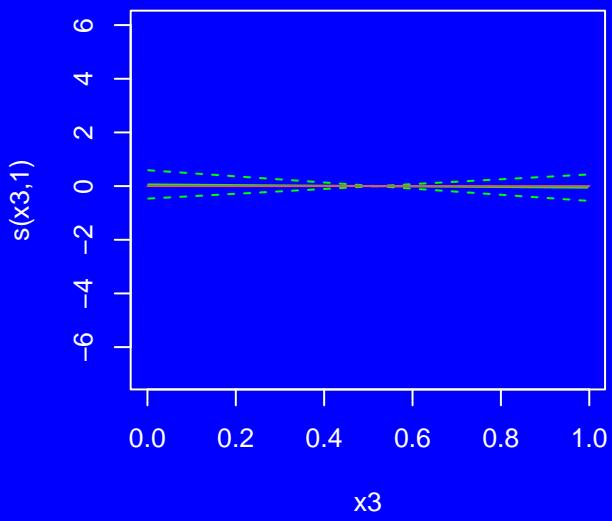
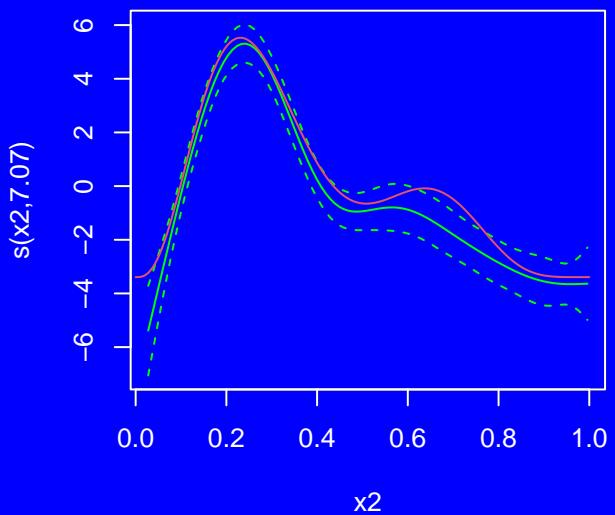
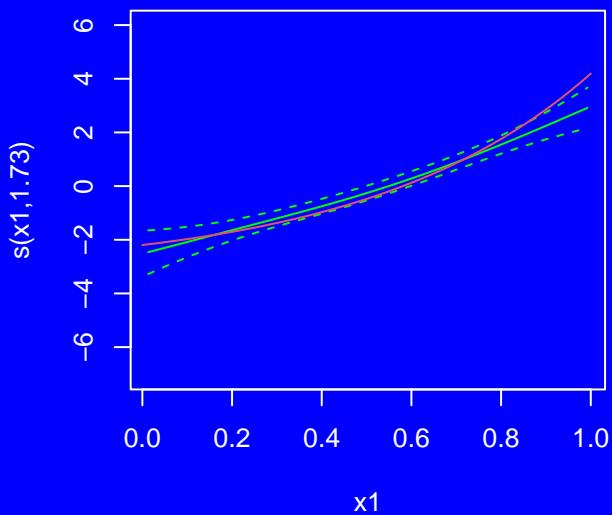


$x_3$

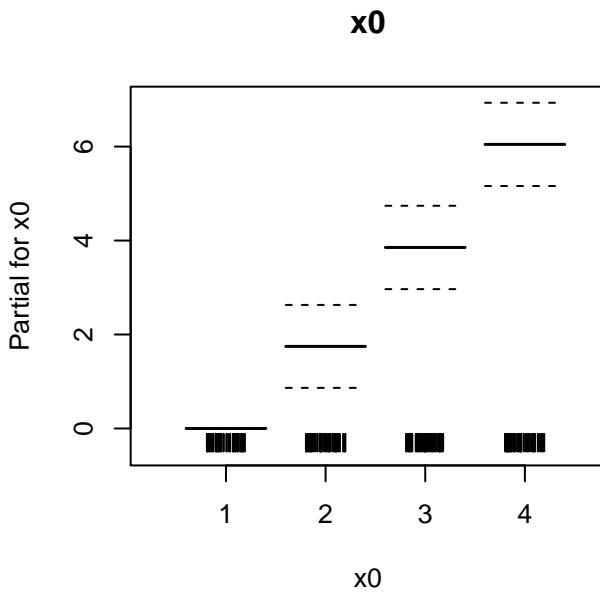
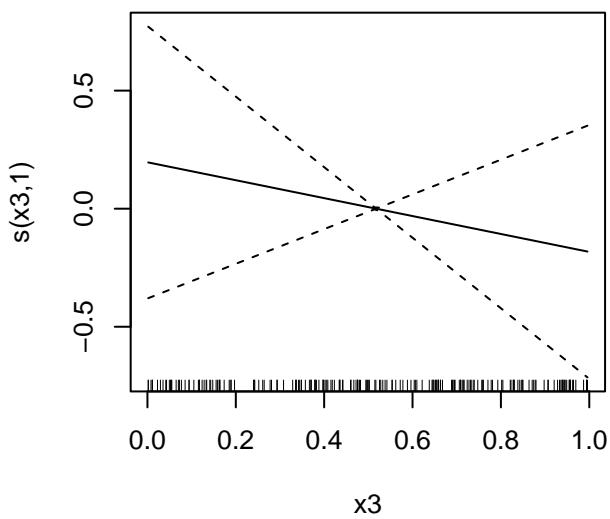
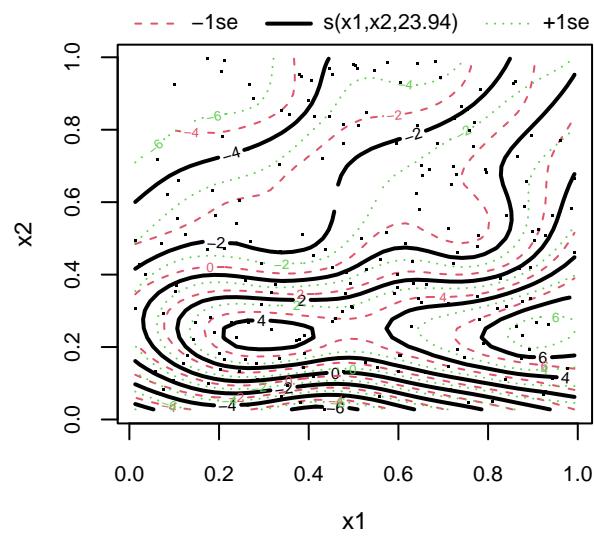
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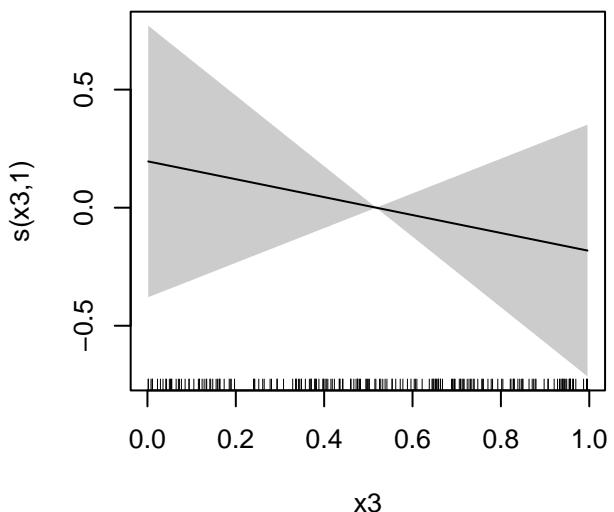
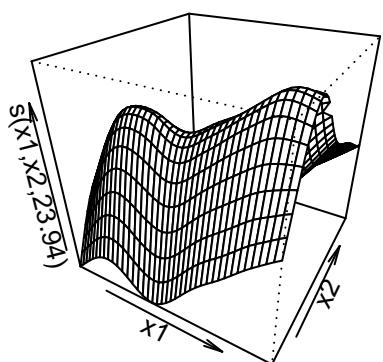
help("plot.gam")





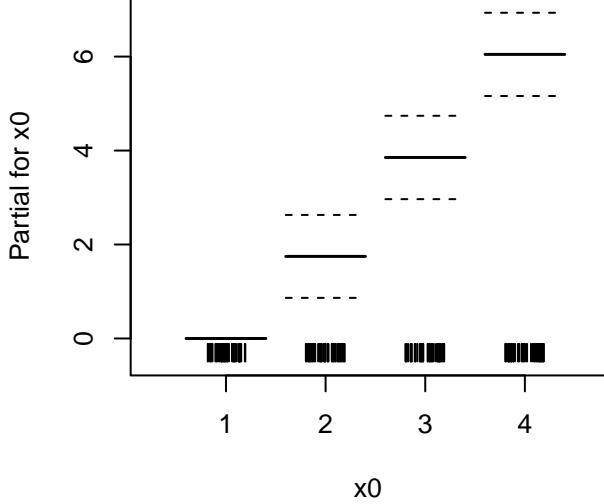
help("plot.gam")



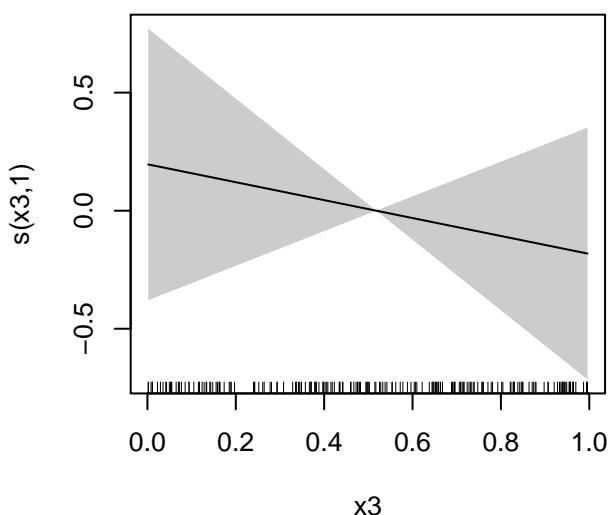
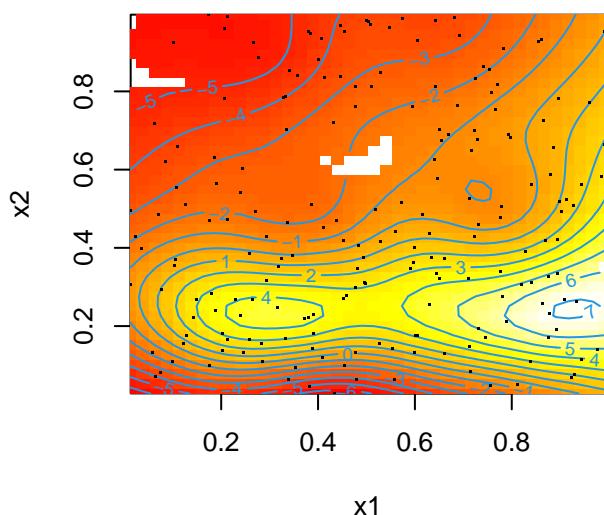


help("plot.gam")

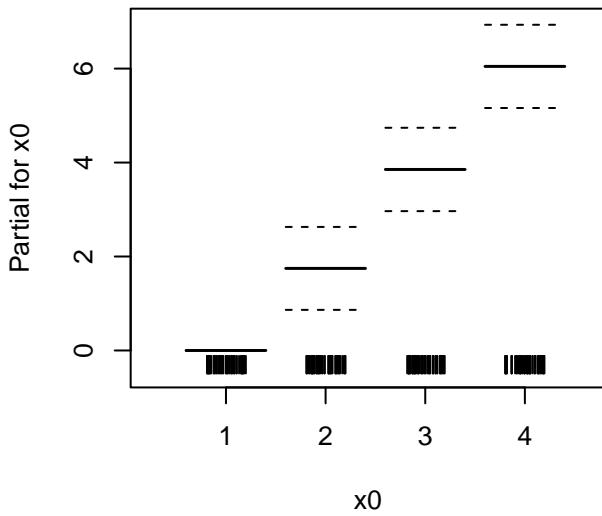
**x0**



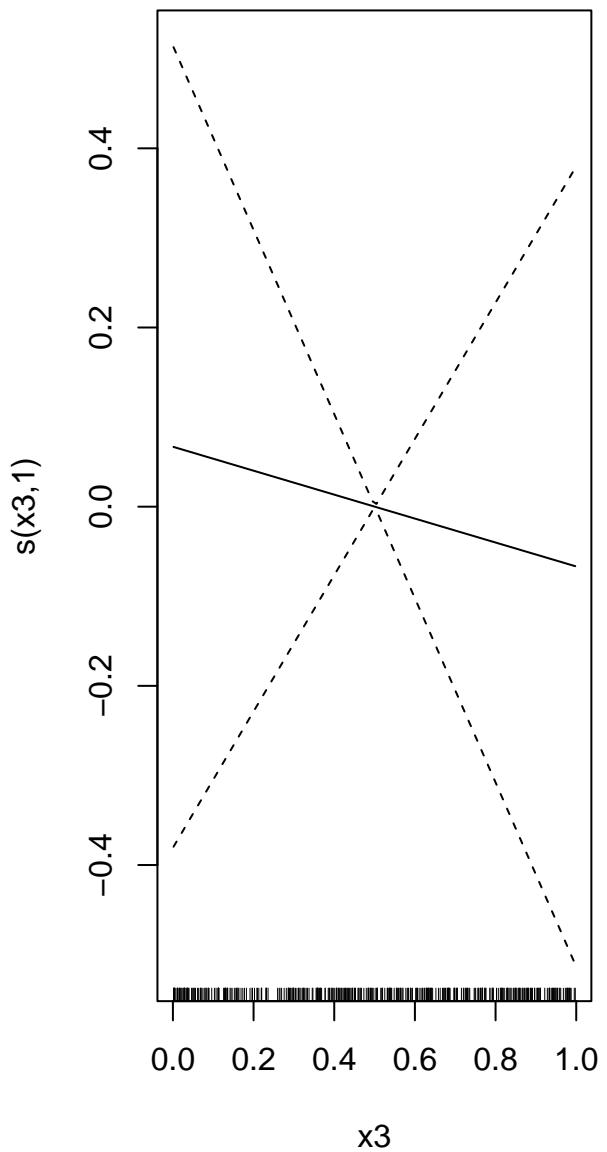
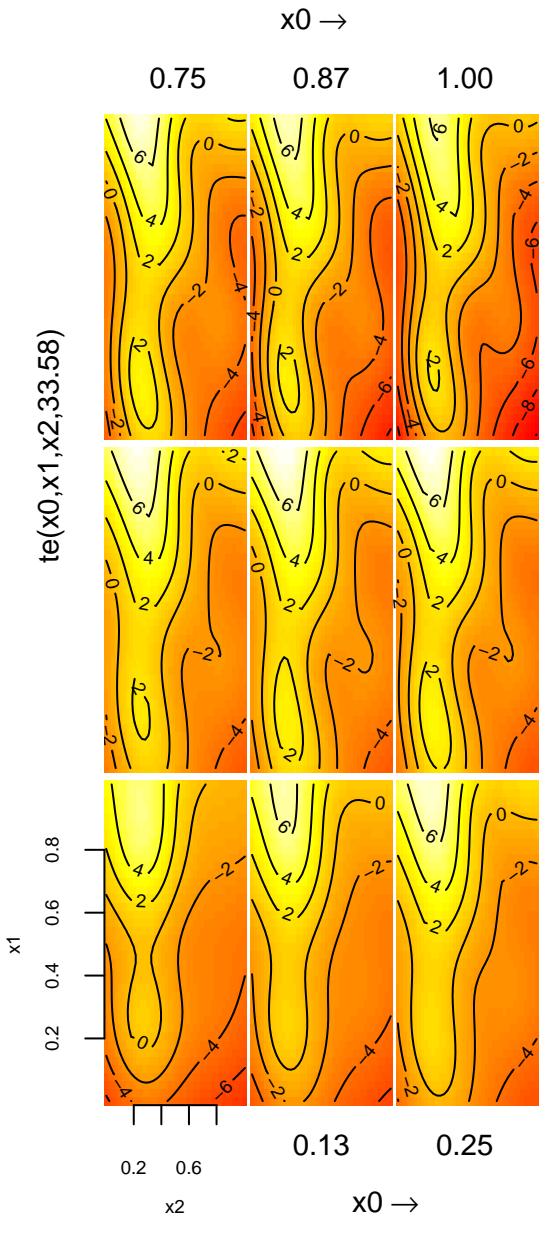
$s(x_1, x_2, 23.94)$



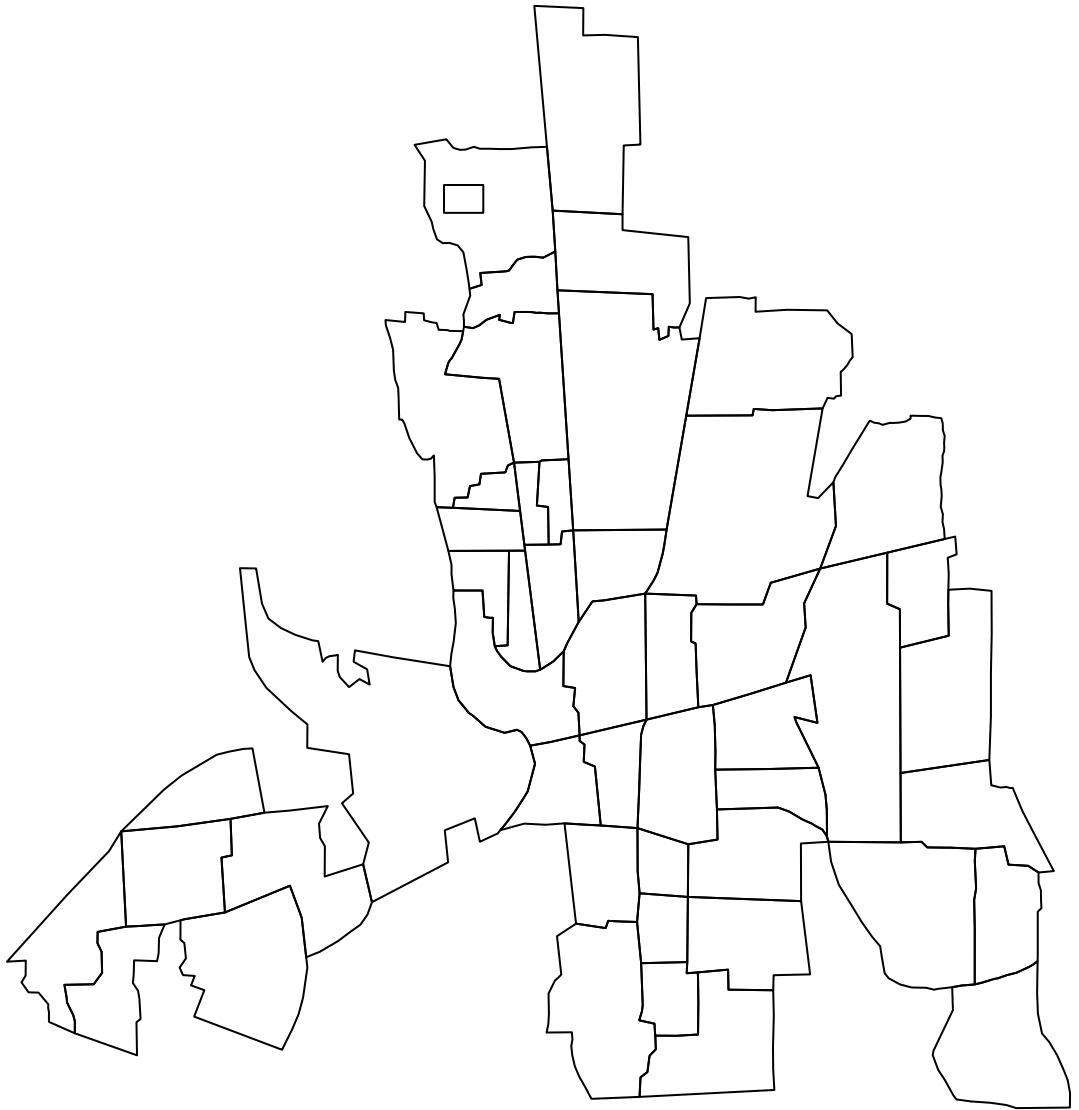
$x_0$



help("plot.gam")

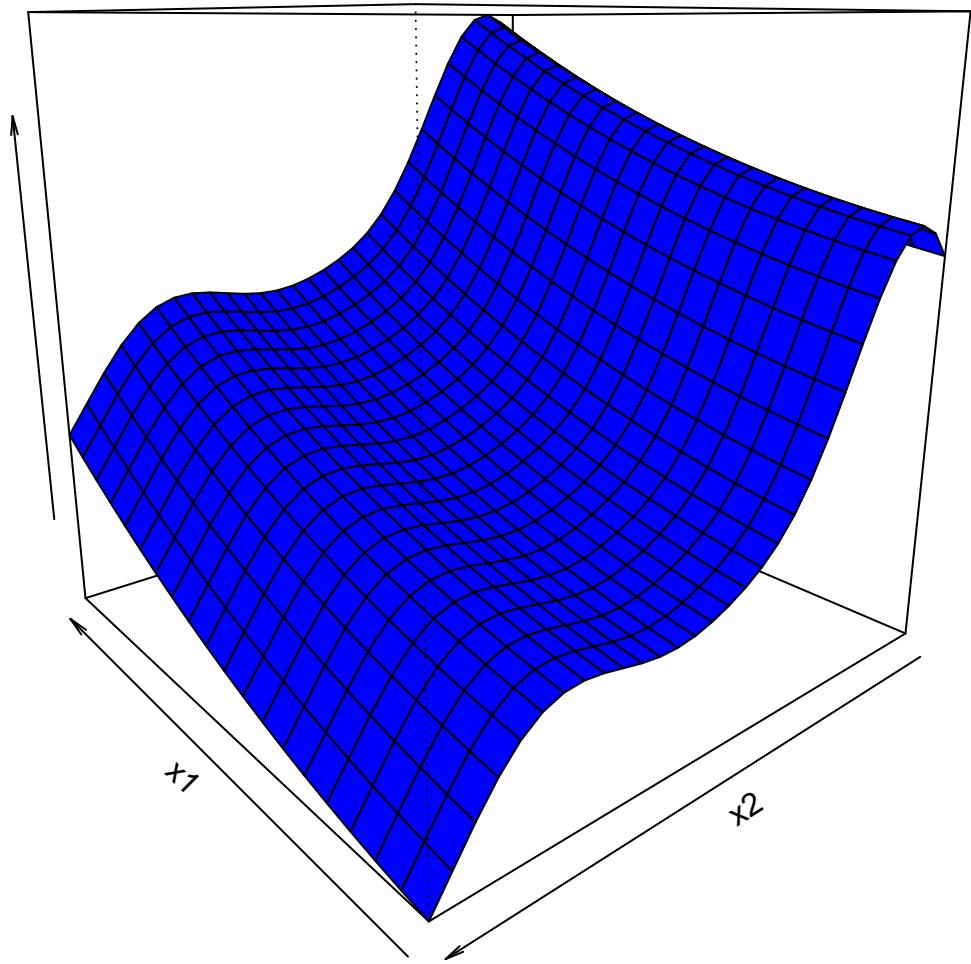


help("plot.gam")

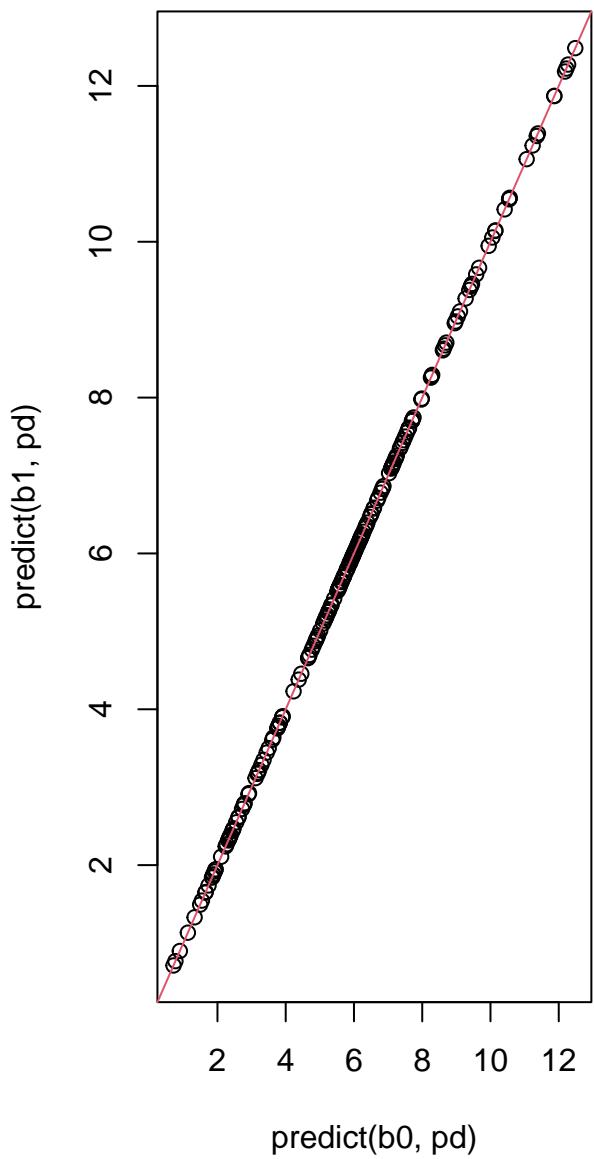


help("polys.plot")

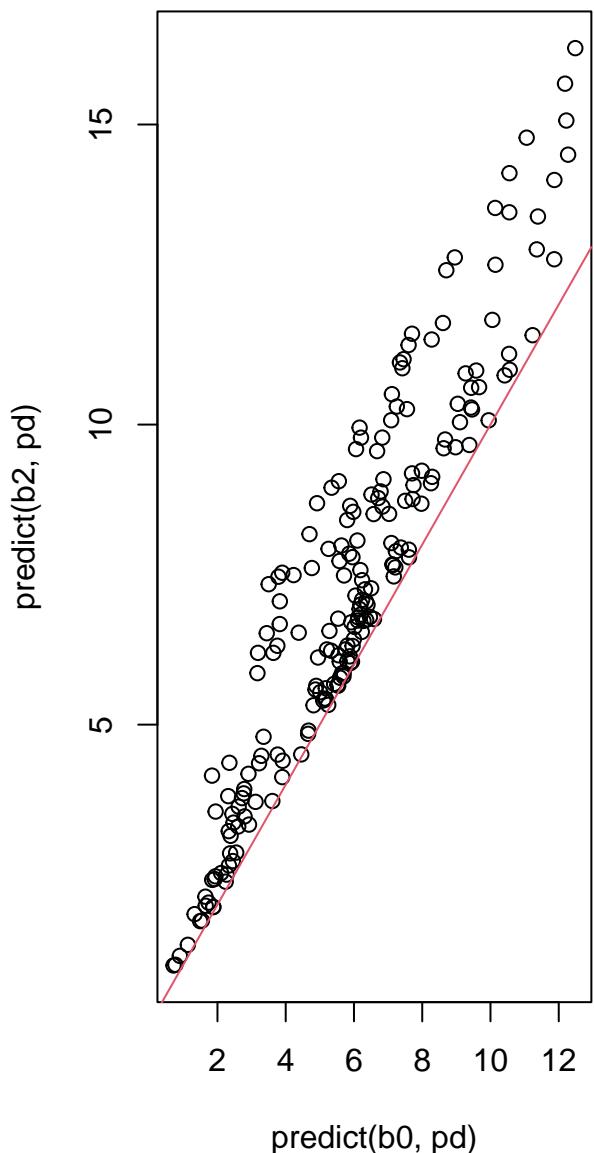
help("predict.gam")



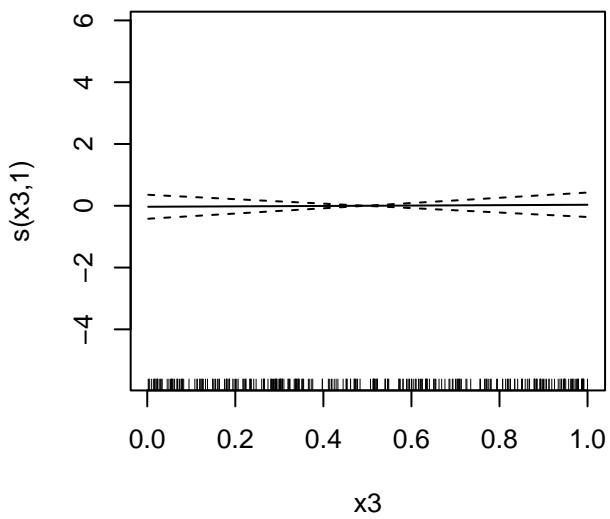
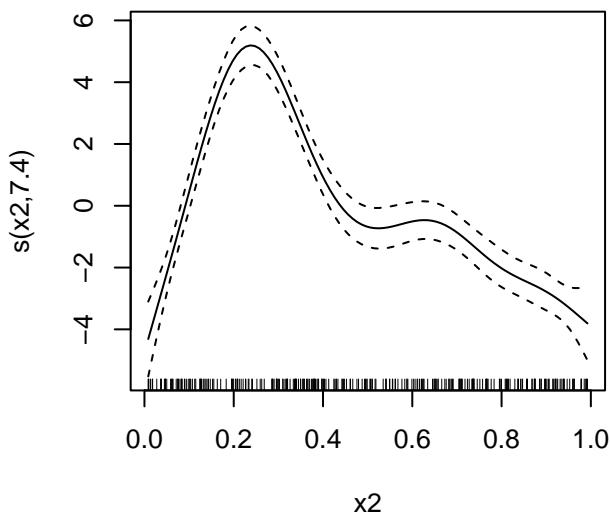
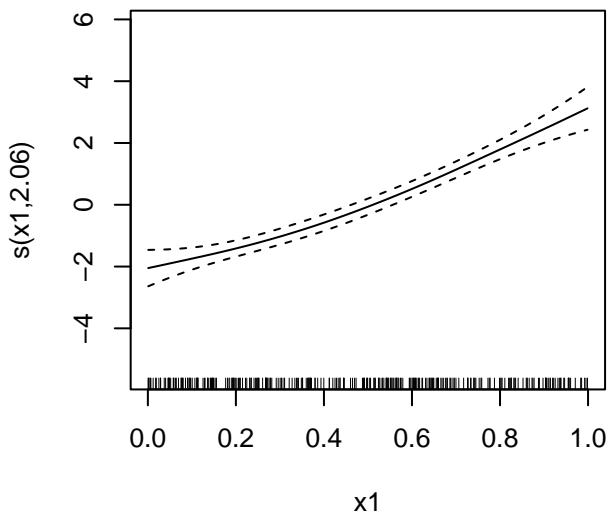
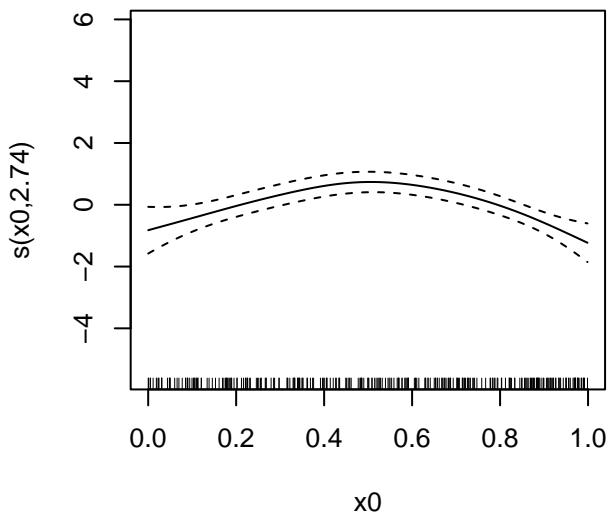
**b0 and b1 predictions match**



**b2 unsafe, doesn't match**

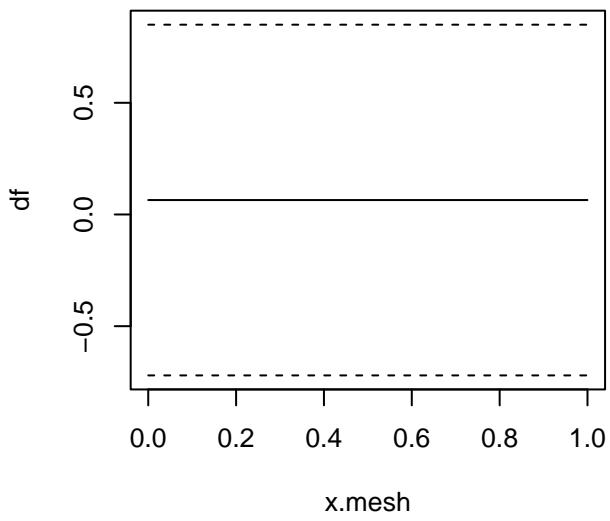
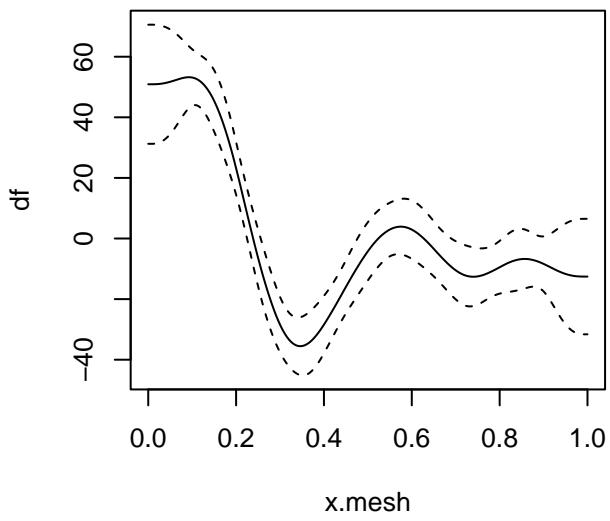
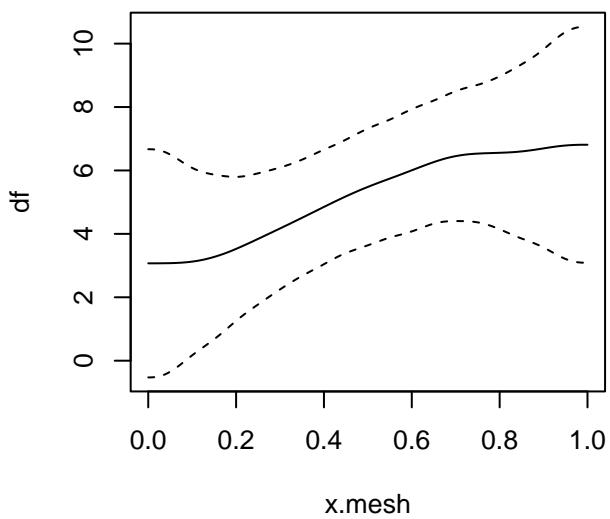
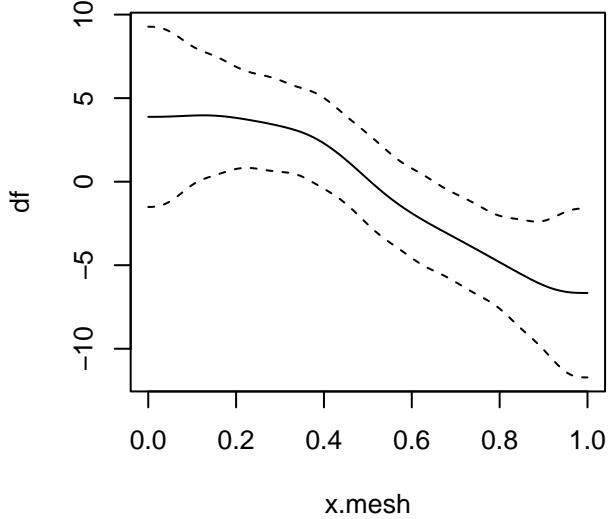


help("predict.gam")

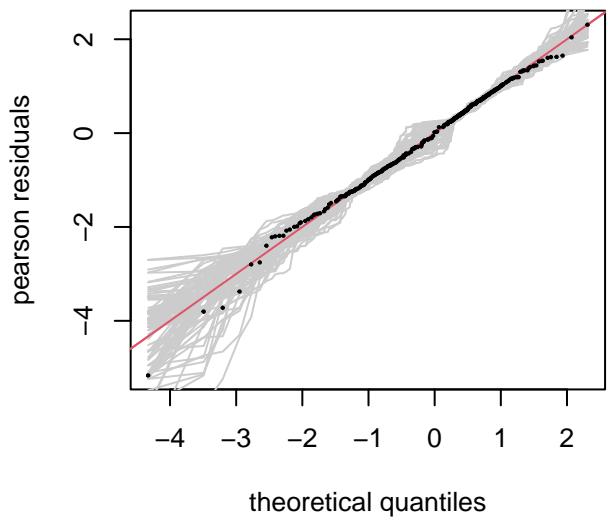
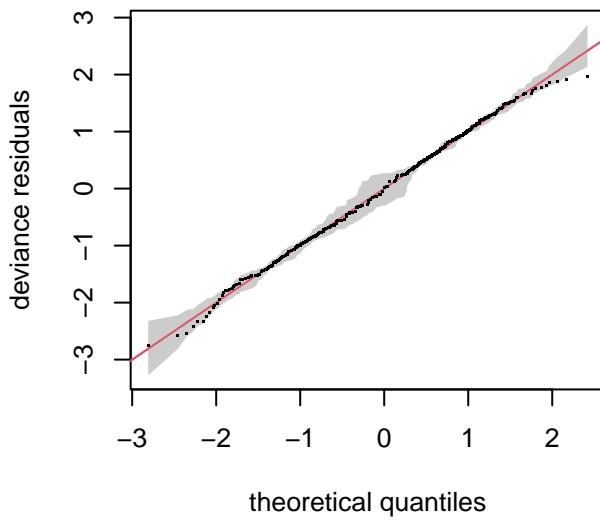
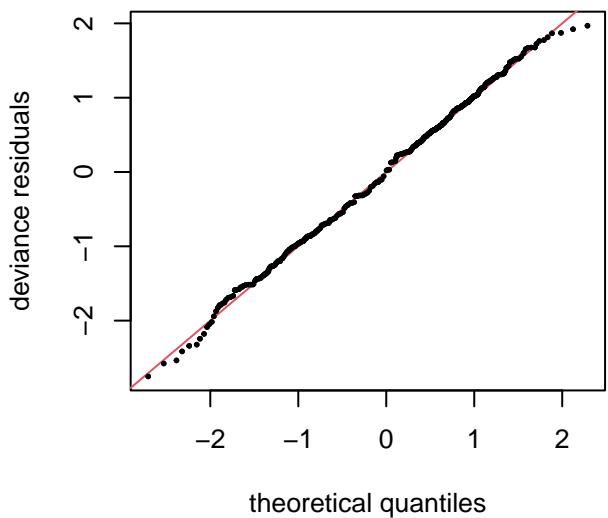
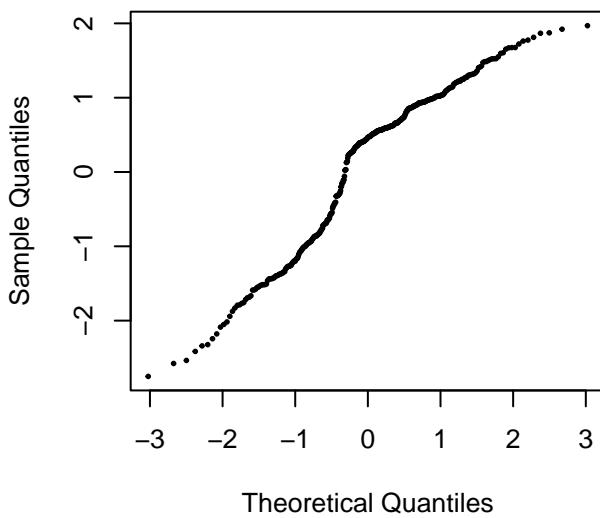


help("predict.gam")

help("predict.gam")

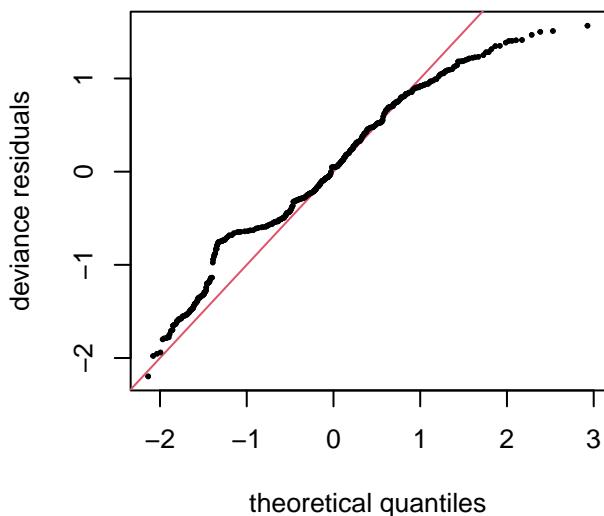
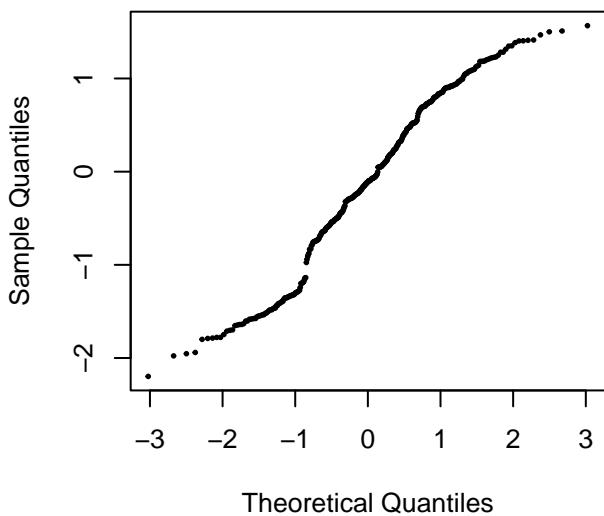


## Normal Q-Q Plot

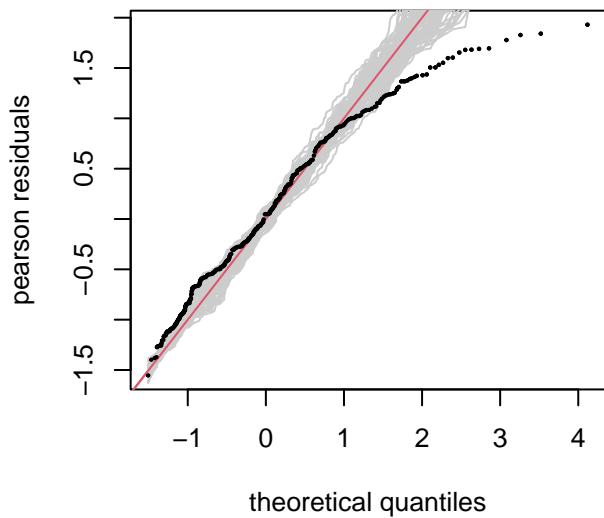
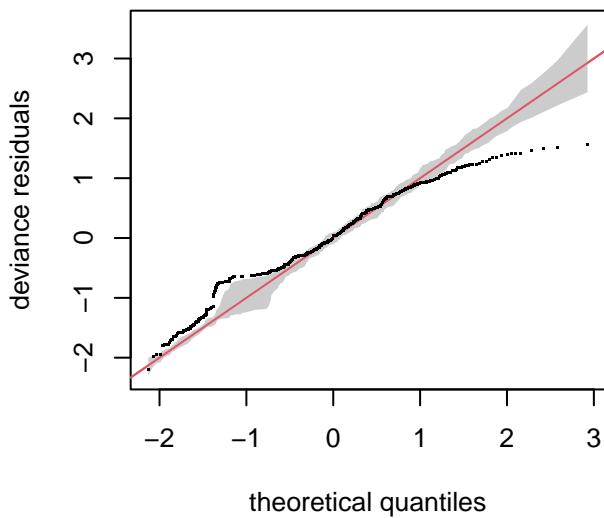


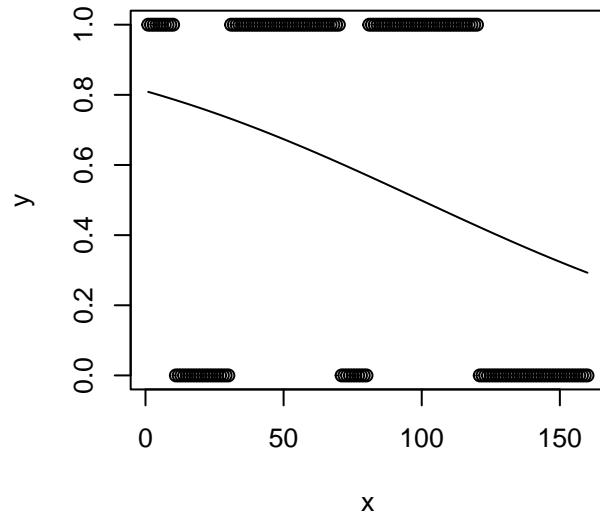
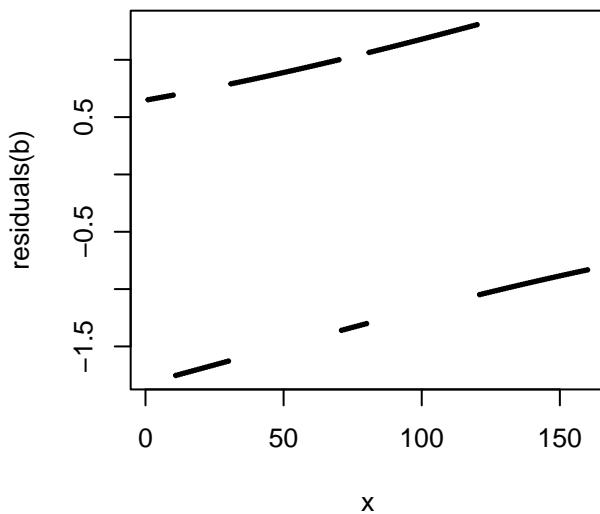
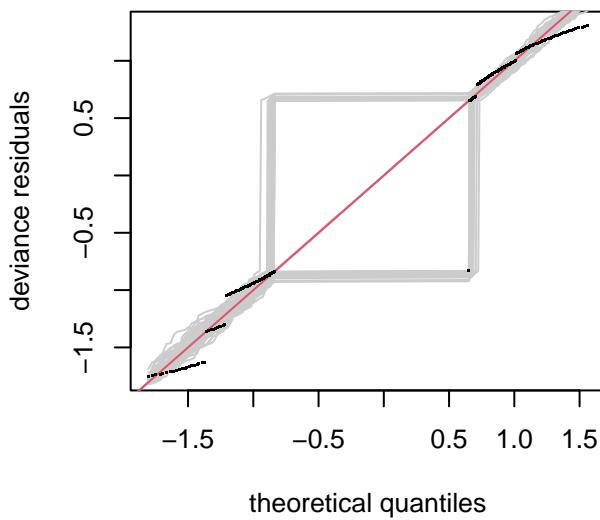
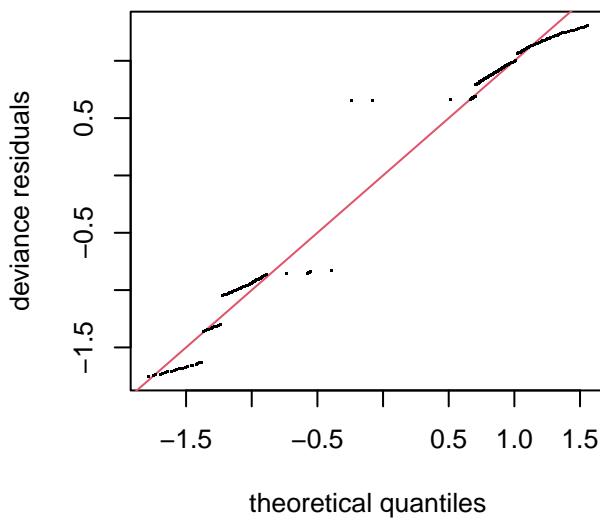
help("qq.gam")

## Normal Q–Q Plot

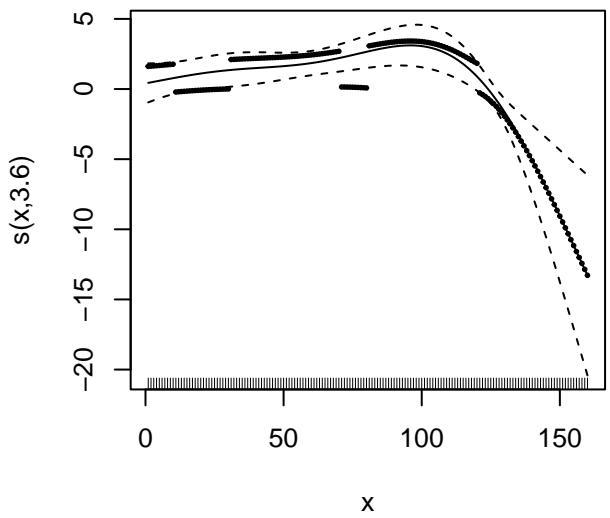
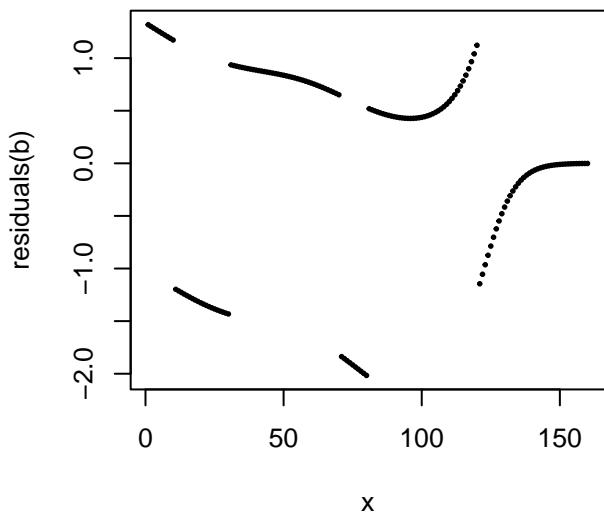
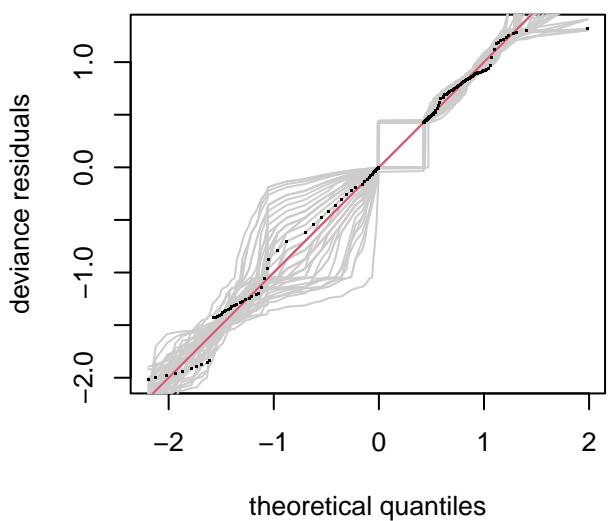
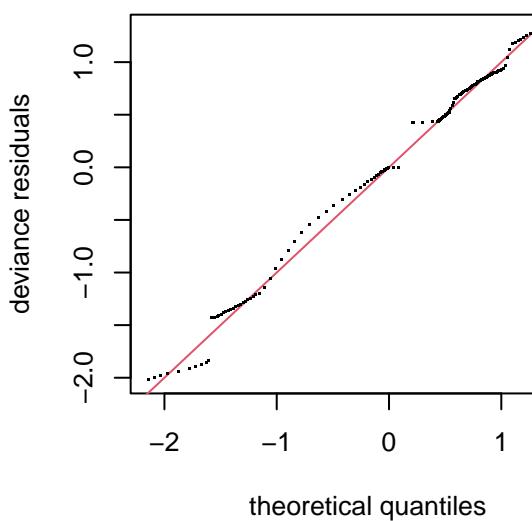


help("qq.gam")





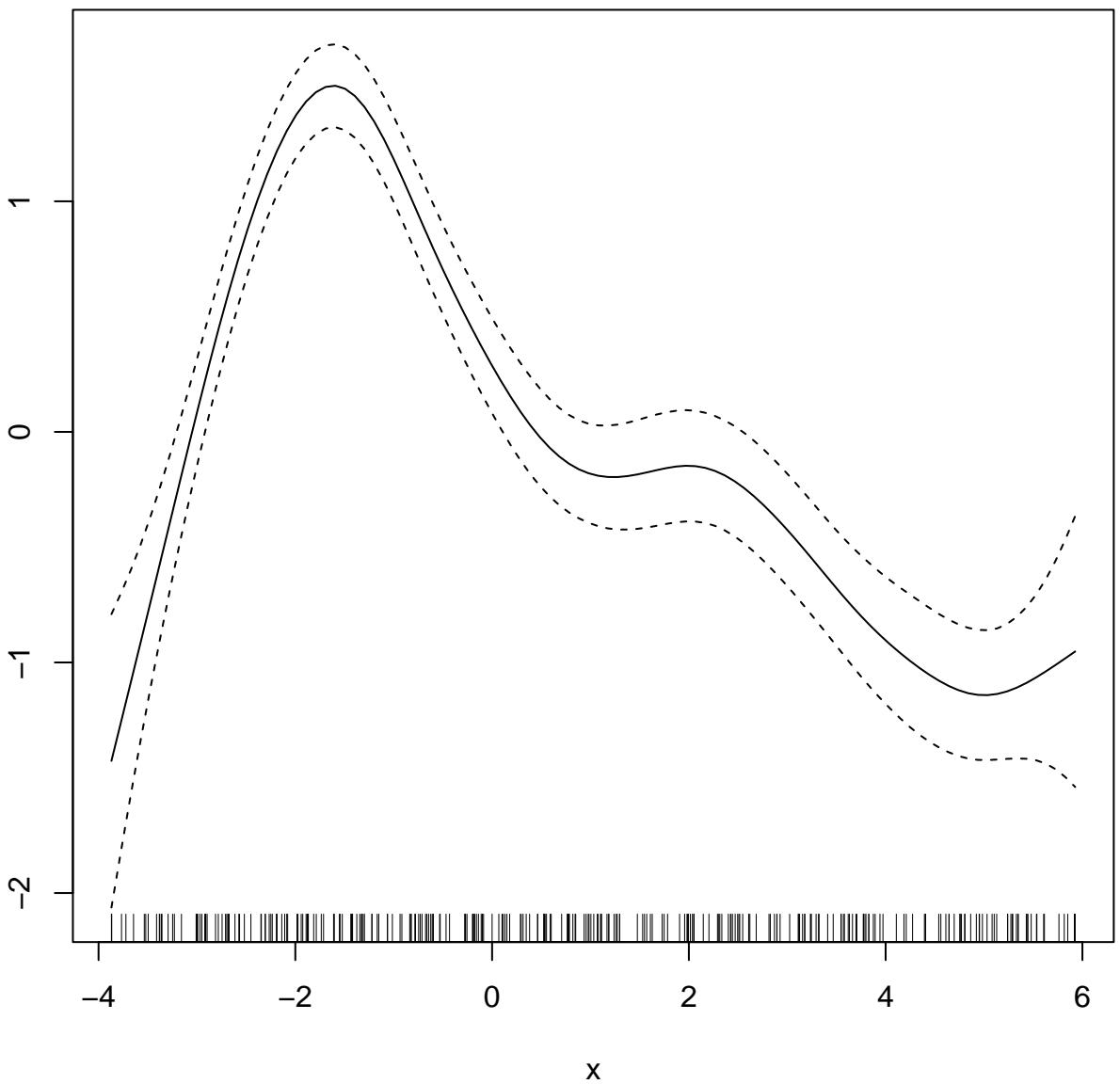
help("qq.gam")



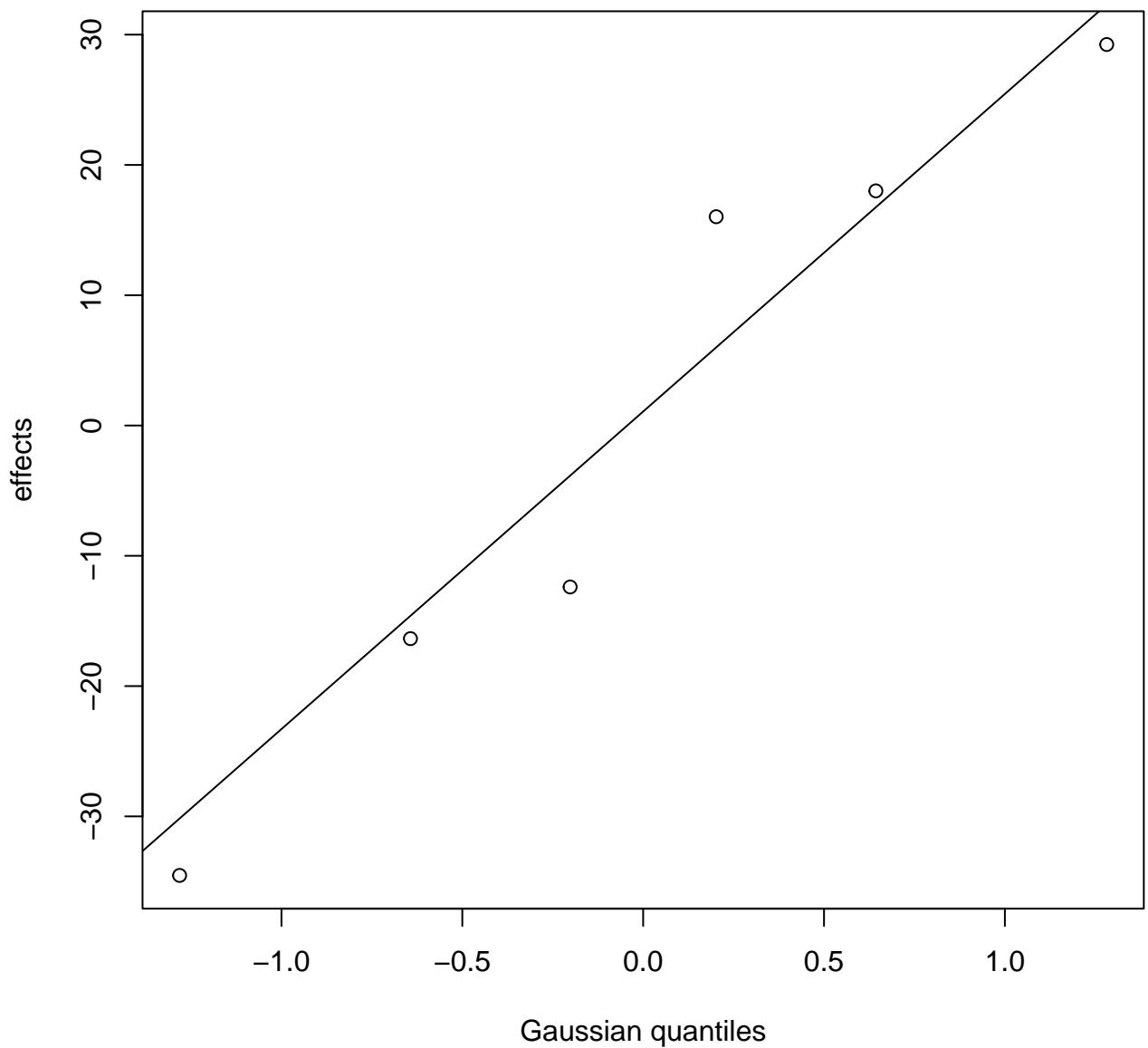
`help("q.q.gam")`

help("rTweedie")

$s(x, 7, 12)$

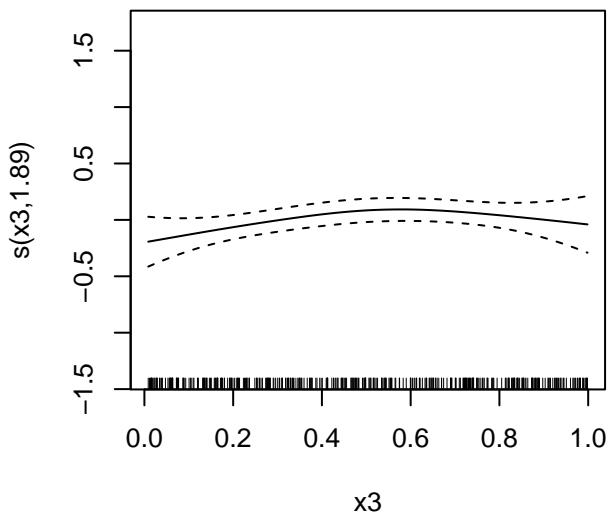
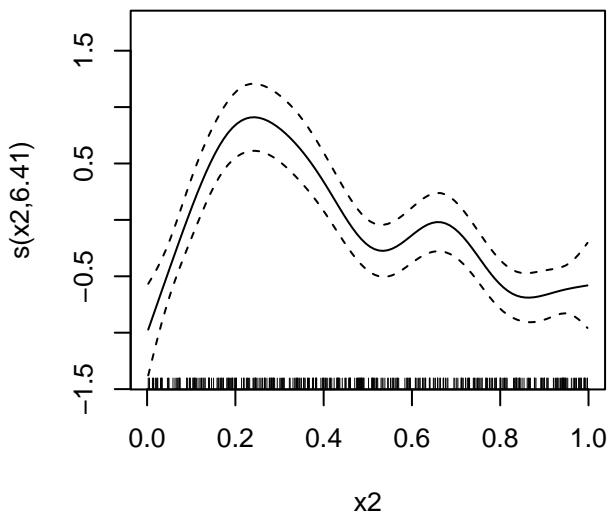
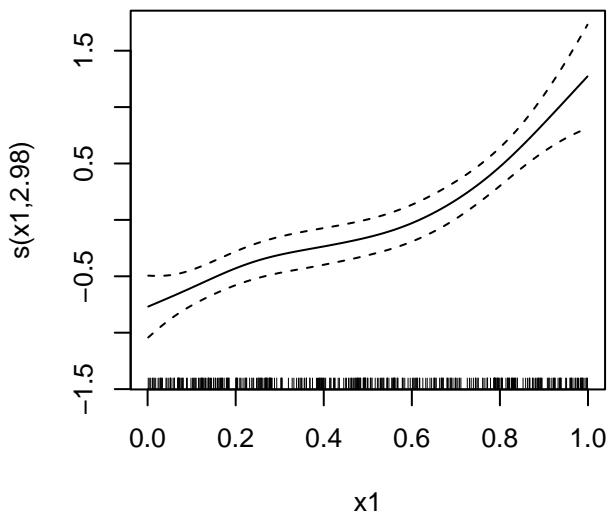
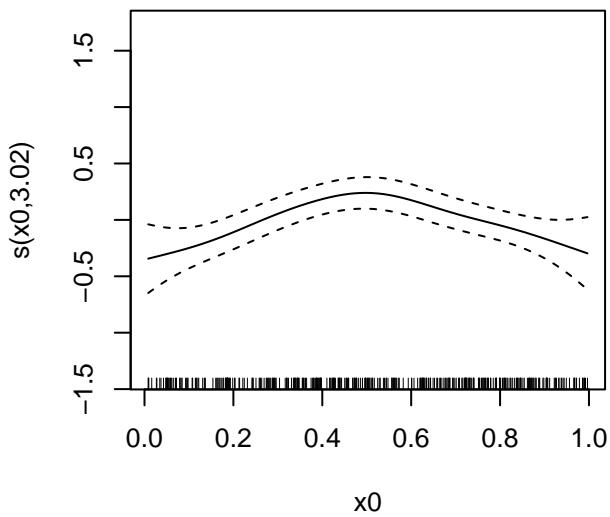


**s(Rail,4.96)**

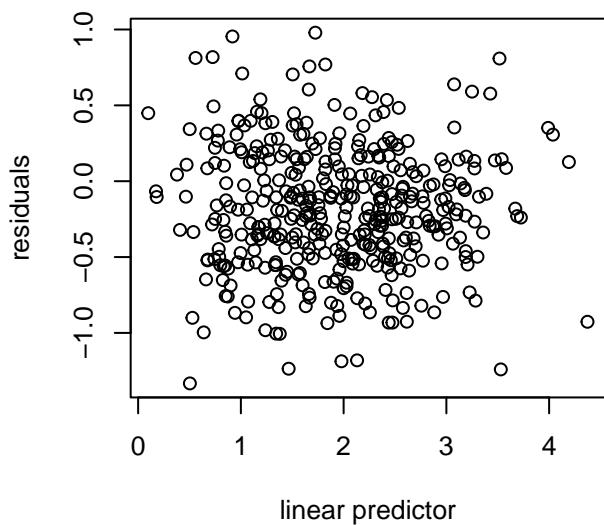
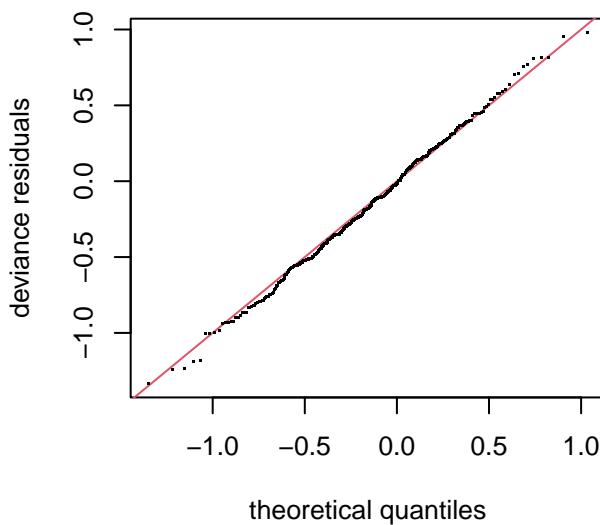


help("random.effects")

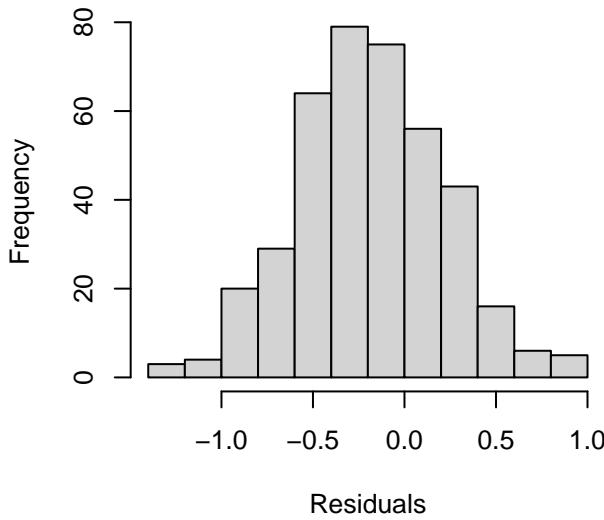
help("rig")



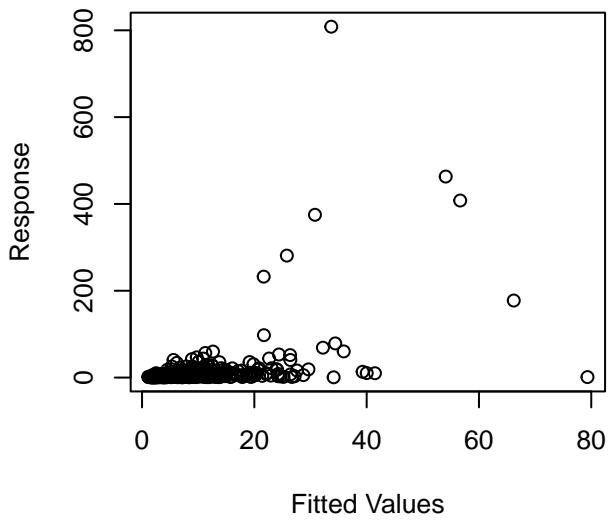
## Resids vs. linear pred.



## Histogram of residuals

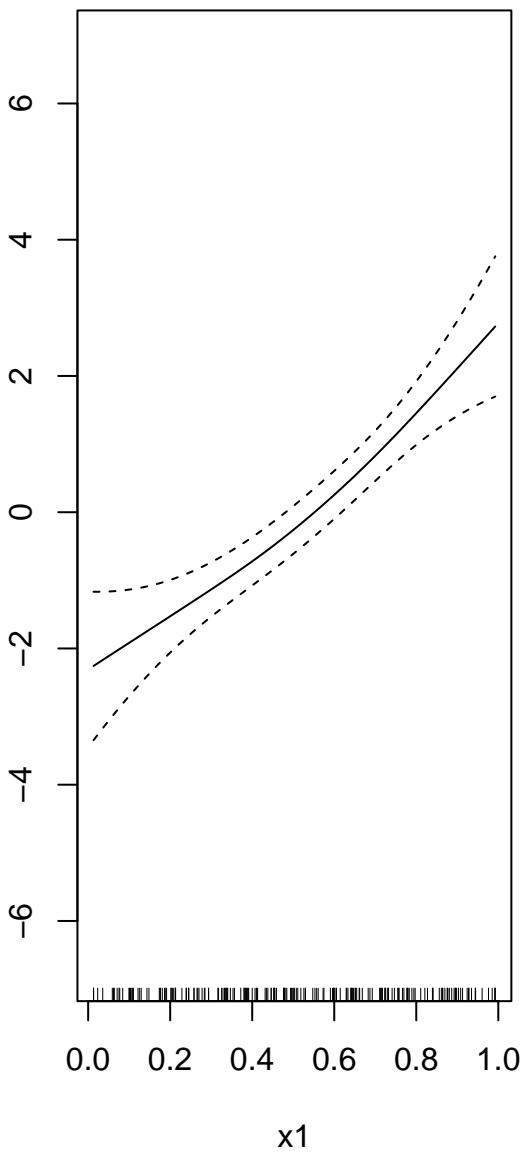


## Response vs. Fitted Values

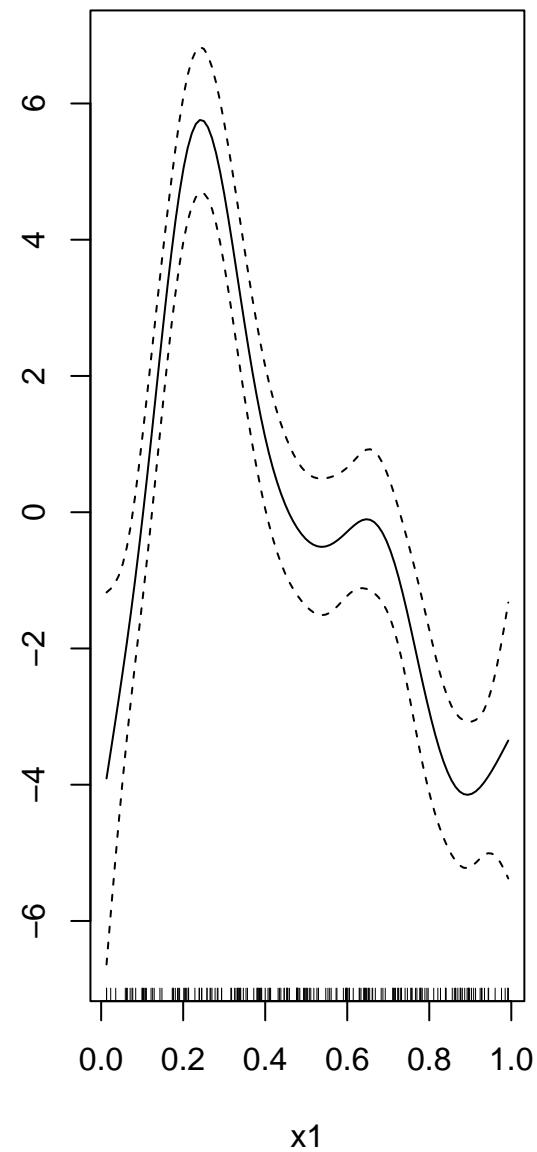


help("rig")

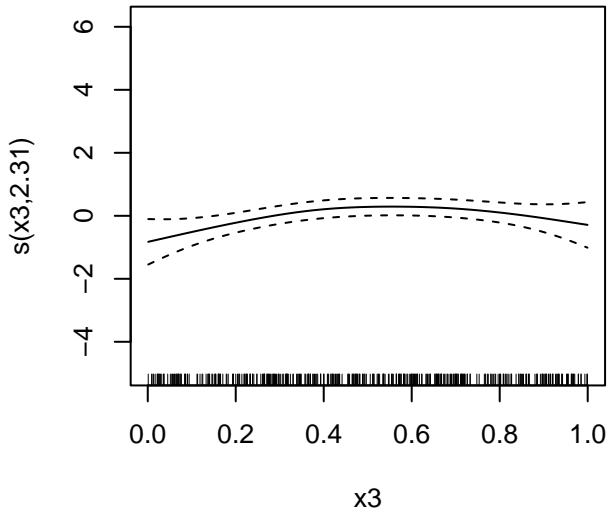
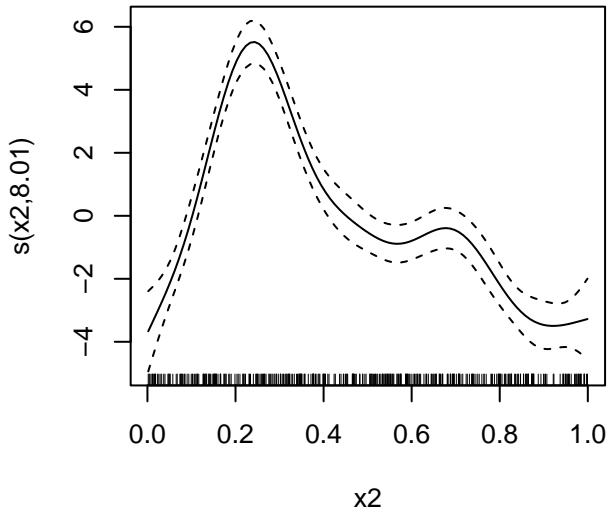
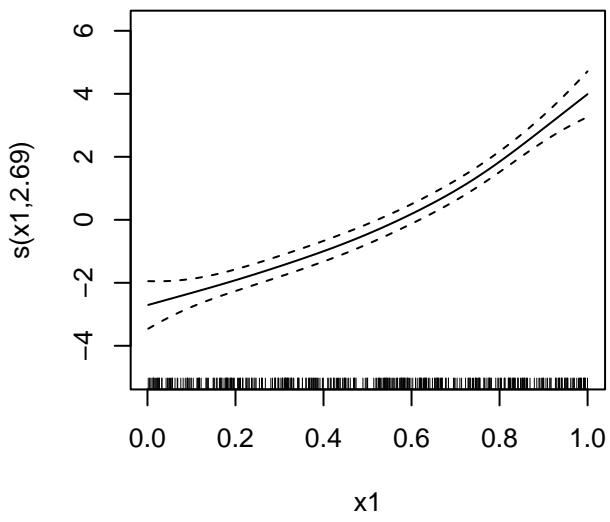
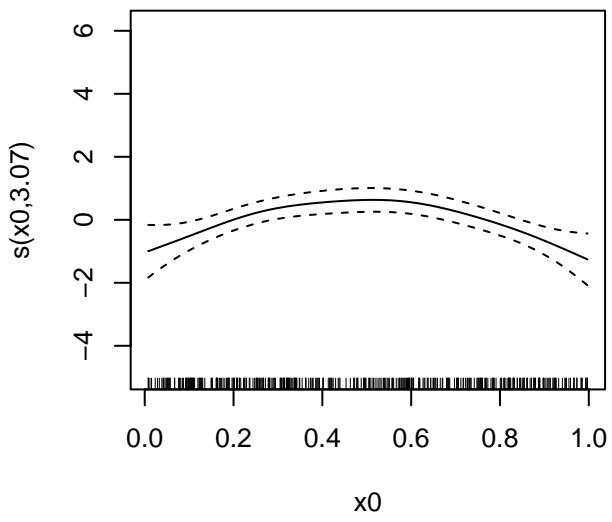
$s(x1,1.58):fac1$



$s(x1,7.35):fac2$

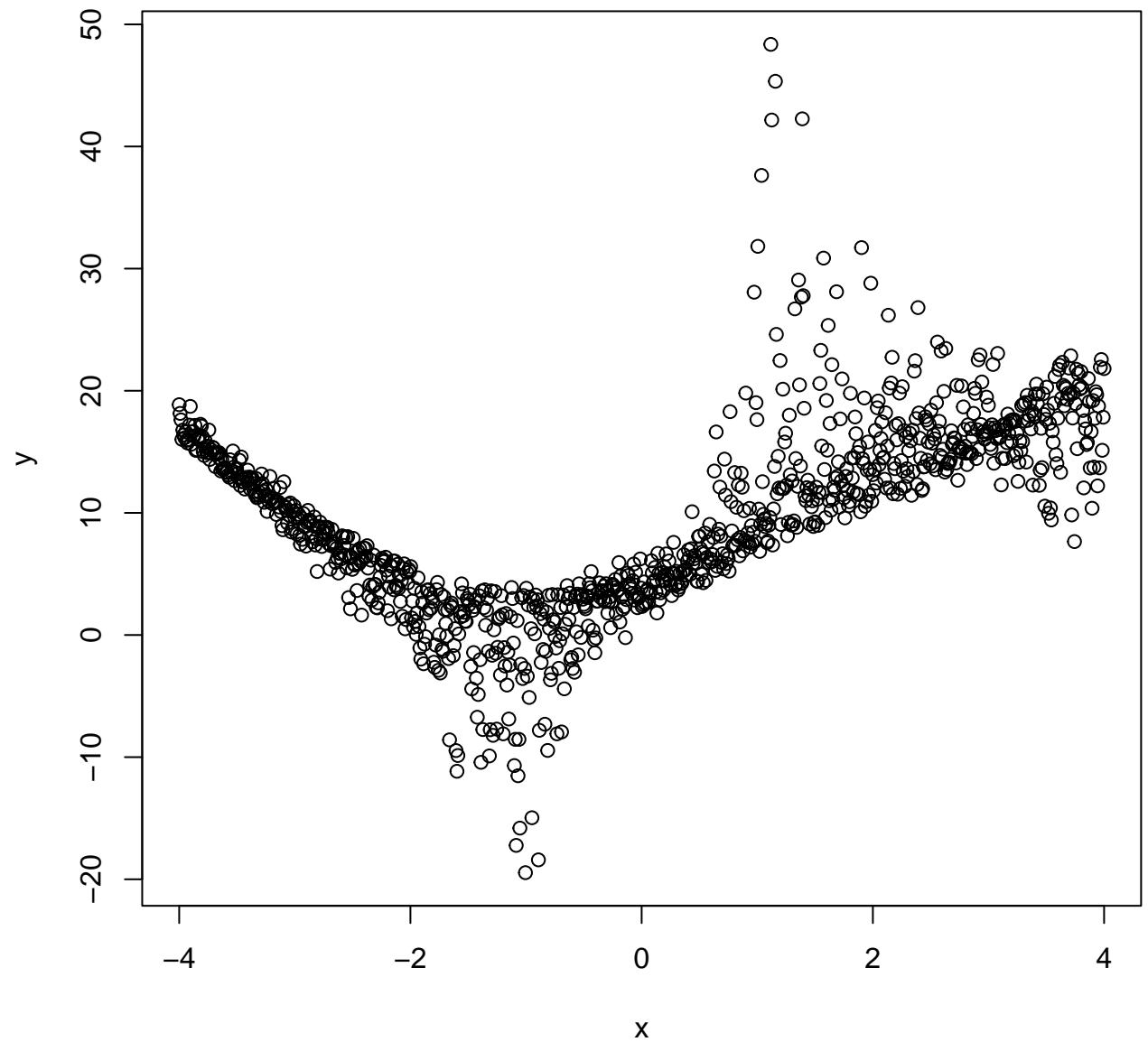


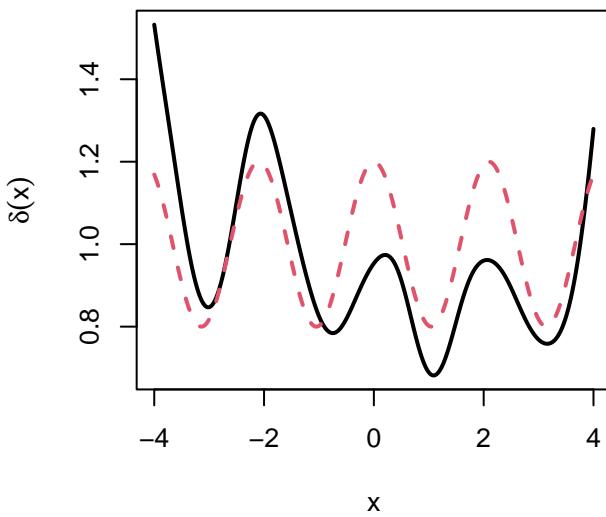
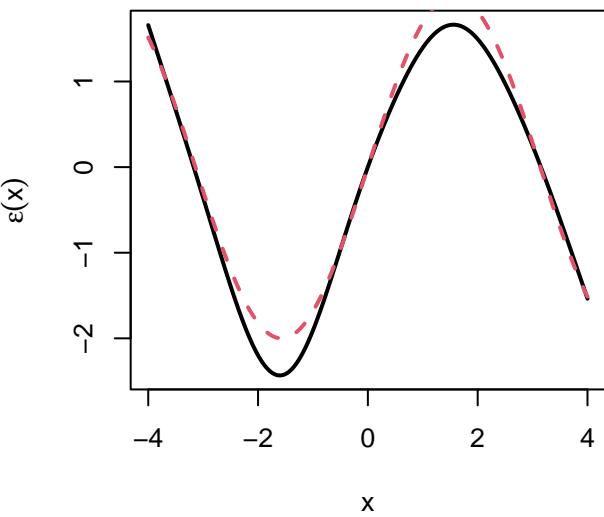
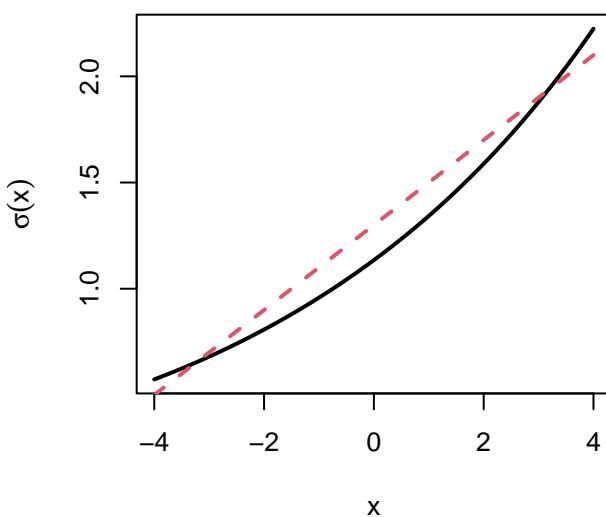
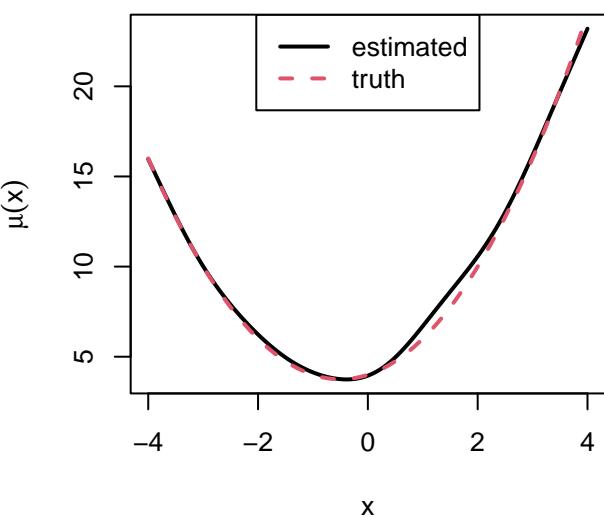
help("s")



help("scat")

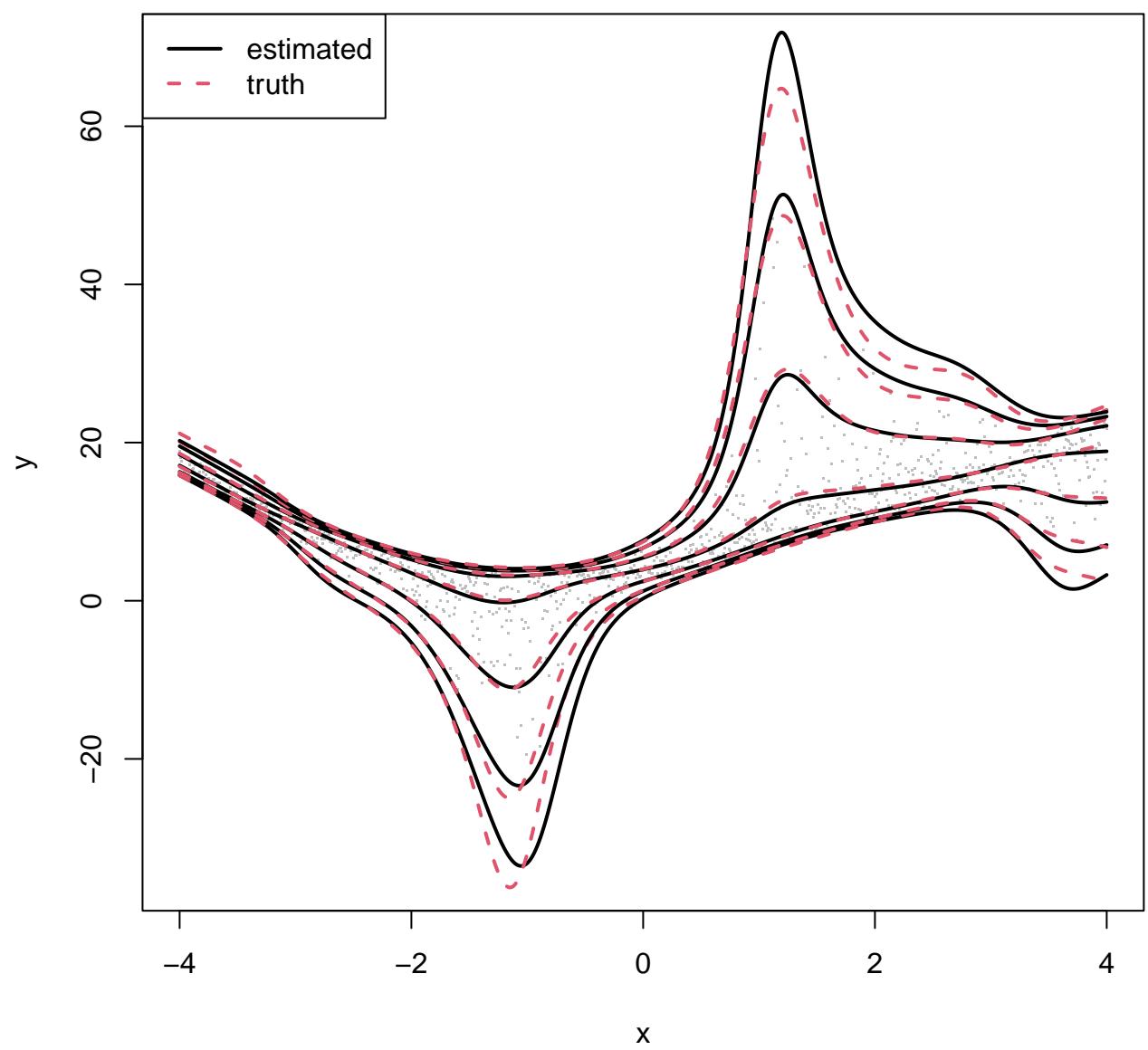
help("shash")



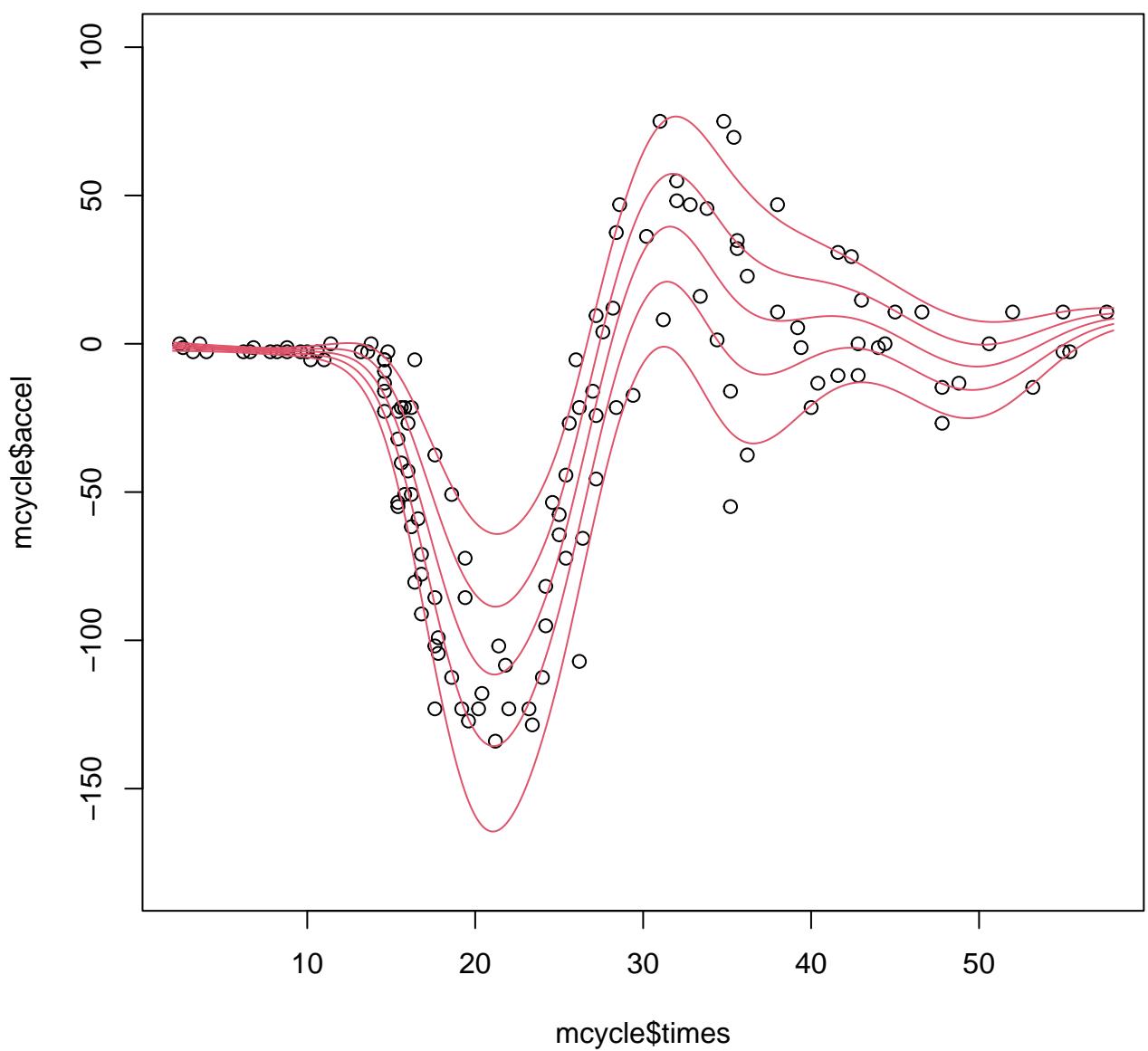


help("shash")

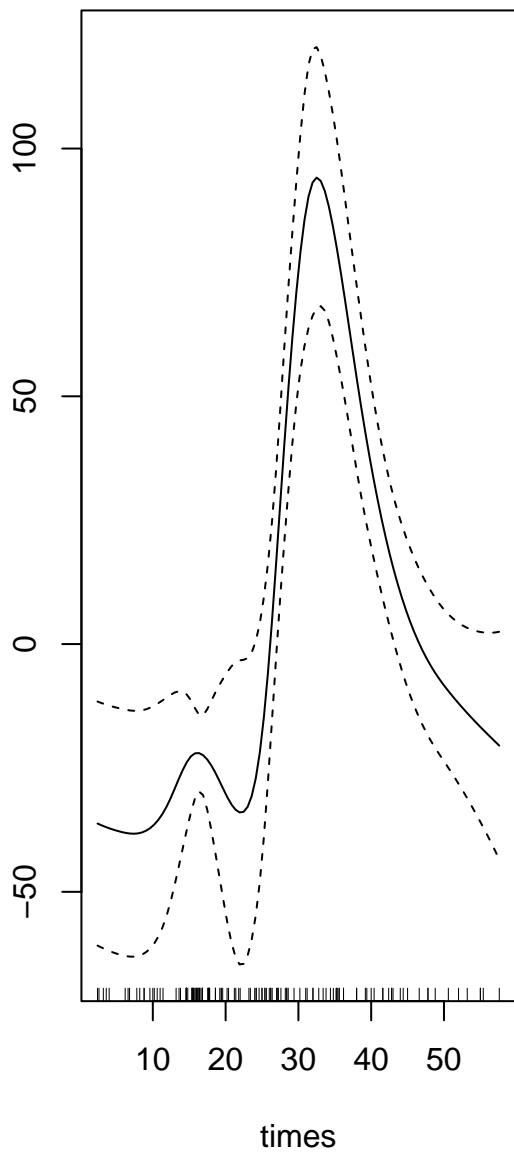
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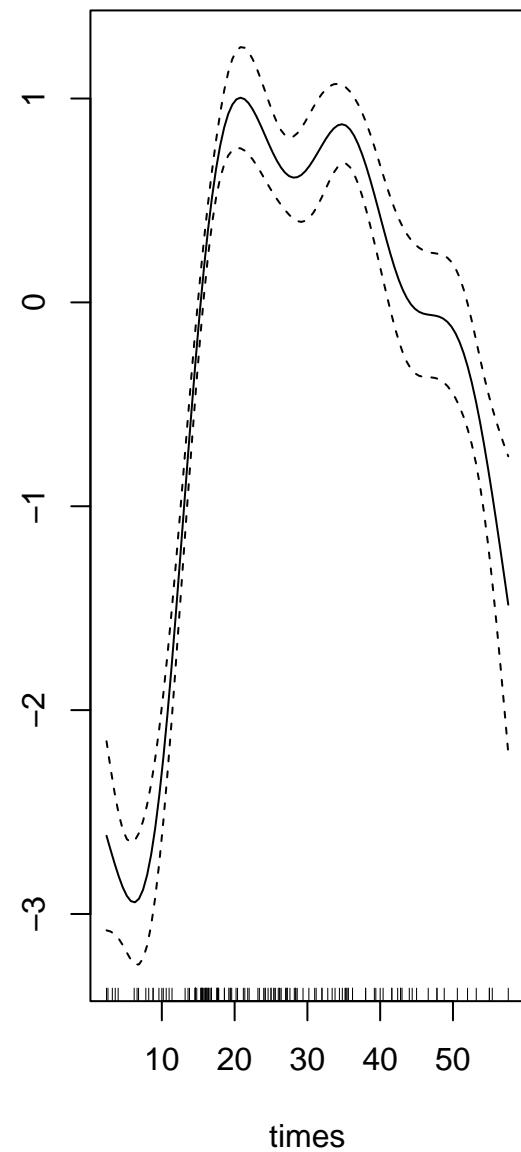
help("shash")



s(times,8.75)

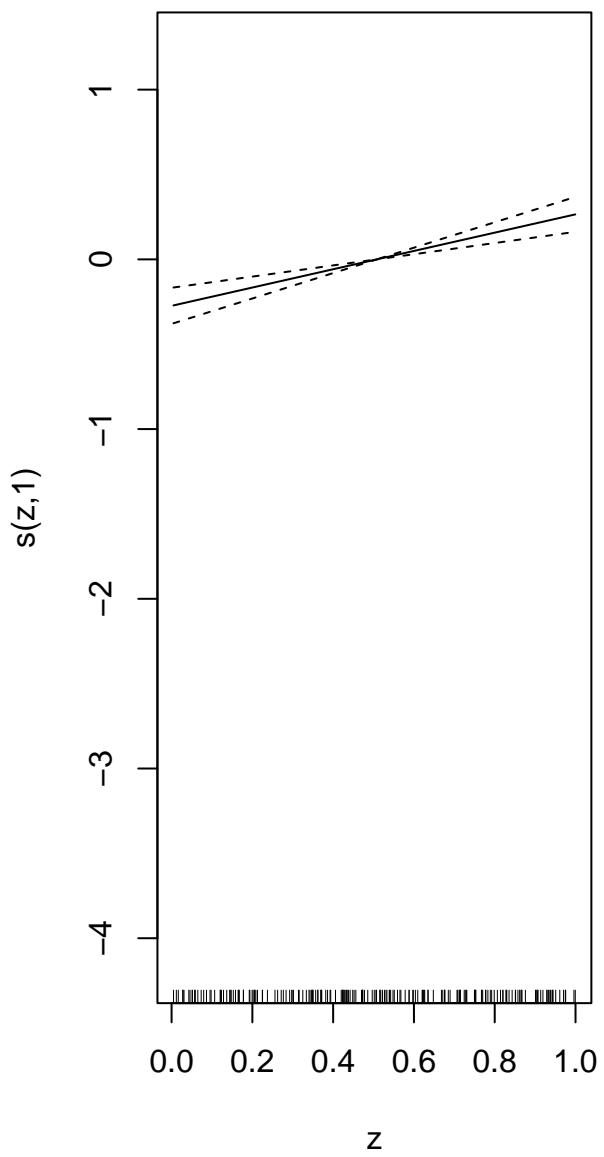
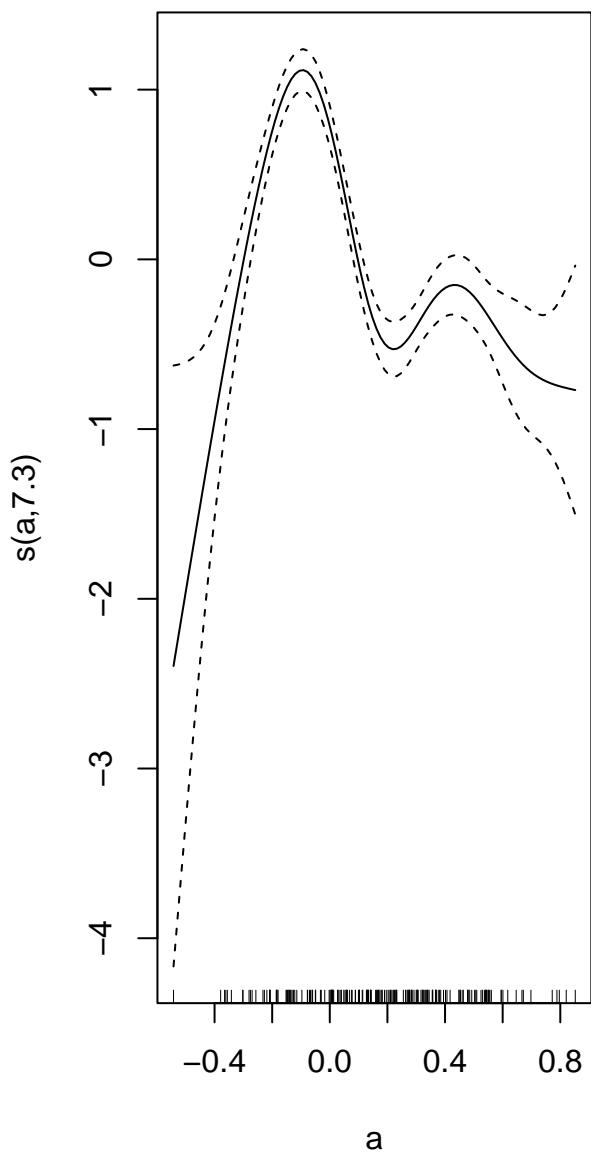


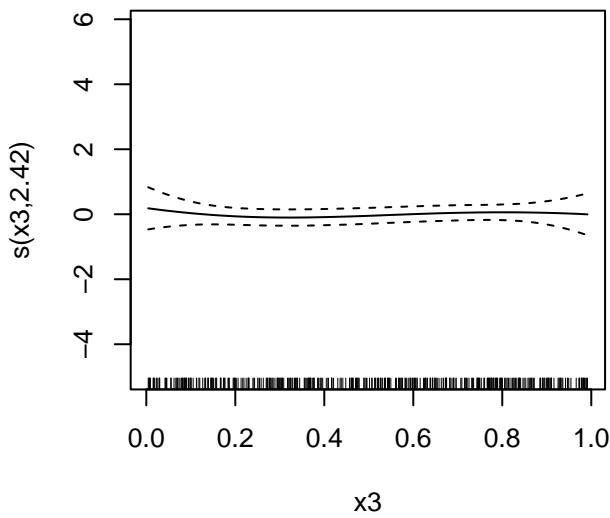
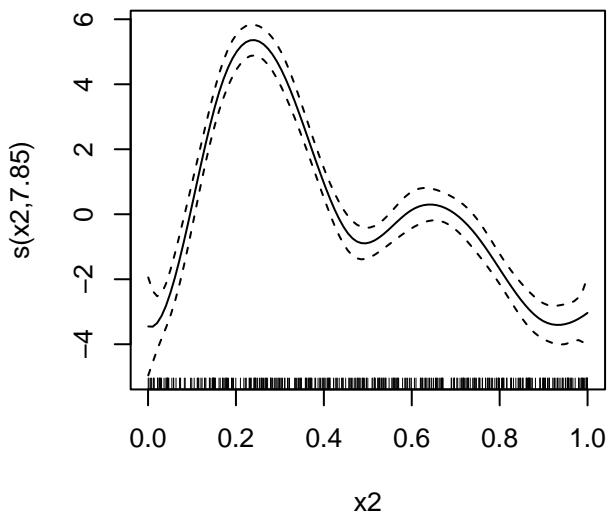
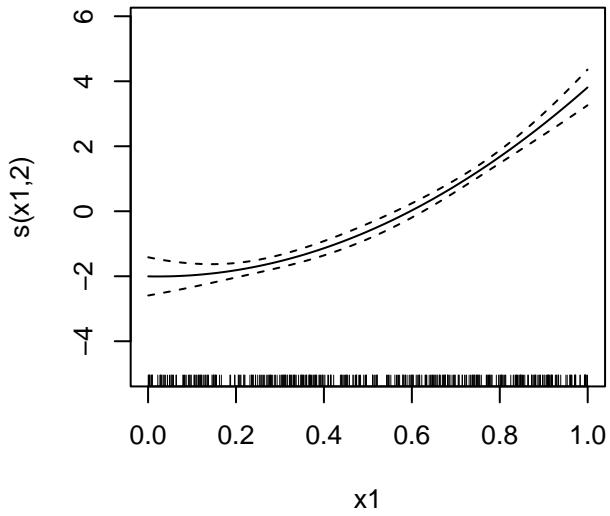
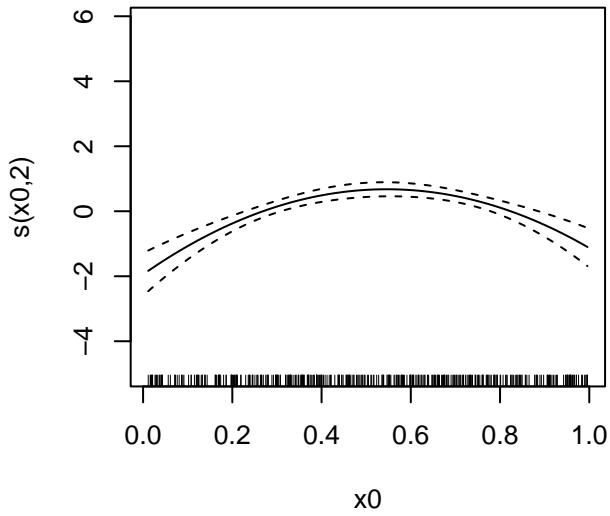
s.1(times,8.16)



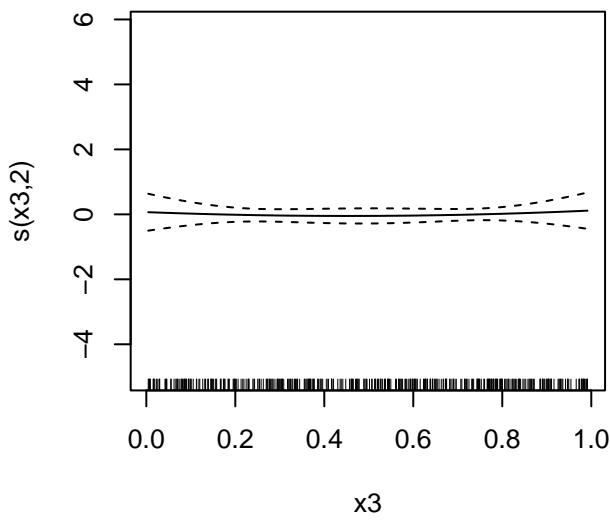
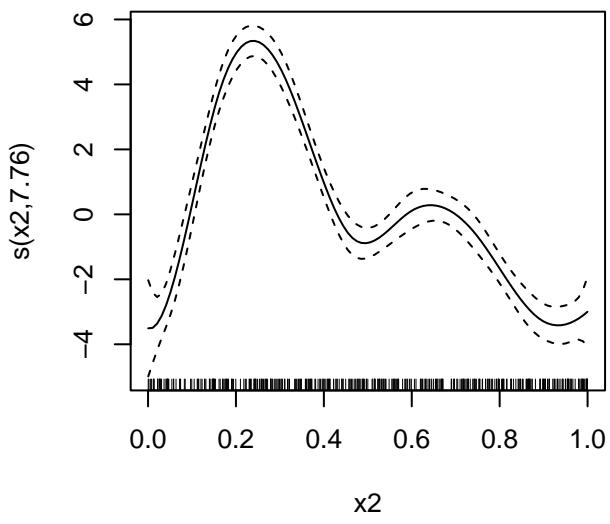
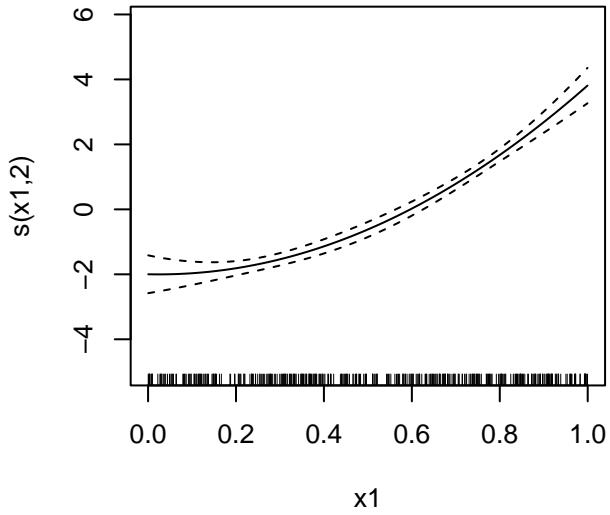
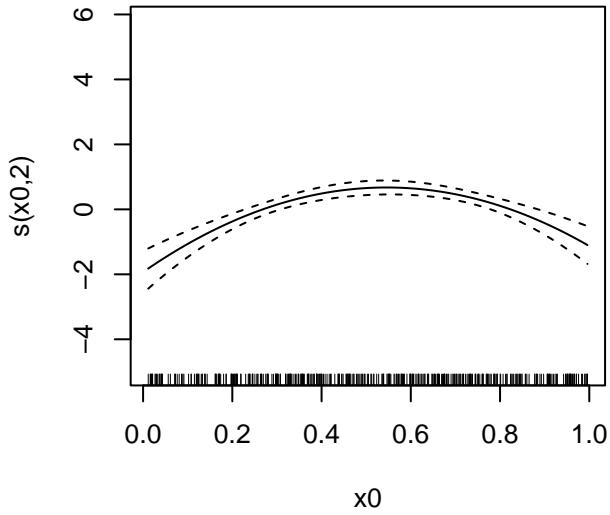
help("shash")

help("single.index")

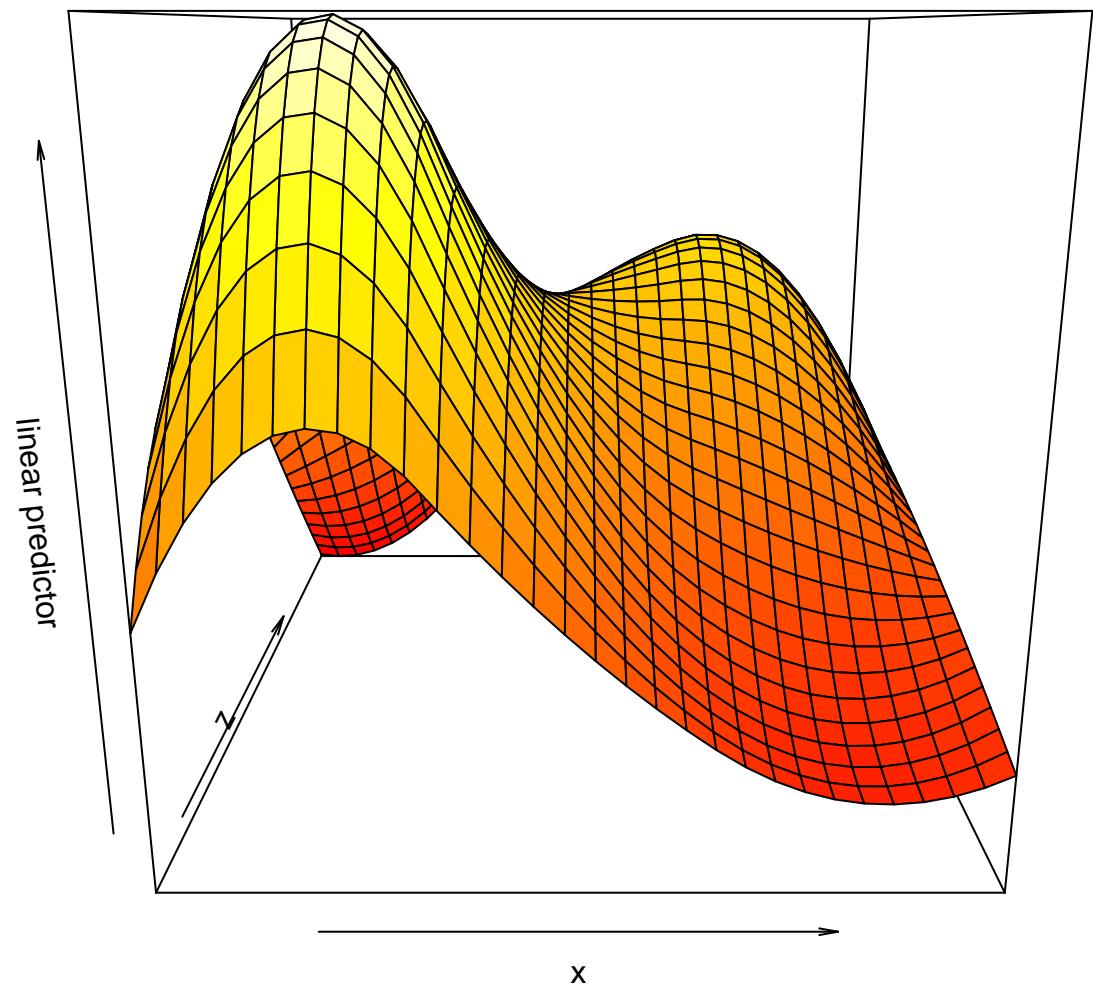




help("smooth.construct")

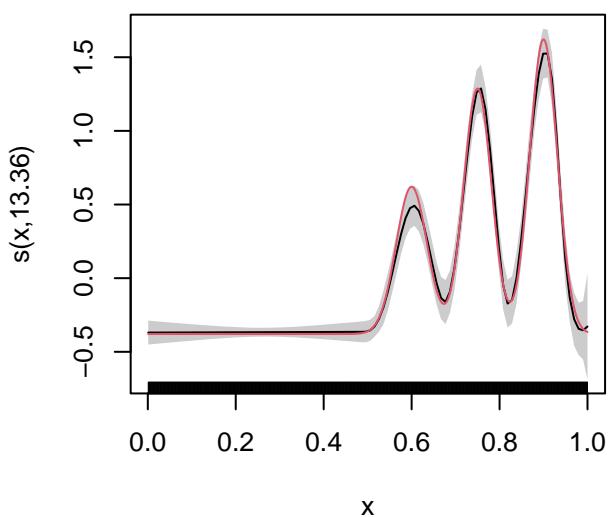


help("smooth.construct")

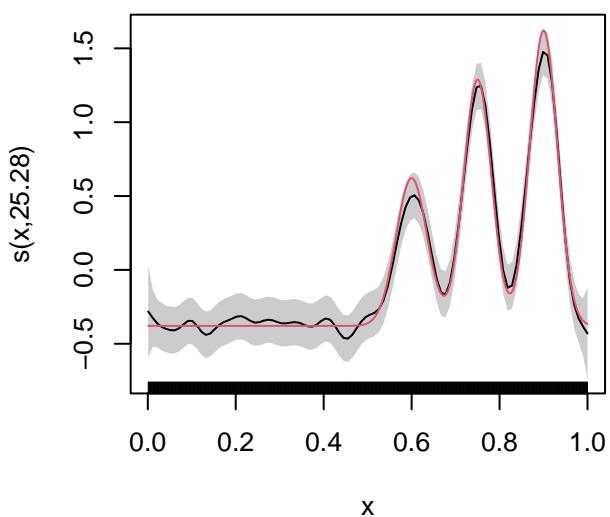


help("smooth.construct")

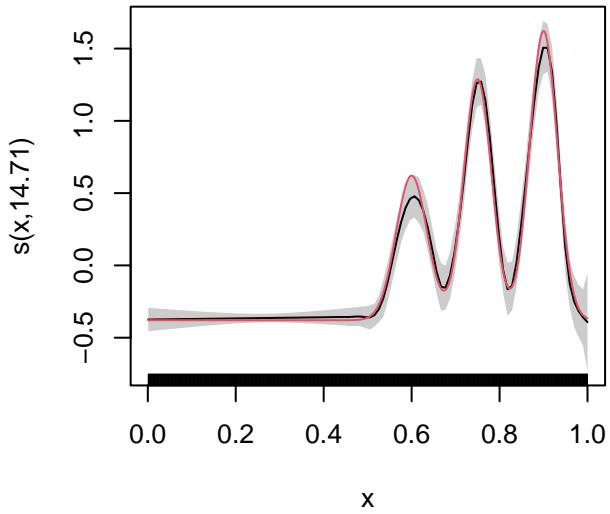
**0.9963**



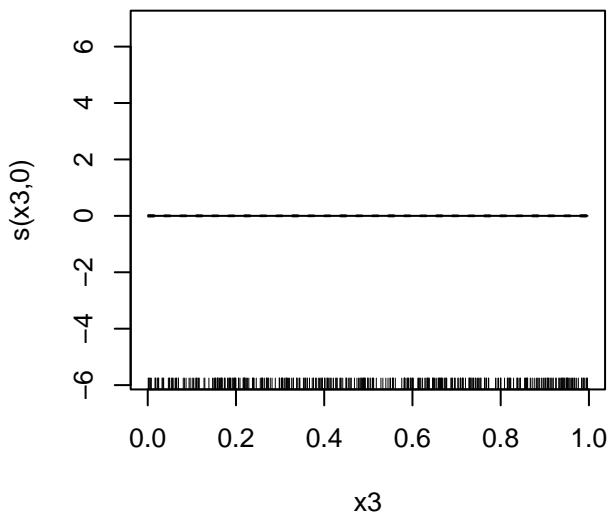
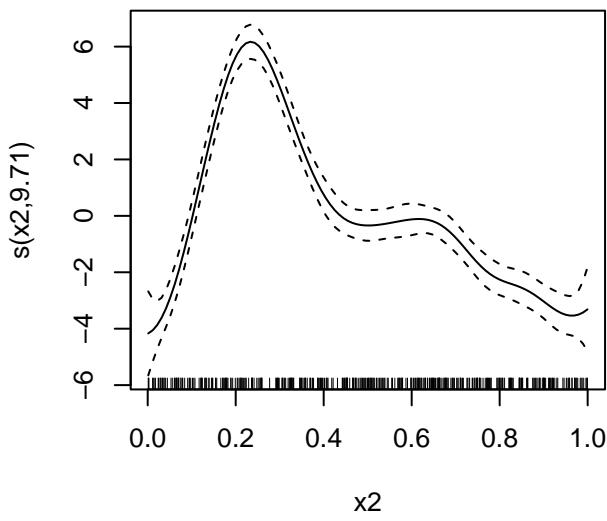
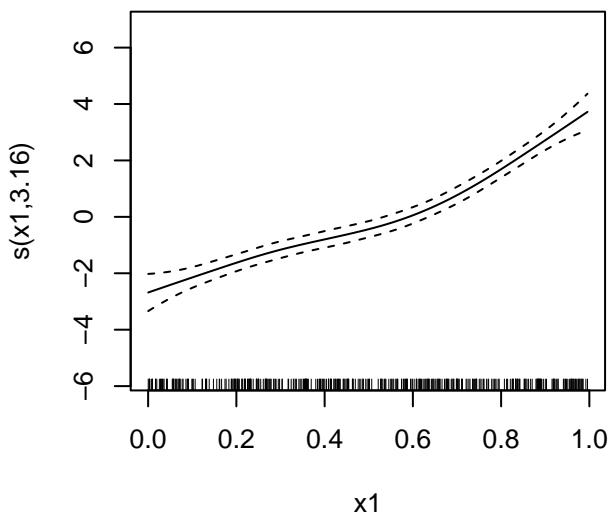
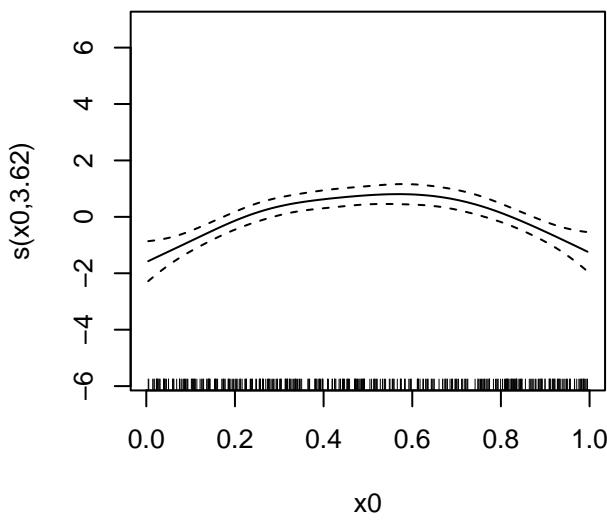
**0.9957**



**0.9959**

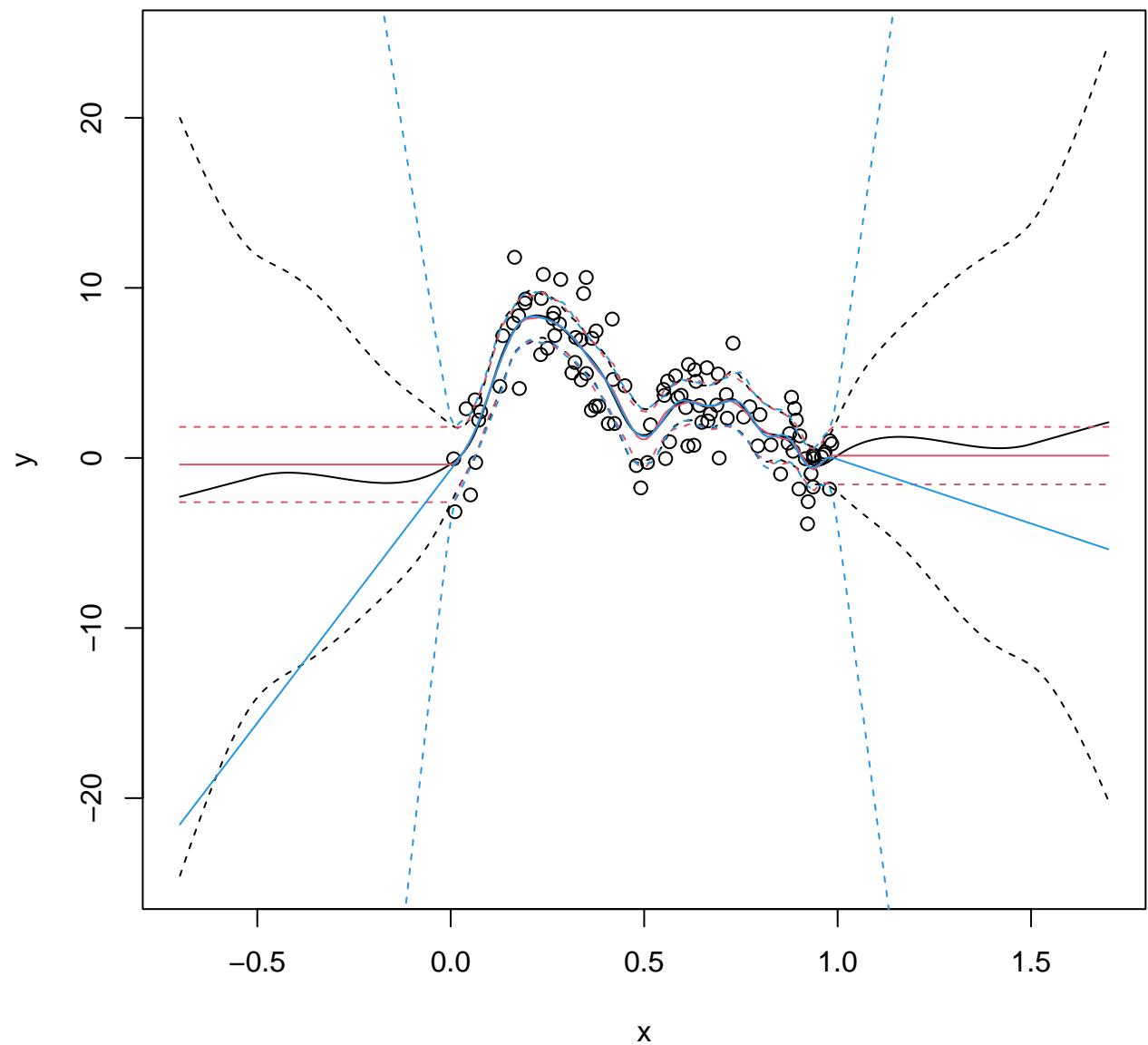


help("smooth.construct.ad.smooth.spec")

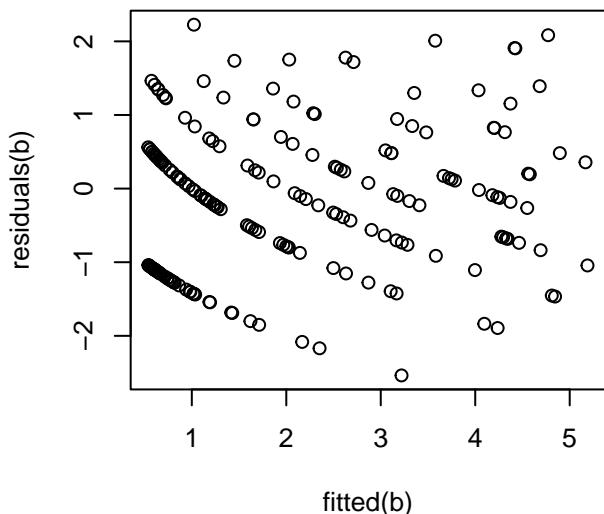
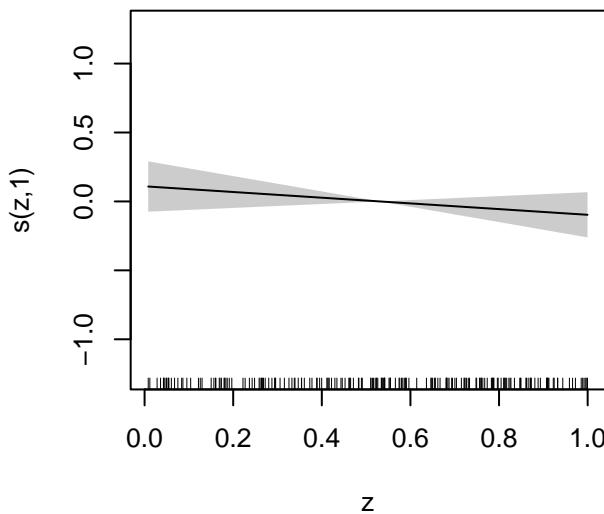
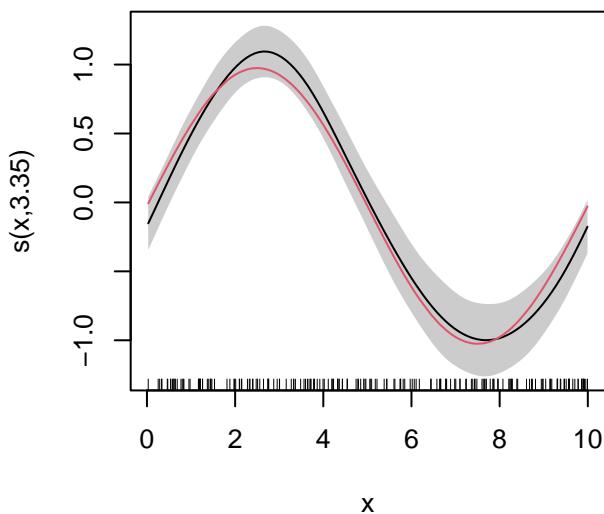
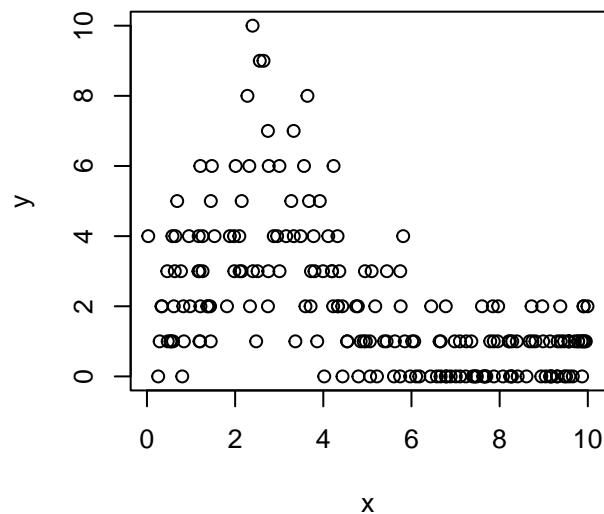


help("smooth.construct.bs.smooth.spec")

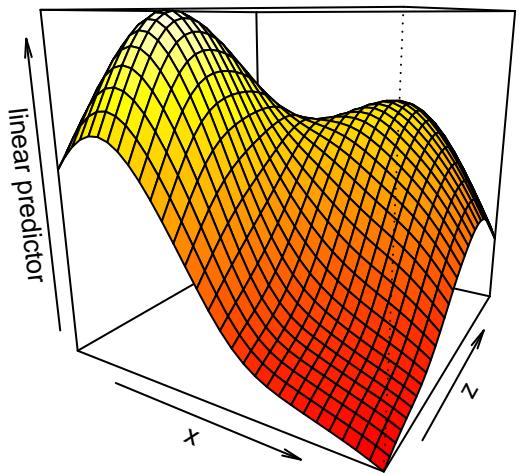
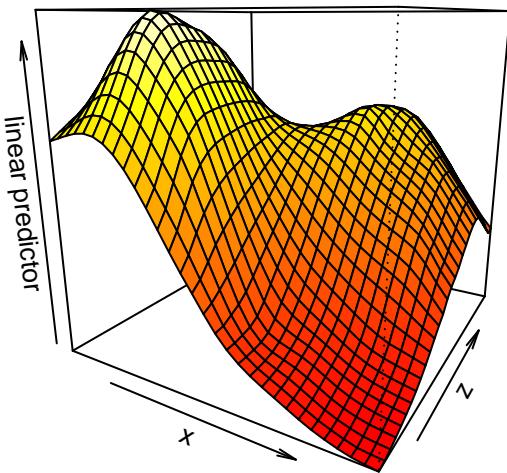
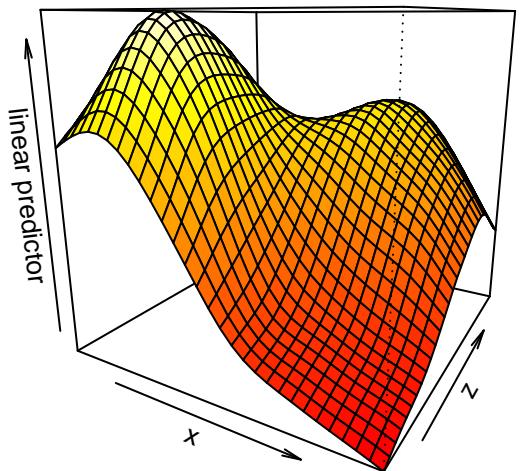
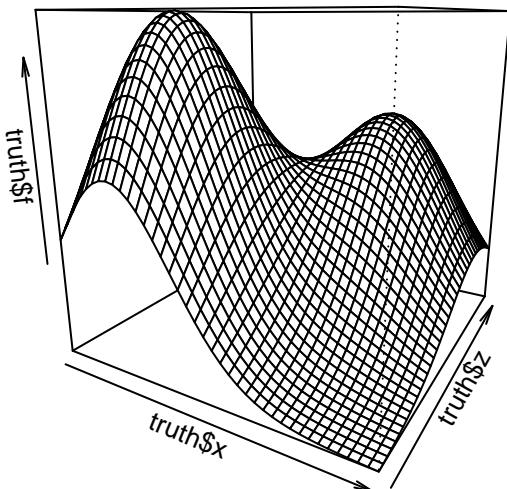
**Order 1 penalties: red tps; blue bs on (0,1); black bs on (-.5,1.5)**



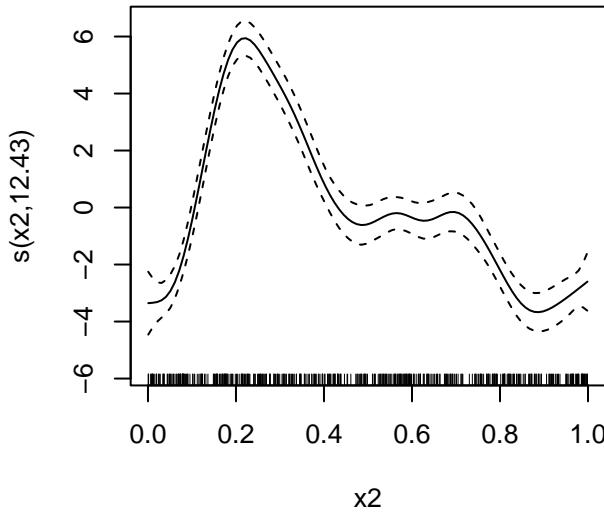
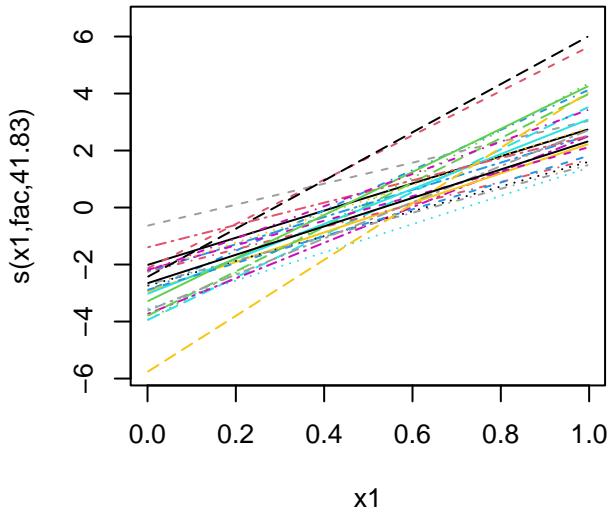
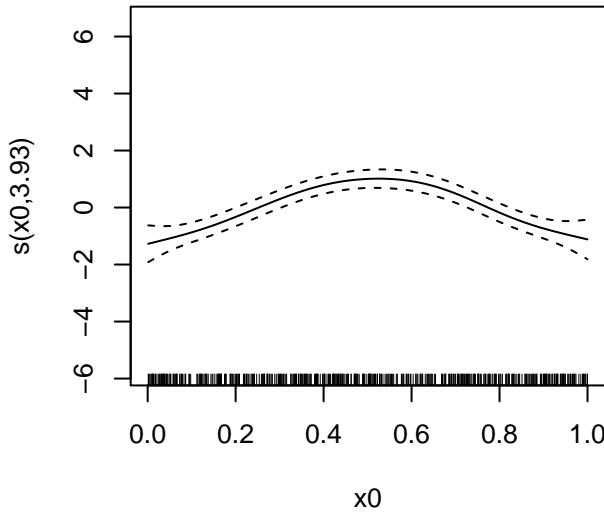
help("smooth.construct.bs.smooth.spec")



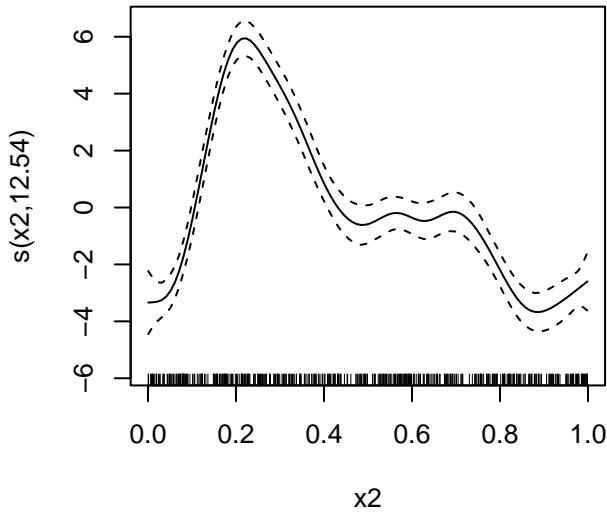
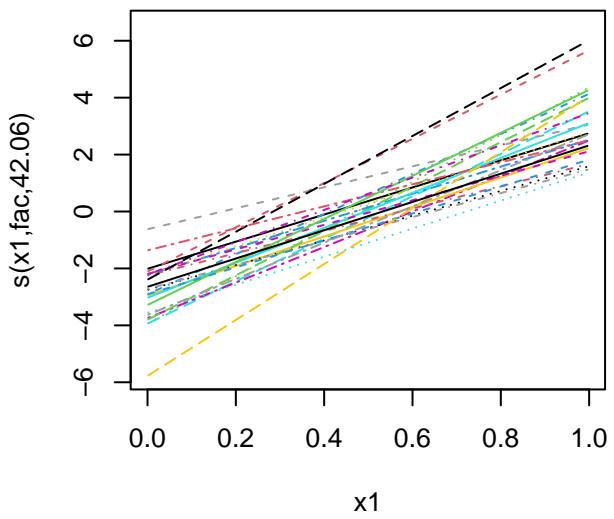
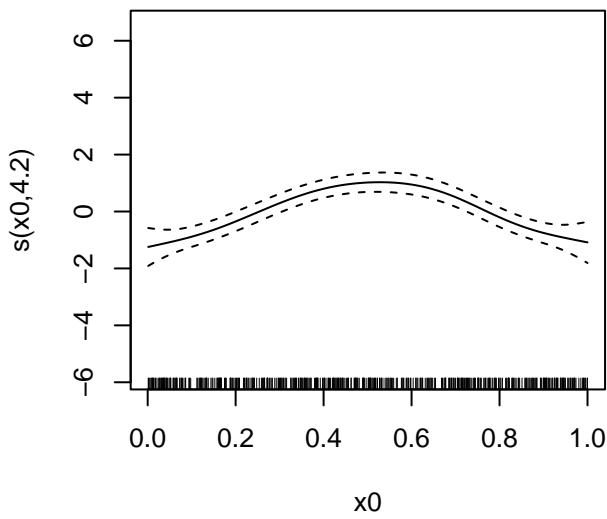
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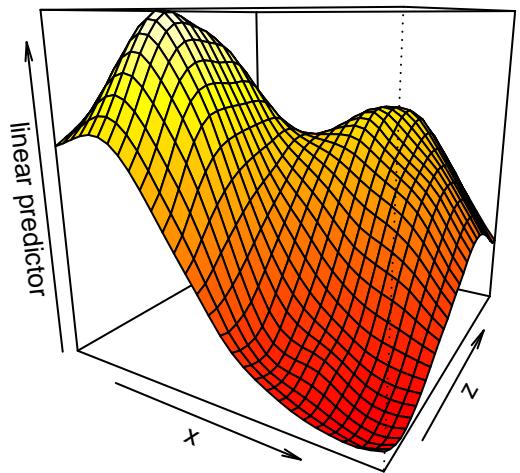
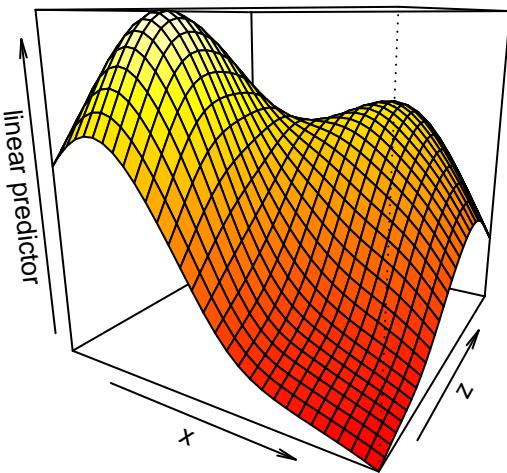
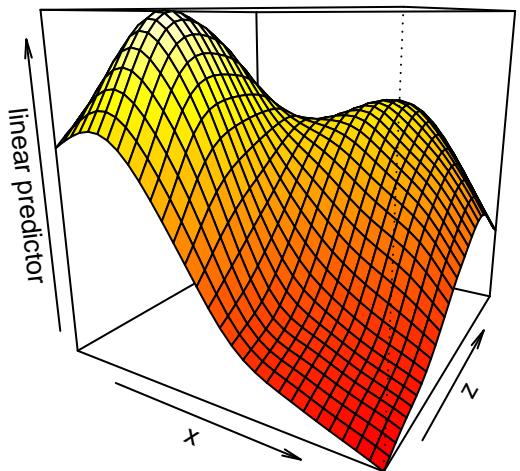
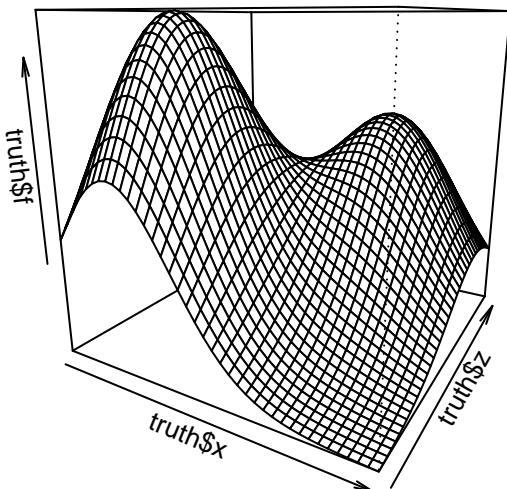
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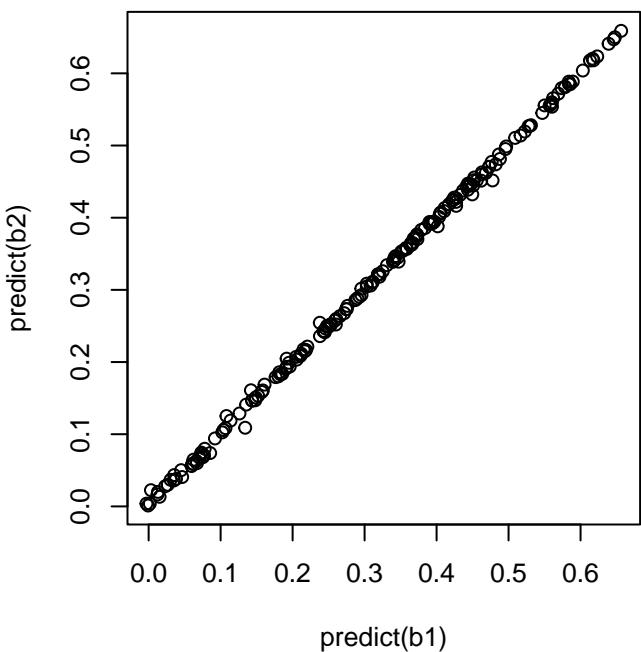
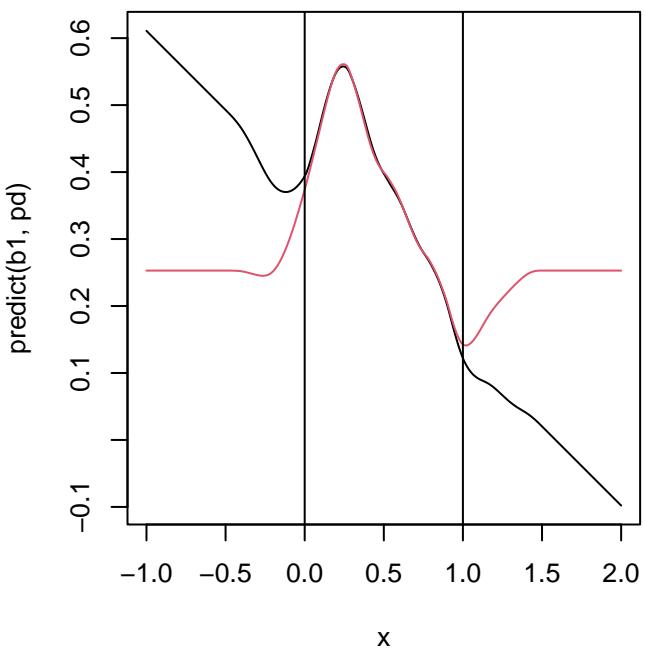
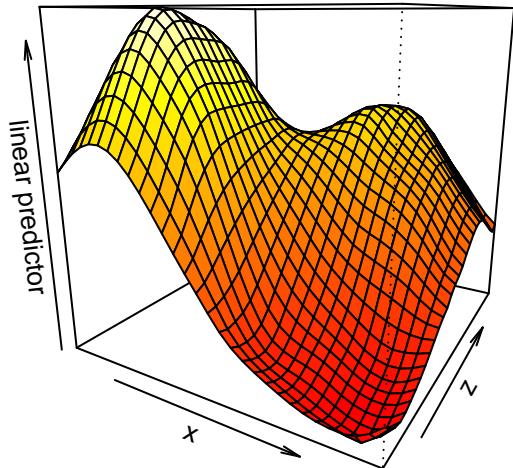
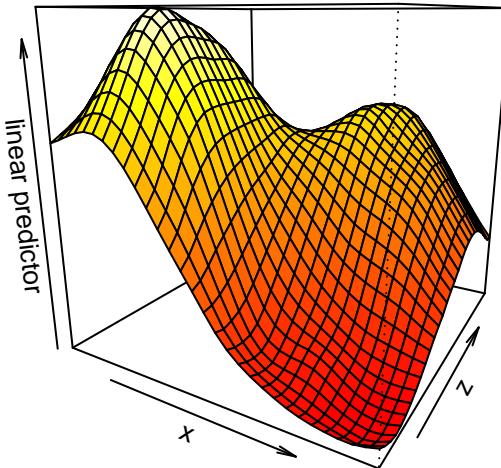
help("smooth.construct.fs.smooth.spec")



help("smooth.construct.fs.smooth.spec")



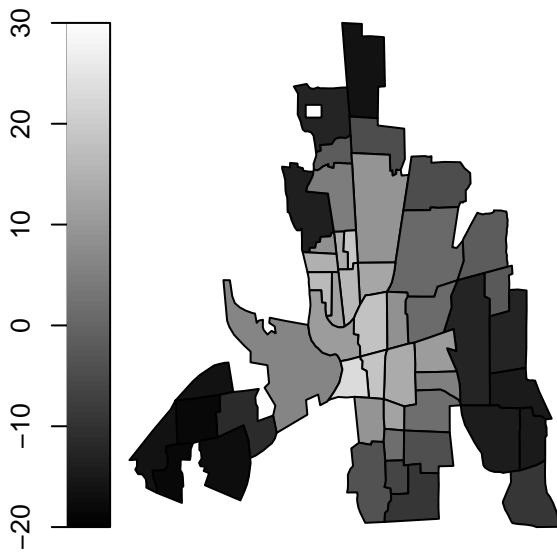
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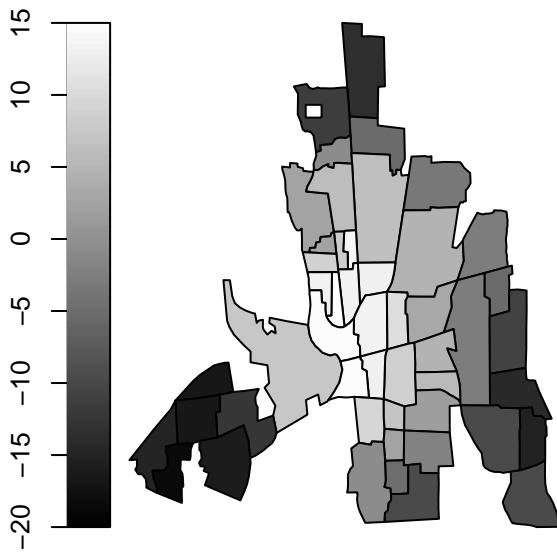
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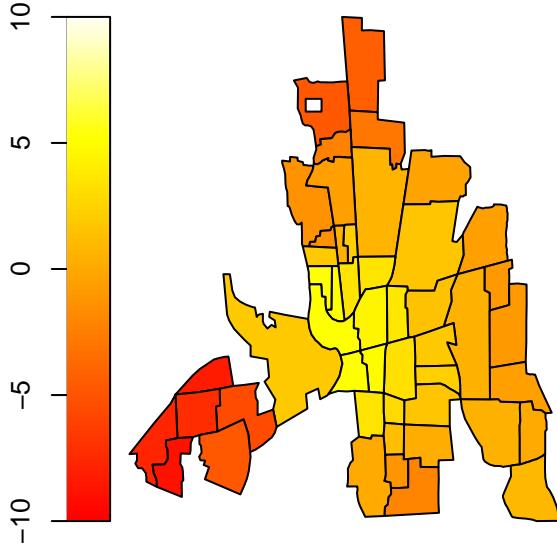
$s(\text{district}, 25.95)$



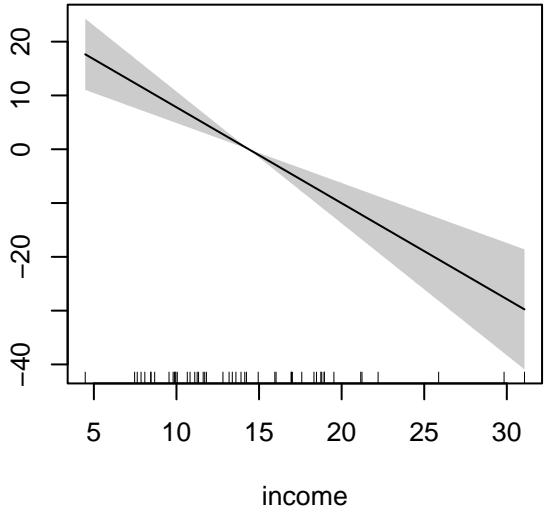
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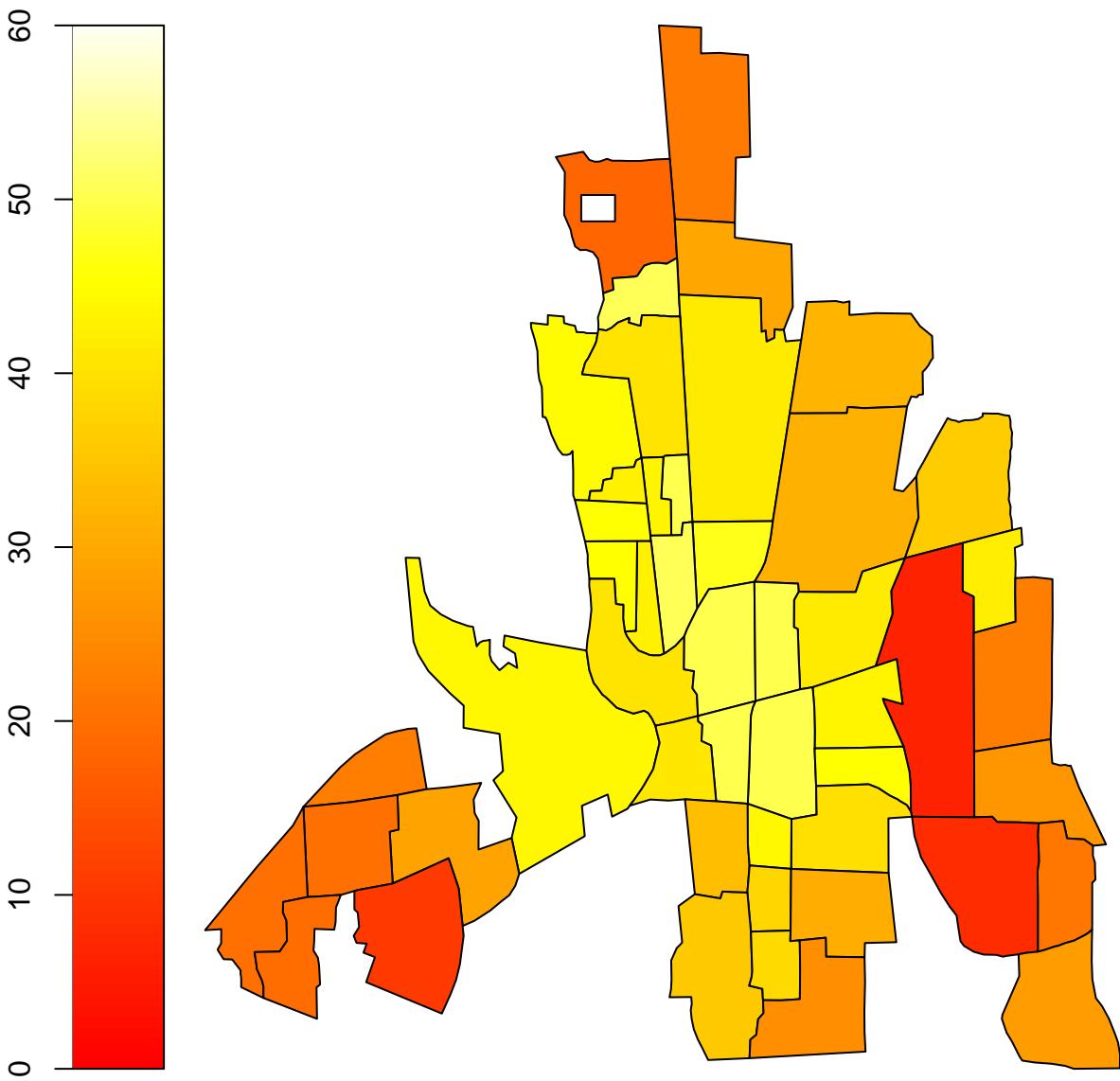


$s(\text{district}, 5.43)$



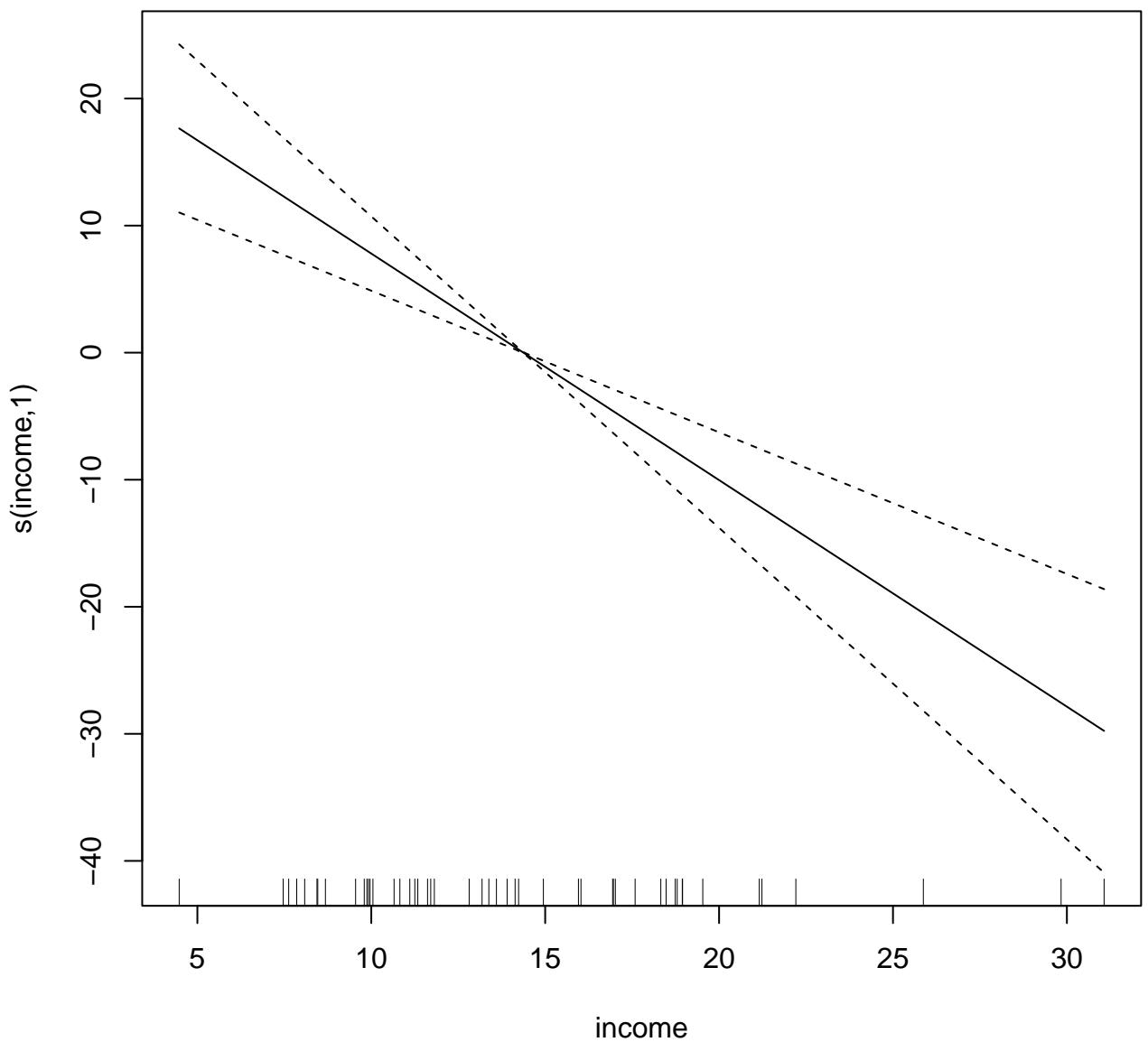
$s(\text{income}, 1)$



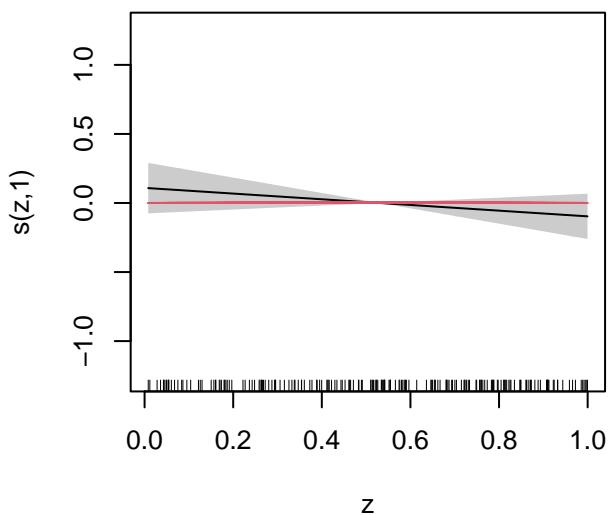
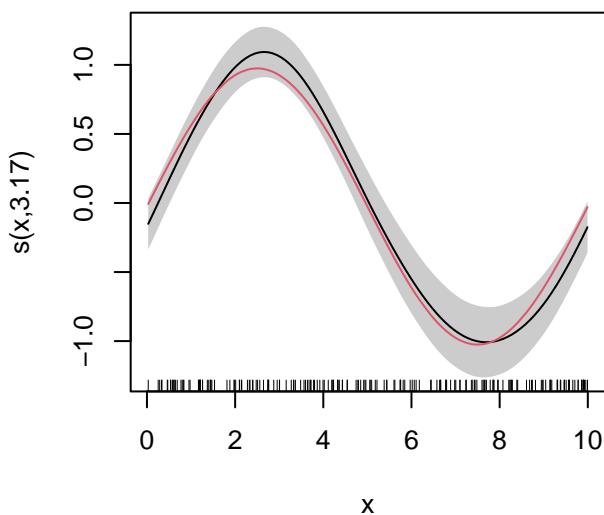
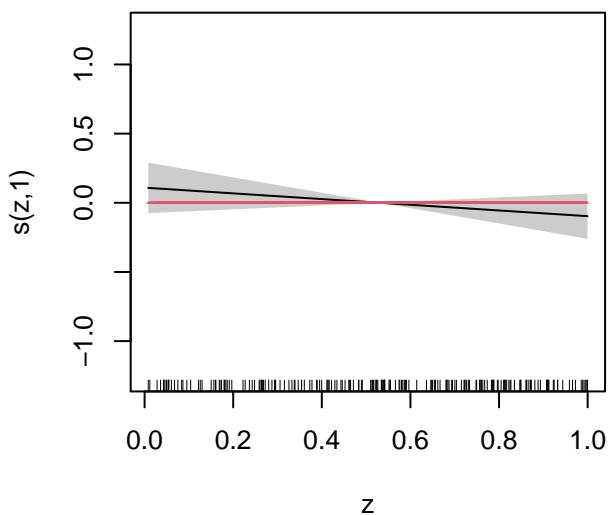
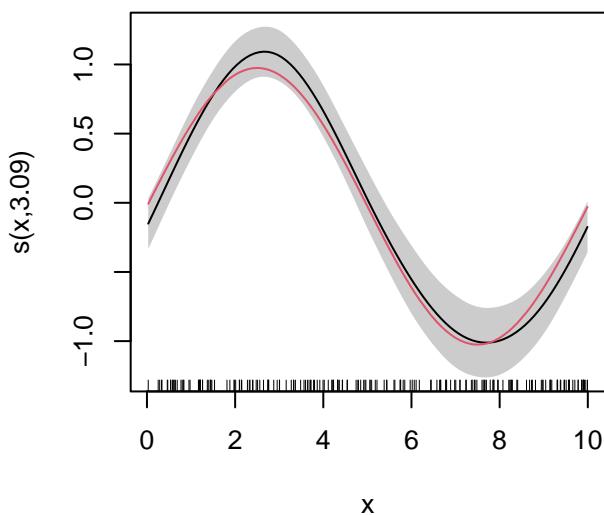


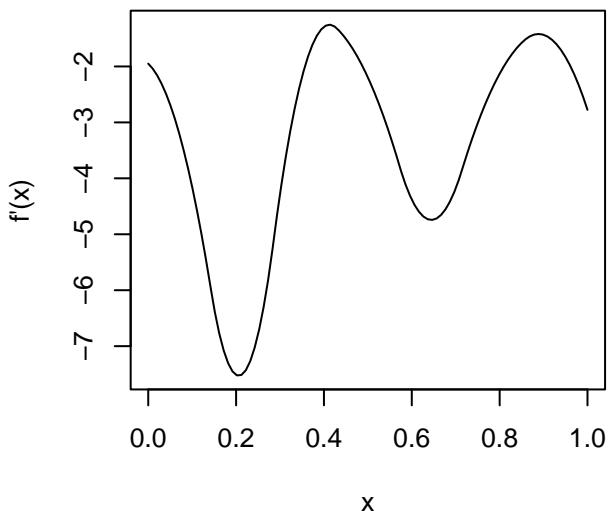
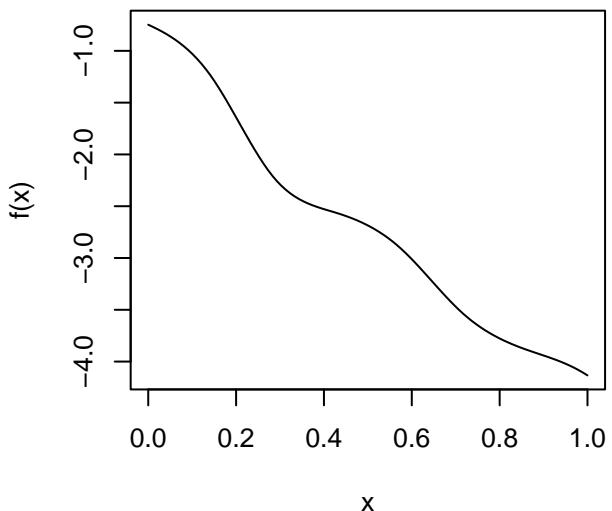
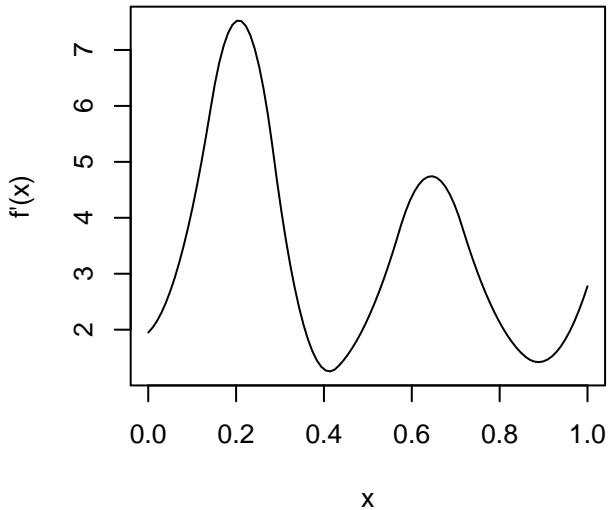
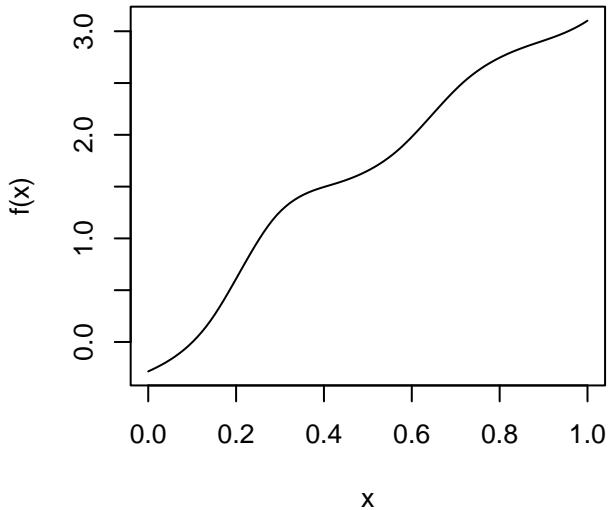
help("smooth.construct.mrf.smooth.spec")

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help("smooth.construct.mrf.smooth.spec")
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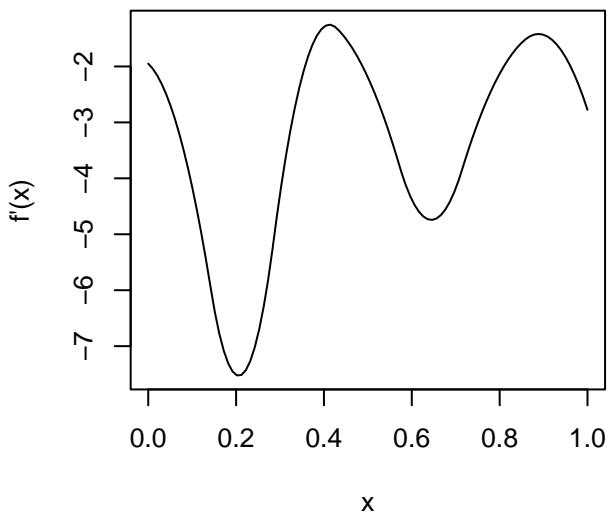
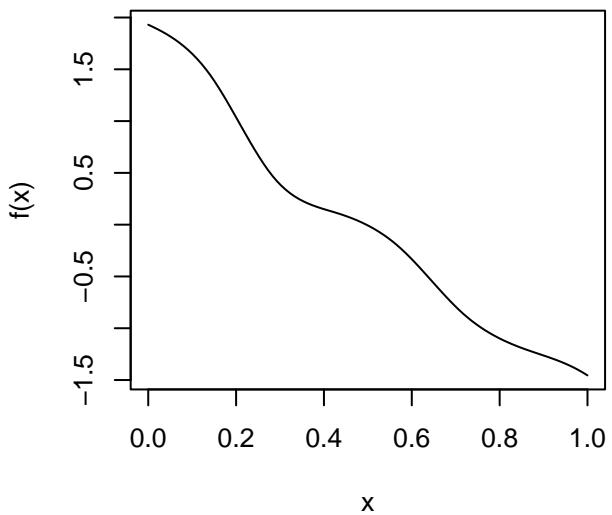
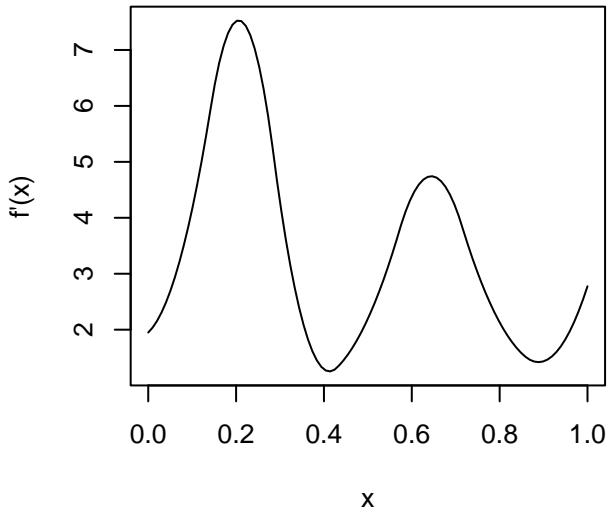
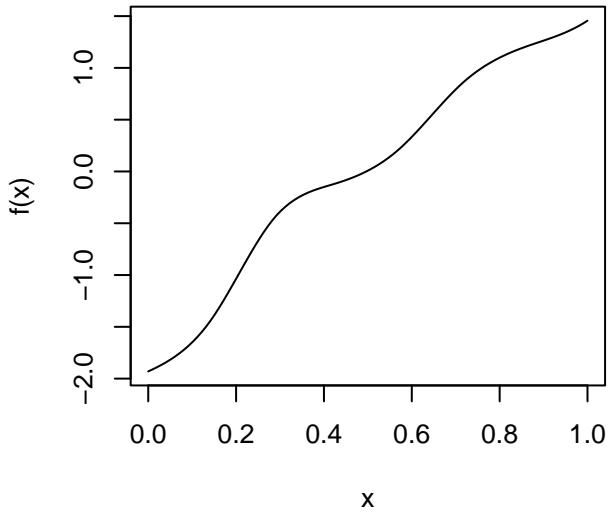


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help("smooth.construct.ps.smooth.spec")
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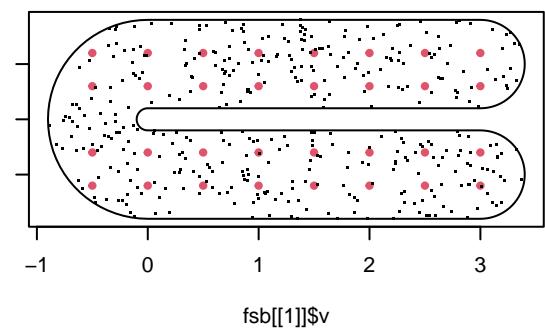


help("smooth.construct.ps.smooth.spec")

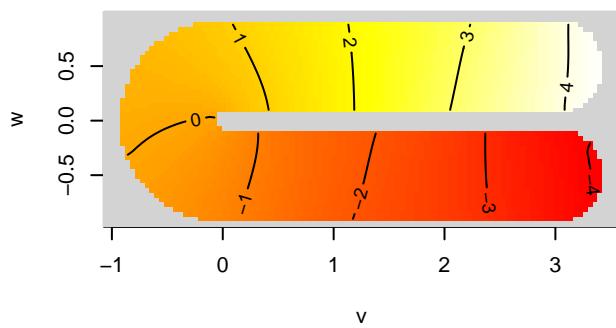


help("smooth.construct.ps.smooth.spec")

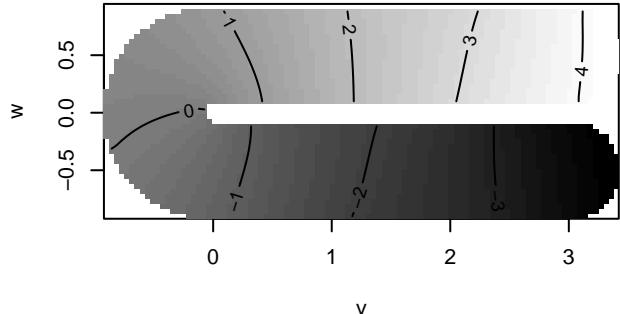
fsb[[1]]\$w



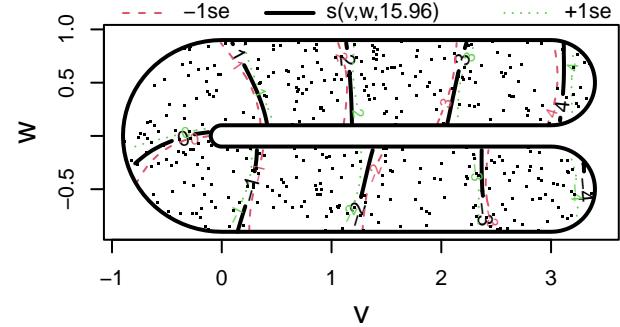
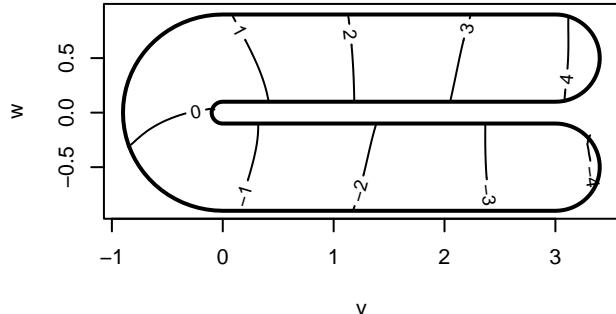
$s(v, w, 15.96)$



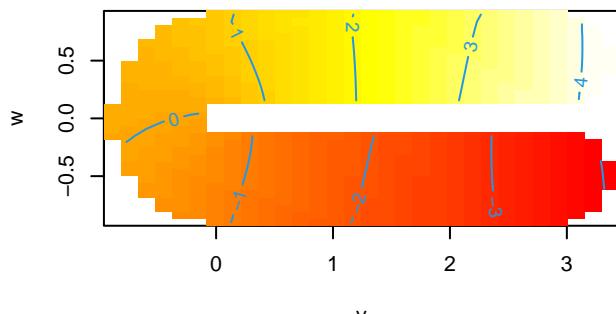
$s(v, w, 15.96)$



$s(v, w, 15.96)$

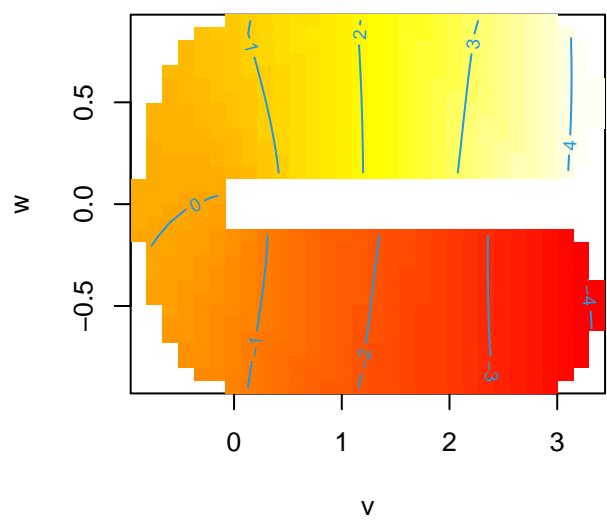


linear predictor

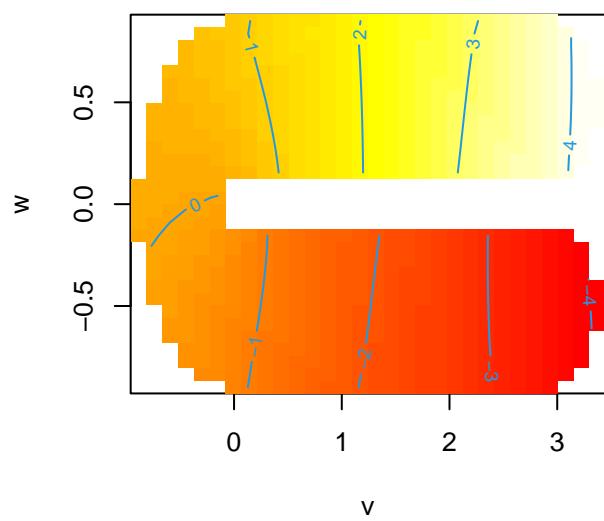


help("smooth.construct.smooth.spec")

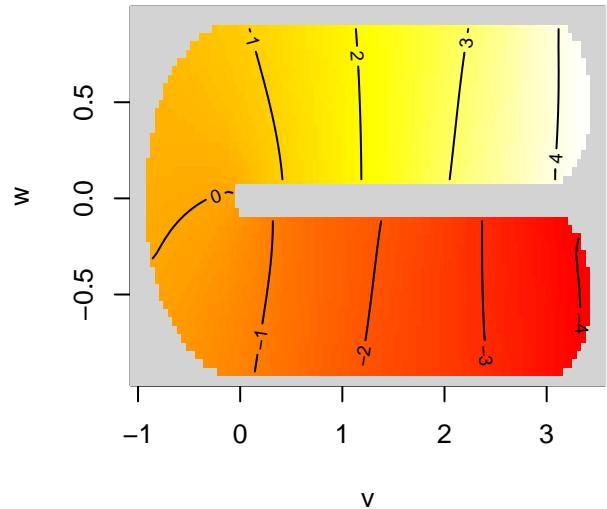
**linear predictor**



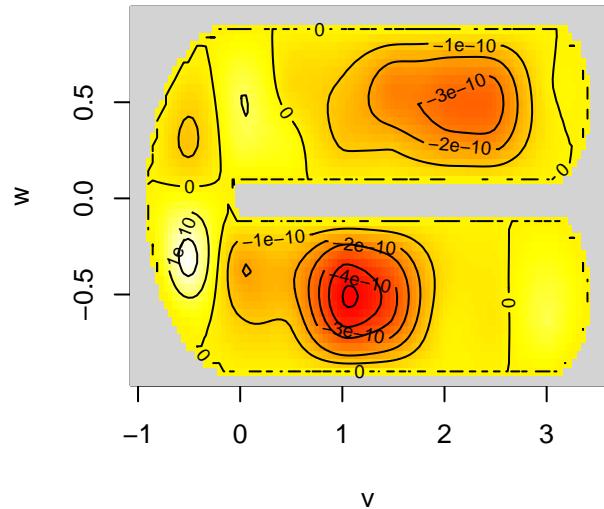
**linear predictor**



**$s(v,w,15.96)$**

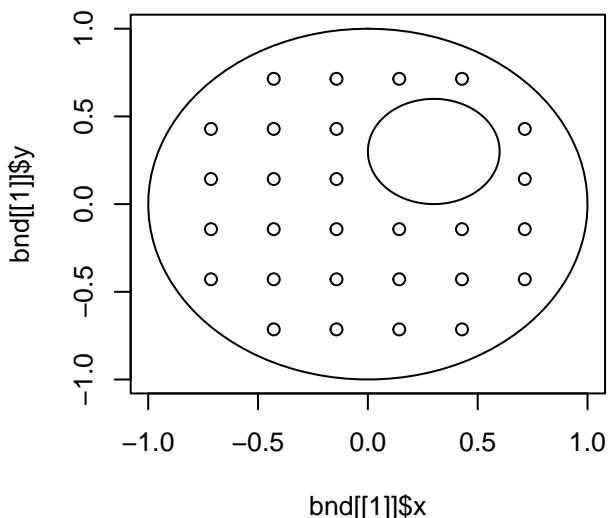
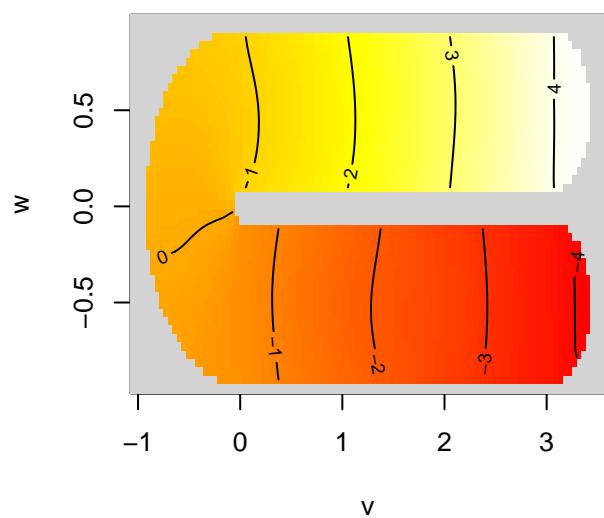


**$s(v,w,0)$**



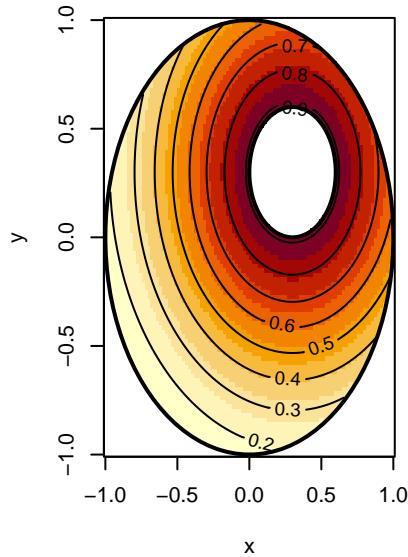
help("smooth.construct.smooth.spec")

$s(v, w, 8.4)$

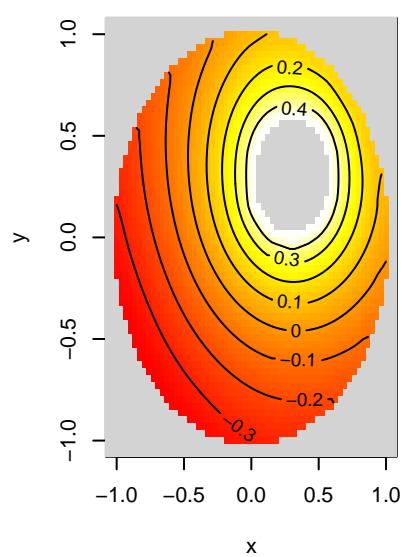


help("smooth.construct.so.smooth.spec")

$s(x,y,5.88)$

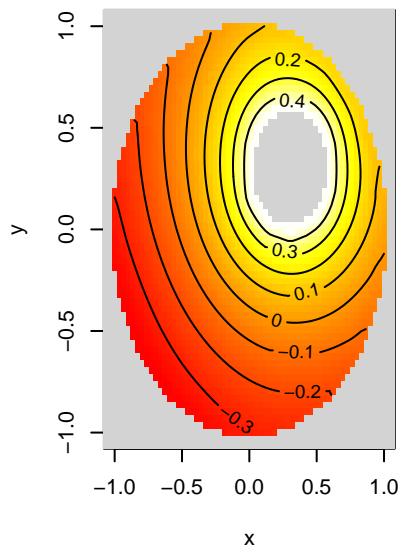


linear predictor

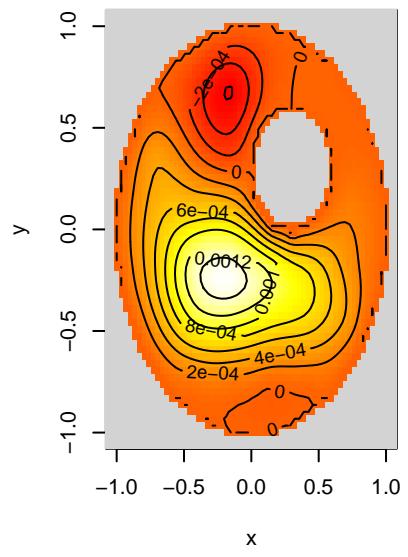


help("smooth.construct.smooth.spec")

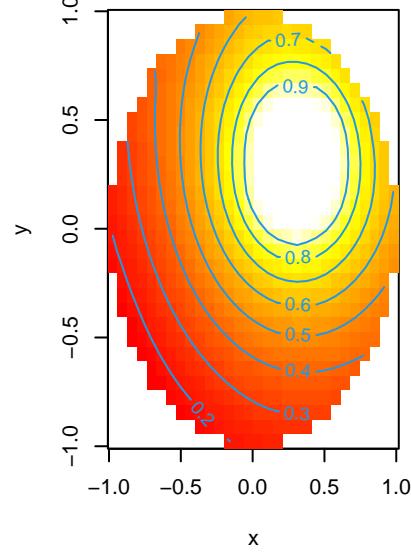
$s(x,y,5.73)$

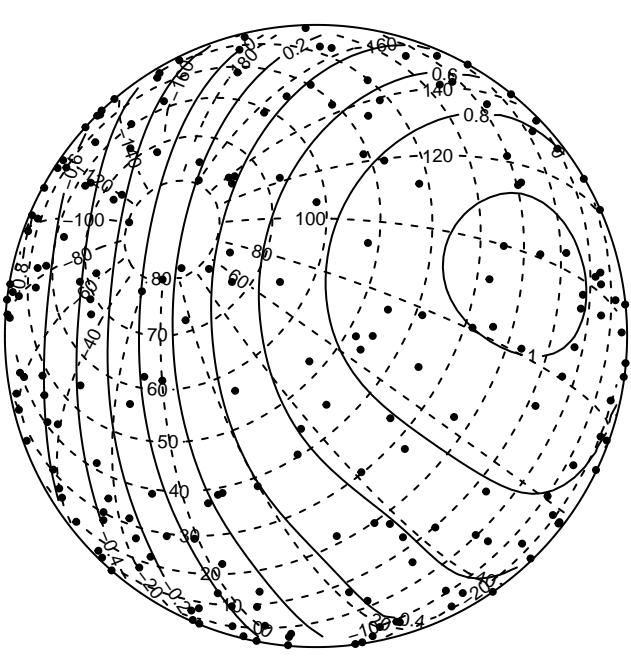
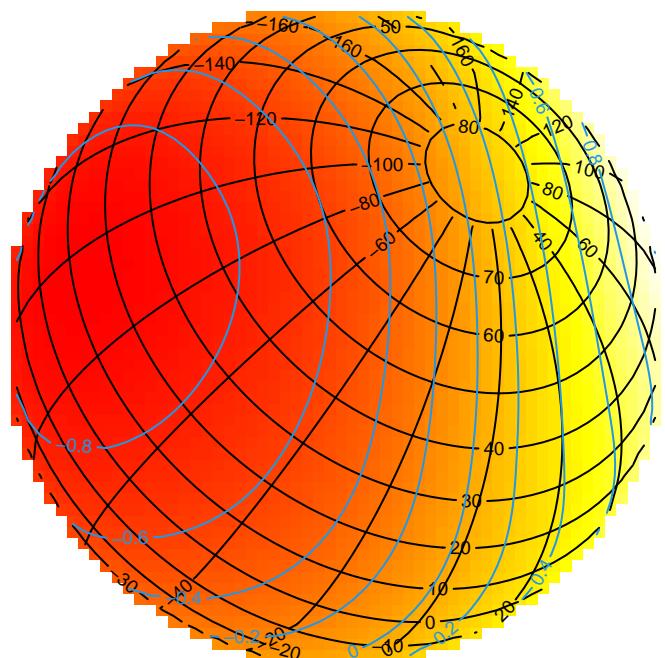
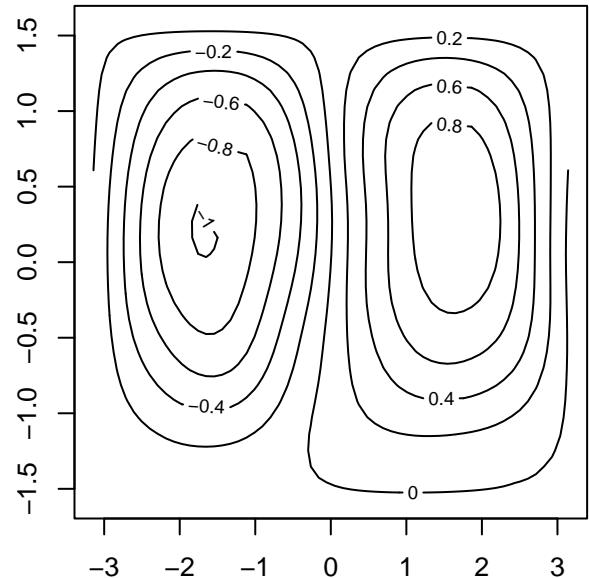
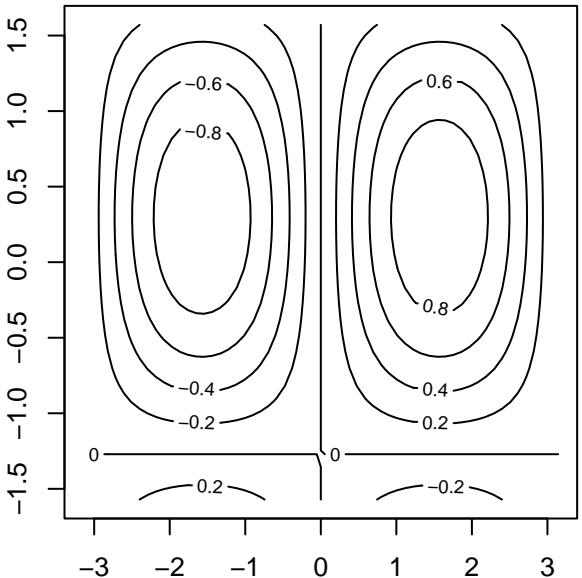


$s(x,y,0.15)$



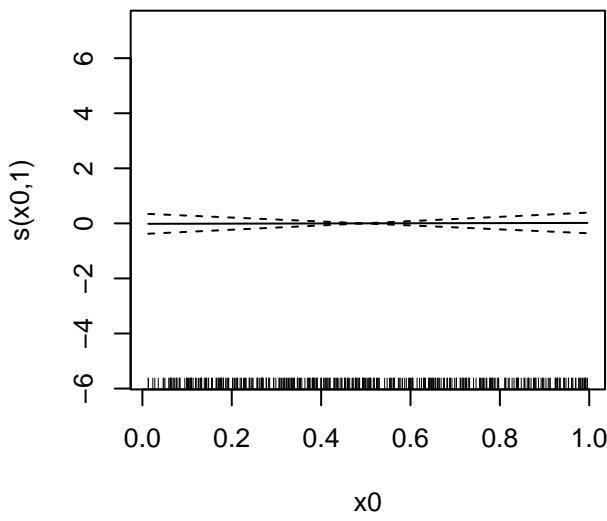
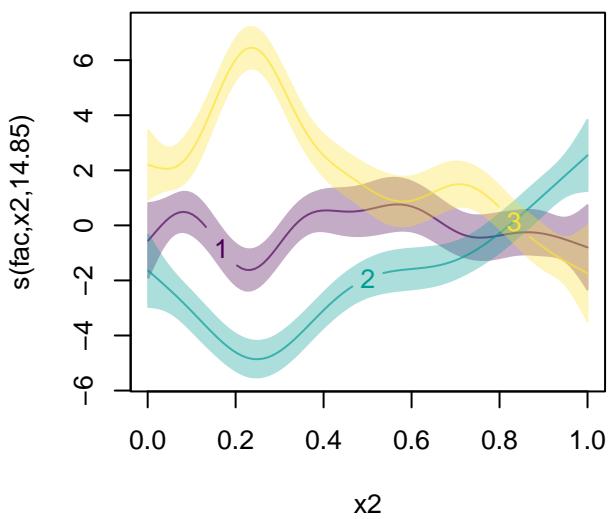
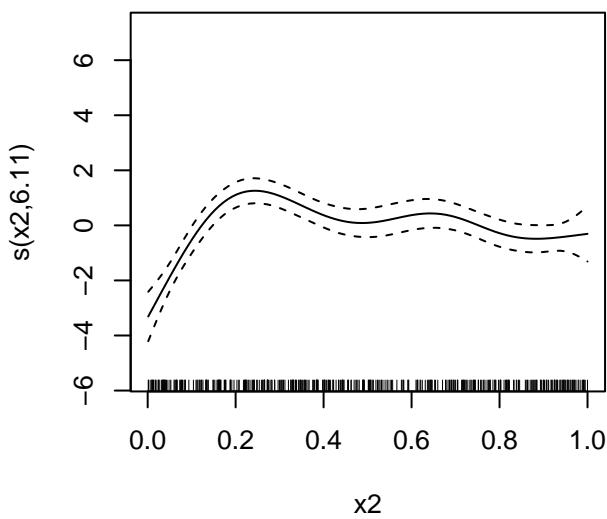
linear predictor



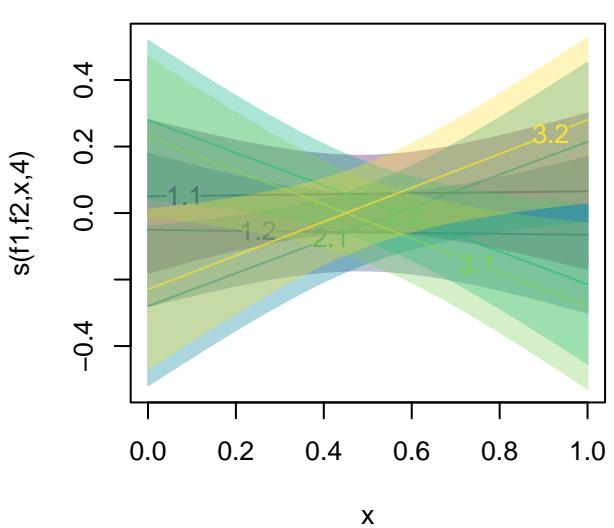
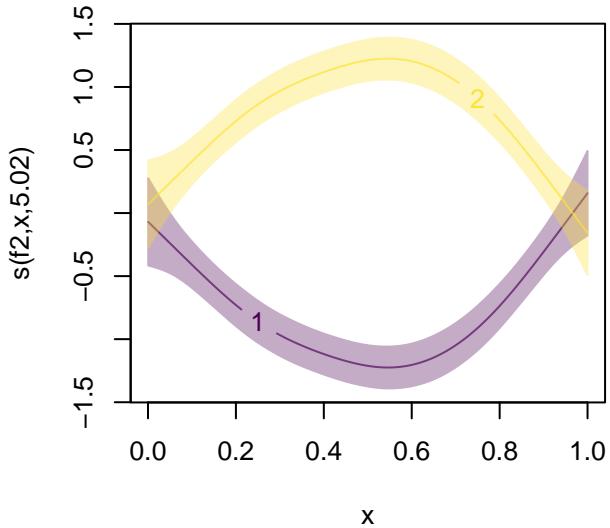
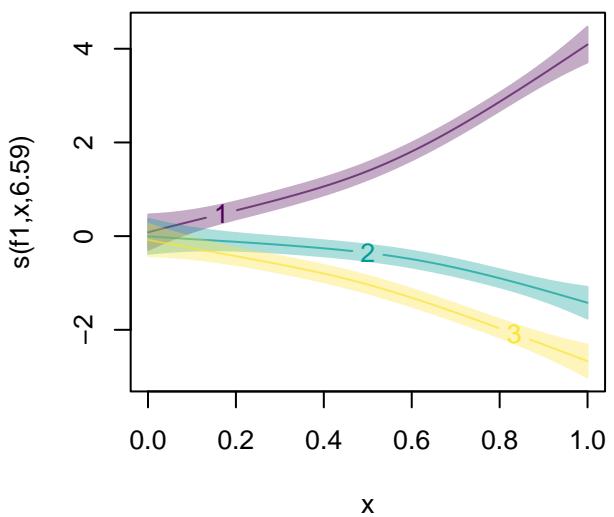
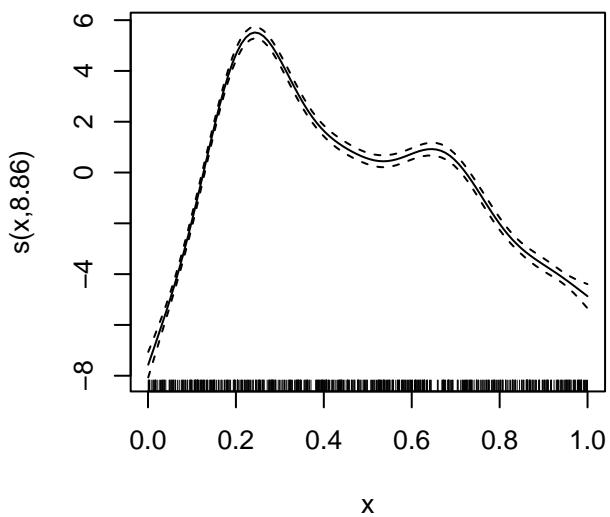


help("smooth.construct.sos.smooth.spec")

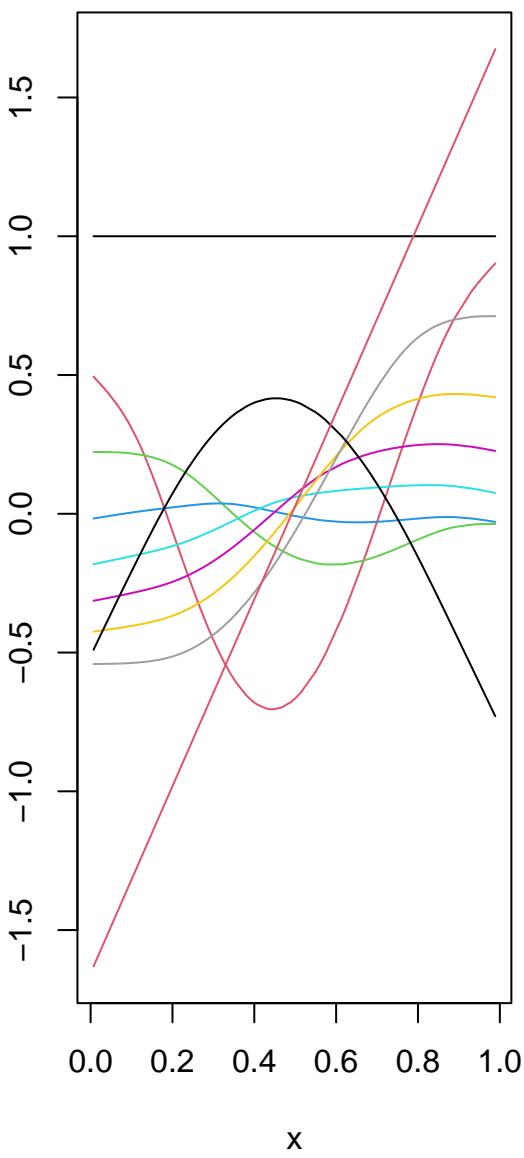
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help("smooth.construct.sz.smooth.spec")
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`help("smooth.construct.sz.smooth.spec")`

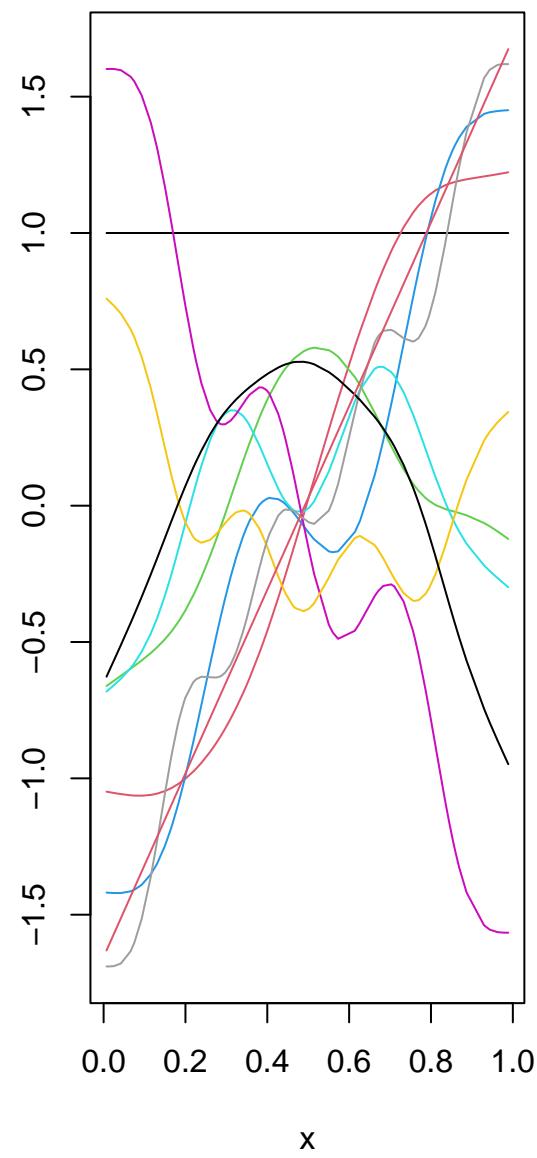


$x[1]$



$x$

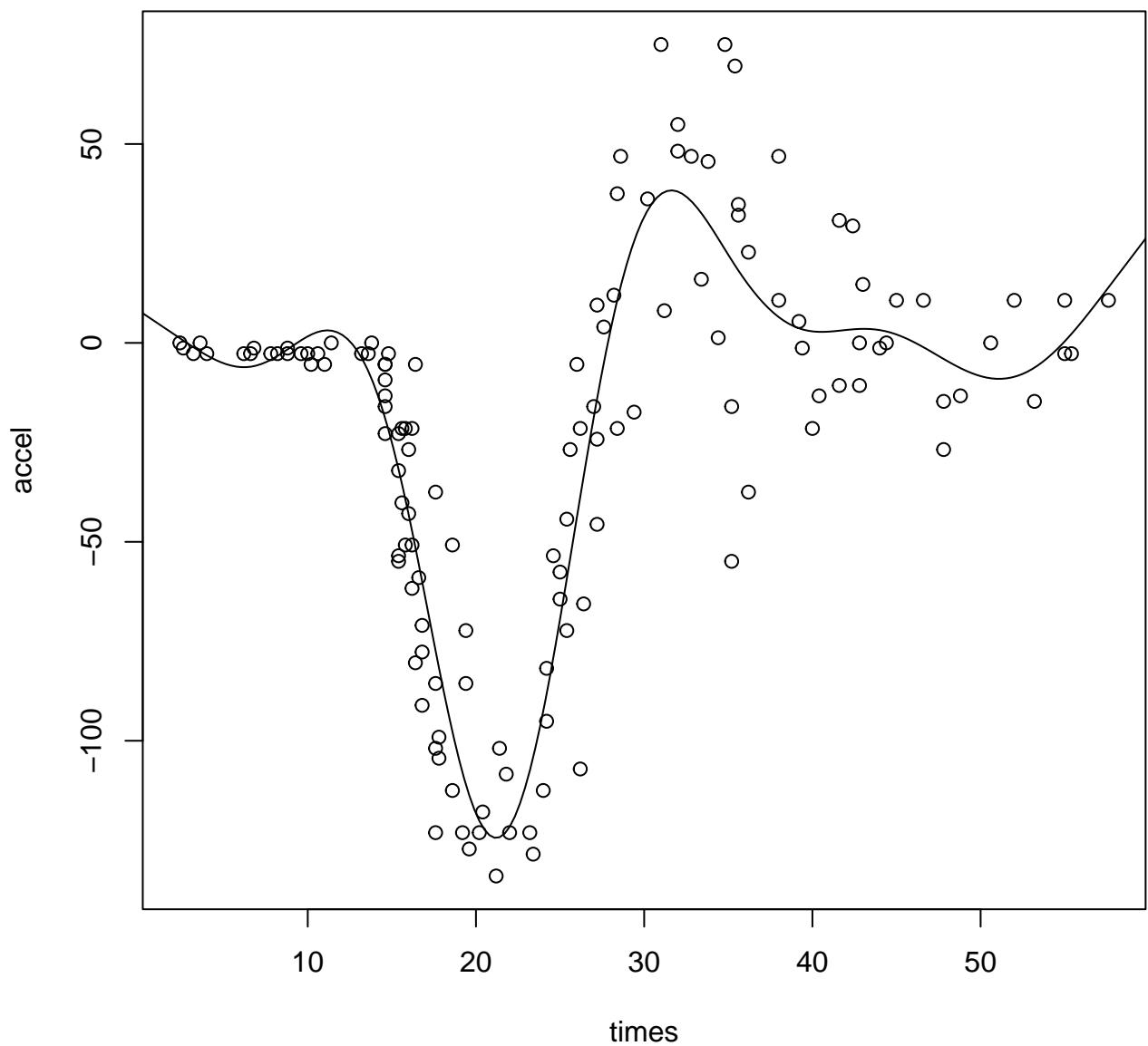
$x[1]$



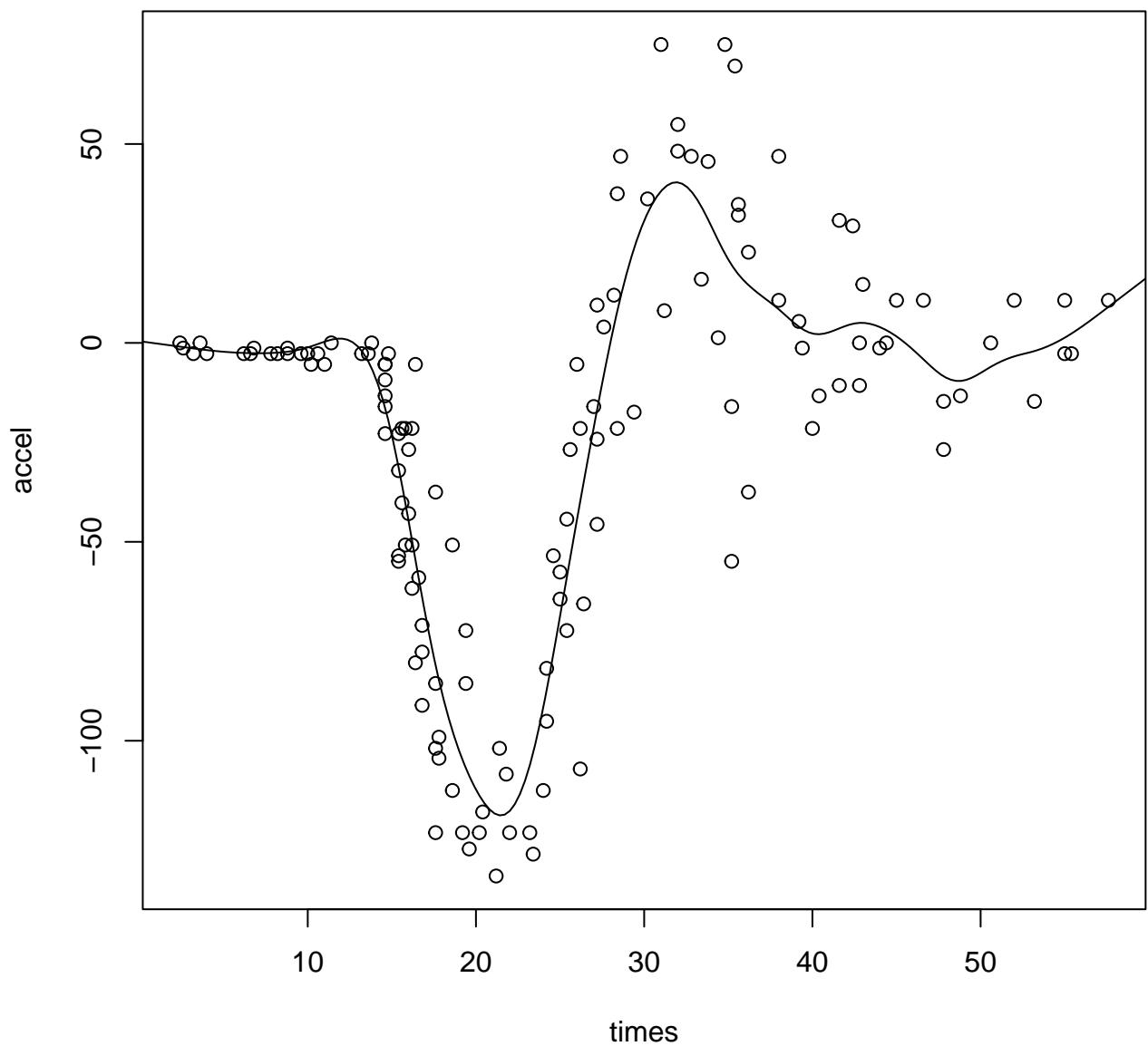
$x$

help("smooth.construct.tp.smooth.spec")

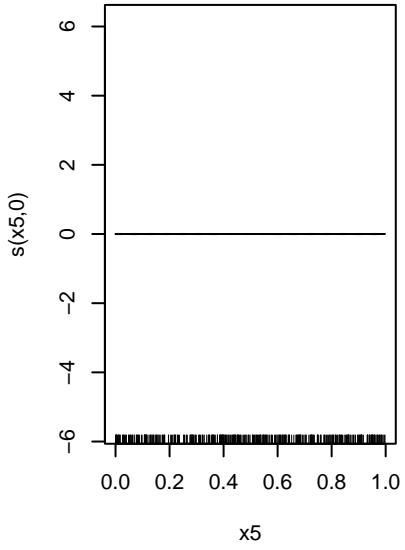
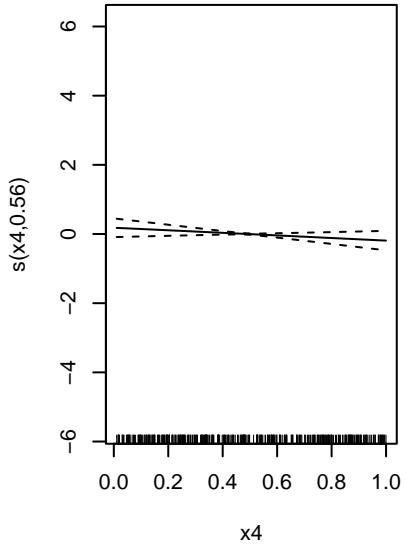
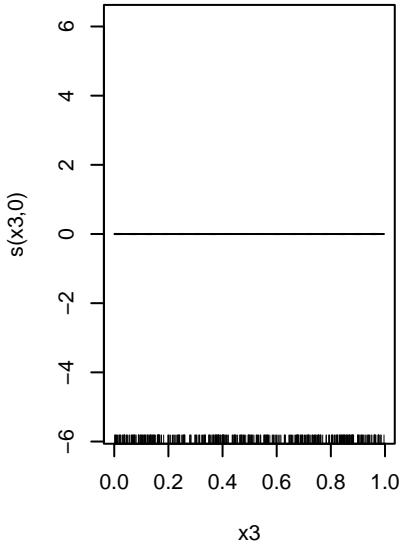
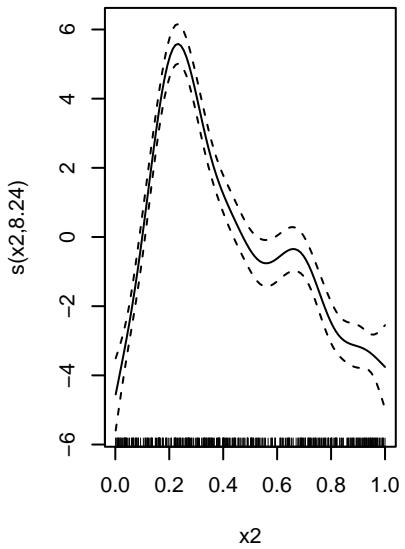
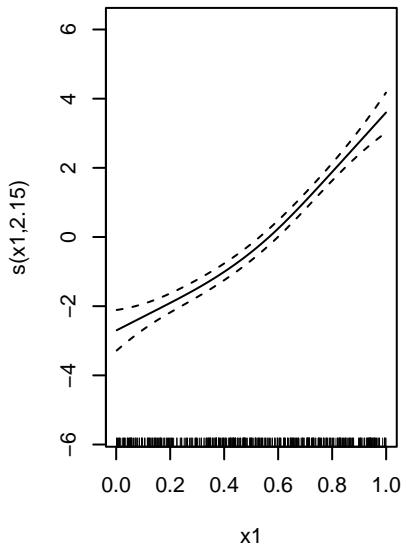
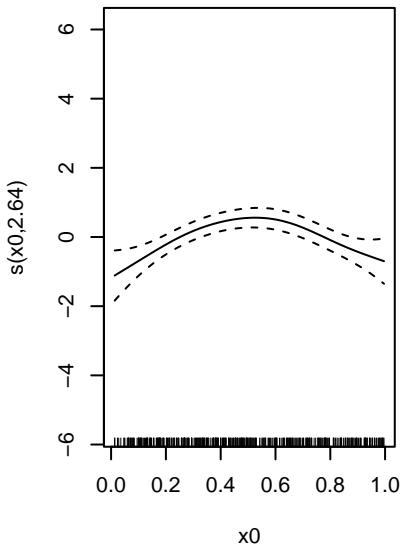
help("smoothCon")



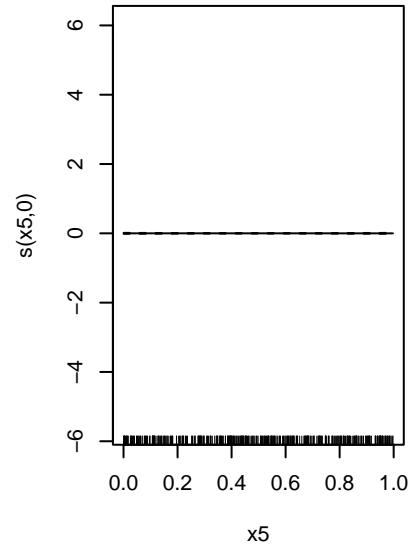
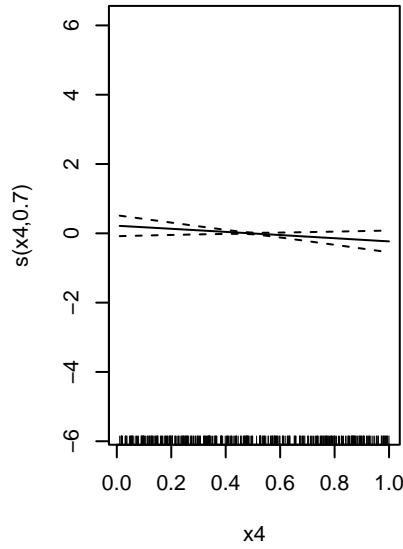
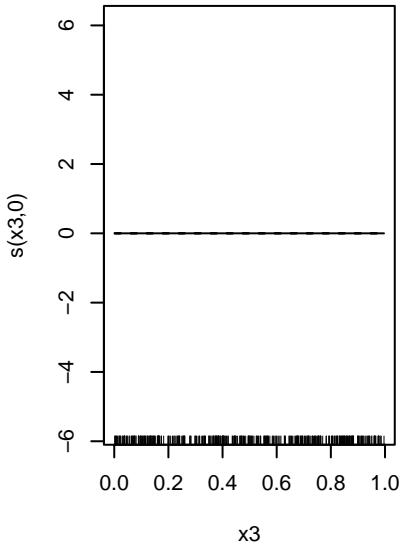
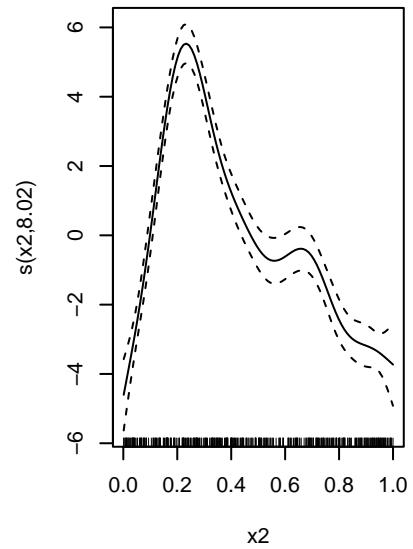
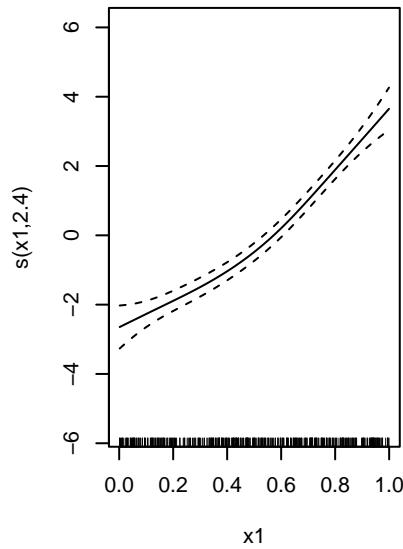
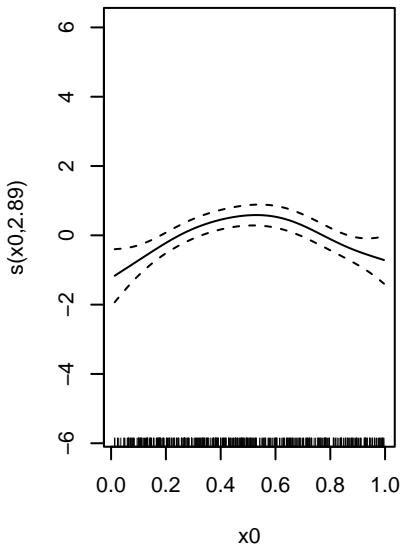
help("smoothCon")



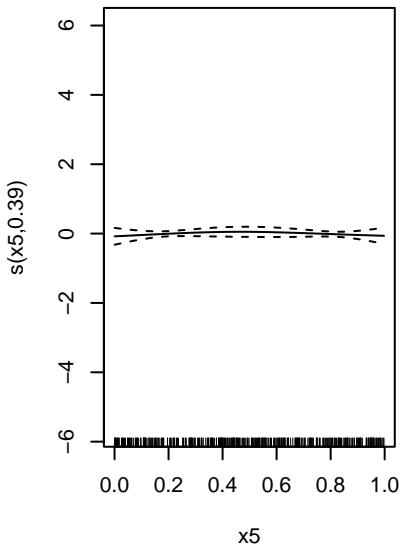
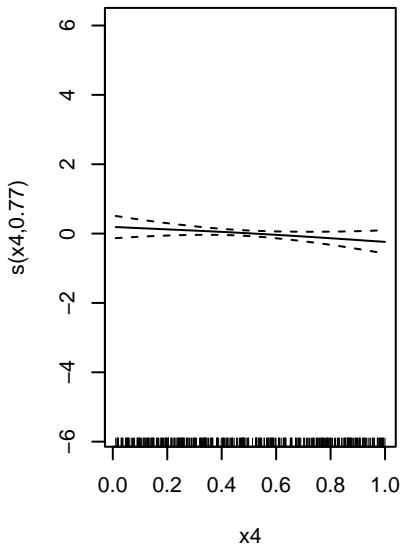
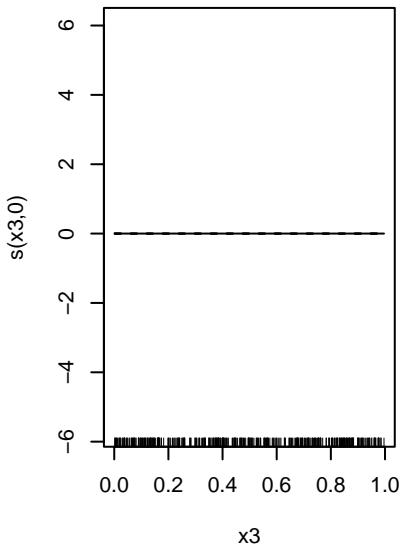
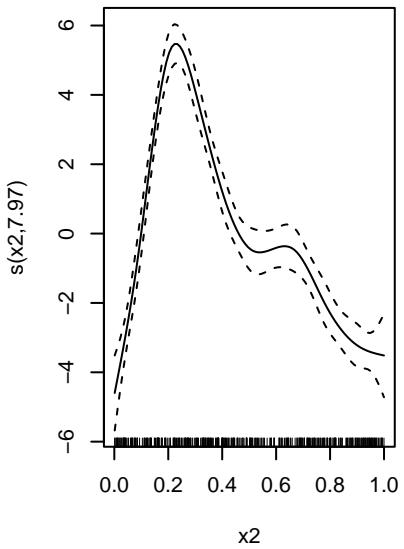
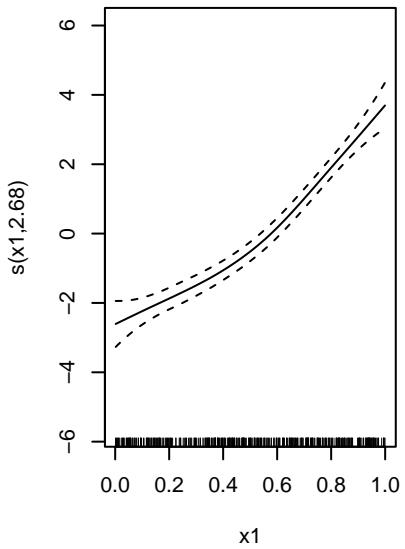
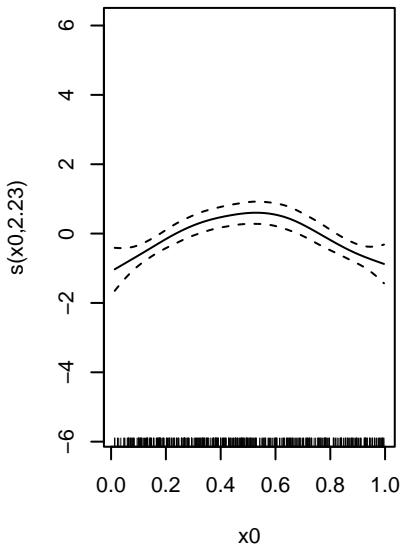
help("step.gam")



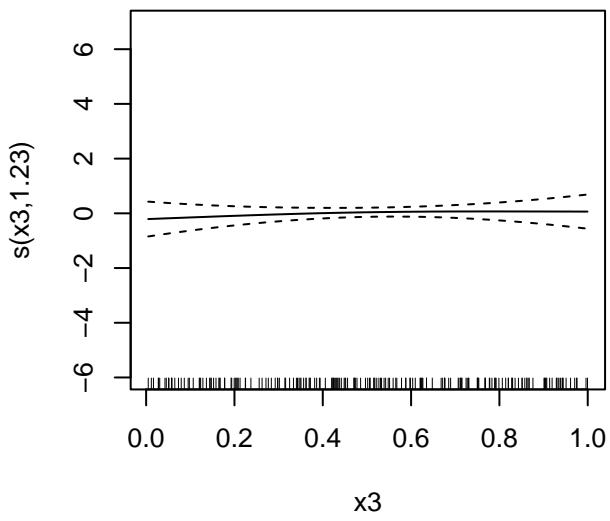
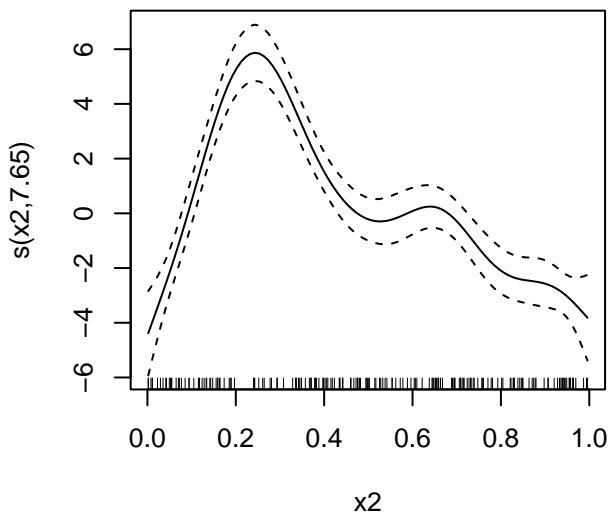
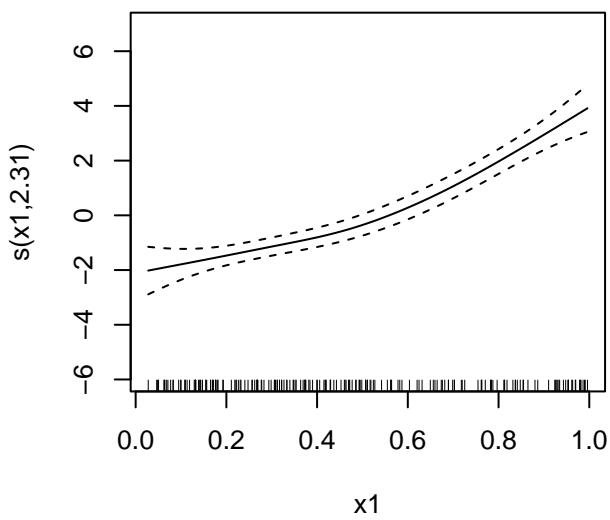
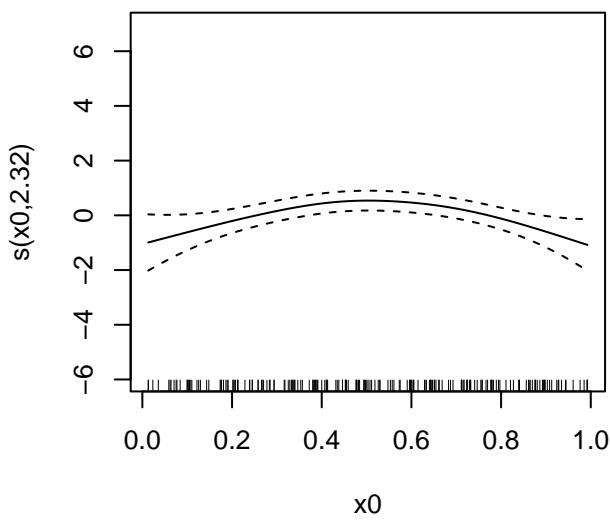
help("step.gam")



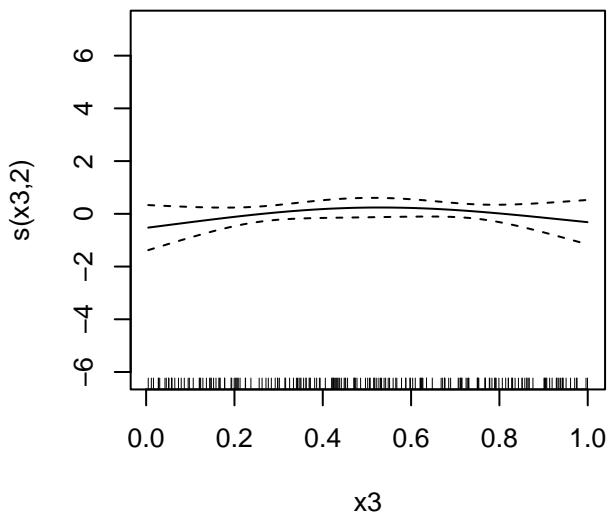
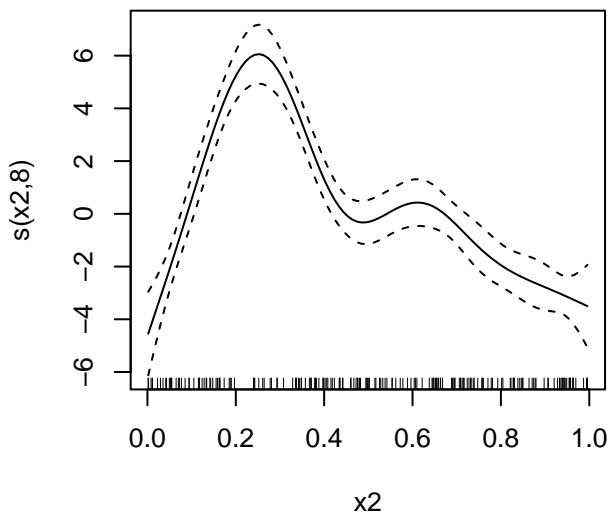
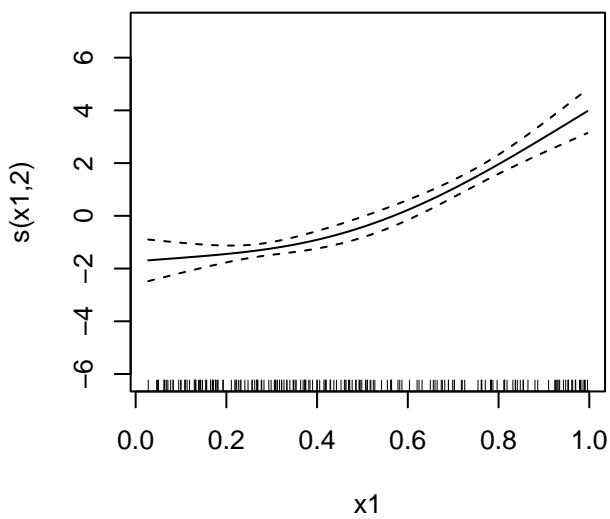
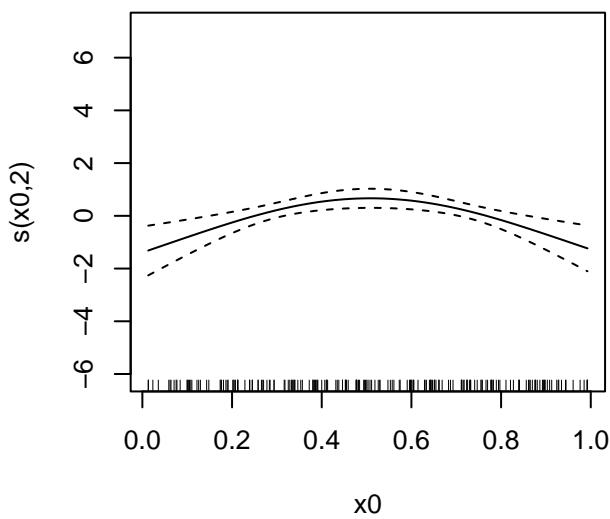
help("step.gam")



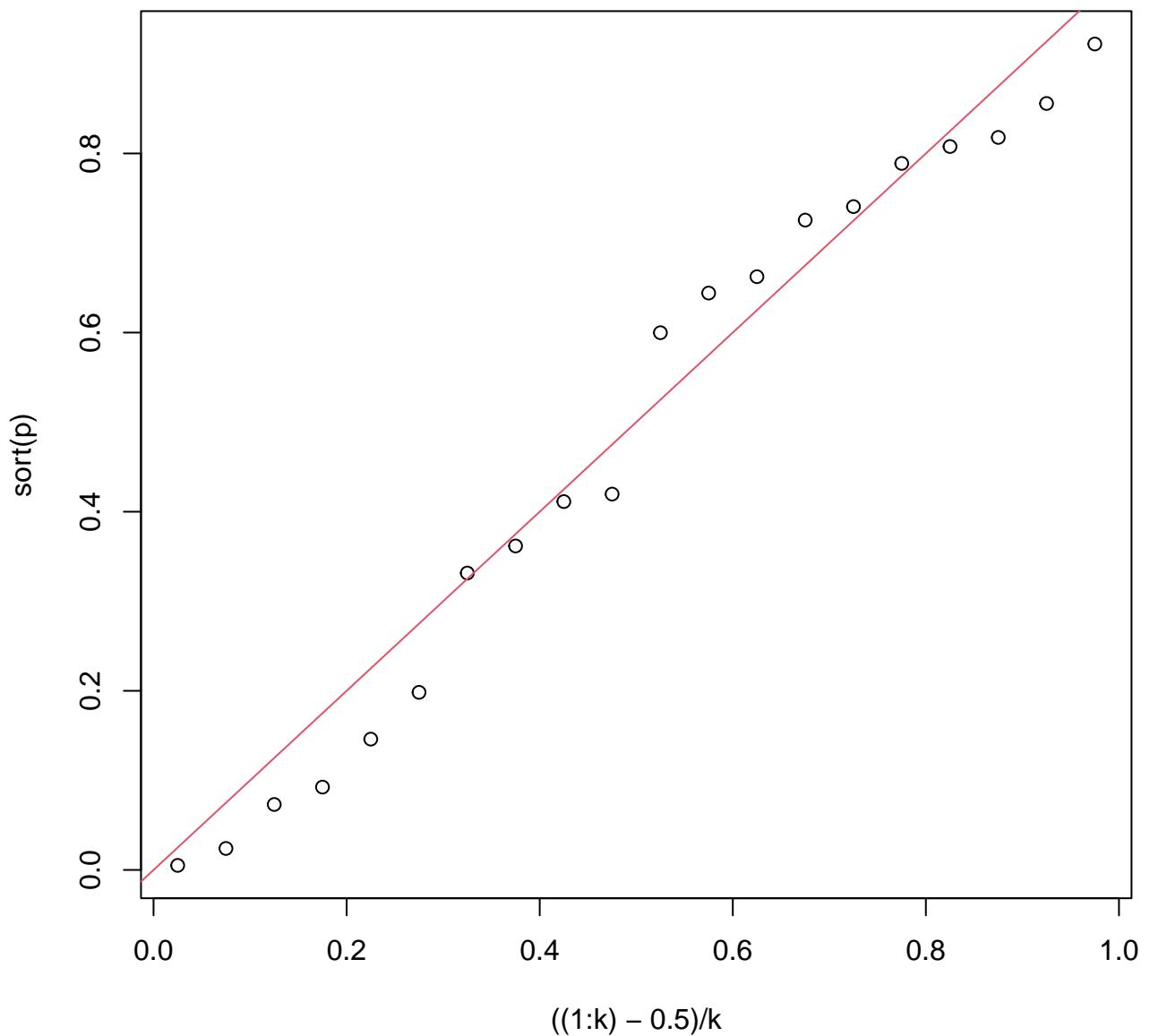
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help("summary.gam")
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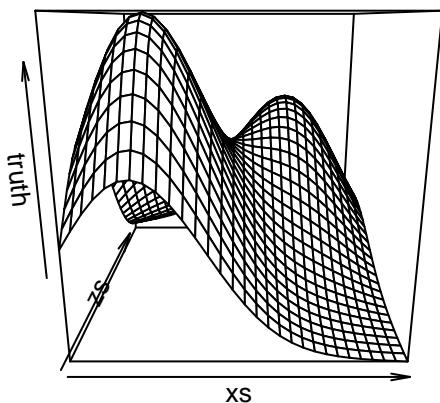
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help("summary.gam")
```



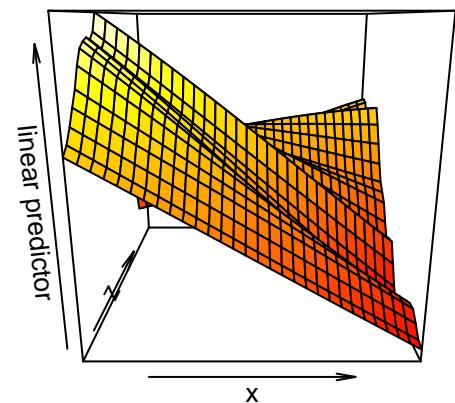
help("summary.gam")



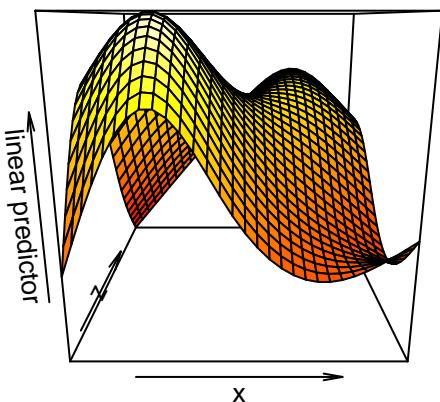
**truth**



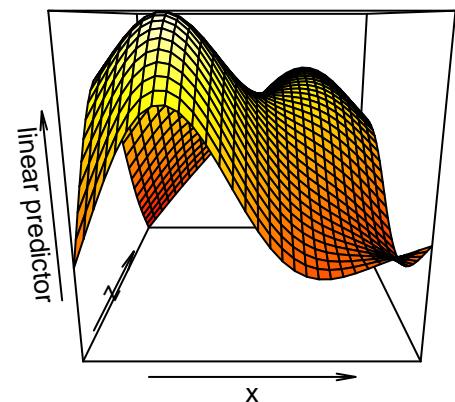
**t.p.r.s**



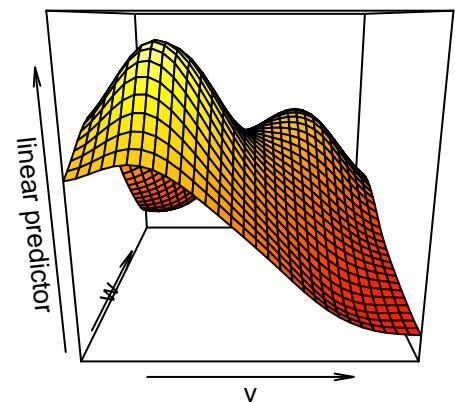
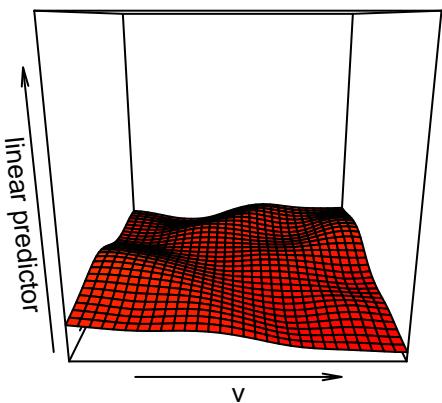
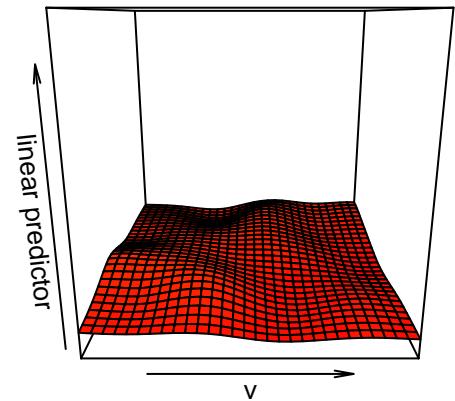
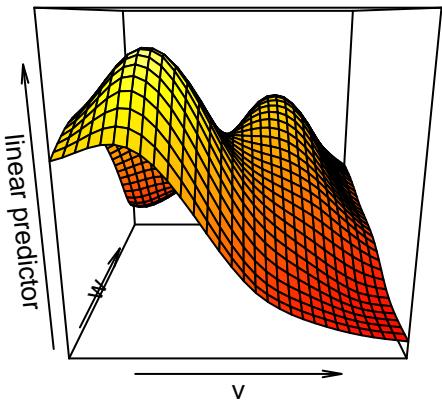
**tensor product**



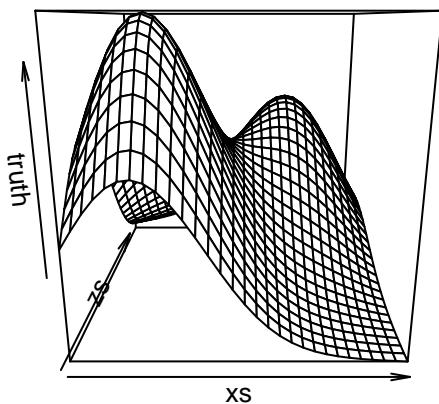
**tensor product**



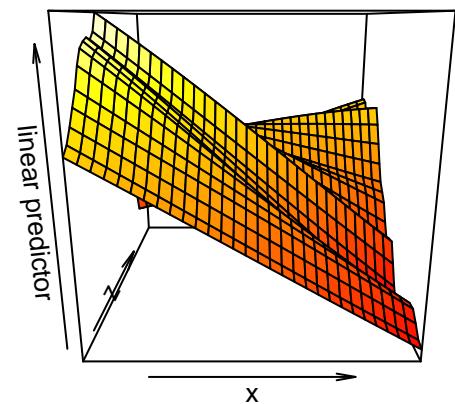
$\text{label}(z_n)$



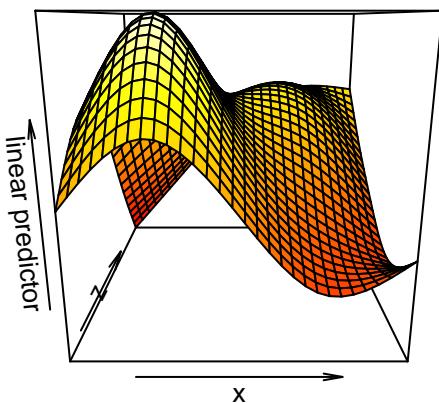
**truth**



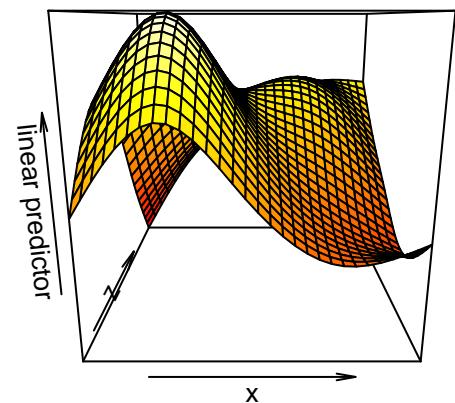
**t.p.r.s**



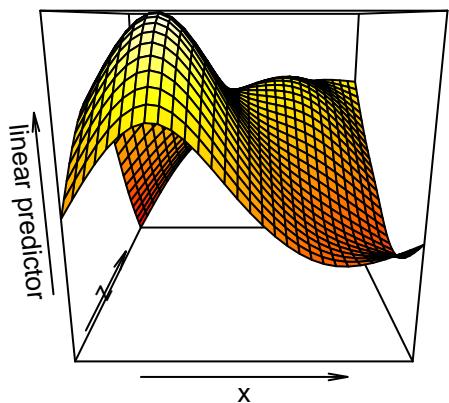
**tensor product**



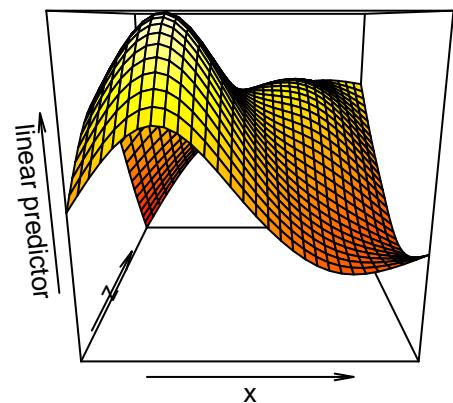
**tensor anova**



**full anova**

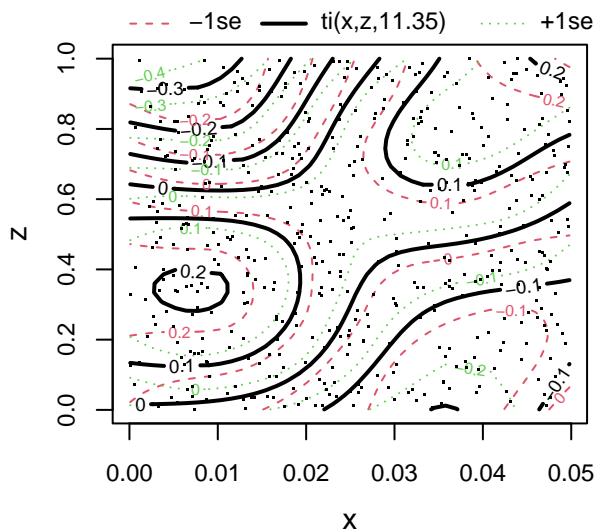
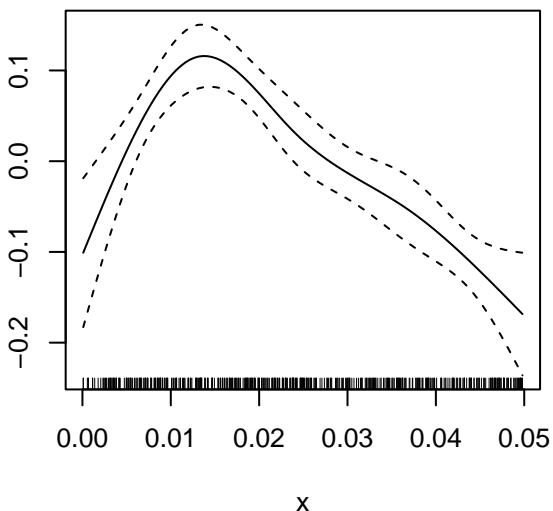


**partial anova**



help("te")

$ti(x, 3.74)$

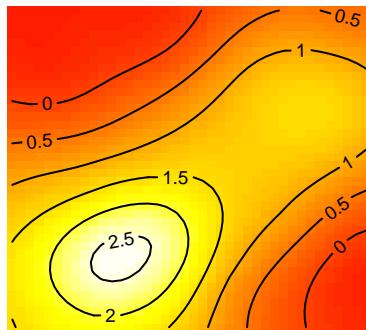
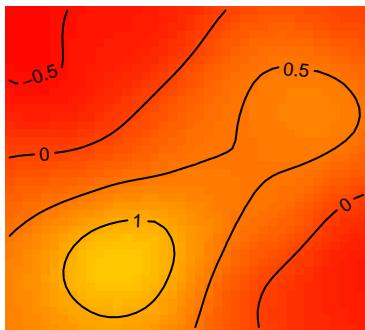
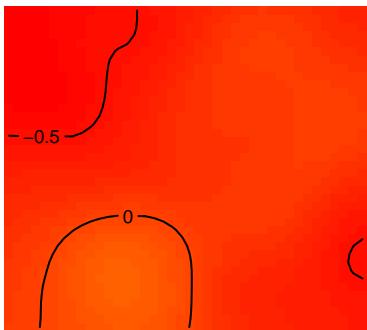


$u \rightarrow$ 

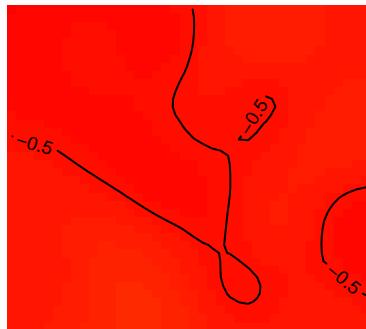
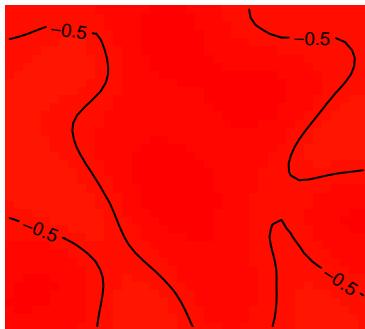
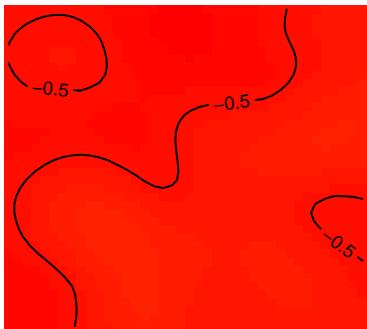
0.75

0.87

1.00

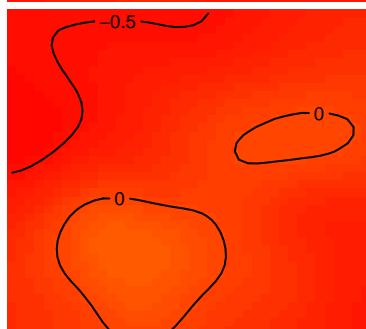
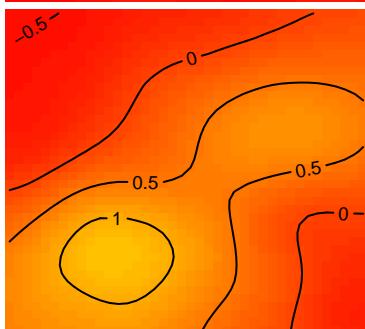
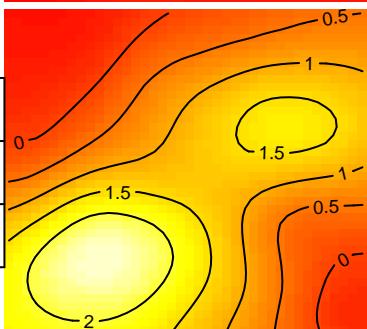
 $te(vwu, 80.07)$  $v$ 0.2  
0.4  
0.6  
0.8

0.2 0.4 0.6 0.8

 $w$ 

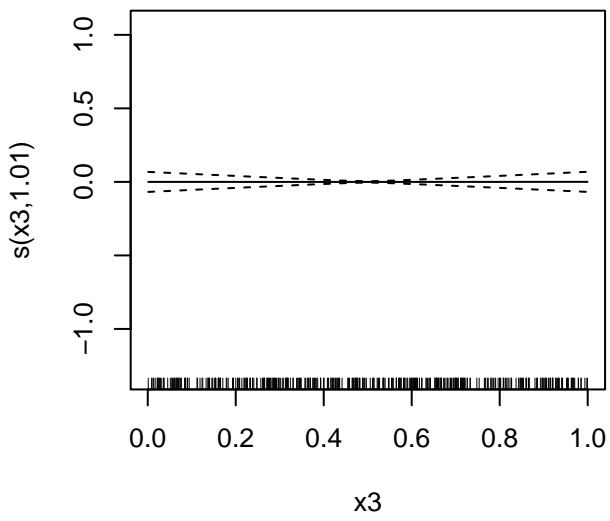
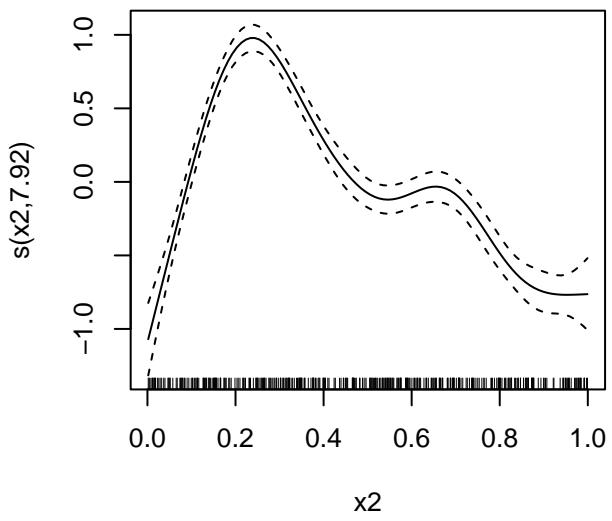
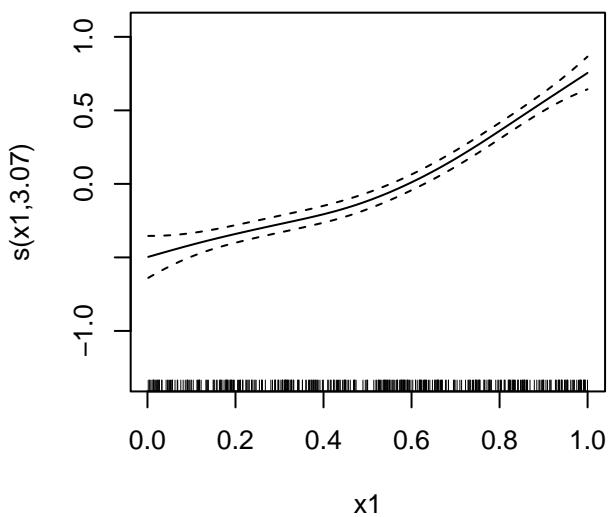
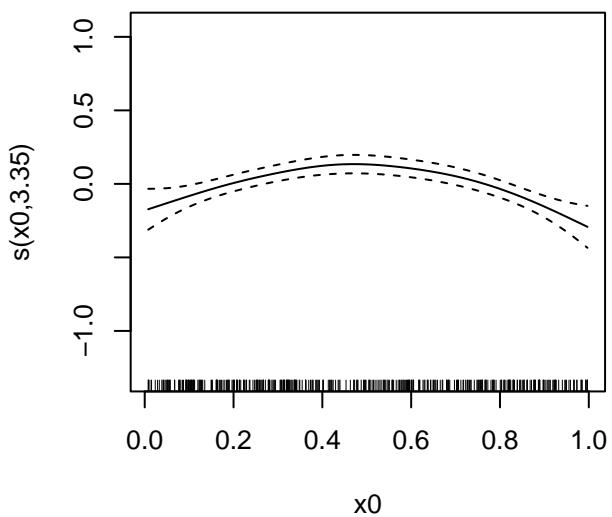
0.13

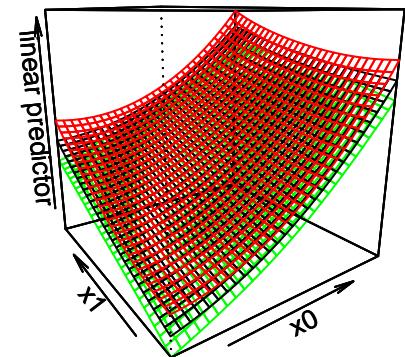
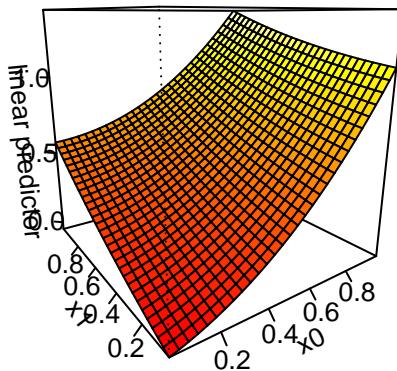
0.25

 $u \rightarrow$ 

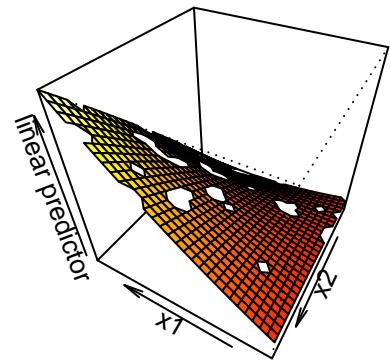
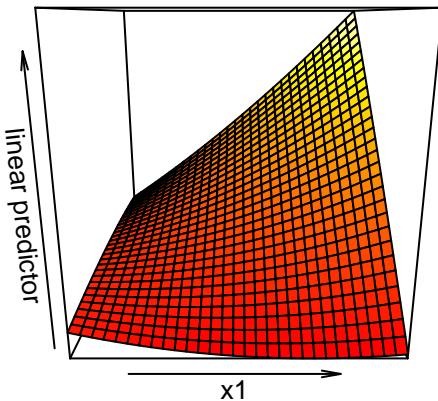
help("te")

help("twiss")

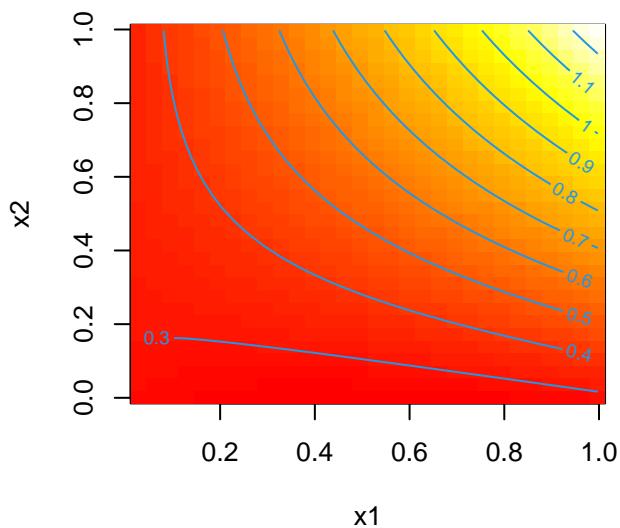




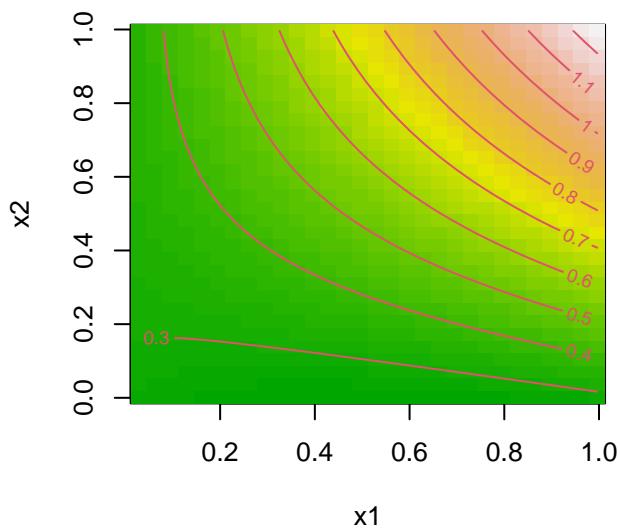
red/green are  $\pm 2$  s.e.



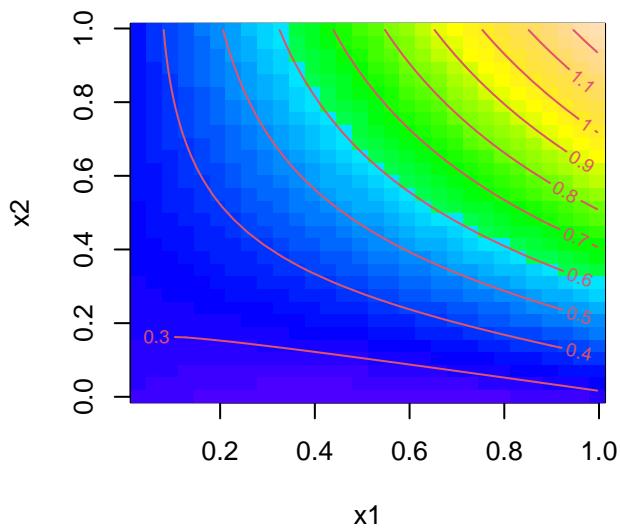
**linear predictor**



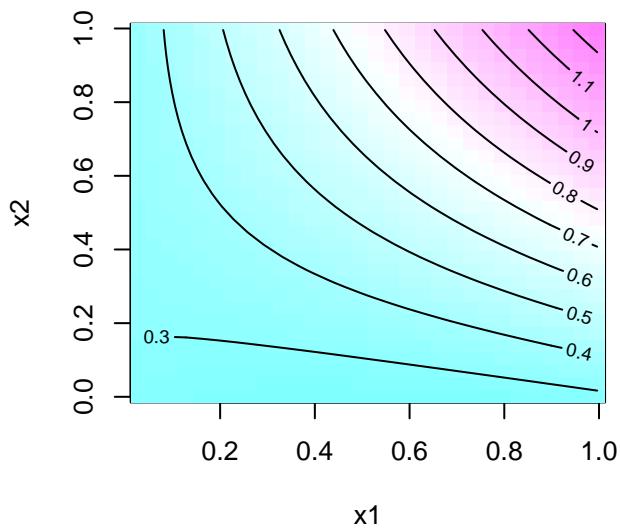
**linear predictor**



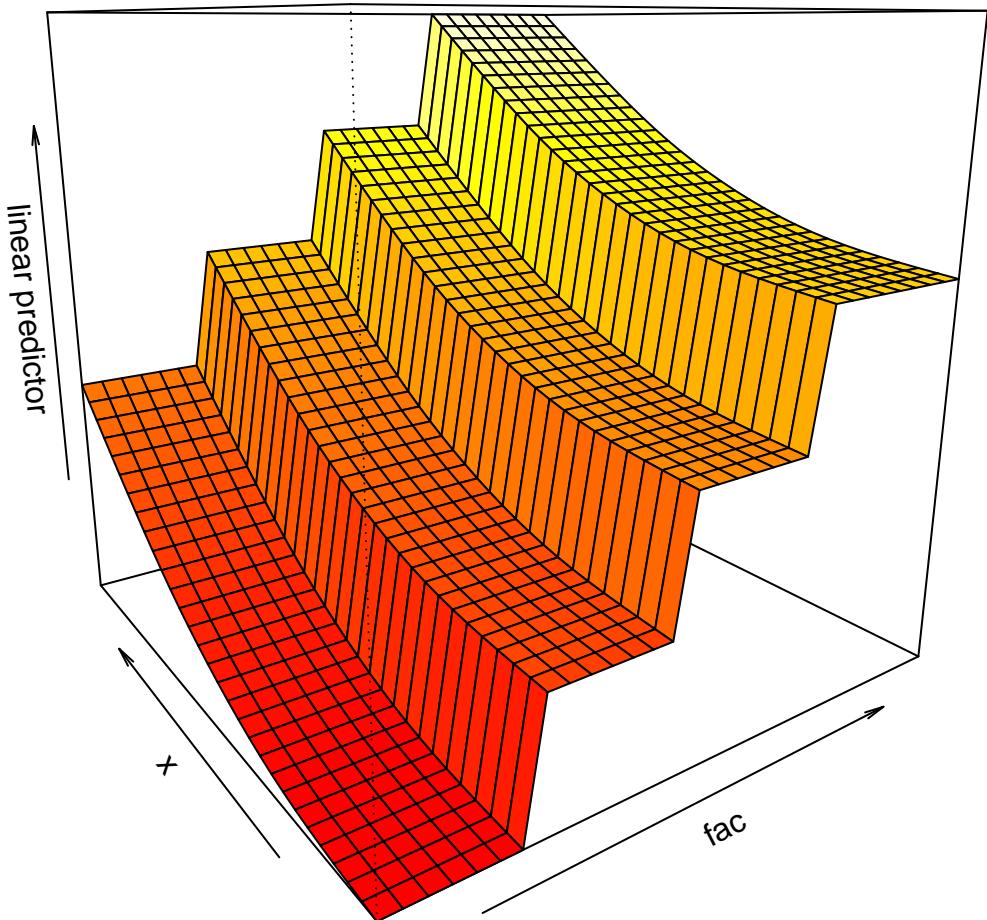
**linear predictor**



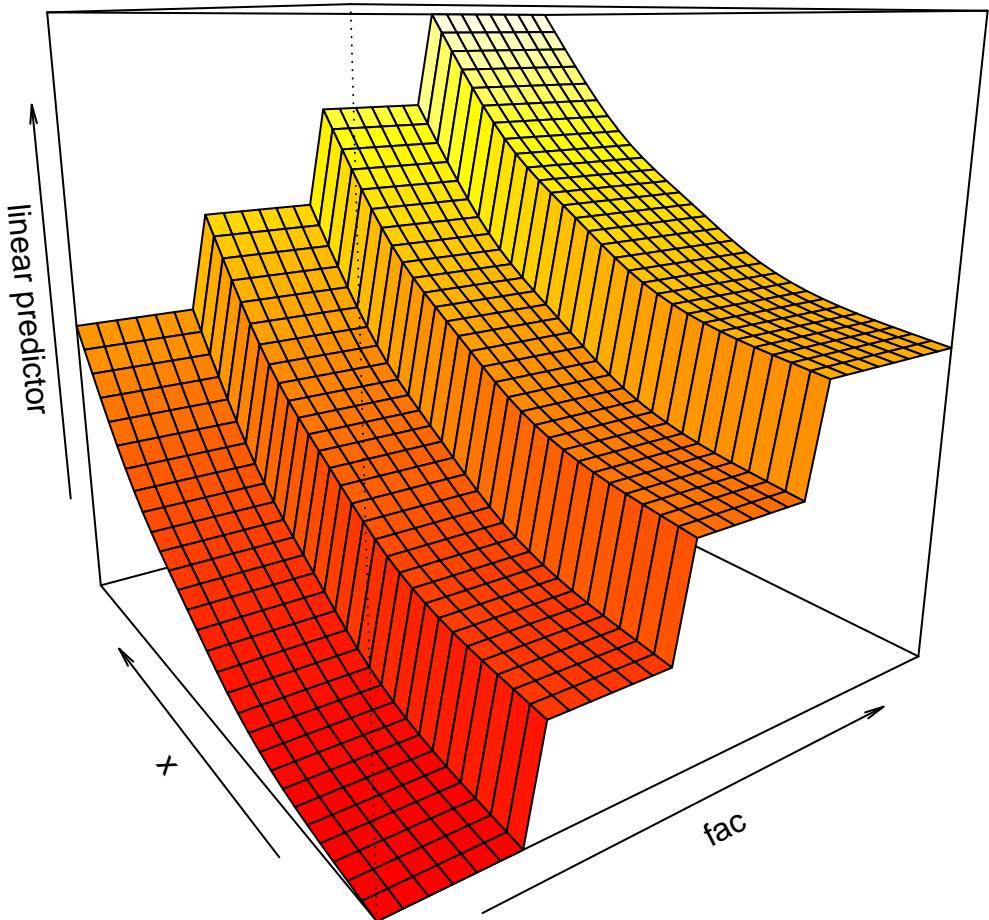
**linear predictor**

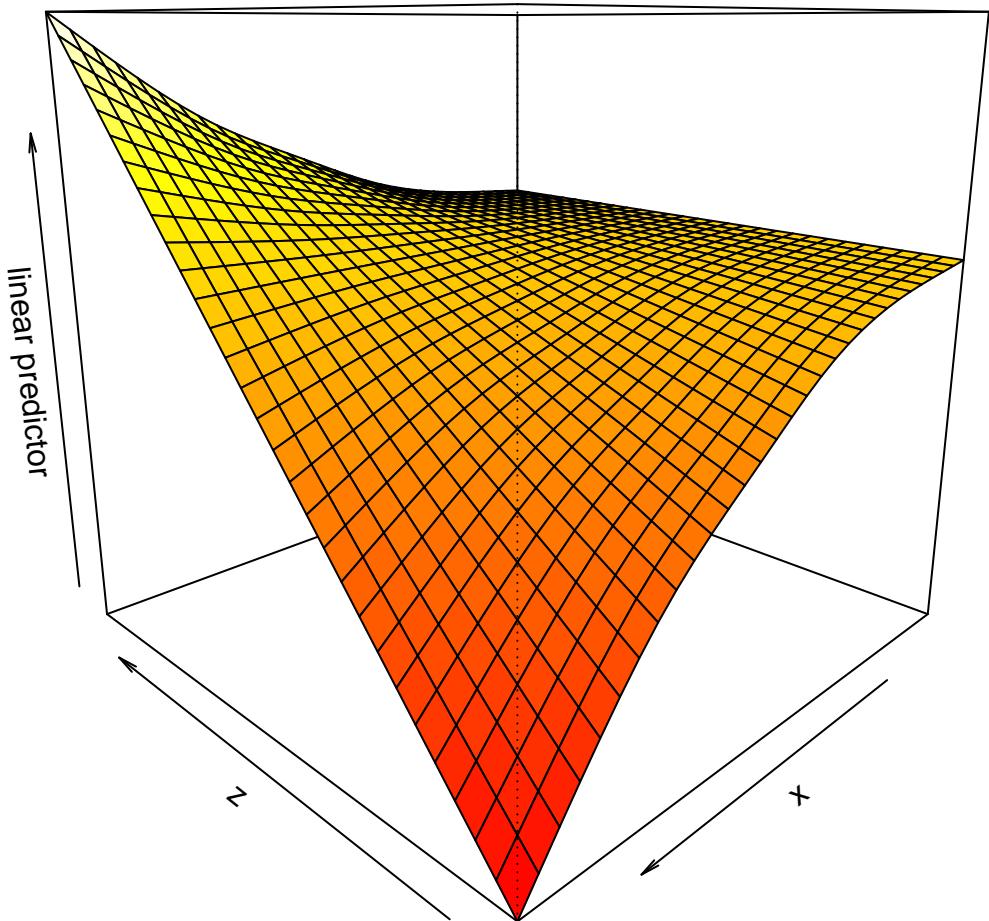


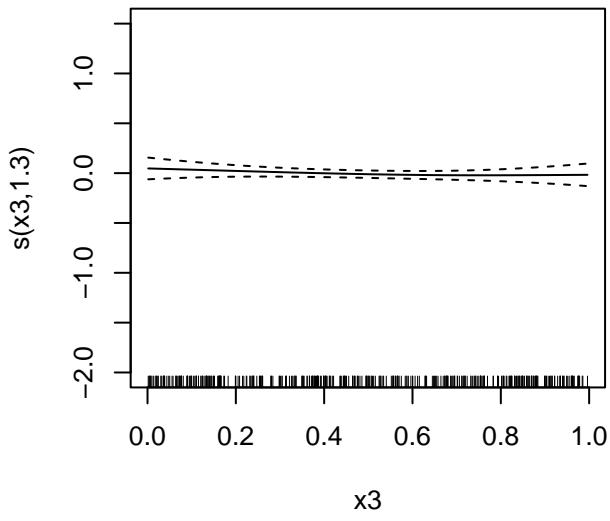
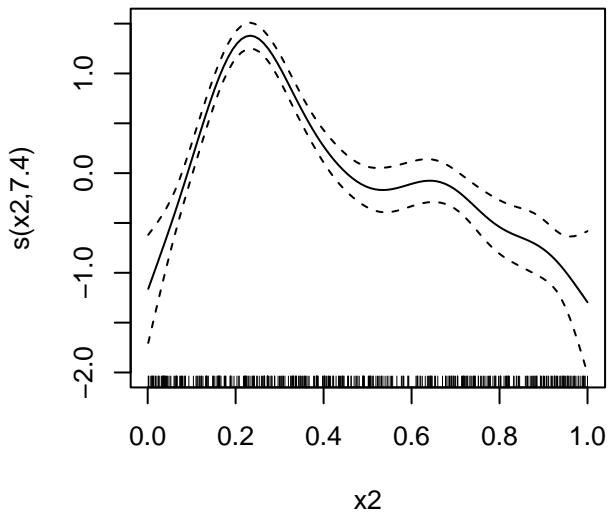
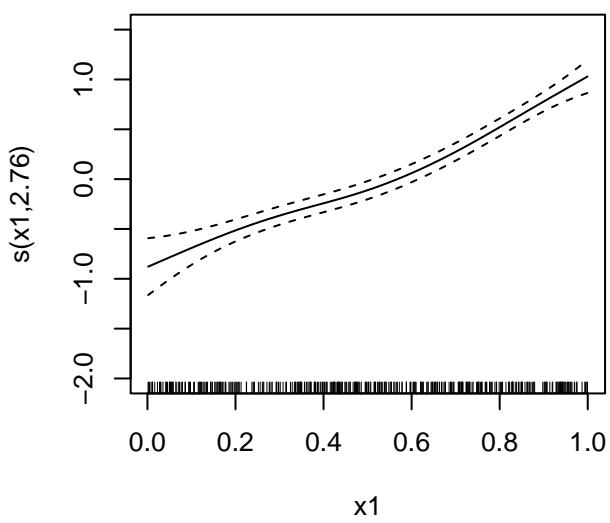
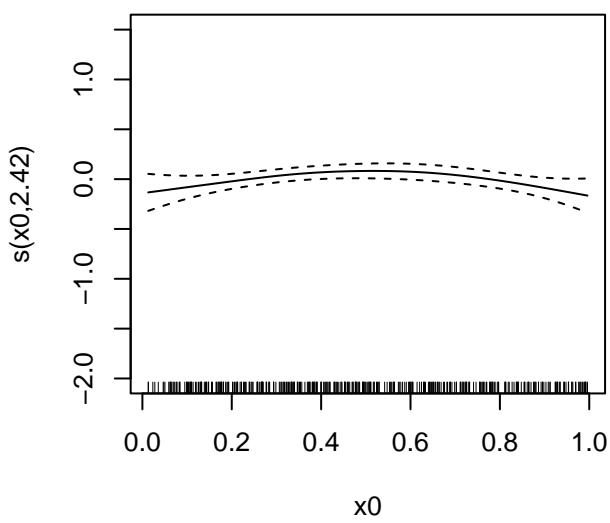
help("vis.gam")



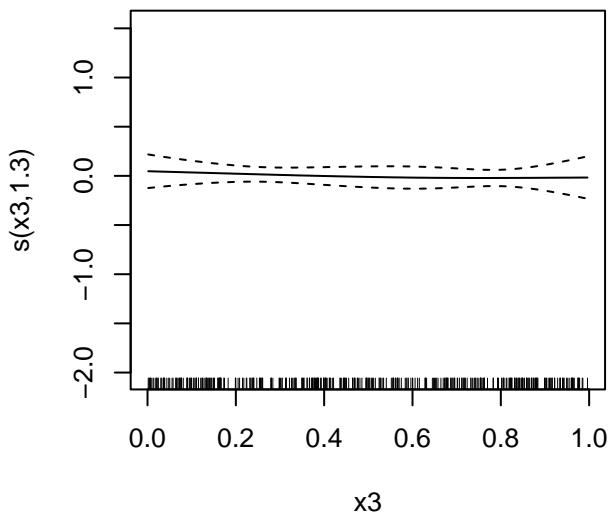
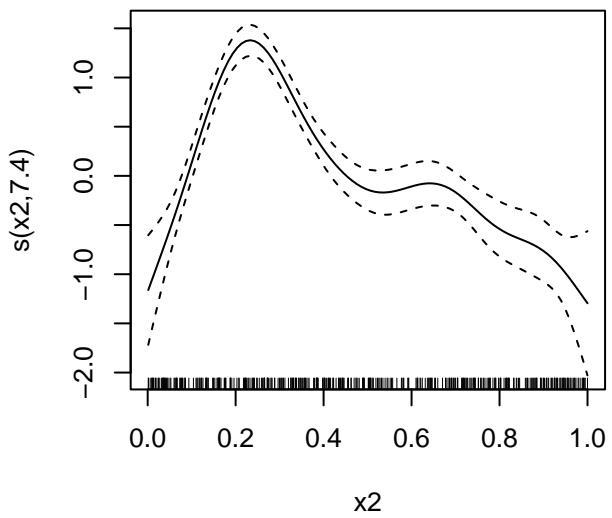
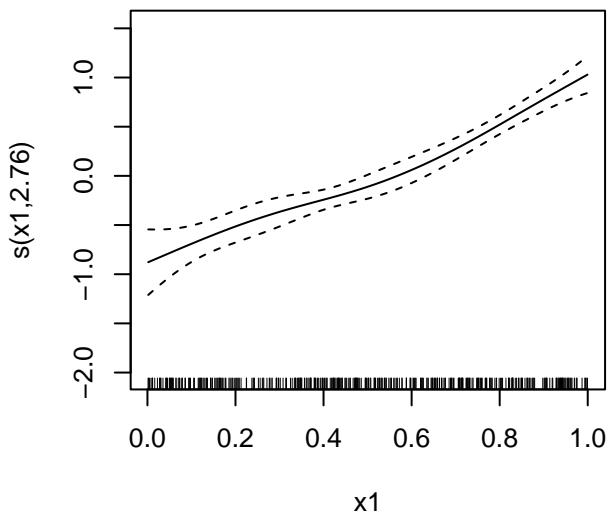
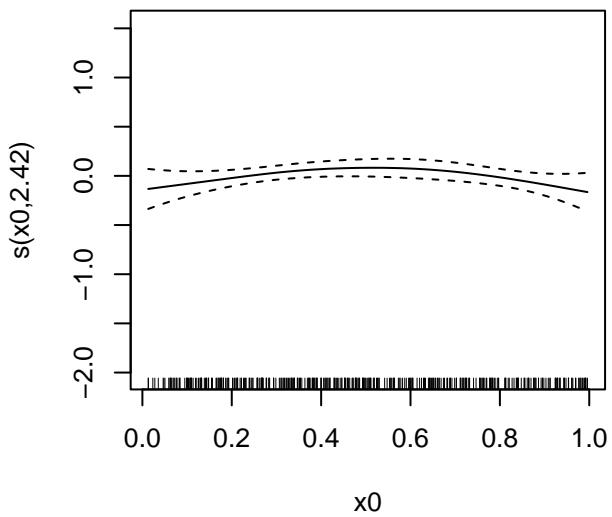
help("vis.gam")





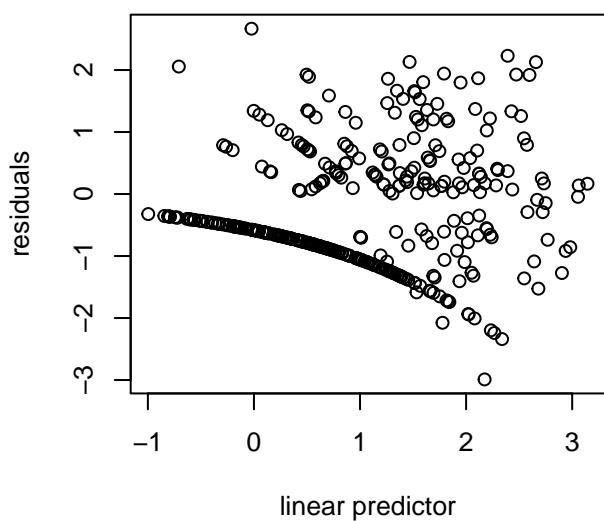
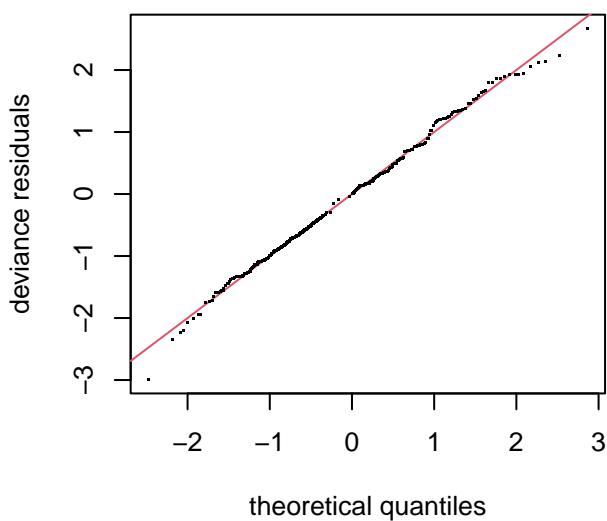


help("zIP")

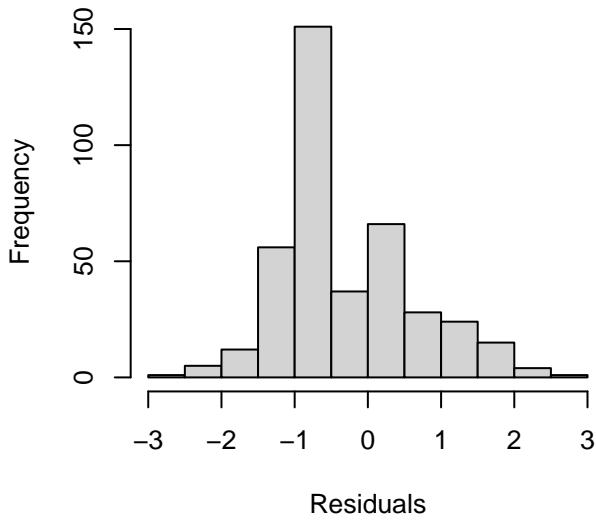


help("ziP")

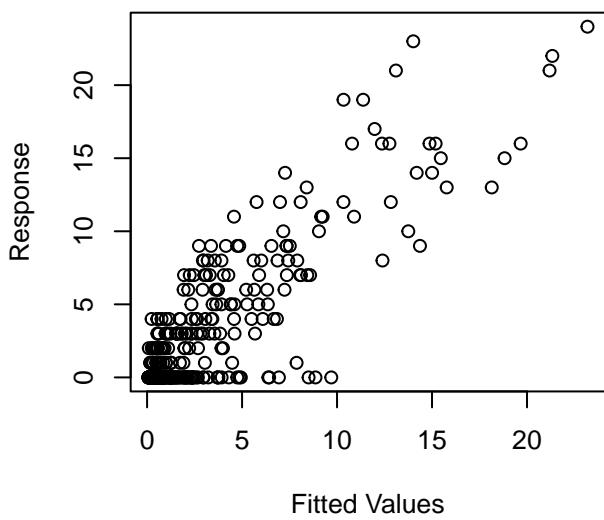
## Resids vs. linear pred.



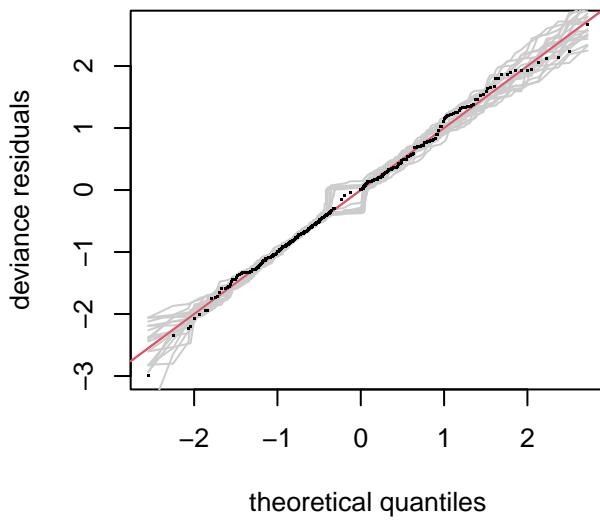
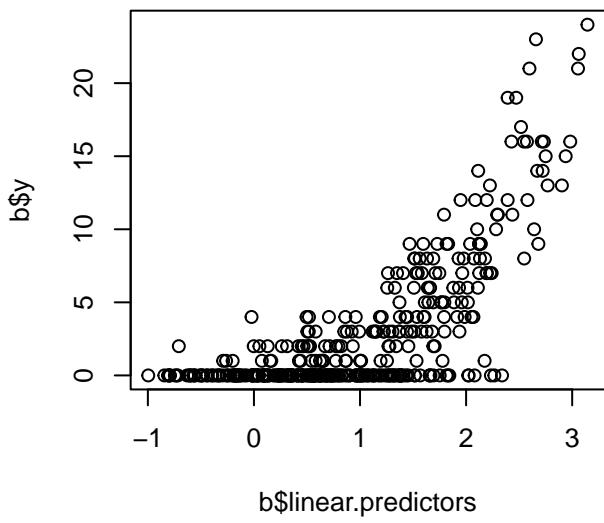
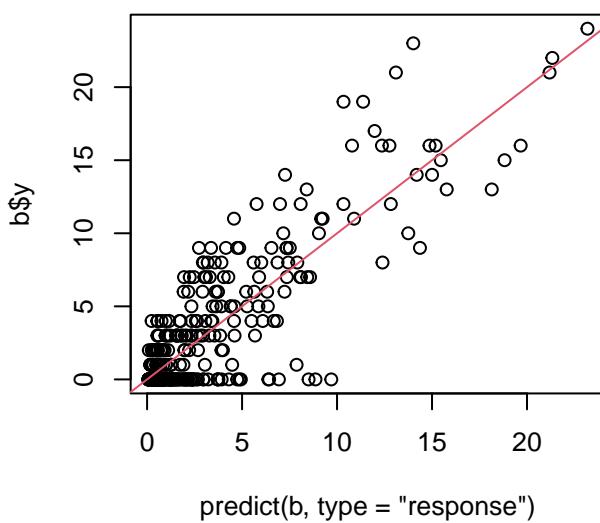
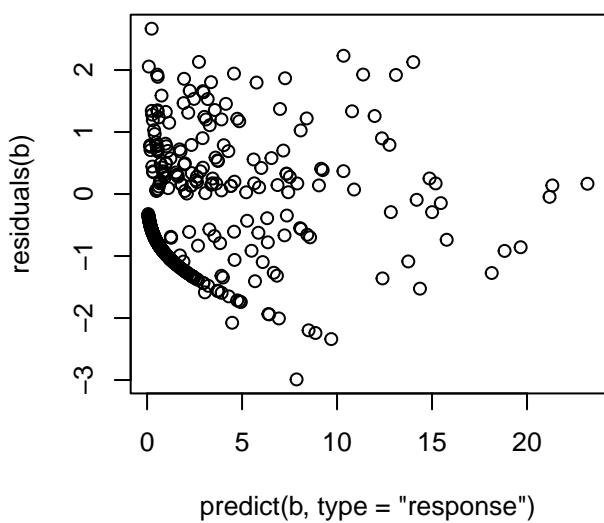
## Histogram of residuals



## Response vs. Fitted Values



help("zIIP")



help("zIIP")

help("ziplss")

