Model report

Tuesday 19th December, 2017 15:30

1 Description of the fitted model

Trait	yield
Experimental design features	row(replicate) (R) + col(replicate) (R)
Spatial model	splines
Genotype	fixed

2 Summary of the results

Table 1: Size of the data set and seven number descriptives

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Number of observations	338.00
Number of missing values	0.00
Mean	184.16
Median	179.81
Min	54.58
Max	341.77
Lower quartile	148.56
Upper quartile	220.50
Variance	2569.23

Table 2: Effective dimensions

	Effective	Model	Nominal	Ratio	Type
Genotype	168.0	168	168	1.00	F
Intercept	1.0	1	1	1.00	F
Replicate	1.0	1	1	1.00	F
Row(replicate)	18.3	52	51	0.36	R
Col(replicate)	1.1	26	25	0.04	R
Lineair trend along columns	1.0	1	1	1.00	S
Lineair trend along rows	1.0	1	1	1.00	S
Lineair trend along rows and cols	1.0	1	1	1.00	S
Smooth trend along cols	4.2	8	8	0.52	S
Smooth trend along rows	0.0	14	14	0.00	S
Lineair trend in rows changing smootly along cols	0.0	8	8	0.00	S
Lineair trend in cols changing smootly along rows	1.3	14	14	0.09	S
Smooth-by-smooth interaction trend over rows and cols	2.3	28	28	0.08	S
Total	200.2	323	321	0.62	
Residual	137.8				
Nobs	338				

Table 3: Variance components

	Variance
Row(replicate)	2.336e+02
Col(replicate)	4.994e+00
Smooth trend along cols	2.229e+04
Smooth trend along rows	6.228e-08
Lineair trend in rows changing smootly along cols	9.975e-01
Lineair trend in cols changing smootly along rows	2.882e+01
Smooth-by-smooth interaction trend over rows and cols	4.653e+02
Residual	2.345e+02

3   Diagnostic plots

Trait: yield

4
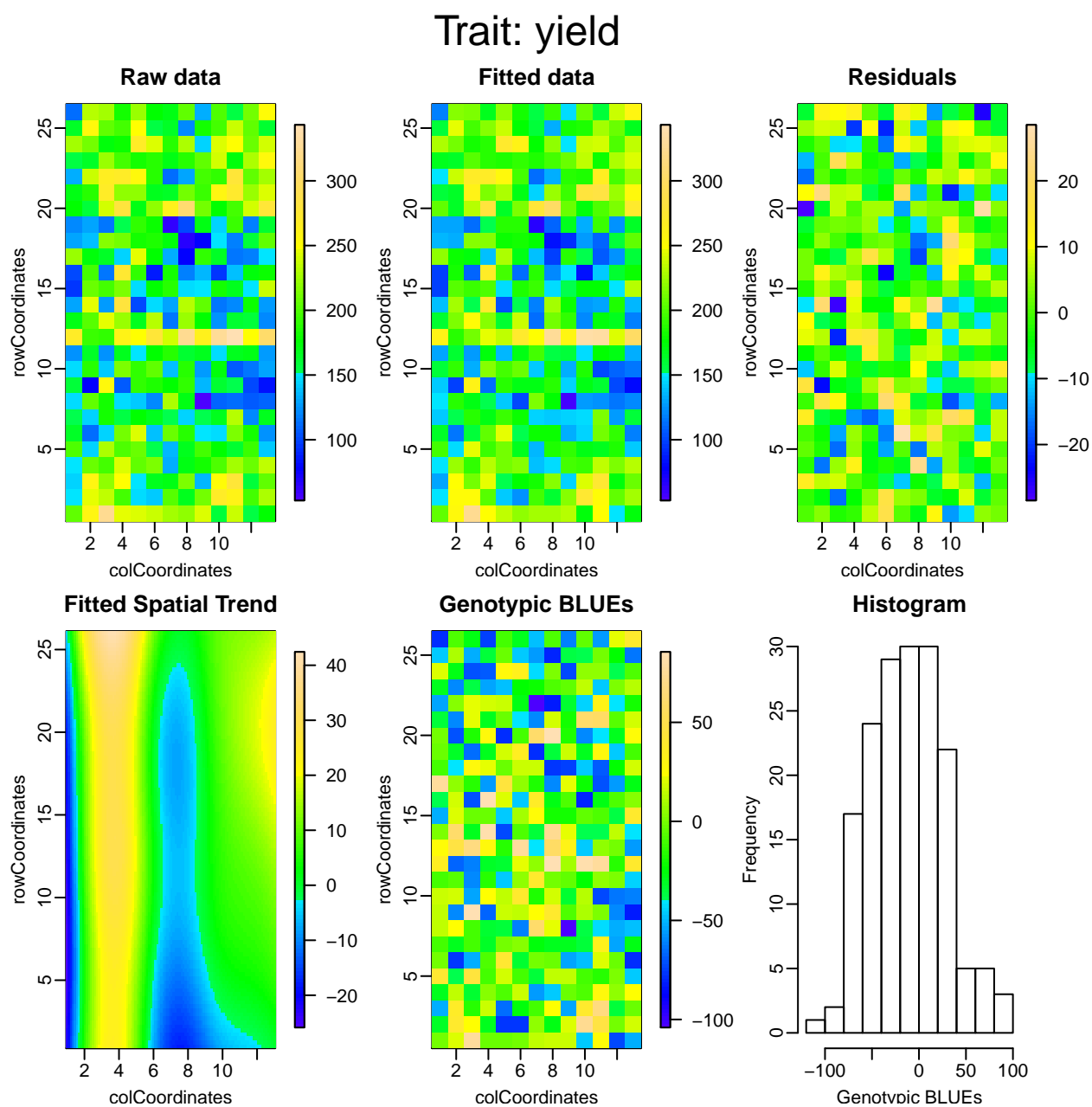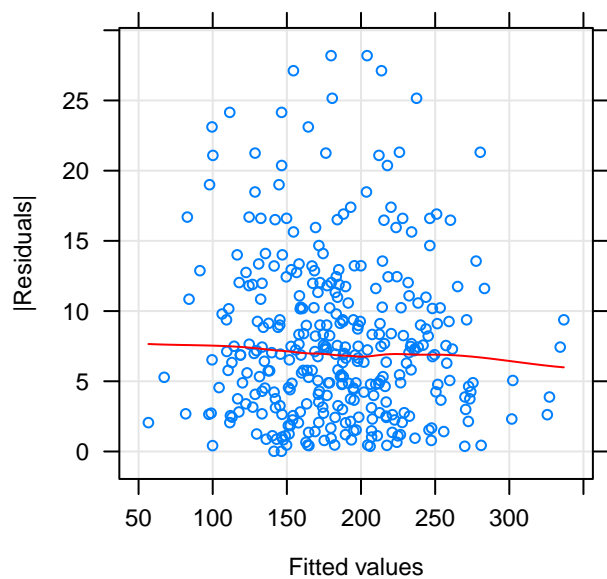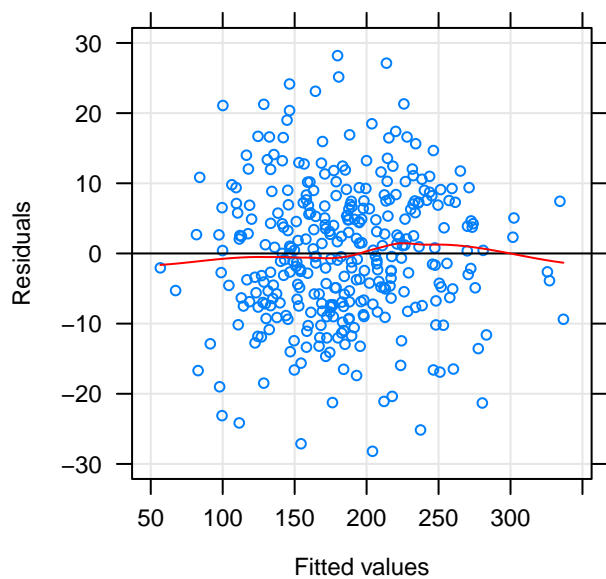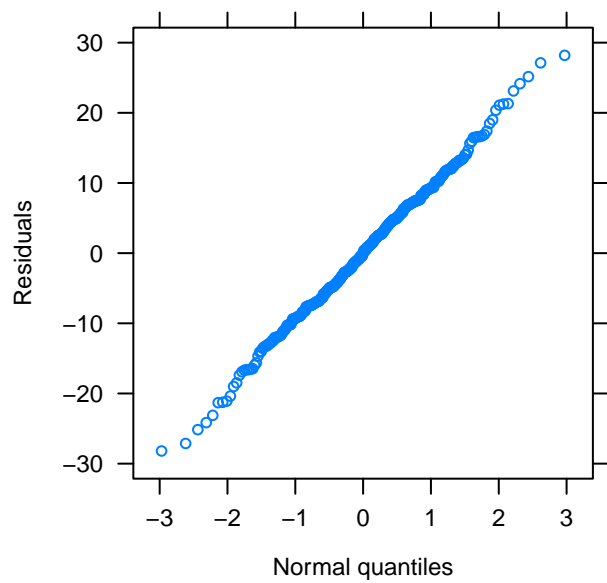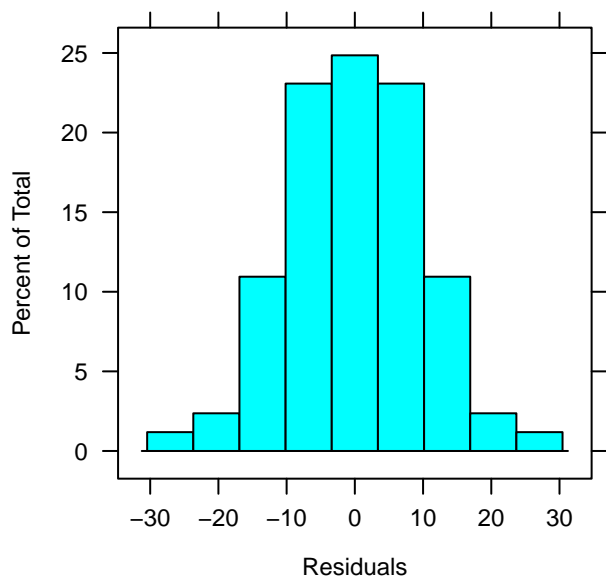
4 List of best 20 genotypes

	predictedBLUEs	se predictedBLUEs
SB025	297.93	13.75
SB032	297.77	14.51
SB023	296.40	13.61
SB022	291.29	14.43
SB011	290.38	13.95
SB144	287.02	14.18
SB156	281.01	14.80
SB031	273.75	14.56
SB055	272.72	14.23
SB054	270.55	14.87
SB143	260.58	14.96
SB194	258.68	14.00
SB183	255.15	14.91
SB020	253.16	13.15
SB155	253.15	13.77
SB140	253.07	14.69
SB128	252.18	15.89
SB163	251.25	14.57
SB028	248.93	14.43
SB093	246.58	14.75