Single trial analysis for

1 General information

Analysis done on	18-03-26 14:41:25
Pipeline version	0.0.0.9000
Mixed model engine	SpATS

2 Description of the fitted model

Trait	yield
Experimental design features	replicate (F) + row(replicate) (R) + col(replicate) (R)
Spatial model	2 dimensional P-splines
Genotype	fixed

3 Summary of the results

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

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

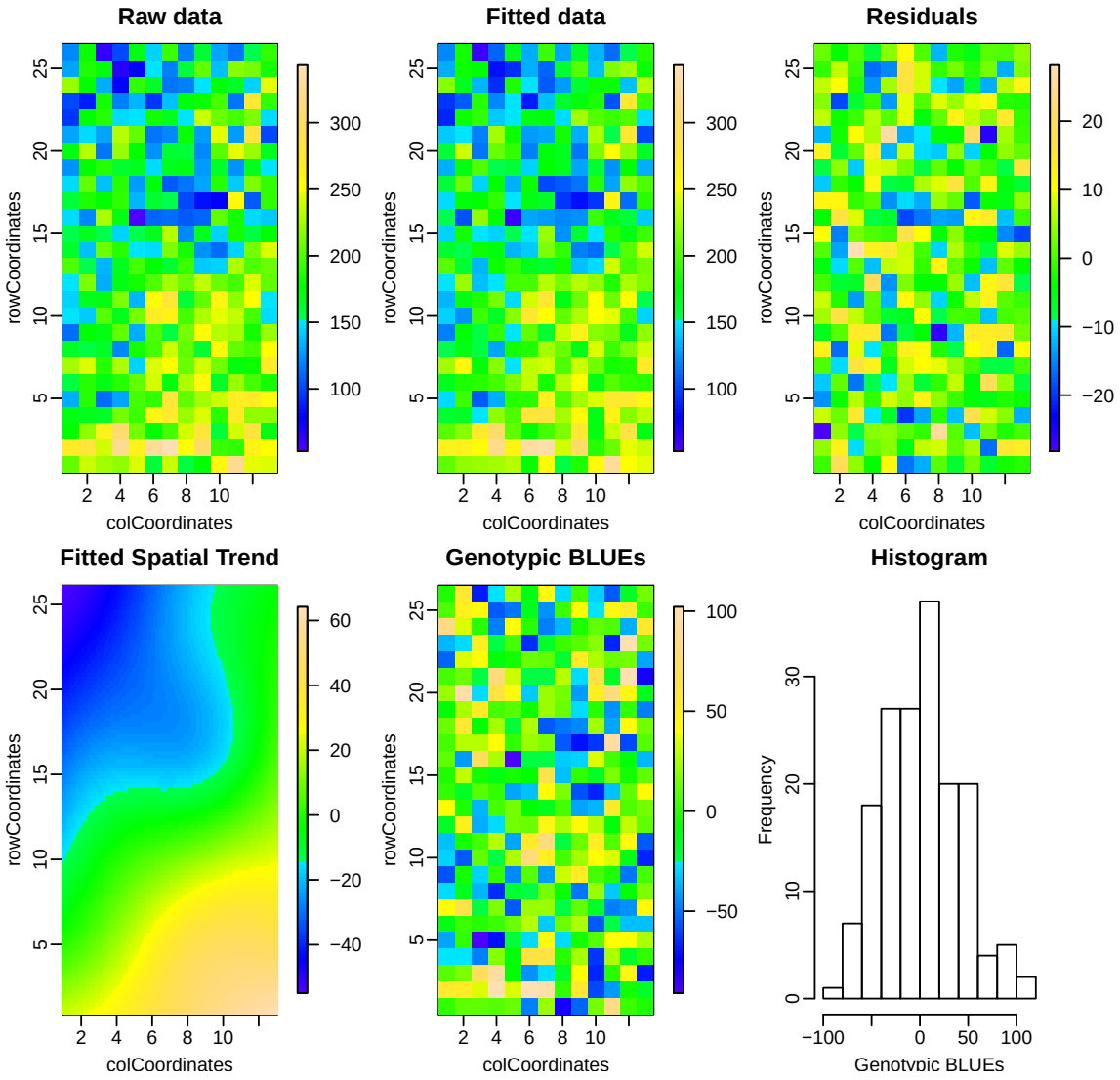
Table 2: Effective dimensions

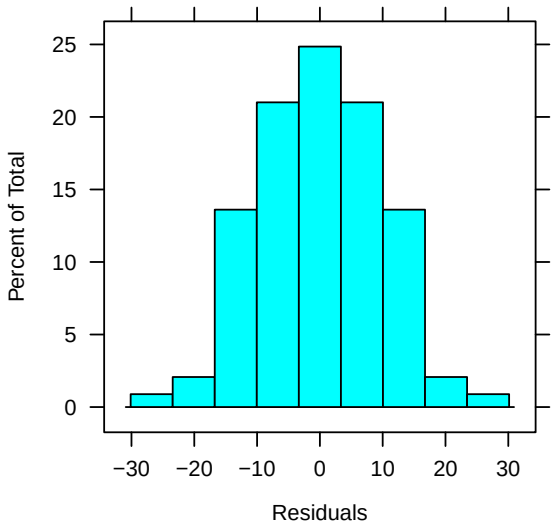
	Effective	Model	Nominal	Ratio	Type
Genotype	168.0	168	168	1.00	F
Intercept	1.0	1	1	1.00	F
Replicate	1.0	1	1	1.00	F
Row(replicate)	10.5	52	51	0.21	R
Col(replicate)	0.0	26	25	0.00	R
Linear trend along cols	1.0	1	1	1.00	S
Linear trend along rows	1.0	1	1	1.00	S
Linear trend along rows and cols	1.0	1	1	1.00	S
Smooth trend along cols	0.0	8	8	0.00	S
Smooth trend along rows	1.6	14	14	0.12	S
Linear trend in rows changing smoothly along cols	0.0	8	8	0.00	S
Linear trend in cols changing smoothly along rows	0.1	14	14	0.00	S
Smooth-by-smooth interaction trend over rows and cols	5.7	28	28	0.20	S
Total	190.8	323	321	0.59	
Residual	147.2				
Number of observations	338				

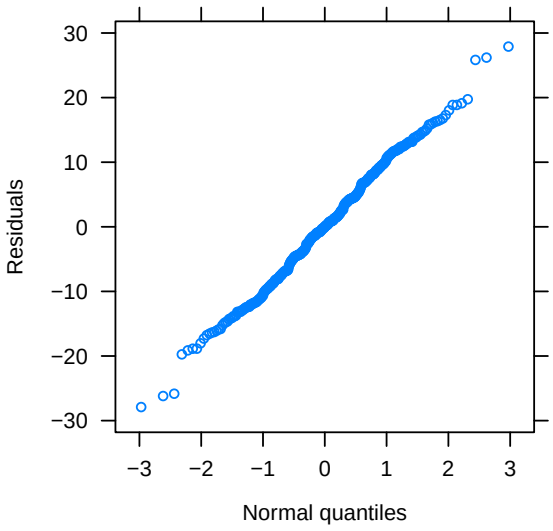
Table 3: Variance components

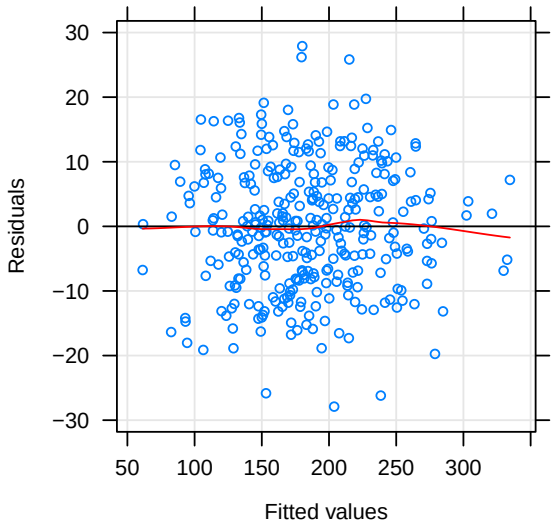
	Variance
Row(replicate)	34.27
Col(replicate)	0.00
Smooth trend along cols	0.00
Smooth trend along rows	78.89
Linear trend in rows changing smoothly along cols	0.00
Linear trend in cols changing smoothly along rows	0.59
Smooth-by-smooth interaction trend over rows and cols	1732.00
Residual	213.80

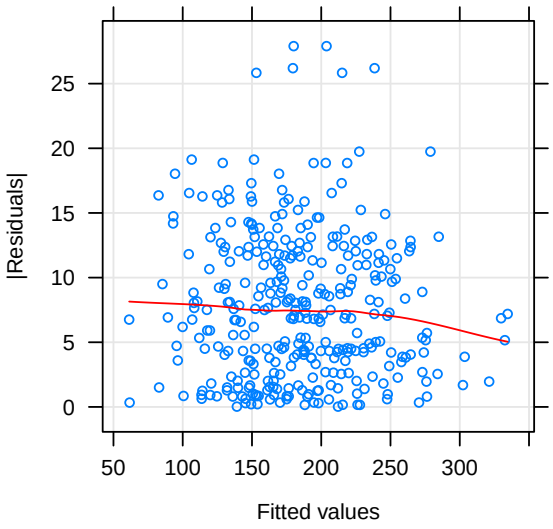
4 Diagnostic plots

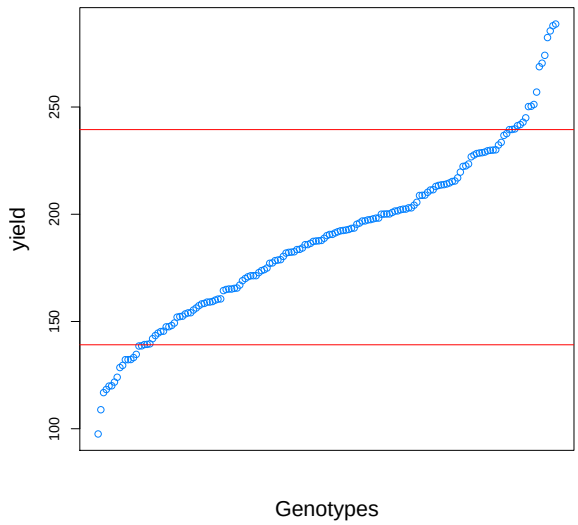



Percent of Total
Residuals


Residuals
Normal quantiles


Residuals
Fitted values


|Residuals|
Fitted values

5 List of best 10% genotypes with highest BLUEs

genotype	yield	SE
SB023	288.69	11.81
SB025	287.90	11.75
SB022	285.49	11.86
SB032	282.39	11.92
SB011	274.11	12.03
SB156	270.44	11.78
SB144	268.80	11.89
SB031	256.97	11.99
SB093	251.19	12.26
SB055	250.36	11.99
SB054	250.21	12.05
SB020	244.95	11.87
SB028	242.94	12.12
SB194	241.81	11.57
SB128	241.31	11.97
SB155	239.79	11.76
SB027	239.54	11.88