

Summary G2F Variance Components analyses

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## # and by the International Maize and Wheat Improvement Center (CIMMyT).

## # Type 'help(BGLR)' for summary information

## Loading required package: viridisLite
```

Variance components

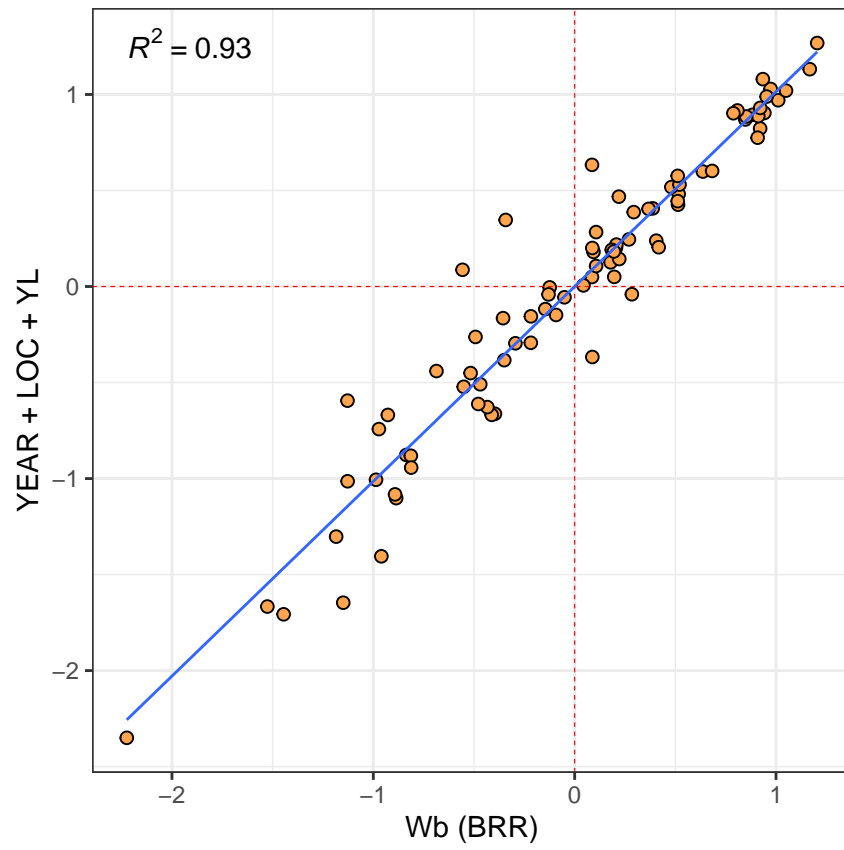
Model M2a was fitted including EC with Gaussian prior and model M2b EC are assumed a Bayes C prior

M	Model	Year	Loc	Year-Loc	(Year-Loc)	Wb	G	Error
M1	YEAR+LOC+YL+G	0.122	0.312	0.233	0.581		0.076	0.427
M2a	Wb+G					0.542	0.076	0.433
M2b	Wb+G					0.528	0.076	0.433
M3a	LOC+Wb+G		0.462			0.674	0.076	0.432
M3b	LOC+Wb+G		0.527			0.748	0.076	0.431

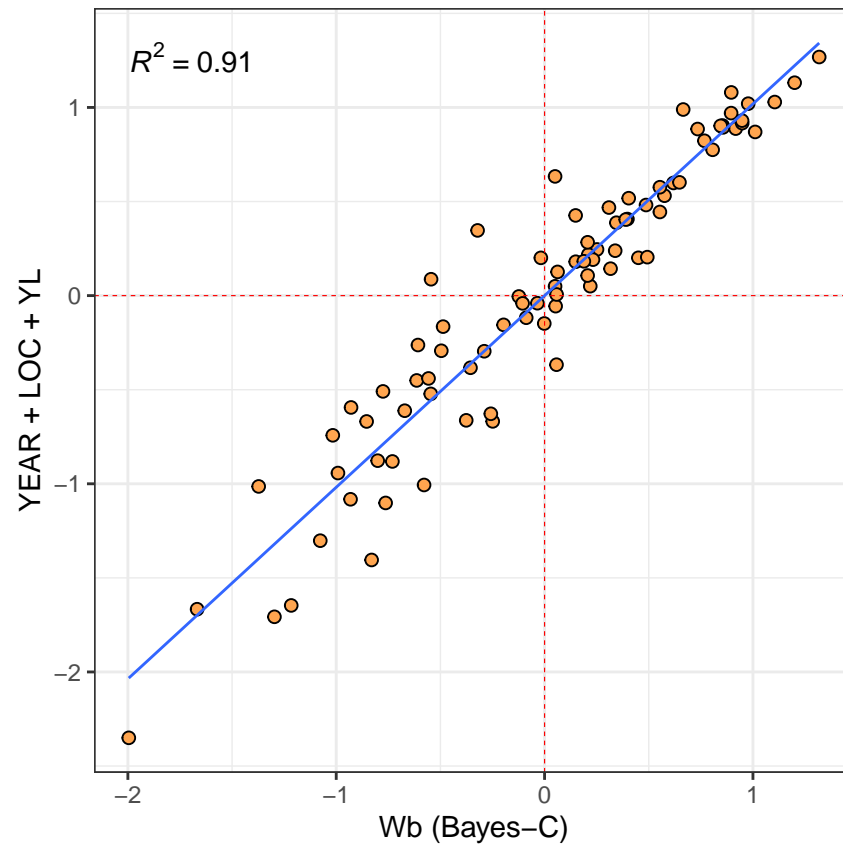
a: Effects are assumed Gaussian prior, b: Effects with Bayes C

Mean effects of *year – location* vs **Wb**

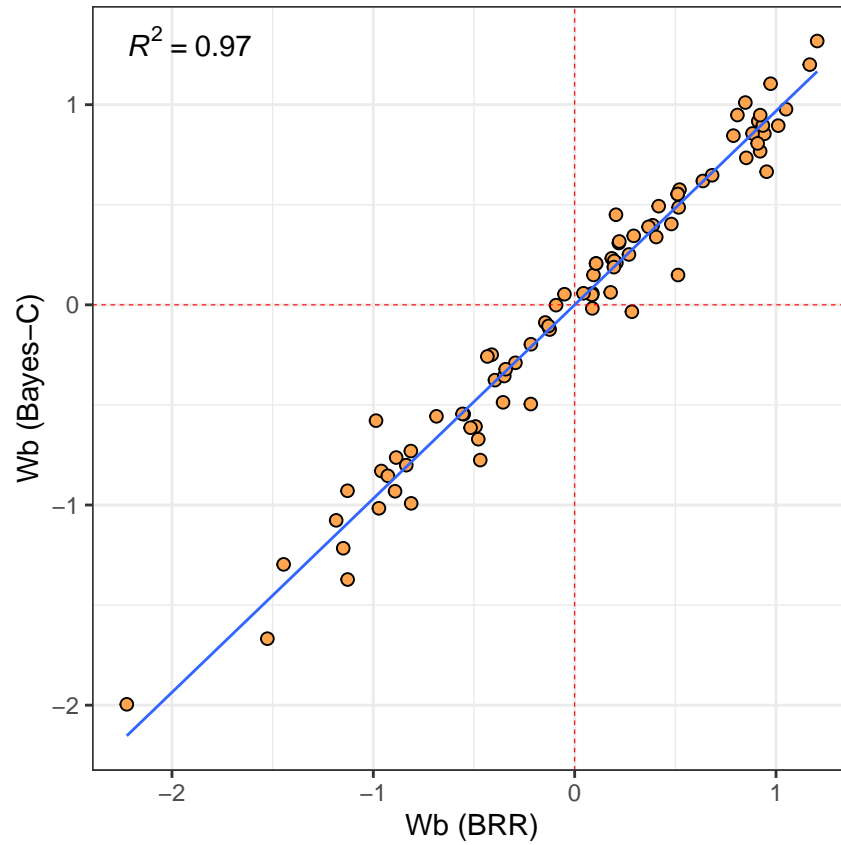
```
print(pp1)
```



```
print(pp2)
```



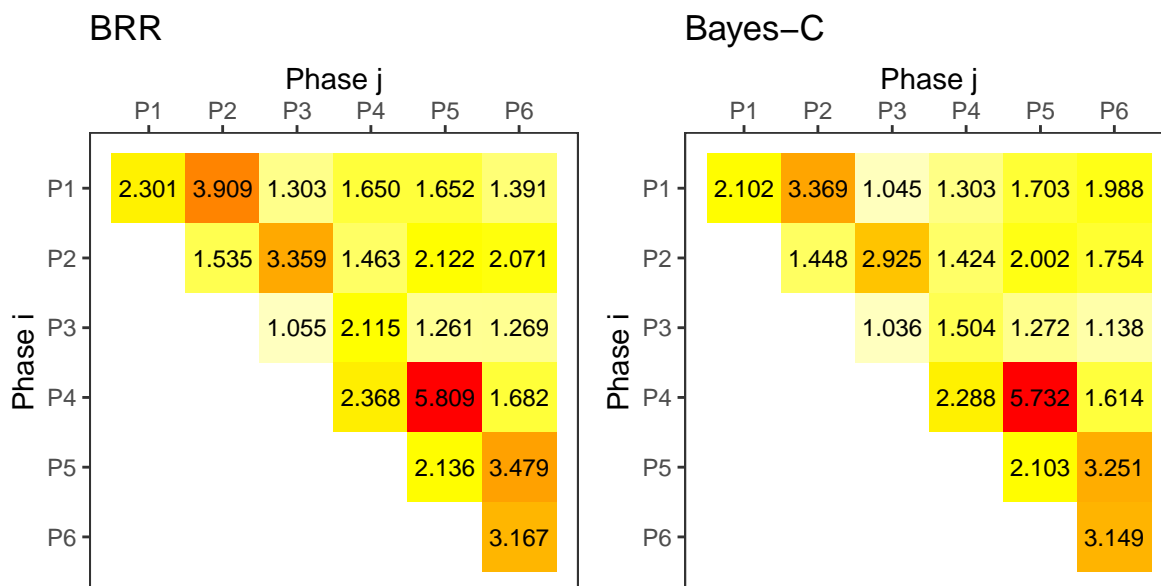
```
print(pp3)
```



Sequential variance

Variance explained by **Wb** using EC from Phase i to Phase j

```
ggarrange(pp1, pp2)
```



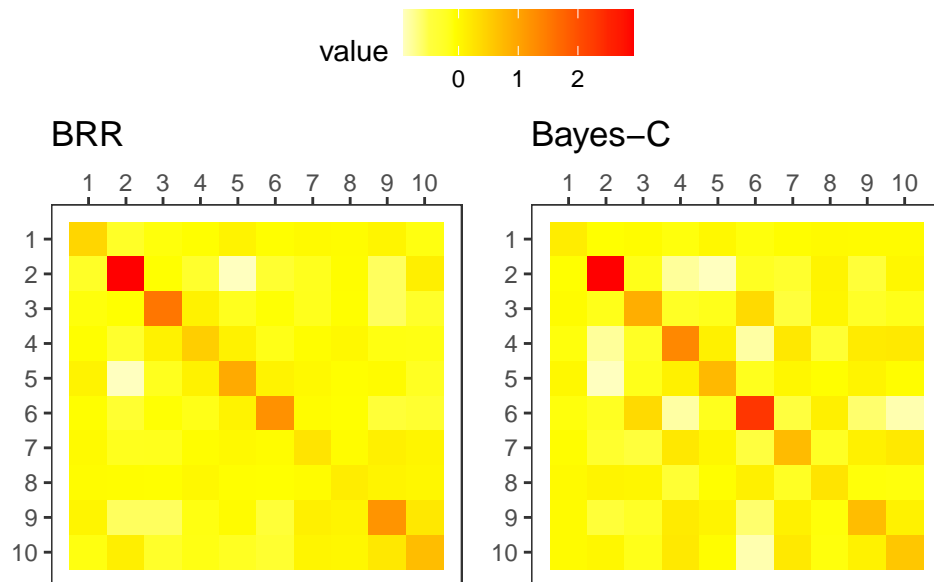
Separation of variance by groups

```
B1 <- readBinMat(paste0("../Output/run_VC_full_model/M",names(models0)[1],"_ETA_W1_b.bin"))
B2 <- readBinMat(paste0("../Output/run_VC_full_model/M",names(models0)[2],"_ETA_W2_b.bin"))

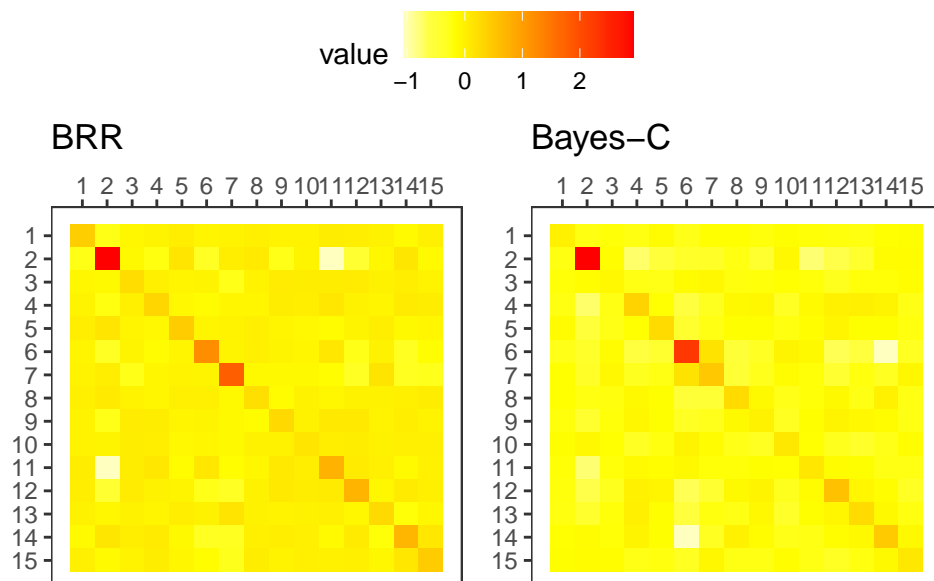
hc <- hclust(dist(t(W)), method="ward.D")
```

Hierarchical clustering applied to a distance among ECs.

$k = 10$ groups



$k = 15$ groups



$k = 20$ groups

