

HPH

HPH

LPH

| | Parent (1) | | | | Parent (2) | | | | Hybrid (3) | | | | Truth |
|---------------|------------|-----|-----|-----|------------|-----|-----|-----|------------|-----|-----|-----|-------|
| Feature 1 | 3 | 4 | 2 | 1 | 0 | 0 | 1 | 0 | 700 | 900 | 825 | 860 | 1 |
| Feature 2 | 0 | 1 | 1 | 0 | 2 | 7 | 5 | 18 | 50 | 501 | 400 | 90 | 1 |
| Feature 3 | 100 | 225 | 0 | 15 | 300 | 106 | 200 | 400 | 70 | 279 | 100 | 123 | 0 |
| Feature 4 | 893 | 400 | 760 | 901 | 1000 | 513 | 760 | 580 | 5 | 5 | 6 | 7 | 1 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Feature 25000 | 10 | 13 | 6 | 4 | 902 | 912 | 999 | 825 | 819 | 761 | 800 | 465 | 0 |

Normalization factors

| | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|----------|----------|
| c_1 | c_2 | c_3 | c_4 | c_5 | c_6 | c_7 | c_8 | c_9 | c_{10} | c_{11} | c_{12} |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|----------|----------|

Main effects and dispersions

| Parent (1) | Parent (2) | Hybrid (3) | Dispersion |
|-----------------|-----------------|-----------------|----------------|
| $\mu_{1,1}$ | $\mu_{1,2}$ | $\mu_{1,3}$ | ψ_1 |
| $\mu_{2,1}$ | $\mu_{2,2}$ | $\mu_{2,3}$ | ψ_2 |
| ... | ... | ... | ... |
| $\mu_{27888,1}$ | $\mu_{27888,2}$ | $\mu_{27888,3}$ | ψ_{27888} |

| | |
|---------------|--|
| Feature 1 | $I(\mu_{1,3} > \max(\mu_{1,1}, \mu_{1,2}) \text{ or } < \min(\mu_{1,1}, \mu_{1,2}))$ |
| Feature 2 | $I(\mu_{2,3} > \max(\mu_{2,1}, \mu_{2,2}) \text{ or } < \min(\mu_{2,1}, \mu_{2,2}))$ |
| ... | ... |
| Feature 27888 | $I(\mu_{27888,3} > \max(\mu_{27888,1}, \mu_{27888,2}) \text{ or } < \min(\mu_{27888,1}, \mu_{27888,2}))$ |

| | | | |
|-------------------------|--|--|--|
| $e^{c_1+\mu_{1,1}}$ | $e^{c_2+\mu_{1,1}}$ | $\text{NB}(e^{c_3+\mu_{1,1}}, \phi_1)$ | $\text{NB}(e^{c_4+\mu_{1,1}}, \phi_1)$ |
| ϕ_1 | ϕ_1 | | |
| $e^{c_1+\mu_{2,1}}$ | $e^{c_2+\mu_{2,1}}$ | $\text{NB}(e^{c_3+\mu_{2,1}}, \phi_2)$ | $\text{NB}(e^{c_4+\mu_{2,1}}, \phi_2)$ |
| ϕ_2 | ϕ_2 | | |
| ... | ... | ... | ... |
| $e^{c_1+\mu_{27888,1}}$ | $\text{NB}(e^{c_2+\mu_{27888,1}}, \phi_{27888})$ | $\text{NB}(e^{c_3+\mu_{27888,1}}, \phi_{27888})$ | $\text{NB}(e^{c_4+\mu_{27888,1}}, \phi_{27888})$ |
| ϕ_{27888} | | | |