

## RELAX Combined Report

SRV vs SRV+Double vs SRV+Double+Triple

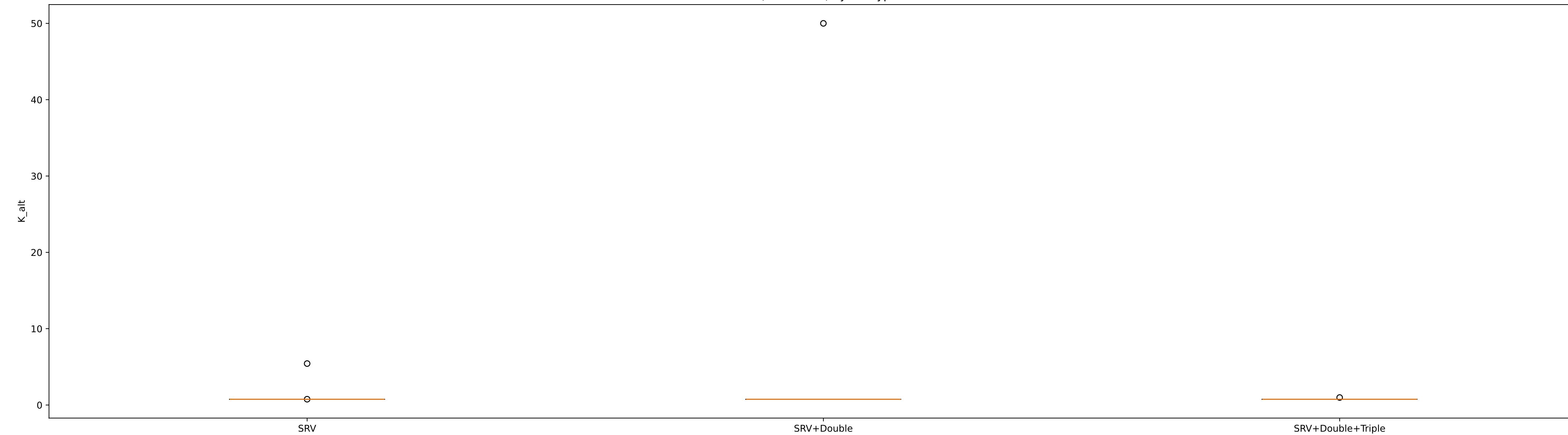
Includes:

- Run-type summary
- Boxplots: K, p-values, 2H/3H
- Full omega/SRV/multihit tables (column-paged)

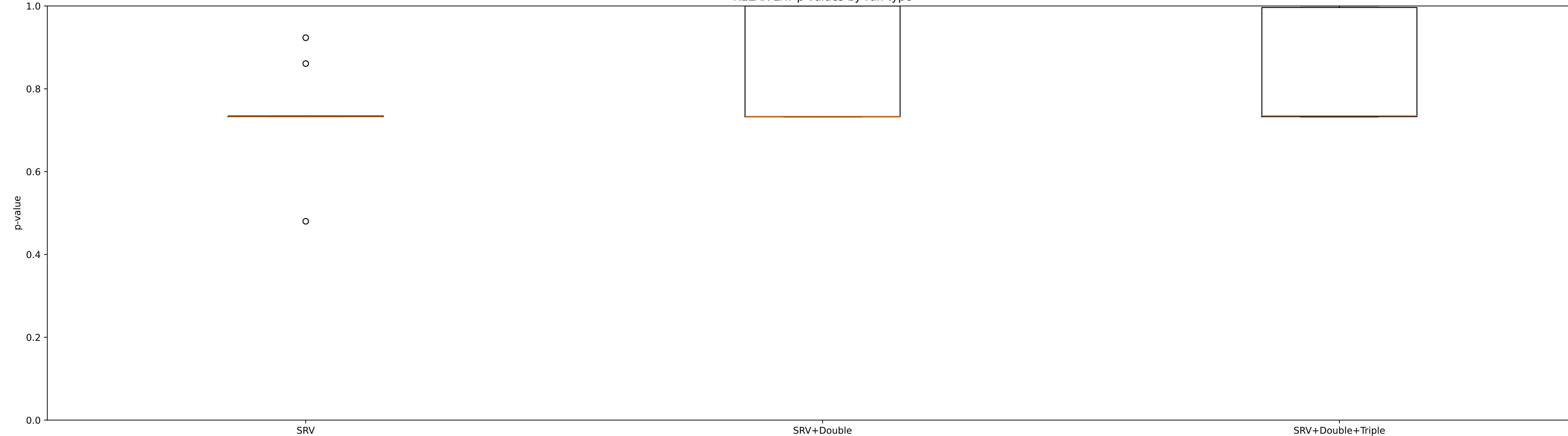
## Run-type summary statistics

| <b>p_median</b> | <b>p_min</b> | <b>p_max</b> | <b>K_median</b> | <b>K_min</b> | <b>K_max</b> | <b>omega_ref_medi<br/>an</b> | <b>omega_test_med<br/>ian</b> | <b>warnings_count</b> | <b>2H_reference_m<br/>edian</b> | <b>2H_test_median</b> |
|-----------------|--------------|--------------|-----------------|--------------|--------------|------------------------------|-------------------------------|-----------------------|---------------------------------|-----------------------|
| 0.7324          | 0.4801       | 0.9233       | 0.75            | 0.75         | 5.43         | 0.309                        | 0.4144                        | 10                    | nan                             | nan                   |
| 0.7335          | 0.7322       | 1.0          | 0.75            | 0.75         | 50.0         | 0.309                        | 0.4144                        | 10                    | 0.0                             | 0.0                   |
| 0.735           | 0.7322       | 1.0          | 0.75            | 0.75         | 0.98         | 0.309                        | 0.4144                        | 10                    | 0.0                             | 0.0                   |

K (alternative) by run type



RELAX LRT p-values by run type



2H rates (reference) by run type



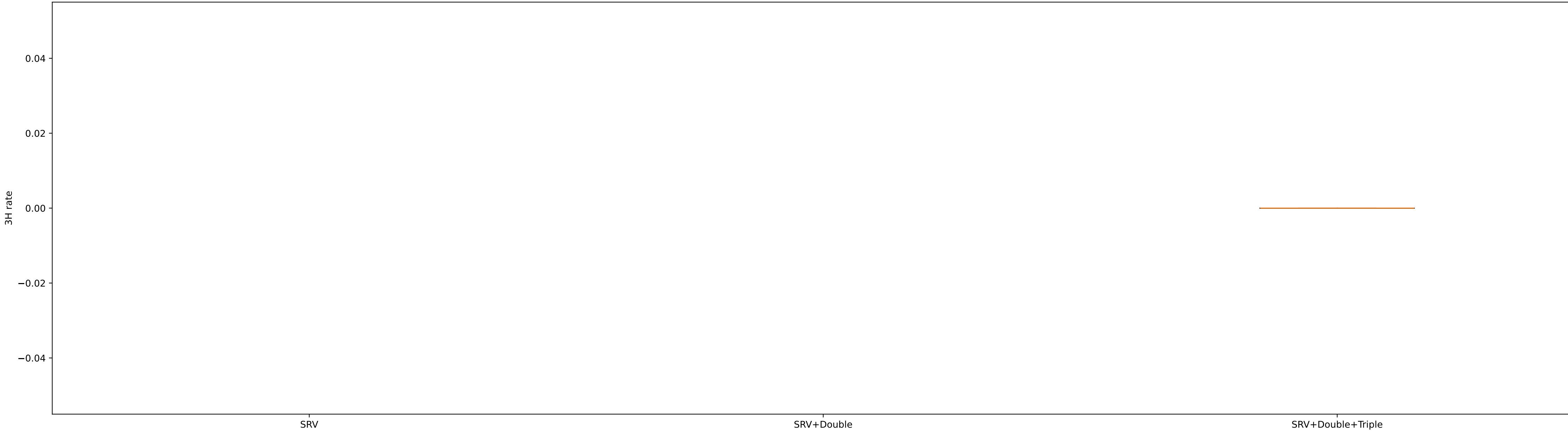
2H rates (test) by run type



3H rates (reference) by run type



3H rates (test) by run type



## Replicate-level summary — SRV (page 1/1)

|  | <b>replicate</b> | <b>p_value</b> | <b>K_alt</b> | <b>global_dNdS_re<br/>ference</b> | <b>global_dNdS_te<br/>st</b> |
|--|------------------|----------------|--------------|-----------------------------------|------------------------------|
|  | 1                | 0.7324         | 0.75         | 0.309                             | 0.4149                       |
|  | 2                | 0.7323         | 0.75         | 0.309                             | 0.4144                       |
|  | 3                | 0.4801         | 5.43         | 0.309                             | 0.4149                       |
|  | 4                | 0.7322         | 0.75         | 0.309                             | 0.4144                       |
|  | 5                | 0.7343         | 0.75         | 0.309                             | 0.4144                       |
|  | 6                | 0.7342         | 0.75         | 0.309                             | 0.4144                       |
|  | 7                | 0.7323         | 0.75         | 0.309                             | 0.4144                       |
|  | 8                | 0.9233         | 0.75         | 0.309                             | 0.4144                       |
|  | 9                | 0.8609         | 0.76         | 0.309                             | 0.4144                       |
|  | 10               | 0.7323         | 0.75         | 0.309                             | 0.4149                       |

## Replicate-level summary — SRV+Double (page 1/1)

|  | <b>replicate</b> | <b>p_value</b> | <b>K_alt</b> | <b>global_dNdS_re<br/>ference</b> | <b>global_dNdS_te<br/>st</b> |
|--|------------------|----------------|--------------|-----------------------------------|------------------------------|
|  | 1                | 0.7327         | 0.75         | 0.309                             | 0.4144                       |
|  | 2                | 1.0            | 0.76         | 0.309                             | 0.4144                       |
|  | 3                | 0.7322         | 0.75         | 0.309                             | 0.4144                       |
|  | 4                | 1.0            | 0.76         | 0.309                             | 0.4144                       |
|  | 5                | 0.7331         | 0.75         | 0.309                             | 0.4149                       |
|  | 6                | 1.0            | 0.75         | 0.309                             | 0.4144                       |
|  | 7                | 1.0            | 0.76         | 0.309                             | 0.4144                       |
|  | 8                | 0.7339         | 0.75         | 0.3088                            | 0.4145                       |
|  | 9                | 0.7322         | 50.0         | 0.309                             | 0.4144                       |
|  | 10               | 0.7325         | 0.75         | 0.309                             | 0.4144                       |

## Replicate-level summary — SRV+Double+Triple (page 1/1)

|  | <b>replicate</b> | <b>p_value</b> | <b>K_alt</b> | <b>global_dNdS_re<br/>ference</b> | <b>global_dNdS_te<br/>st</b> |
|--|------------------|----------------|--------------|-----------------------------------|------------------------------|
|  | 1                | 0.7341         | 0.76         | 0.309                             | 0.4144                       |
|  | 2                | 0.7359         | 0.75         | 0.309                             | 0.4144                       |
|  | 3                | 0.7326         | 0.75         | 0.309                             | 0.4144                       |
|  | 4                | 1.0            | 0.75         | 0.309                             | 0.4144                       |
|  | 5                | 0.7323         | 0.75         | 0.309                             | 0.4149                       |
|  | 6                | 0.7333         | 0.75         | 0.309                             | 0.4144                       |
|  | 7                | 1.0            | 0.76         | 0.309                             | 0.4144                       |
|  | 8                | 0.9852         | 0.98         | 0.309                             | 0.4144                       |
|  | 9                | 1.0            | 0.76         | 0.309                             | 0.4144                       |
|  | 10               | 0.7322         | 0.75         | 0.309                             | 0.4144                       |

|  |           |                         |   |        |            |
|--|-----------|-------------------------|---|--------|------------|
|  | test      | Negative s election     | 0.015   | 0.0    | SRV+Double |
|  | test      | Negative s election     | 0.404   | 100.0  | SRV+Double |
|  | test      | Negative s election     | 0.004   | 0.0    | SRV+Double |
|  | test      | Negative s election     | 0.302   | 100.0  | SRV+Double |
|  | reference | Diversifying selecti on | <b>Ω-class distributions (all) (cols 1-7/7)</b> |        |            |
|  | reference | Negative s election     | 0.003   | 0.0    | SRV+Double |
|  | reference | Negative s election     | 0.31  | 100.0  | SRV+Double |
|  | test      | Negative s election     | 1.595   | 0.0    | SRV+Double |
|  | test      | Negative s election     | 0.003   | 0.0    | SRV+Double |
|  | test      | Negative s election     | 0.31  | 100.0  | SRV+Double |
|  | reference | Diversifying selecti on | 1.008   | 0.0    | SRV+Double |
|  | reference | Negative s election     | 0.294   | 84.933 | SRV+Double |
|  | reference | Negative s election     | 0.353   | 15.067 | SRV+Double |
|  | test      | Diversifying selecti on | 1.006   | 0.0    | SRV+Double |
|  | test      | Diversifying selecti on | 1.008   | 0.0    | SRV+Double |
|  | test      | Negative s election     | 0.397   | 84.933 | SRV+Double |
|  | test      | Negative s election     | 0.456   | 15.067 | SRV+Double |
|  | test      | Negative s election     | 0.294   | 84.933 | SRV+Double |
|  | test      | Negative s election     | 0.353   | 15.067 | SRV+Double |
|  | reference | Diversifying selecti on | 1.079   | 0.0    | SRV+Double |
|  | reference | Negative s election     | 0.302   | 72.332 | SRV+Double |
|  | reference | Negative s election     | 0.329   | 27.668 | SRV+Double |
|  | test      | Diversifying selecti on | 1.079   | 0.0    | SRV+Double |
|  | test      | Negative s election     | 0.302   | 72.332 | SRV+Double |
|  | test      | Negative s election     | 0.329   | 27.668 | SRV+Double |
|  | reference | Diversifying selecti on | 1.004   | 0.0    | SRV+Double |
|  | reference | Negative s election     | 0.006   | 0.0    | SRV+Double |
|  | reference | Negative s election     | 0.302   | 100.0  | SRV+Double |
|  | test      | Diversifying selecti on | 1.003   | 0.0    | SRV+Double |
|  | test      | Diversifying selecti on | 1.004   | 0.0    | SRV+Double |
|  | test      | Negative s election     | 0.022   | 0.0    | SRV+Double |
|  | test      | Negative s election     | 0.405   | 100.0  | SRV+Double |
|  | test      | Negative s election     | 0.006   | 0.0    | SRV+Double |
|  | test      | Negative s election     | 0.302   | 100.0  | SRV+Double |
|  | reference | Diversifying selecti on | 1.089   | 0.0    | SRV+Double |
|  | reference | Negative s election     | 0.005   | 0.0    | SRV+Double |
|  | reference | Negative s election     | 0.31  | 100.0  | SRV+Double |
|  | test      | Diversifying selecti on | 1.089   | 0.0    | SRV+Double |
|  | test      | Negative s election     | 0.005   | 0.0    | SRV+Double |
|  | test      | Negative s election     | 0.31  | 100.0  | SRV+Double |
|  | reference | Diversifying selecti on | 1.004   | 0.0    | SRV+Double |
|  | reference | Negative s election     | 0.012   | 0.0    | SRV+Double |
|  | reference | Negative s election     | 0.301   | 100.0  | SRV+Double |
|  | test      | Diversifying selecti on | 1.003   | 0.0    | SRV+Double |
|  | test      | Diversifying selecti on | 1.004   | 0.0    | SRV+Double |
|  | test      | Negative s election     | 0.034   | 0.0    | SRV+Double |
|  | test      | Negative s election     | 0.403   | 100.0  | SRV+Double |
|  | test      | Negative s election     | 0.012   | 0.0    | SRV+Double |
|  | test      | Negative s election     | 12  | 0.0    | SRV+Double |
|  | test      | Negative s election     | 0.301   | 100.0  | SRV+Double |
|  | reference | Diversifying selecti on | 1.085   | 0.0    | SRV+Double |

## SRV rate classes (all) (cols 1-6/6)

|     | <b>class_id</b> | <b>syn_rate</b> | <b>proportion_per cent</b> | <b>run_type</b> |  |
|-----|-----------------|-----------------|----------------------------|-----------------|--|
| SRV | 1               | 0.175           | 0.0                        | SRV             |  |
|     | 2               | 0.591           | 93.221                     | SRV             |  |
|     | 3               | 6.629           | 6.779                      | SRV             |  |
|     | 1               | 0.044           | 0.0                        | SRV             |  |
|     | 2               | 0.59            | 93.173                     | SRV             |  |
|     | 3               | 6.602           | 6.827                      | SRV             |  |
|     | 1               | 0.588           | 93.11                      | SRV             |  |
|     | 2               | 6.515           | 0.811                      | SRV             |  |
|     | 3               | 6.572           | 6.079                      | SRV             |  |
| SRV | 1               | 0.208           | 0.0                        | SRV             |  |
|     | 2               | 0.589           | 93.125                     | SRV             |  |
|     | 3               | 6.572           | 6.875                      | SRV             |  |
|     | 1               | 0.066           | 0.0                        | SRV             |  |
|     | 2               | 0.588           | 93.114                     | SRV             |  |
|     | 3               | 6.568           | 6.886                      | SRV             |  |
|     | 1               | 0.21            | 0.0                        | SRV             |  |
|     | 2               | 0.589           | 93.14                      | SRV             |  |
|     | 3               | 6.581           | 6.86                       | SRV             |  |
| SRV | 1               | 0.588           | 93.102                     | SRV             |  |
|     | 2               | 6.552           | 4.547                      | SRV             |  |
|     | 3               | 6.573           | 2.351                      | SRV             |  |
|     | 1               | 0.003           | 0.0                        | SRV             |  |
|     | 2               | 0.334           | 83.612                     | SRV             |  |
|     | 3               | 4.397           | 16.388                     | SRV             |  |
|     | 1               | 0.0             | 0.0                        | SRV             |  |
|     | 2               | 0.277           | 80.773                     | SRV             |  |
|     | 3               | 4.038           | 19.227                     | SRV             |  |
| SRV | 1               | 0.363           | 10.933                     | SRV             |  |
|     | 2               | 0.619           | 82.147                     | SRV             |  |
|     | 3               | 6.533           | 6.921                      | SRV             |  |

