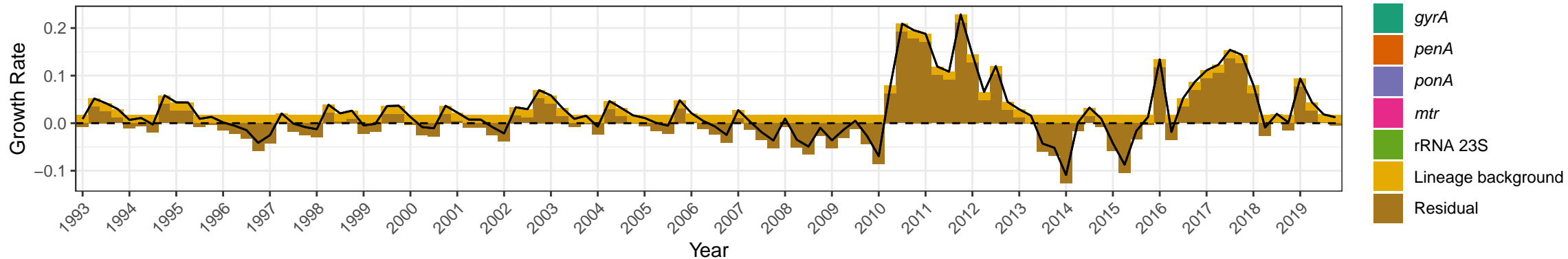
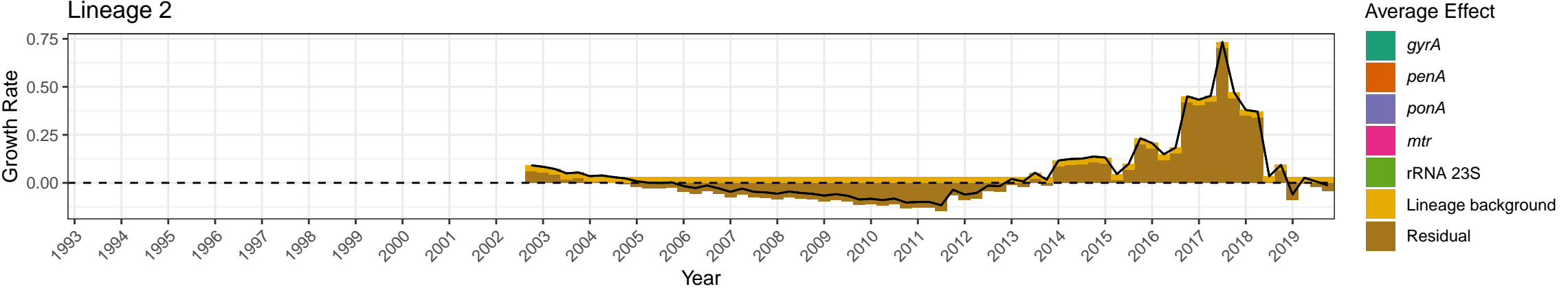


Lineage 1

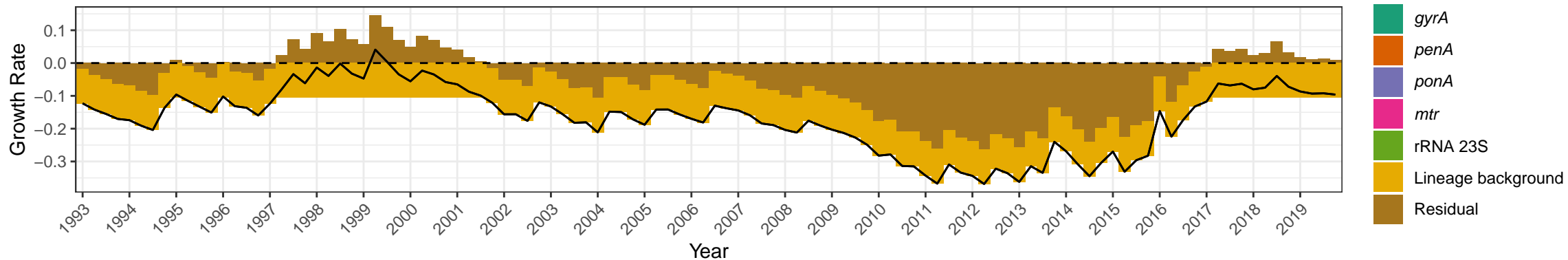


| Contribution       | 1993–2007           | 2007–2010           | 2010–2012          | 2012–2019          |
|--------------------|---------------------|---------------------|--------------------|--------------------|
| <i>gyrA</i>        | –                   | –                   | –                  | –                  |
| <i>penA</i>        | –                   | –                   | –                  | –                  |
| <i>ponA</i>        | –                   | –                   | –                  | –                  |
| <i>mtr</i>         | –                   | –                   | –                  | –                  |
| rRNA 23S           | –                   | –                   | –                  | –                  |
| Lineage background | 0.01 (–0.11, 0.17)  | 0.01 (–0.11, 0.17)  | 0.01 (–0.11, 0.17) | 0.01 (–0.11, 0.17) |
| Residual           | –0.00 (–0.13, 0.13) | –0.03 (–0.30, 0.22) | 0.12 (–0.20, 0.43) | 0.02 (–0.14, 0.18) |
| AMR Total          | –                   | –                   | –                  | –                  |
| Total              | 0.01 (–0.17, 0.20)  | –0.02 (–0.32, 0.28) | 0.13 (–0.20, 0.47) | 0.04 (–0.16, 0.23) |



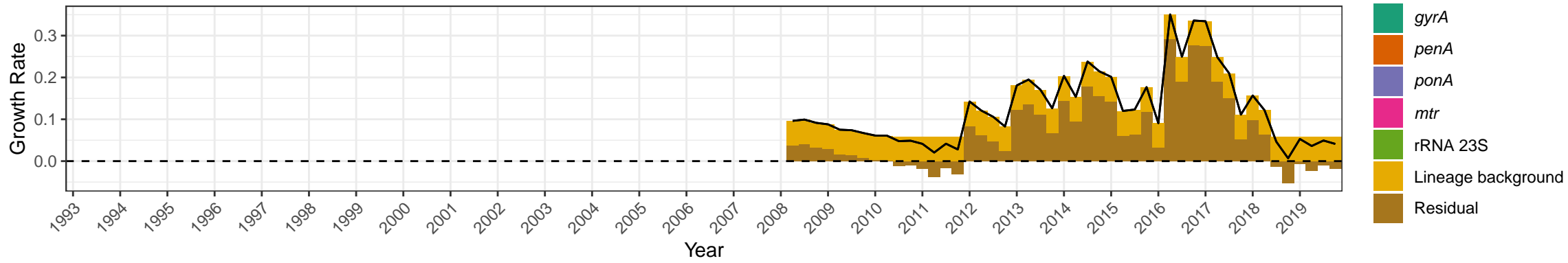
| Contribution       | 1993–2007           | 2007–2010           | 2010–2012           | 2012–2019          |
|--------------------|---------------------|---------------------|---------------------|--------------------|
| <i>gyrA</i>        | –                   | –                   | –                   | –                  |
| <i>penA</i>        | –                   | –                   | –                   | –                  |
| <i>ponA</i>        | –                   | –                   | –                   | –                  |
| <i>mtr</i>         | –                   | –                   | –                   | –                  |
| rRNA 23S           | –                   | –                   | –                   | –                  |
| Lineage background | 0.02 (–0.07, 0.15)  | 0.02 (–0.07, 0.15)  | 0.02 (–0.07, 0.15)  | 0.02 (–0.07, 0.15) |
| Residual           | –0.00 (–0.13, 0.13) | –0.08 (–0.35, 0.18) | –0.11 (–0.46, 0.20) | 0.12 (–0.01, 0.27) |
| AMR Total          | –                   | –                   | –                   | –                  |
| Total              | 0.03 (–0.14, 0.20)  | –0.06 (–0.34, 0.21) | –0.08 (–0.43, 0.23) | 0.15 (0.01, 0.29)  |

Lineage 3



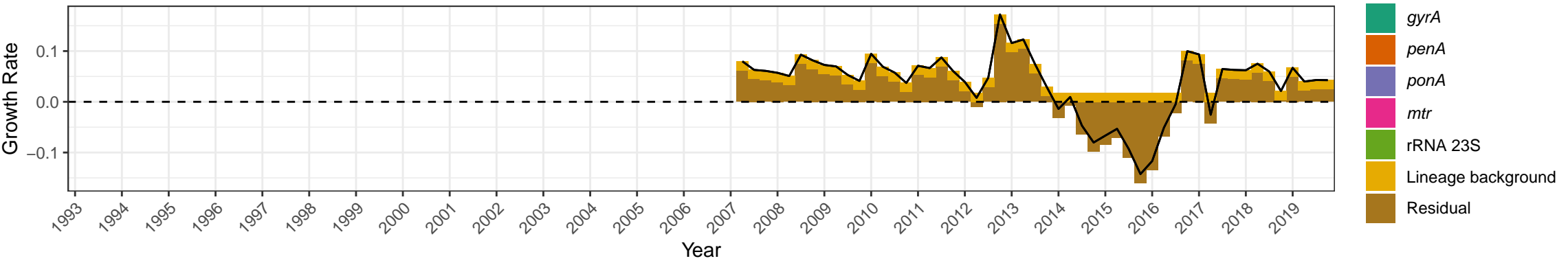
| Contribution       | 1993–2007           | 2007–2010           | 2010–2012           | 2012–2019            |
|--------------------|---------------------|---------------------|---------------------|----------------------|
| <i>gyrA</i>        | –                   | –                   | –                   | –                    |
| <i>penA</i>        | –                   | –                   | –                   | –                    |
| <i>ponA</i>        | –                   | –                   | –                   | –                    |
| <i>mtr</i>         | –                   | –                   | –                   | –                    |
| rRNA 23S           | –                   | –                   | –                   | –                    |
| Lineage background | –0.10 (–0.26, 0.01) | –0.10 (–0.26, 0.01) | –0.10 (–0.26, 0.01) | –0.10 (–0.26, 0.01)  |
| Residual           | –0.01 (–0.13, 0.10) | –0.09 (–0.37, 0.17) | –0.21 (–0.56, 0.12) | –0.10 (–0.26, 0.06)  |
| AMR Total          | –                   | –                   | –                   | –                    |
| Total              | –0.11 (–0.27, 0.03) | –0.20 (–0.47, 0.08) | –0.32 (–0.65, 0.01) | –0.21 (–0.36, –0.06) |

Lineage 4



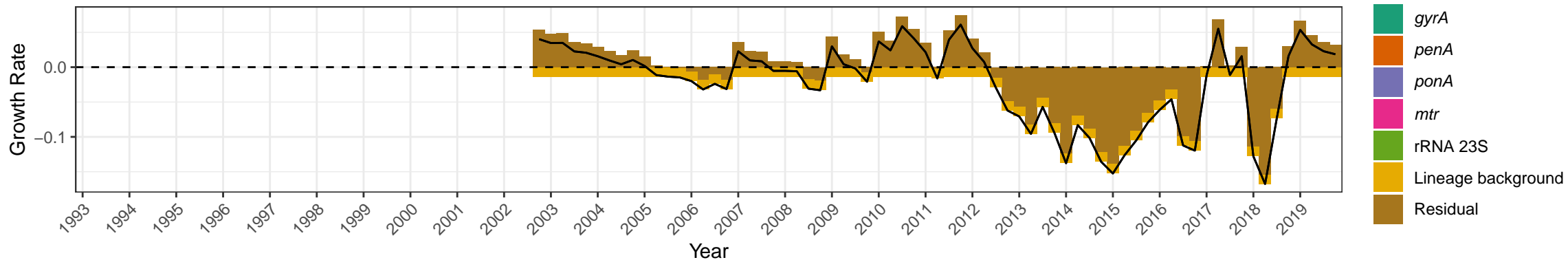
| Contribution       | 1993–2007 | 2007–2010          | 2010–2012           | 2012–2019          |
|--------------------|-----------|--------------------|---------------------|--------------------|
| <i>gyrA</i>        | –         | –                  | –                   | –                  |
| <i>penA</i>        | –         | –                  | –                   | –                  |
| <i>ponA</i>        | –         | –                  | –                   | –                  |
| <i>mtr</i>         | –         | –                  | –                   | –                  |
| rRNA 23S           | –         | –                  | –                   | –                  |
| Lineage background | –         | 0.04 (–0.06, 0.23) | 0.04 (–0.06, 0.23)  | 0.04 (–0.06, 0.23) |
| Residual           | –         | 0.01 (–0.27, 0.30) | –0.01 (–0.35, 0.30) | 0.10 (–0.06, 0.26) |
| AMR Total          | –         | –                  | –                   | –                  |
| Total              | –         | 0.08 (–0.24, 0.38) | 0.05 (–0.30, 0.37)  | 0.15 (0.01, 0.32)  |

Lineage 5

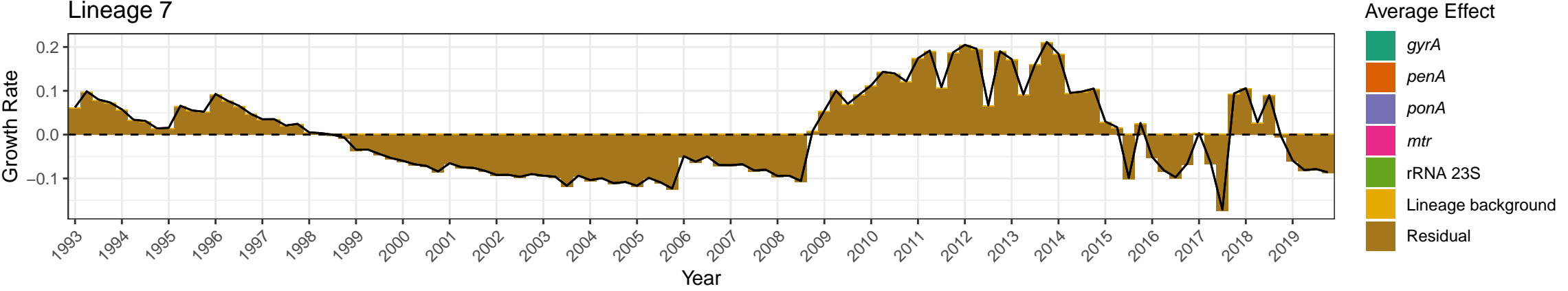


| Contribution       | 1993–2007 | 2007–2010          | 2010–2012          | 2012–2019          |
|--------------------|-----------|--------------------|--------------------|--------------------|
| <i>gyrA</i>        | –         | –                  | –                  | –                  |
| <i>penA</i>        | –         | –                  | –                  | –                  |
| <i>ponA</i>        | –         | –                  | –                  | –                  |
| <i>mtr</i>         | –         | –                  | –                  | –                  |
| rRNA 23S           | –         | –                  | –                  | –                  |
| Lineage background | –         | 0.01 (–0.10, 0.16) | 0.01 (–0.10, 0.16) | 0.01 (–0.10, 0.16) |
| Residual           | –         | 0.04 (–0.25, 0.33) | 0.05 (–0.27, 0.39) | 0.00 (–0.14, 0.14) |
| AMR Total          | –         | –                  | –                  | –                  |
| Total              | –         | 0.06 (–0.26, 0.36) | 0.07 (–0.26, 0.41) | 0.02 (–0.11, 0.16) |

Lineage 6

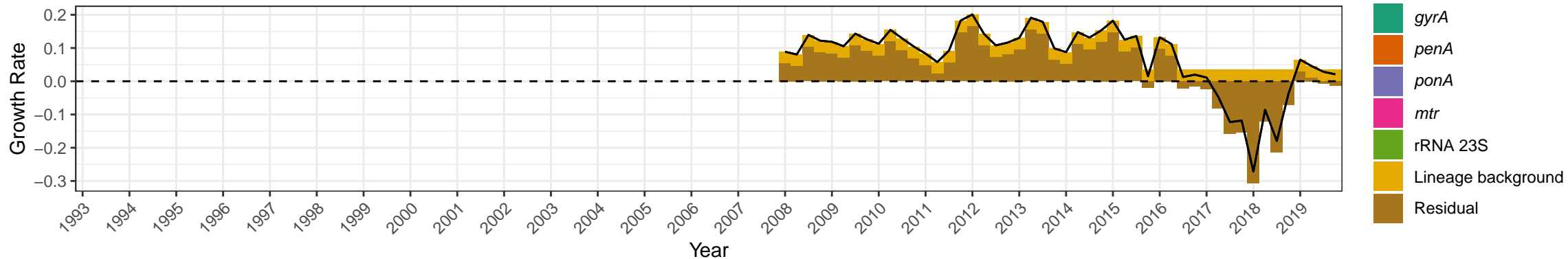


| Contribution       | 1993–2007           | 2007–2010           | 2010–2012           | 2012–2019           |
|--------------------|---------------------|---------------------|---------------------|---------------------|
| <i>gyrA</i>        | –                   | –                   | –                   | –                   |
| <i>penA</i>        | –                   | –                   | –                   | –                   |
| <i>ponA</i>        | –                   | –                   | –                   | –                   |
| <i>mtr</i>         | –                   | –                   | –                   | –                   |
| rRNA 23S           | –                   | –                   | –                   | –                   |
| Lineage background | –0.01 (–0.14, 0.09) | –0.01 (–0.14, 0.09) | –0.01 (–0.14, 0.09) | –0.01 (–0.14, 0.09) |
| Residual           | 0.00 (–0.13, 0.14)  | 0.01 (–0.25, 0.28)  | 0.05 (–0.28, 0.37)  | –0.04 (–0.18, 0.09) |
| AMR Total          | –                   | –                   | –                   | –                   |
| Total              | –0.01 (–0.18, 0.16) | –0.00 (–0.28, 0.28) | 0.04 (–0.29, 0.37)  | –0.05 (–0.20, 0.08) |



| Contribution       | 1993–2007           | 2007–2010           | 2010–2012          | 2012–2019          |
|--------------------|---------------------|---------------------|--------------------|--------------------|
| <i>gyrA</i>        | –                   | –                   | –                  | –                  |
| <i>penA</i>        | –                   | –                   | –                  | –                  |
| <i>ponA</i>        | –                   | –                   | –                  | –                  |
| <i>mtr</i>         | –                   | –                   | –                  | –                  |
| rRNA 23S           | –                   | –                   | –                  | –                  |
| Lineage background | 0.00 (–0.11, 0.11)  | 0.00 (–0.11, 0.11)  | 0.00 (–0.11, 0.11) | 0.00 (–0.11, 0.11) |
| Residual           | –0.03 (–0.14, 0.08) | –0.03 (–0.28, 0.23) | 0.14 (–0.16, 0.47) | 0.04 (–0.10, 0.17) |
| AMR Total          | –                   | –                   | –                  | –                  |
| Total              | –0.03 (–0.16, 0.11) | –0.02 (–0.29, 0.23) | 0.14 (–0.16, 0.46) | 0.04 (–0.11, 0.19) |

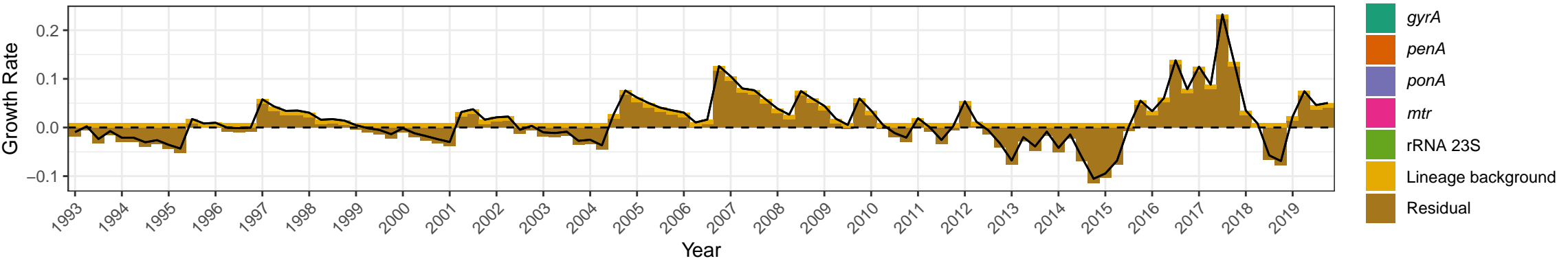
Lineage 8



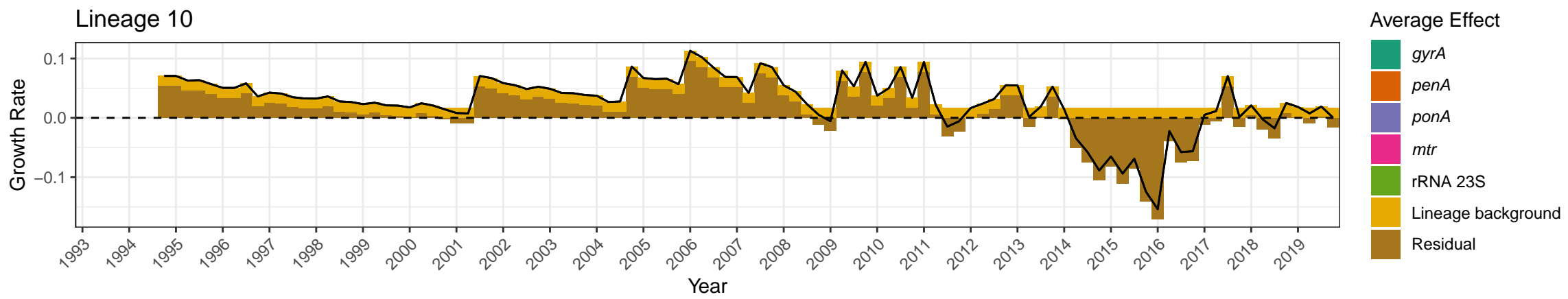
| Contribution       | 1993–2007 | 2007–2010          | 2010–2012          | 2012–2019          |
|--------------------|-----------|--------------------|--------------------|--------------------|
| <i>gyrA</i>        | –         | –                  | –                  | –                  |
| <i>penA</i>        | –         | –                  | –                  | –                  |
| <i>ponA</i>        | –         | –                  | –                  | –                  |
| <i>mtr</i>         | –         | –                  | –                  | –                  |
| rRNA 23S           | –         | –                  | –                  | –                  |
| Lineage background | –         | 0.03 (–0.07, 0.18) | 0.03 (–0.07, 0.18) | 0.03 (–0.07, 0.18) |
| Residual           | –         | 0.05 (–0.23, 0.35) | 0.08 (–0.24, 0.41) | 0.02 (–0.12, 0.16) |
| AMR Total          | –         | –                  | –                  | –                  |
| Total              | –         | 0.08 (–0.21, 0.40) | 0.11 (–0.22, 0.44) | 0.05 (–0.08, 0.20) |



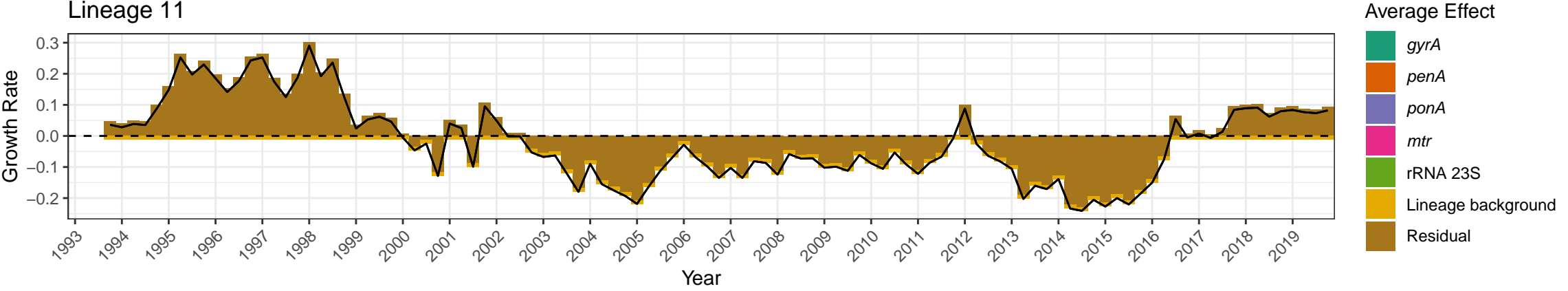
Lineage 9



| Contribution       | 1993–2007           | 2007–2010          | 2010–2012           | 2012–2019          |
|--------------------|---------------------|--------------------|---------------------|--------------------|
| <i>gyrA</i>        | –                   | –                  | –                   | –                  |
| <i>penA</i>        | –                   | –                  | –                   | –                  |
| <i>ponA</i>        | –                   | –                  | –                   | –                  |
| <i>mtr</i>         | –                   | –                  | –                   | –                  |
| rRNA 23S           | –                   | –                  | –                   | –                  |
| Lineage background | 0.01 (–0.12, 0.14)  | 0.01 (–0.12, 0.14) | 0.01 (–0.12, 0.14)  | 0.01 (–0.12, 0.14) |
| Residual           | –0.00 (–0.12, 0.12) | 0.04 (–0.21, 0.31) | –0.01 (–0.35, 0.32) | 0.01 (–0.14, 0.16) |
| AMR Total          | –                   | –                  | –                   | –                  |
| Total              | 0.01 (–0.15, 0.16)  | 0.05 (–0.22, 0.33) | –0.00 (–0.34, 0.34) | 0.02 (–0.15, 0.19) |

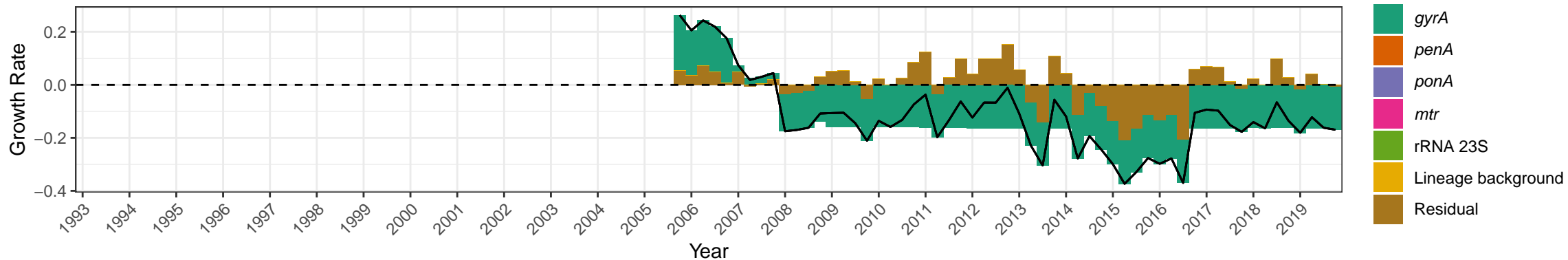


| Contribution       | 1993–2007          | 2007–2010          | 2010–2012          | 2012–2019           |
|--------------------|--------------------|--------------------|--------------------|---------------------|
| <i>gyrA</i>        | –                  | –                  | –                  | –                   |
| <i>penA</i>        | –                  | –                  | –                  | –                   |
| <i>ponA</i>        | –                  | –                  | –                  | –                   |
| <i>mtr</i>         | –                  | –                  | –                  | –                   |
| rRNA 23S           | –                  | –                  | –                  | –                   |
| Lineage background | 0.01 (–0.09, 0.14) | 0.01 (–0.09, 0.14) | 0.01 (–0.09, 0.14) | 0.01 (–0.09, 0.14)  |
| Residual           | 0.03 (–0.10, 0.15) | 0.04 (–0.23, 0.29) | 0.02 (–0.28, 0.33) | –0.03 (–0.17, 0.11) |
| AMR Total          | –                  | –                  | –                  | –                   |
| Total              | 0.04 (–0.10, 0.19) | 0.06 (–0.22, 0.31) | 0.04 (–0.26, 0.34) | –0.01 (–0.16, 0.14) |



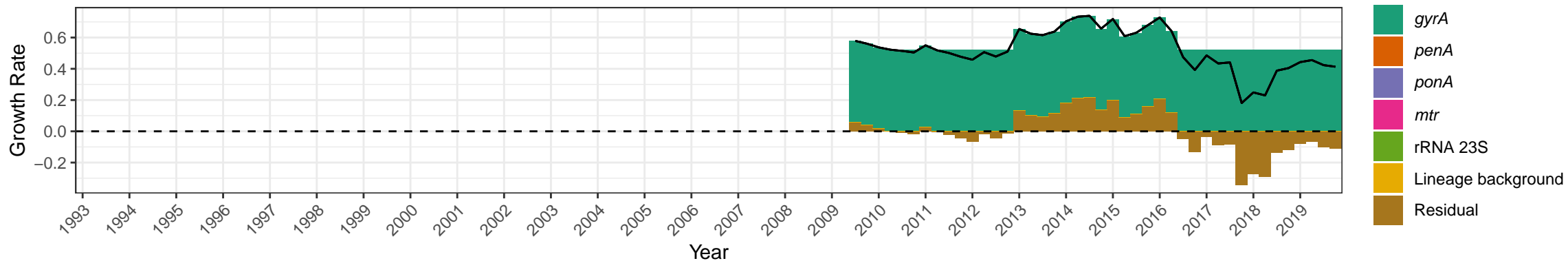
| Contribution       | 1993–2007           | 2007–2010           | 2010–2012           | 2012–2019           |
|--------------------|---------------------|---------------------|---------------------|---------------------|
| <i>gyrA</i>        | –                   | –                   | –                   | –                   |
| <i>penA</i>        | –                   | –                   | –                   | –                   |
| <i>ponA</i>        | –                   | –                   | –                   | –                   |
| <i>mtr</i>         | –                   | –                   | –                   | –                   |
| rRNA 23S           | –                   | –                   | –                   | –                   |
| Lineage background | –0.01 (–0.12, 0.09) | –0.01 (–0.12, 0.09) | –0.01 (–0.12, 0.09) | –0.01 (–0.12, 0.09) |
| Residual           | 0.04 (–0.07, 0.15)  | –0.08 (–0.33, 0.17) | –0.06 (–0.39, 0.26) | –0.04 (–0.18, 0.09) |
| AMR Total          | –                   | –                   | –                   | –                   |
| Total              | 0.03 (–0.10, 0.16)  | –0.09 (–0.34, 0.15) | –0.08 (–0.40, 0.24) | –0.06 (–0.21, 0.10) |

Lineage 12

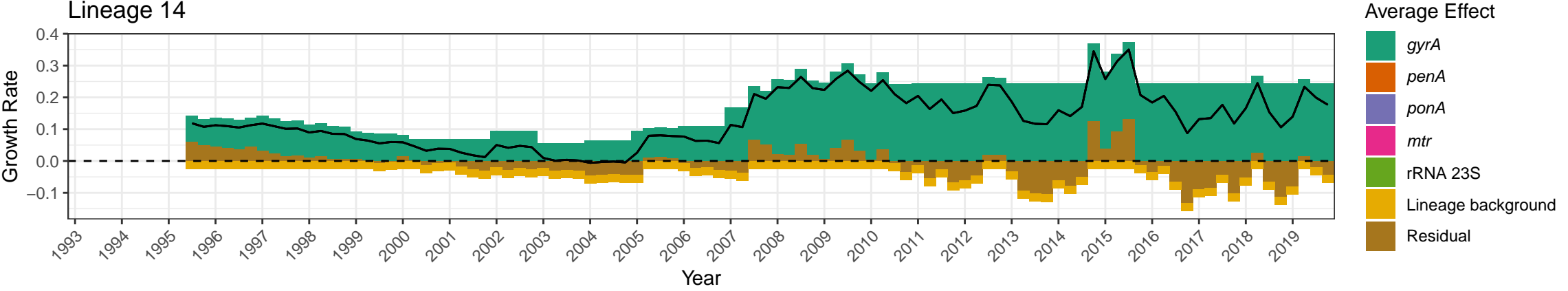


| Contribution       | 1993–2007          | 2007–2010           | 2010–2012           | 2012–2019           |
|--------------------|--------------------|---------------------|---------------------|---------------------|
| <i>gyrA</i>        | 0.18 (−0.86, 1.36) | −0.13 (−1.01, 0.98) | −0.20 (−1.07, 0.90) | −0.21 (−1.07, 0.89) |
| <i>penA</i>        | —                  | —                   | —                   | —                   |
| <i>ponA</i>        | —                  | —                   | —                   | —                   |
| <i>mtr</i>         | —                  | —                   | —                   | —                   |
| rRNA 23S           | —                  | —                   | —                   | —                   |
| Lineage background | 0.00 (−0.15, 0.15) | 0.00 (−0.15, 0.15)  | 0.00 (−0.15, 0.15)  | 0.00 (−0.15, 0.15)  |
| Residual           | 0.01 (−0.13, 0.13) | 0.01 (−0.26, 0.28)  | 0.04 (−0.28, 0.36)  | −0.02 (−0.19, 0.16) |
| AMR Total          | 0.18 (−0.86, 1.36) | −0.13 (−1.01, 0.98) | −0.20 (−1.07, 0.90) | −0.21 (−1.07, 0.89) |
| Total              | 0.19 (−0.88, 1.38) | −0.12 (−1.06, 1.01) | −0.14 (−1.12, 1.00) | −0.22 (−1.11, 0.89) |

Lineage 13

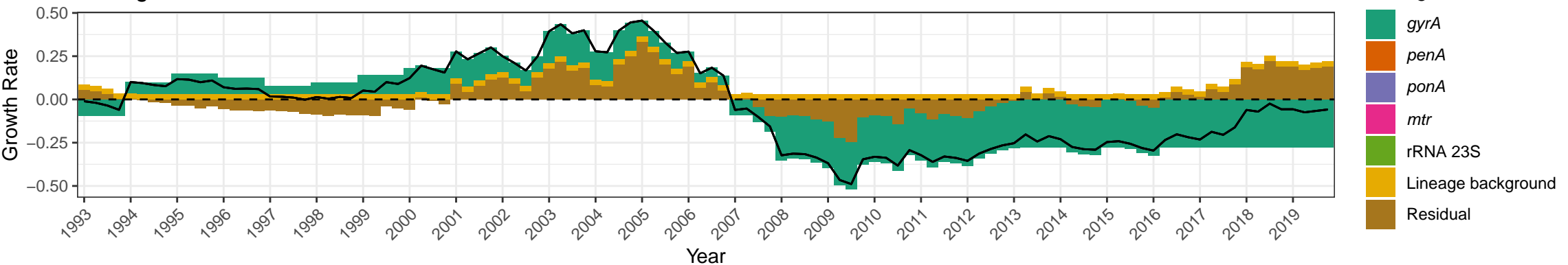


| Contribution       | 1993–2007 | 2007–2010          | 2010–2012           | 2012–2019          |
|--------------------|-----------|--------------------|---------------------|--------------------|
| <i>gyrA</i>        | –         | 0.50 (0.20, 0.79)  | 0.52 (0.24, 0.79)   | 0.52 (0.24, 0.79)  |
| <i>penA</i>        | –         | –                  | –                   | –                  |
| <i>ponA</i>        | –         | –                  | –                   | –                  |
| <i>mtr</i>         | –         | –                  | –                   | –                  |
| rRNA 23S           | –         | –                  | –                   | –                  |
| Lineage background | –         | 0.00 (–0.14, 0.16) | 0.00 (–0.14, 0.16)  | 0.00 (–0.14, 0.16) |
| Residual           | –         | 0.01 (–0.28, 0.30) | –0.01 (–0.34, 0.33) | 0.00 (–0.17, 0.17) |
| AMR Total          | –         | 0.50 (0.20, 0.79)  | 0.52 (0.24, 0.79)   | 0.52 (0.24, 0.79)  |
| Total              | –         | 0.51 (0.11, 0.90)  | 0.52 (0.10, 0.91)   | 0.53 (0.29, 0.75)  |



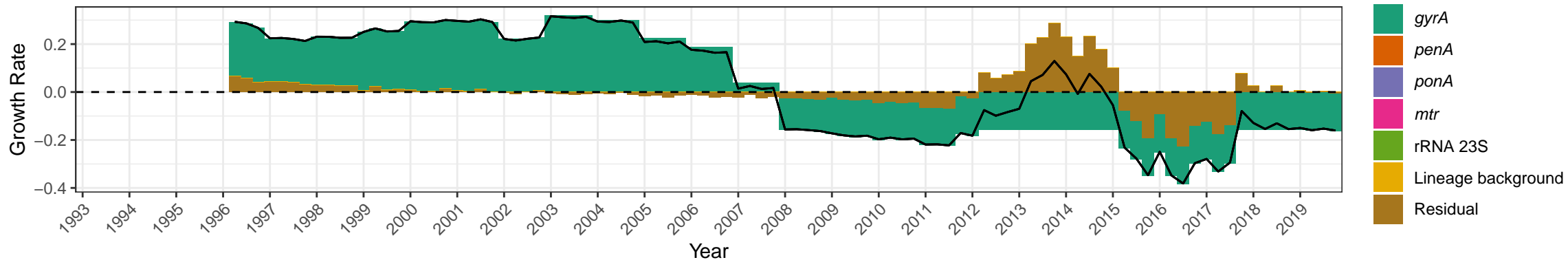
| Contribution       | 1993–2007           | 2007–2010           | 2010–2012           | 2012–2019           |
|--------------------|---------------------|---------------------|---------------------|---------------------|
| <i>gyrA</i>        | 0.09 (−0.24, 0.43)  | 0.21 (0.00, 0.45)   | 0.24 (0.01, 0.48)   | 0.24 (0.01, 0.49)   |
| <i>penA</i>        | –                   | –                   | –                   | –                   |
| <i>ponA</i>        | –                   | –                   | –                   | –                   |
| <i>mtr</i>         | –                   | –                   | –                   | –                   |
| rRNA 23S           | –                   | –                   | –                   | –                   |
| Lineage background | −0.01 (−0.20, 0.11) | −0.01 (−0.20, 0.11) | −0.01 (−0.20, 0.11) | −0.01 (−0.20, 0.11) |
| Residual           | −0.00 (−0.13, 0.12) | 0.02 (−0.24, 0.30)  | −0.02 (−0.34, 0.31) | −0.04 (−0.20, 0.12) |
| AMR Total          | 0.09 (−0.24, 0.43)  | 0.21 (0.00, 0.45)   | 0.24 (0.01, 0.48)   | 0.24 (0.01, 0.49)   |
| Total              | 0.07 (−0.24, 0.34)  | 0.21 (−0.10, 0.52)  | 0.20 (−0.15, 0.55)  | 0.18 (−0.02, 0.40)  |

Lineage 15



| Contribution       | 1993–2007          | 2007–2010            | 2010–2012            | 2012–2019            |
|--------------------|--------------------|----------------------|----------------------|----------------------|
| <i>gyrA</i>        | 0.10 (−0.13, 0.30) | −0.20 (−0.40, −0.01) | −0.27 (−0.48, −0.07) | −0.27 (−0.48, −0.07) |
| <i>penA</i>        | –                  | –                    | –                    | –                    |
| <i>ponA</i>        | –                  | –                    | –                    | –                    |
| <i>mtr</i>         | –                  | –                    | –                    | –                    |
| rRNA 23S           | –                  | –                    | –                    | –                    |
| Lineage background | 0.02 (−0.10, 0.19) | 0.02 (−0.10, 0.19)   | 0.02 (−0.10, 0.19)   | 0.02 (−0.10, 0.19)   |
| Residual           | 0.04 (−0.08, 0.16) | −0.10 (−0.35, 0.14)  | −0.09 (−0.41, 0.21)  | 0.04 (−0.11, 0.21)   |
| AMR Total          | 0.10 (−0.13, 0.30) | −0.20 (−0.40, −0.01) | −0.27 (−0.48, −0.07) | −0.27 (−0.48, −0.07) |
| Total              | 0.16 (0.01, 0.31)  | −0.28 (−0.52, −0.04) | −0.34 (−0.65, −0.03) | −0.20 (−0.39, −0.01) |

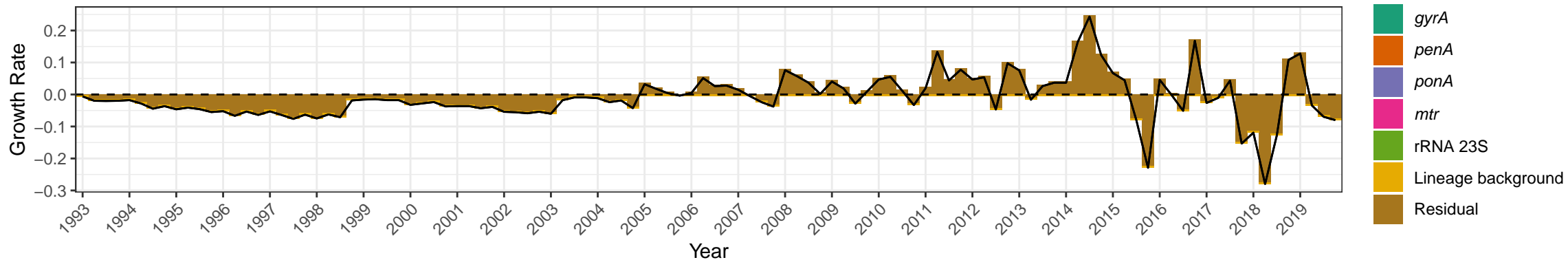
Lineage 16



| Contribution       | 1993–2007          | 2007–2010           | 2010–2012           | 2012–2019           |
|--------------------|--------------------|---------------------|---------------------|---------------------|
| <i>gyrA</i>        | 0.19 (−0.77, 1.35) | −0.12 (−0.99, 0.95) | −0.19 (−1.06, 0.87) | −0.19 (−1.06, 0.86) |
| <i>penA</i>        | —                  | —                   | —                   | —                   |
| <i>ponA</i>        | —                  | —                   | —                   | —                   |
| <i>mtr</i>         | —                  | —                   | —                   | —                   |
| rRNA 23S           | —                  | —                   | —                   | —                   |
| Lineage background | 0.00 (−0.16, 0.17) | 0.00 (−0.16, 0.17)  | 0.00 (−0.16, 0.17)  | 0.00 (−0.16, 0.17)  |
| Residual           | 0.01 (−0.13, 0.14) | −0.03 (−0.31, 0.26) | −0.04 (−0.41, 0.30) | 0.01 (−0.15, 0.18)  |
| AMR Total          | 0.19 (−0.77, 1.35) | −0.12 (−0.99, 0.95) | −0.19 (−1.06, 0.87) | −0.19 (−1.06, 0.86) |
| Total              | 0.20 (−0.77, 1.38) | −0.13 (−1.05, 0.95) | −0.23 (−1.17, 0.89) | −0.17 (−1.06, 0.89) |

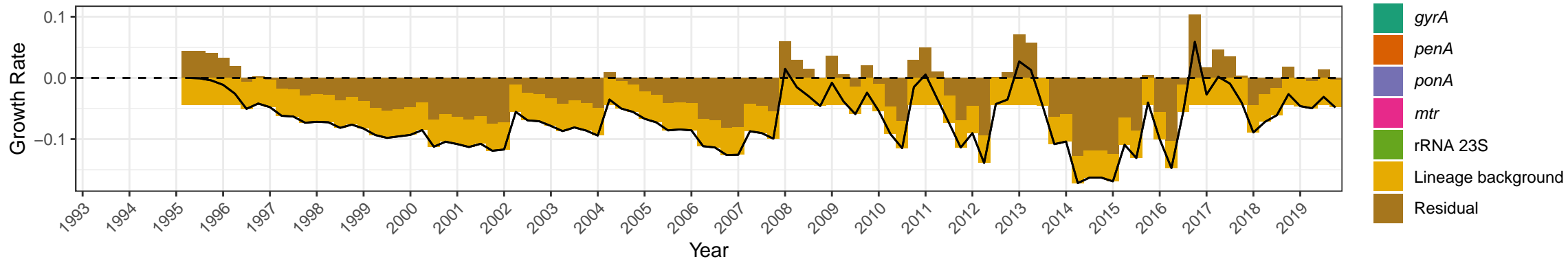


Lineage 17

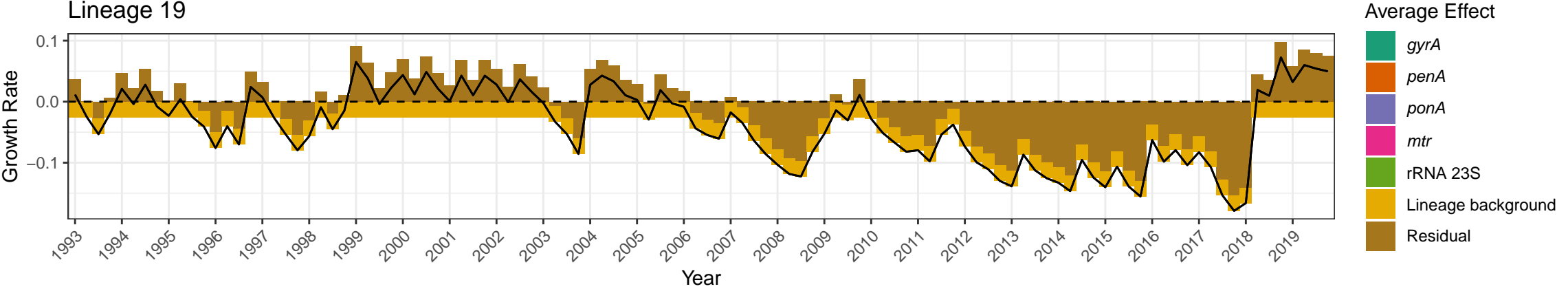


| Contribution       | 1993–2007           | 2007–2010           | 2010–2012           | 2012–2019           |
|--------------------|---------------------|---------------------|---------------------|---------------------|
| <i>gyrA</i>        | –                   | –                   | –                   | –                   |
| <i>penA</i>        | –                   | –                   | –                   | –                   |
| <i>ponA</i>        | –                   | –                   | –                   | –                   |
| <i>mtr</i>         | –                   | –                   | –                   | –                   |
| rRNA 23S           | –                   | –                   | –                   | –                   |
| Lineage background | –0.00 (–0.12, 0.10) | –0.00 (–0.12, 0.10) | –0.00 (–0.12, 0.10) | –0.00 (–0.12, 0.10) |
| Residual           | –0.02 (–0.15, 0.09) | 0.02 (–0.24, 0.27)  | 0.05 (–0.25, 0.35)  | 0.01 (–0.12, 0.14)  |
| AMR Total          | –                   | –                   | –                   | –                   |
| Total              | –0.03 (–0.18, 0.10) | 0.02 (–0.25, 0.27)  | 0.05 (–0.26, 0.35)  | 0.01 (–0.14, 0.14)  |

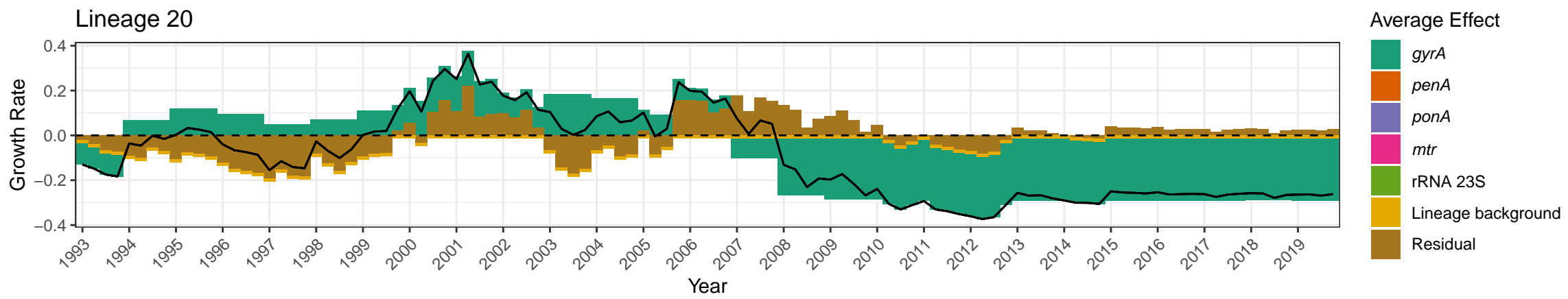
Lineage 18



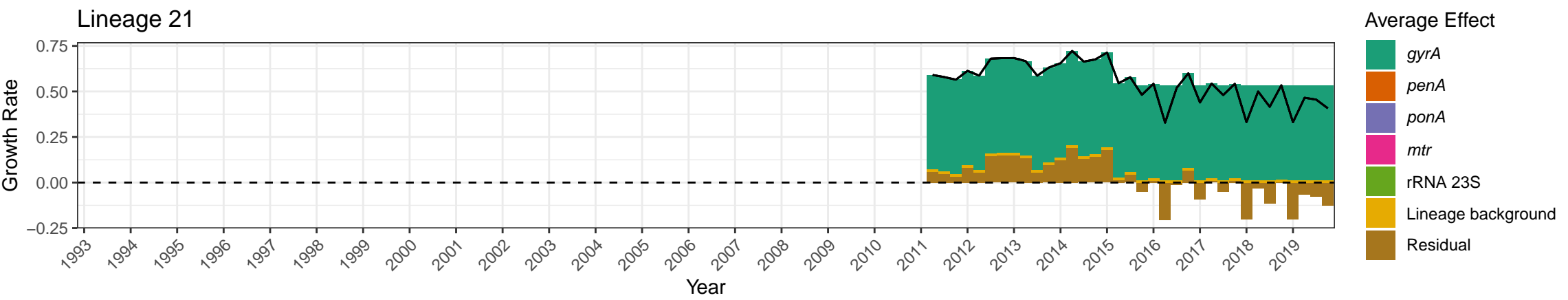
| Contribution       | 1993–2007           | 2007–2010           | 2010–2012           | 2012–2019           |
|--------------------|---------------------|---------------------|---------------------|---------------------|
| <i>gyrA</i>        | –                   | –                   | –                   | –                   |
| <i>penA</i>        | –                   | –                   | –                   | –                   |
| <i>ponA</i>        | –                   | –                   | –                   | –                   |
| <i>mtr</i>         | –                   | –                   | –                   | –                   |
| rRNA 23S           | –                   | –                   | –                   | –                   |
| Lineage background | –0.04 (–0.17, 0.05) | –0.04 (–0.17, 0.05) | –0.04 (–0.17, 0.05) | –0.04 (–0.17, 0.05) |
| Residual           | –0.02 (–0.15, 0.09) | –0.01 (–0.27, 0.24) | –0.02 (–0.32, 0.29) | –0.02 (–0.16, 0.11) |
| AMR Total          | –                   | –                   | –                   | –                   |
| Total              | –0.07 (–0.22, 0.07) | –0.05 (–0.32, 0.22) | –0.06 (–0.36, 0.24) | –0.07 (–0.21, 0.07) |



| Contribution       | 1993–2007           | 2007–2010           | 2010–2012           | 2012–2019           |
|--------------------|---------------------|---------------------|---------------------|---------------------|
| <i>gyrA</i>        | –                   | –                   | –                   | –                   |
| <i>penA</i>        | –                   | –                   | –                   | –                   |
| <i>ponA</i>        | –                   | –                   | –                   | –                   |
| <i>mtr</i>         | –                   | –                   | –                   | –                   |
| rRNA 23S           | –                   | –                   | –                   | –                   |
| Lineage background | –0.02 (–0.17, 0.09) | –0.02 (–0.17, 0.09) | –0.02 (–0.17, 0.09) | –0.02 (–0.17, 0.09) |
| Residual           | 0.02 (–0.09, 0.13)  | –0.03 (–0.30, 0.23) | –0.04 (–0.35, 0.28) | –0.06 (–0.22, 0.09) |
| AMR Total          | –                   | –                   | –                   | –                   |
| Total              | –0.01 (–0.17, 0.14) | –0.06 (–0.34, 0.22) | –0.07 (–0.39, 0.27) | –0.08 (–0.26, 0.09) |

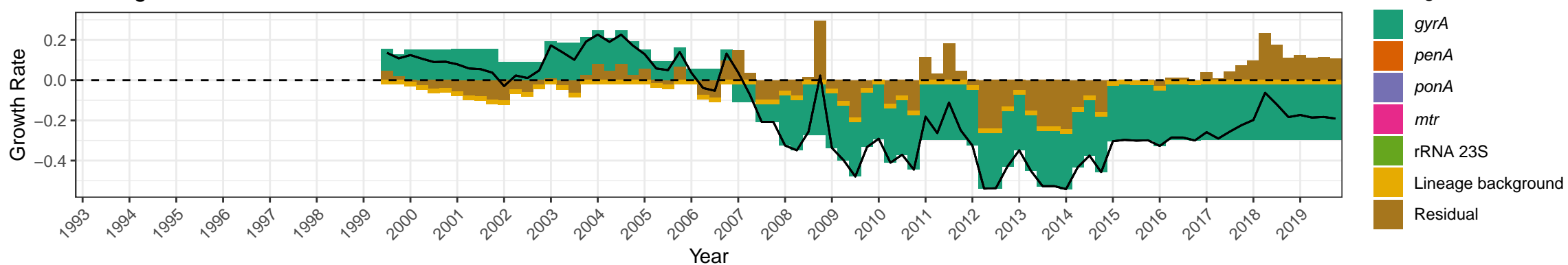


| Contribution       | 1993–2007           | 2007–2010            | 2010–2012            | 2012–2019            |
|--------------------|---------------------|----------------------|----------------------|----------------------|
| <i>gyrA</i>        | 0.10 (−0.13, 0.30)  | −0.20 (−0.40, −0.01) | −0.27 (−0.48, −0.07) | −0.27 (−0.48, −0.07) |
| <i>penA</i>        | —                   | —                    | —                    | —                    |
| <i>ponA</i>        | —                   | —                    | —                    | —                    |
| <i>mtr</i>         | —                   | —                    | —                    | —                    |
| rRNA 23S           | —                   | —                    | —                    | —                    |
| Lineage background | −0.01 (−0.18, 0.13) | −0.01 (−0.18, 0.13)  | −0.01 (−0.18, 0.13)  | −0.01 (−0.18, 0.13)  |
| Residual           | −0.04 (−0.16, 0.09) | 0.10 (−0.14, 0.35)   | −0.02 (−0.35, 0.29)  | 0.01 (−0.15, 0.18)   |
| AMR Total          | 0.10 (−0.13, 0.30)  | −0.20 (−0.40, −0.01) | −0.27 (−0.48, −0.07) | −0.27 (−0.48, −0.07) |
| Total              | 0.05 (−0.25, 0.31)  | −0.12 (−0.46, 0.23)  | −0.31 (−0.71, 0.09)  | −0.28 (−0.56, −0.00) |

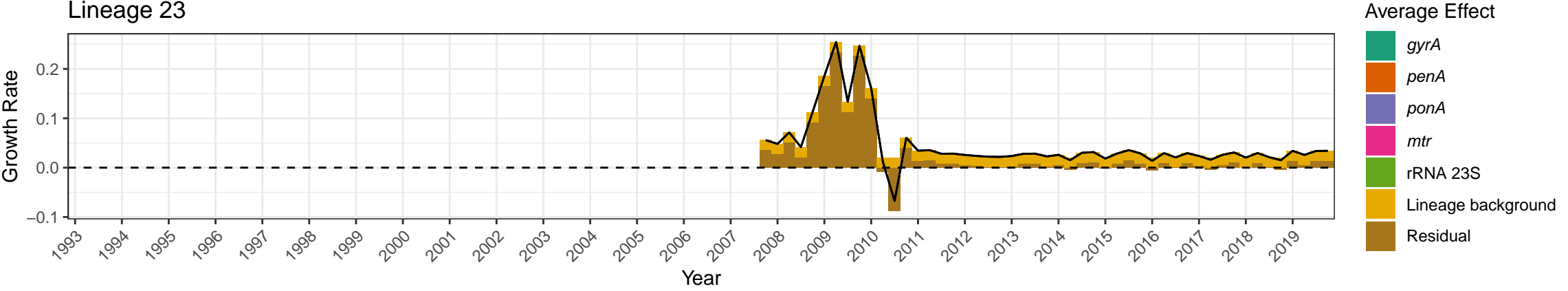


| Contribution       | 1993–2007 | 2007–2010 | 2010–2012          | 2012–2019          |
|--------------------|-----------|-----------|--------------------|--------------------|
| <i>gyrA</i>        | –         | –         | 0.52 (0.24, 0.79)  | 0.52 (0.24, 0.79)  |
| <i>penA</i>        | –         | –         | –                  | –                  |
| <i>ponA</i>        | –         | –         | –                  | –                  |
| <i>mtr</i>         | –         | –         | –                  | –                  |
| rRNA 23S           | –         | –         | –                  | –                  |
| Lineage background | –         | –         | 0.01 (–0.13, 0.18) | 0.01 (–0.13, 0.18) |
| Residual           | –         | –         | 0.02 (–0.32, 0.37) | 0.02 (–0.15, 0.18) |
| AMR Total          | –         | –         | 0.52 (0.24, 0.79)  | 0.52 (0.24, 0.79)  |
| Total              | –         | –         | 0.55 (0.11, 0.98)  | 0.55 (0.26, 0.85)  |

Lineage 22

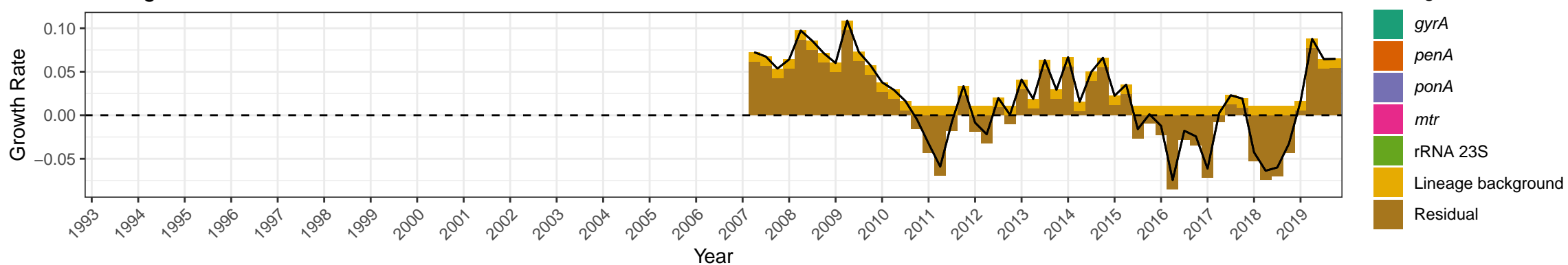


| Contribution       | 1993–2007           | 2007–2010            | 2010–2012            | 2012–2019            |
|--------------------|---------------------|----------------------|----------------------|----------------------|
| <i>gyrA</i>        | 0.10 (−0.13, 0.30)  | −0.20 (−0.40, −0.01) | −0.27 (−0.48, −0.07) | −0.27 (−0.48, −0.07) |
| <i>penA</i>        | —                   | —                    | —                    | —                    |
| <i>ponA</i>        | —                   | —                    | —                    | —                    |
| <i>mtr</i>         | —                   | —                    | —                    | —                    |
| rRNA 23S           | —                   | —                    | —                    | —                    |
| Lineage background | −0.01 (−0.18, 0.12) | −0.01 (−0.18, 0.12)  | −0.01 (−0.18, 0.12)  | −0.01 (−0.18, 0.12)  |
| Residual           | −0.01 (−0.13, 0.12) | −0.02 (−0.27, 0.23)  | 0.00 (−0.26, 0.27)   | −0.02 (−0.18, 0.13)  |
| AMR Total          | 0.10 (−0.13, 0.30)  | −0.20 (−0.40, −0.01) | −0.27 (−0.48, −0.07) | −0.27 (−0.48, −0.07) |
| Total              | 0.07 (−0.21, 0.33)  | −0.24 (−0.57, 0.07)  | −0.29 (−0.61, 0.02)  | −0.32 (−0.58, −0.07) |



| Contribution       | 1993–2007 | 2007–2010          | 2010–2012          | 2012–2019          |
|--------------------|-----------|--------------------|--------------------|--------------------|
| <i>gyrA</i>        | –         | –                  | –                  | –                  |
| <i>penA</i>        | –         | –                  | –                  | –                  |
| <i>ponA</i>        | –         | –                  | –                  | –                  |
| <i>mtr</i>         | –         | –                  | –                  | –                  |
| rRNA 23S           | –         | –                  | –                  | –                  |
| Lineage background | –         | 0.01 (–0.12, 0.18) | 0.01 (–0.12, 0.18) | 0.01 (–0.12, 0.18) |
| Residual           | –         | 0.08 (–0.19, 0.36) | 0.02 (–0.32, 0.36) | 0.01 (–0.16, 0.17) |
| AMR Total          | –         | –                  | –                  | –                  |
| Total              | –         | 0.10 (–0.20, 0.41) | 0.04 (–0.32, 0.38) | 0.03 (–0.18, 0.23) |

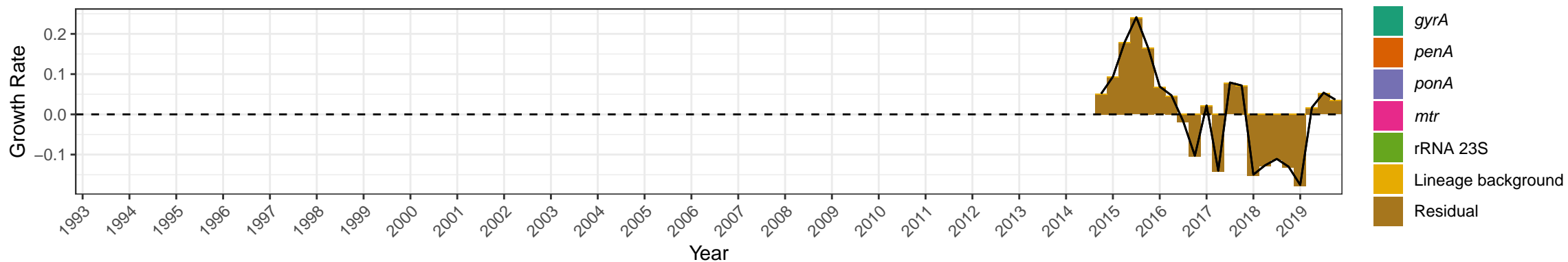
Lineage 24



| Contribution       | 1993–2007 | 2007–2010          | 2010–2012           | 2012–2019           |
|--------------------|-----------|--------------------|---------------------|---------------------|
| <i>gyrA</i>        | –         | –                  | –                   | –                   |
| <i>penA</i>        | –         | –                  | –                   | –                   |
| <i>ponA</i>        | –         | –                  | –                   | –                   |
| <i>mtr</i>         | –         | –                  | –                   | –                   |
| rRNA 23S           | –         | –                  | –                   | –                   |
| Lineage background | –         | 0.01 (–0.10, 0.14) | 0.01 (–0.10, 0.14)  | 0.01 (–0.10, 0.14)  |
| Residual           | –         | 0.06 (–0.21, 0.35) | –0.01 (–0.33, 0.32) | –0.00 (–0.14, 0.13) |
| AMR Total          | –         | –                  | –                   | –                   |
| Total              | –         | 0.07 (–0.21, 0.36) | 0.00 (–0.32, 0.32)  | 0.01 (–0.13, 0.15)  |

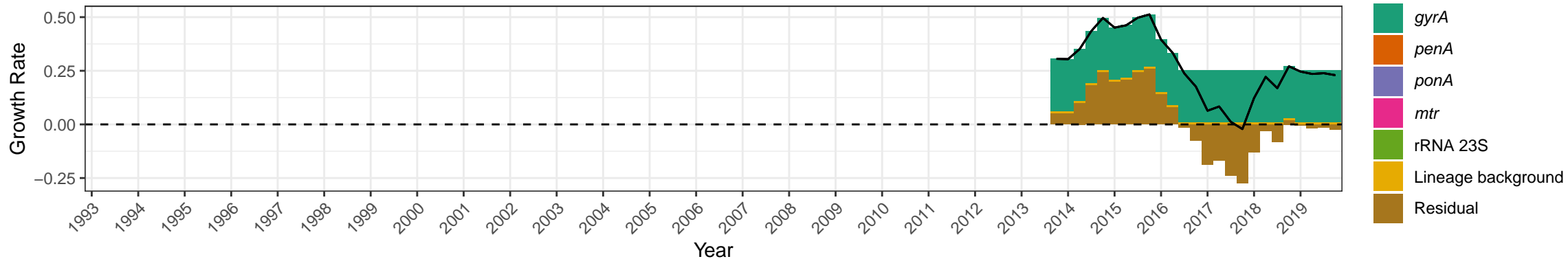


Lineage 25

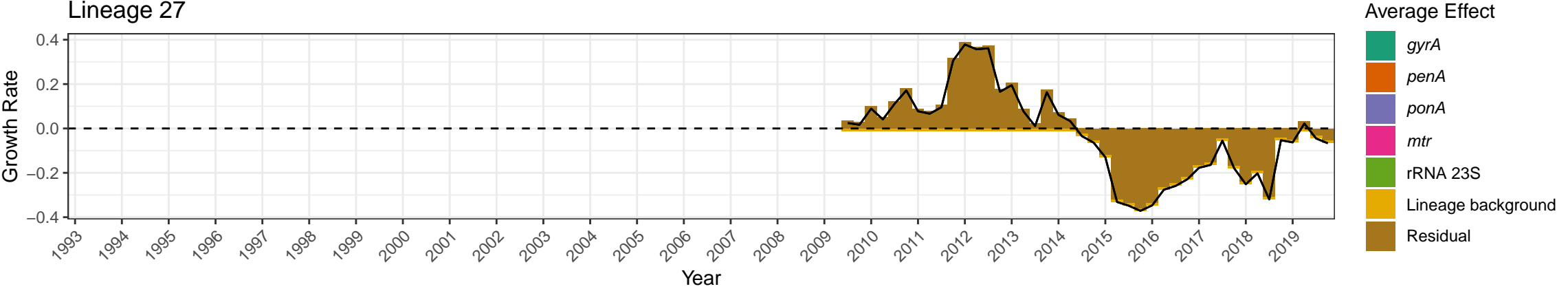


| Contribution       | 1993–2007 | 2007–2010 | 2010–2012 | 2012–2019          |
|--------------------|-----------|-----------|-----------|--------------------|
| <i>gyrA</i>        | –         | –         | –         | –                  |
| <i>penA</i>        | –         | –         | –         | –                  |
| <i>ponA</i>        | –         | –         | –         | –                  |
| <i>mtr</i>         | –         | –         | –         | –                  |
| rRNA 23S           | –         | –         | –         | –                  |
| Lineage background | –         | –         | –         | 0.00 (–0.17, 0.17) |
| Residual           | –         | –         | –         | 0.01 (–0.17, 0.18) |
| AMR Total          | –         | –         | –         | –                  |
| Total              | –         | –         | –         | 0.01 (–0.23, 0.25) |

Lineage 26

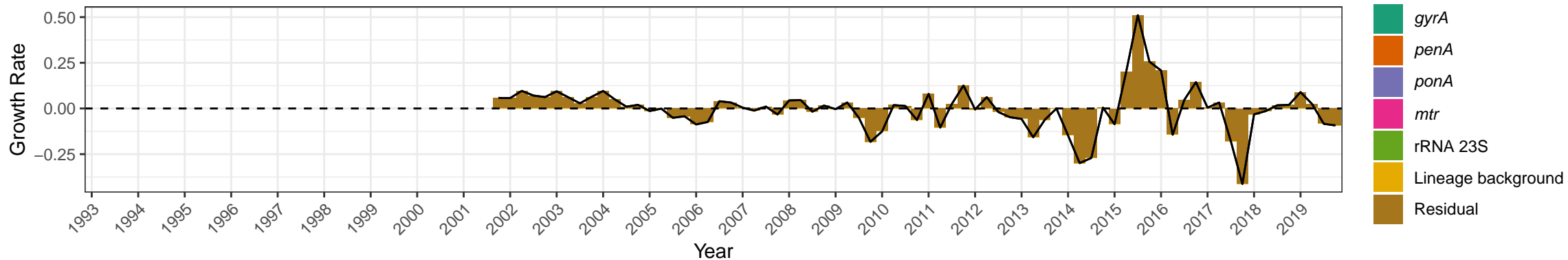


| Contribution       | 1993–2007 | 2007–2010 | 2010–2012 | 2012–2019          |
|--------------------|-----------|-----------|-----------|--------------------|
| <i>gyrA</i>        | –         | –         | –         | 0.24 (0.01, 0.49)  |
| <i>penA</i>        | –         | –         | –         | –                  |
| <i>ponA</i>        | –         | –         | –         | –                  |
| <i>mtr</i>         | –         | –         | –         | –                  |
| rRNA 23S           | –         | –         | –         | –                  |
| Lineage background | –         | –         | –         | 0.00 (–0.15, 0.17) |
| Residual           | –         | –         | –         | 0.02 (–0.15, 0.18) |
| AMR Total          | –         | –         | –         | 0.24 (0.01, 0.49)  |
| Total              | –         | –         | –         | 0.27 (0.01, 0.54)  |



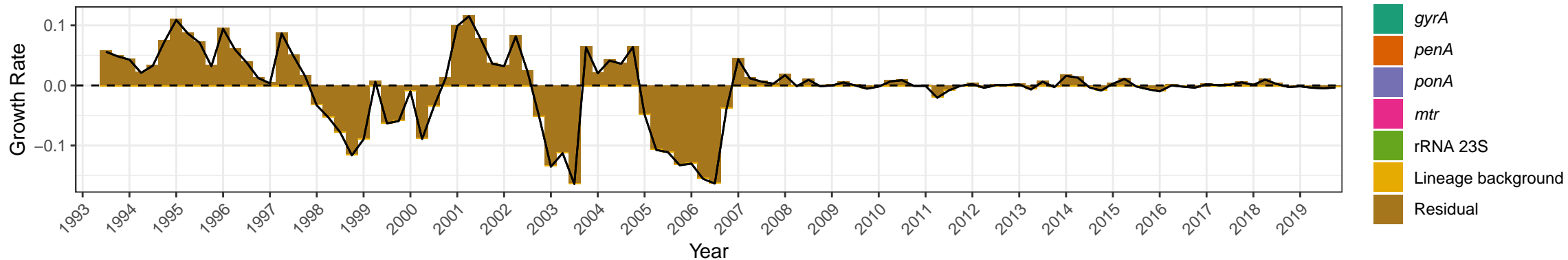
| Contribution       | 1993–2007 | 2007–2010           | 2010–2012           | 2012–2019           |
|--------------------|-----------|---------------------|---------------------|---------------------|
| <i>gyrA</i>        | –         | –                   | –                   | –                   |
| <i>penA</i>        | –         | –                   | –                   | –                   |
| <i>ponA</i>        | –         | –                   | –                   | –                   |
| <i>mtr</i>         | –         | –                   | –                   | –                   |
| rRNA 23S           | –         | –                   | –                   | –                   |
| Lineage background | –         | –0.01 (–0.17, 0.14) | –0.01 (–0.17, 0.14) | –0.01 (–0.17, 0.14) |
| Residual           | –         | 0.01 (–0.28, 0.30)  | 0.13 (–0.18, 0.46)  | –0.06 (–0.23, 0.11) |
| AMR Total          | –         | –                   | –                   | –                   |
| Total              | –         | –0.00 (–0.33, 0.32) | 0.12 (–0.23, 0.48)  | –0.07 (–0.28, 0.14) |

Lineage 28



| Contribution       | 1993–2007          | 2007–2010           | 2010–2012           | 2012–2019           |
|--------------------|--------------------|---------------------|---------------------|---------------------|
| <i>gyrA</i>        | –                  | –                   | –                   | –                   |
| <i>penA</i>        | –                  | –                   | –                   | –                   |
| <i>ponA</i>        | –                  | –                   | –                   | –                   |
| <i>mtr</i>         | –                  | –                   | –                   | –                   |
| rRNA 23S           | –                  | –                   | –                   | –                   |
| Lineage background | 0.00 (–0.17, 0.16) | 0.00 (–0.17, 0.16)  | 0.00 (–0.17, 0.16)  | 0.00 (–0.17, 0.16)  |
| Residual           | 0.01 (–0.12, 0.14) | –0.01 (–0.28, 0.26) | –0.00 (–0.30, 0.29) | –0.01 (–0.18, 0.15) |
| AMR Total          | –                  | –                   | –                   | –                   |
| Total              | 0.01 (–0.20, 0.21) | –0.01 (–0.32, 0.29) | –0.00 (–0.34, 0.33) | –0.01 (–0.24, 0.20) |

Lineage 29



| Contribution       | 1993–2007           | 2007–2010           | 2010–2012           | 2012–2019           |
|--------------------|---------------------|---------------------|---------------------|---------------------|
| <i>gyrA</i>        | –                   | –                   | –                   | –                   |
| <i>penA</i>        | –                   | –                   | –                   | –                   |
| <i>ponA</i>        | –                   | –                   | –                   | –                   |
| <i>mtr</i>         | –                   | –                   | –                   | –                   |
| rRNA 23S           | –                   | –                   | –                   | –                   |
| Lineage background | –0.00 (–0.17, 0.16) | –0.00 (–0.17, 0.16) | –0.00 (–0.17, 0.16) | –0.00 (–0.17, 0.16) |
| Residual           | –0.00 (–0.14, 0.13) | 0.01 (–0.28, 0.30)  | 0.00 (–0.35, 0.34)  | 0.00 (–0.17, 0.18)  |
| AMR Total          | –                   | –                   | –                   | –                   |
| Total              | –0.01 (–0.21, 0.19) | 0.01 (–0.32, 0.33)  | –0.00 (–0.38, 0.37) | 0.00 (–0.23, 0.24)  |