Preprint 6 January 2021

# First constraints on the intrinsic CMB dipole and our velocity with Doppler and aberration - Tables

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6 January 2021

| | **TT** | $\boldsymbol{\beta = \Delta_1}$ | | $\beta = \mathrm{DD} = 0$ | |
|---|---|---|---|---|---|
| | | $\chi^2$ | $\sigma$-value | $\chi^2$ | $\sigma$-value |
| SMICA | Aberration | 0.8 | 0.2 | 18 | 3.5 |
| | Doppler | 5.0 | 1.4 | 11 | 2.4 |
| | Boost | 1.4 | 0.4 | 45 | 6.1 |
| NILC | Aberration | 0.6 | 0.1 | 17 | 3.4 |
| | Doppler | 2.2 | 0.6 | 11 | 2.6 |
| | Boost | 0.6 | 0.3 | 46 | 6.2 |

| | **EE** | $\boldsymbol{\beta = \Delta_1}$ | | $\beta = \mathrm{DD} = 0$ | |
|---|---|---|---|---|---|
| | | $\chi^2$ | $\sigma$-value | $\chi^2$ | $\sigma$-value |
| SMICA | Aberration | 0.6 | 0.1 | 2.5 | 0.7 |
| | Doppler | 2.2 | 0.3 | 3.5 | 1.0 |
| | Boost | 0.6 | 0.2 | 2.4 | 0.7 |
| NILC | Aberration | 0.3 | 0.1 | 5.3 | 1.4 |
| | Doppler | 1.1 | 0.3 | 3.0 | 0.9 |
| | Boost | 0.7 | 0.2 | 4.4 | 1.2 |

| | **TT+EE** | $\boldsymbol{\beta = \Delta_1}$ | | $\beta = \mathrm{DD} = 0$ | |
|---|---|---|---|---|---|
| | | $\chi^2$ | $\sigma$-value | $\chi^2$ | $\sigma$-value |
| SMICA | Aberration | 0.3 | 0.1 | 18 | 3.5 |
| | Doppler | 4.6 | 1.3 | 12 | 2.6 |
| | Boost | 1.3 | 0.3 | 45 | 6.1 |
| | Aber. & Dopp. | 4.9 | 0.6 | 30 | 4.1 |
| NILC | Aberration | 0.3 | 0.1 | 21 | 3.9 |
| | Doppler | 2.7 | 0.8 | 13 | 2.9 |
| | Boost | 0.4 | 0.1 | 49 | 6.4 |
| | Aber. & Dopp. | 3.0 | 0.2 | 34 | 4.6 |

**Table 1.** Statistical significance for each component separation method and each estimator. The $\beta = \Delta_1$ column assumes the dipole is completely due to a peculiar velocity; the $\beta = \mathrm{DD} = 0$ column assumes there is no Doppler or aberration effect of any kind.