

Principal Components Analysis: NS quadratic

PC 1 (1.28e+11): $-0.965c_{\varphi G} + 0.233c_{\varphi WB} + 0.104c_{\varphi D} - 0.058c_{tG}$

PC 2 (1.91e+07): $-0.728c_{tG} - 0.399c_{qq}^{1,8} - 0.342c_{qt}^8 - 0.312c_{ut}^8 + 0.164c_{qu}^1 - 0.140c_{dt}^8 + 0.139c_{qt}^1 - 0.104c_{qq}^{1,1} - 0.064c_{qu}^8 - 0.063c_{ut}^1$
 $+ 0.060c_{qd}^1 - 0.045c_{dt}^1 + 0.044c_{\varphi G} - 0.039c_{qq}^{8,3} - 0.038c_{qq}^{1,3} - 0.019c_{qd}^8$

PC 3 (1.05e+07): $-0.888c_{\varphi WB} - 0.380c_{\varphi D} - 0.255c_{\varphi G} - 0.041c_{WWW} + 0.015c_{\varphi B} - 0.012c_{tG}$

PC 4 (8.83e+05): $-0.668c_{qq}^{1,8} + 0.459c_{qt}^8 + 0.299c_{qu}^8 - 0.287c_{ut}^8 + 0.234c_{tG} - 0.184c_{qt}^1 - 0.135c_{qq}^{8,3} - 0.128c_{dt}^8 - 0.127c_{qu}^1 - 0.103c_{qq}^{1,1}$
 $- 0.088c_{ut}^1 + 0.077c_{qd}^8 - 0.062c_{qd}^1 - 0.038c_{dt}^1 - 0.037c_{qq}^{1,3} - 0.014c_{\varphi G}$

PC 5 (2.87e+05): $-0.929c_{\varphi B} - 0.286c_{\varphi W} - 0.192c_{\varphi D} + 0.085c_{b\varphi} + 0.067c_{\varphi WB} - 0.056c_{tW} + 0.050c_{tZ} + 0.027c_{c\varphi} - 0.020c_{WWW}$
 $+ 0.017c_{\tau\varphi}$

PC 6 (2.47e+05): $-0.611c_{tG} + 0.590c_{qt}^8 + 0.296c_{qq}^{1,8} - 0.275c_{qu}^1 - 0.199c_{qq}^{8,3} - 0.196c_{qt}^1 + 0.164c_{ut}^8 - 0.069c_{qd}^1 + 0.066c_{qu}^8 + 0.035c_{\varphi G}$
 $+ 0.023c_{dt}^8 + 0.019c_{dt}^1 - 0.015c_{qd}^8 + 0.013c_{\varphi B} + 0.013c_{WWW} - 0.011c_{qq}^{1,3}$

PC 7 (1.16e+05): $-0.600c_{ut}^8 + 0.482c_{qq}^{1,8} + 0.420c_{qd}^8 - 0.302c_{qq}^{8,3} - 0.191c_{dt}^8 + 0.166c_{qu}^8 - 0.148c_{qt}^8 - 0.146c_{qt}^1 - 0.109c_{qq}^{1,1} - 0.096c_{qq}^{1,3}$
 $+ 0.085c_{tG} - 0.055c_{ut}^1 - 0.032c_{dt}^1 - 0.016c_{qu}^1 - 0.013c_{qd}^1$

PC 8 (5.89e+04): $+0.974c_{WWW} - 0.195c_{\varphi D} - 0.065c_{\varphi\Box} + 0.043c_{\varphi WB} + 0.042c_{qu}^8 + 0.041c_{t\varphi} + 0.034c_{qq}^{8,3} + 0.033c_{qu}^1 + 0.025c_{qt}^1$
 $+ 0.020c_{qd}^8 + 0.018c_{\varphi B} + 0.015c_{\varphi W} - 0.011c_{\varphi G} + 0.010c_{qd}^1$

PC 9 (1.21e+04): $+0.471c_{qq}^{1,1} + 0.413c_{qu}^1 + 0.402c_{qt}^1 + 0.369c_{qu}^8 + 0.298c_{ut}^1 + 0.266c_{qt}^8 + 0.258c_{qd}^8 + 0.162c_{qq}^{1,3} + 0.149c_{qd}^1 + 0.100c_{dt}^1$
 $+ 0.100c_{qq}^{8,3} - 0.081c_{tG} - 0.071c_{ut}^8 - 0.045c_{WWW} + 0.033c_{qq}^{1,8} - 0.013c_{dt}^8 + 0.012c_{\varphi D}$

PC 10 (8.61e+03): $+0.543c_{qt}^1 - 0.420c_{qq}^{8,3} - 0.409c_{qd}^8 - 0.398c_{qu}^8 + 0.289c_{qt}^8 - 0.253c_{ut}^8 + 0.146c_{tG} - 0.100c_{dt}^8 - 0.097c_{qq}^{1,1} + 0.085c_{qq}^{1,8}$
 $+ 0.069c_{qu}^1 + 0.039c_{dt}^1 + 0.027c_{qd}^1 + 0.021c_{WWW}$

PC 11 (5.20e+03): $-0.836c_{b\varphi} + 0.500c_{\tau\varphi} - 0.211c_{c\varphi} - 0.073c_{\varphi B} - 0.024c_{\varphi D} + 0.021c_{\varphi W} + 0.011c_{\varphi WB} - 0.010c_{WWW}$

PC 12 (3.36e+03): $-0.866c_{\tau\varphi} - 0.476c_{b\varphi} - 0.139c_{c\varphi} - 0.061c_{\varphi B} - 0.025c_{\varphi D} + 0.015c_{\varphi W} + 0.011c_{\varphi WB} + 0.011c_{\varphi\Box}$

PC 13 (9.15e+02): $-0.998c_{tW} + 0.052c_{\varphi B} + 0.016c_{\varphi W} + 0.011c_{\varphi D}$

PC 14 (4.77e+02): $-0.592c_{qq}^{8,3} + 0.456c_{qd}^1 + 0.447c_{ut}^8 - 0.353c_{dt}^1 + 0.191c_{qu}^1 + 0.153c_{qd}^8 - 0.146c_{dt}^8 - 0.103c_{qt}^8 - 0.094c_{qt}^1 - 0.092c_{qq}^{1,8}$
 $+ 0.048c_{qq}^{1,3} + 0.047c_{qu}^8 + 0.046c_{tG} - 0.024c_{qq}^{1,1} - 0.011c_{ut}^1$

PC 15 (4.11e+02): $+0.515c_{qq}^{1,1} + 0.448c_{ut}^1 - 0.414c_{qu}^8 + 0.296c_{qq}^{1,3} - 0.283c_{qt}^1 - 0.229c_{qu}^1 - 0.197c_{dt}^1 - 0.178c_{ut}^8 - 0.143c_{qd}^1 - 0.134c_{qq}^{8,3}$
 $- 0.125c_{qq}^{1,8} - 0.082c_{dt}^8 - 0.080c_{qt}^8 - 0.046c_{\varphi D} + 0.036c_{WWW} + 0.022c_{qd}^8 + 0.012c_{\varphi WB}$

PC 16 (2.11e+02): $-0.926c_{c\varphi} - 0.281c_{\varphi W} + 0.227c_{b\varphi} + 0.078c_{\varphi B} - 0.072c_{\varphi\Box} + 0.021c_{t\varphi} + 0.013c_{\varphi D} + 0.012c_{\tau\varphi}$

PC 17 (1.04e+02): $+0.854c_{\varphi D} - 0.375c_{\varphi WB} - 0.204c_{\varphi B} - 0.194c_{\varphi\Box} + 0.174c_{WWW} + 0.115c_{t\varphi} - 0.064c_{dt}^1 + 0.025c_{ut}^1 - 0.024c_{qu}^8$
 $- 0.024c_{b\varphi} + 0.020c_{qq}^{1,3} + 0.020c_{qq}^{8,3} + 0.012c_{c\varphi} + 0.012c_{qt}^8 - 0.012c_{ut}^8 - 0.011c_{\varphi W}$

PC 18 (5.47e+01): $+0.887c_{\varphi W} - 0.275c_{c\varphi} - 0.269c_{\varphi B} + 0.164c_{\varphi\Box} + 0.124c_{b\varphi} - 0.071c_{qq}^{1,3} - 0.070c_{dt}^8 + 0.051c_{qq}^{8,3} + 0.049c_{qu}^1$
 $+ 0.045c_{ut}^1 - 0.041c_{qt}^1 - 0.035c_{qu}^8 + 0.032c_{qt}^8 - 0.030c_{t\varphi} + 0.026c_{qd}^1 - 0.015c_{qq}^{1,1} - 0.013c_{\varphi Q}^3 - 0.012c_{qd}^8 + 0.012c_{\tau\varphi} - 0.011c_{\varphi t} + 0.010c_{qq}^{1,8}$

PC 19 (5.02e+01): $-0.465c_{qq}^{1,3} - 0.413c_{dt}^8 + 0.365c_{qu}^1 + 0.325c_{qq}^{8,3} + 0.307c_{ut}^1 - 0.280c_{qt}^1 - 0.236c_{qu}^8 + 0.224c_{qt}^8 + 0.165c_{qd}^1 - 0.135c_{dt}^1$
 $- 0.133c_{\varphi W} - 0.121c_{qq}^{1,1} - 0.085c_{qd}^8 + 0.071c_{qq}^{1,8} + 0.046c_{\varphi B} + 0.038c_{c\varphi} - 0.022c_{ut}^8 - 0.021c_{\varphi D} - 0.019c_{\varphi\Box} - 0.017c_{b\varphi} + 0.016c_{tG}$
 $- 0.010c_{WWW} + 0.010c_{\varphi WB}$

PC 20 (1.48e+01): $+0.513c_{ut}^1 - 0.492c_{qq}^{1,3} + 0.468c_{dt}^1 + 0.279c_{dt}^8 - 0.258c_{qq}^{8,3} - 0.209c_{qu}^1 + 0.147c_{qd}^8 - 0.145c_{qq}^{1,8} - 0.134c_{qt}^8 + 0.096c_{qd}^1$
 $- 0.074c_{qq}^{1,1} + 0.071c_{ut}^8 + 0.060c_{qt}^1 + 0.032c_{\varphi D} + 0.027c_{\varphi Q}^{(-)} - 0.020c_{\varphi t} + 0.020c_{WWW} - 0.016c_{\varphi WB}$

PC 21 (1.05e+01): $-0.576c_{qq}^{1,1} + 0.499c_{qq}^{1,3} + 0.319c_{qd}^8 + 0.311c_{ut}^1 + 0.281c_{qd}^1 + 0.228c_{qq}^{8,3} - 0.187c_{qu}^8 - 0.150c_{qu}^1 + 0.120c_{qt}^1 + 0.119c_{qt}^8$
 $- 0.028c_{ut}^8 - 0.026c_{\varphi Q}^{(-)} - 0.024c_{\varphi D} + 0.022c_{dt}^8 + 0.019c_{\varphi t} - 0.016c_{qq}^{1,8} - 0.015c_{WWW} + 0.012c_{\varphi WB}$

PC 22 (8.84e+00): $-0.672c_{qd}^1 - 0.410c_{dt}^1 + 0.350c_{qd}^8 + 0.327c_{qt}^1 + 0.230c_{ut}^8 - 0.183c_{qq}^{1,3} - 0.168c_{qq}^{1,1} + 0.147c_{ut}^1 - 0.051c_{dt}^8 - 0.050c_{qq}^{1,8}$
 $- 0.043c_{qq}^{8,3} - 0.043c_{qu}^8 + 0.043c_{qu}^1 - 0.039c_{\varphi Q}^{(-)} + 0.029c_{\varphi t} - 0.026c_{\varphi D} - 0.017c_{WWW} + 0.014c_{\varphi WB} + 0.011c_{qt}^8$

PC 23 (5.40e+00): $+0.732c_{dt}^8 + 0.497c_{qu}^1 - 0.266c_{qt}^1 - 0.192c_{qu}^8 - 0.181c_{ut}^8 + 0.142c_{qt}^8 - 0.135c_{dt}^1 - 0.101c_{qq}^{8,3} - 0.093c_{qq}^{1,1} - 0.081c_{\varphi Q}^{(-)}$
 $- 0.062c_{qd}^1 + 0.062c_{\varphi t} + 0.048c_{qd}^8 - 0.026c_{ut}^1 - 0.023c_{qq}^{1,8} - 0.022c_{\varphi\Box} + 0.018c_{\varphi W} - 0.018c_{tG} - 0.018c_{\varphi D} + 0.017c_{t\varphi} + 0.016c_{qq}^{1,3}$
 $- 0.011c_{WWW}$

PC 24 (3.35e+00): $+0.765c_{\varphi Q}^{(-)} - 0.574c_{\varphi t} + 0.203c_{\varphi\Box} - 0.094c_{t\varphi} + 0.092c_{qu}^1 - 0.065c_{qu}^8 + 0.063c_{qd}^8 - 0.058c_{qd}^1 - 0.052c_{\varphi W}$
 $+ 0.048c_{\varphi D} + 0.041c_{qq}^{1,3} + 0.037c_{dt}^8 - 0.035c_{qq}^{1,1} + 0.032c_{qt}^8 + 0.031c_{WWW} - 0.029c_{ut}^1 - 0.026c_{qt}^1 - 0.025c_{\varphi WB} - 0.020c_{tZ}$

PC 25 (3.18e+00): $+0.842c_{\varphi\Box} - 0.384c_{t\varphi} - 0.196c_{\varphi Q}^{(-)} + 0.176c_{\varphi D} - 0.171c_{\varphi W} + 0.146c_{\varphi t} + 0.114c_{WWW} - 0.091c_{\varphi WB} + 0.020c_{tZ}$
 $- 0.017c_{c\varphi} + 0.015c_{dt}^1 + 0.013c_{qd}^8 + 0.013c_{qu}^1 - 0.012c_{qu}^8 - 0.011c_{qd}^1$

PC 26 (1.40e+00): $-0.520c_{dt}^1 - 0.456c_{qd}^8 + 0.455c_{qu}^8 + 0.369c_{ut}^1 + 0.213c_{dt}^8 - 0.184c_{qu}^1 - 0.169c_{ut}^8 - 0.125c_{qq}^{1,1} + 0.106c_{qq}^{1,8} - 0.105c_{qt}^8$
 $+ 0.105c_{qd}^1 + 0.069c_{qt}^1 + 0.068c_{\varphi Q}^{(-)} + 0.066c_{\varphi\Box} + 0.055c_{qq}^{8,3} - 0.053c_{\varphi t} - 0.048c_{qq}^{1,3} - 0.012c_{\varphi D} + 0.011c_{t\varphi}$

PC 27 (5.51e-01): $-0.383c_{qd}^1 + 0.345c_{qu}^1 + 0.342c_{qq}^{1,3} + 0.342c_{dt}^1 - 0.299c_{qd}^8 + 0.279c_{ut}^1 - 0.248c_{qq}^{1,1} + 0.247c_{qu}^8 - 0.242c_{qt}^1 - 0.224c_{qq}^{8,3}$
 $- 0.220c_{dt}^8 - 0.128c_{\varphi Q}^3 - 0.120c_{qt}^8 + 0.105c_{ut}^8 - 0.072c_{t\varphi} - 0.056c_{\varphi\Box} + 0.037c_{qq}^{1,8} - 0.024c_{\varphi Q}^{(-)} + 0.020c_{\varphi t}$

PC 28 (3.88e-01): $+0.900c_{t\varphi} + 0.404c_{\varphi\Box} - 0.102c_{\varphi Q}^3 + 0.073c_{tZ} + 0.050c_{dt}^1 - 0.041c_{\varphi W} - 0.031c_{qd}^1 + 0.030c_{qu}^1 - 0.029c_{dt}^8$
 $+ 0.026c_{qq}^{1,3} - 0.021c_{qt}^1 + 0.021c_{\varphi B} - 0.020c_{qq}^{8,3} - 0.017c_{\varphi D} + 0.015c_{ut}^8 - 0.015c_{\varphi t} - 0.013c_{WWW} - 0.013c_{\varphi Q}^{(-)} - 0.011c_{qq}^{1,1}$

PC 29 (1.48e-01): $+0.979c_{\varphi Q}^3 + 0.098c_{\varphi t} + 0.088c_{t\varphi} + 0.067c_{\varphi Q}^{(-)} + 0.056c_{qq}^{1,3} - 0.049c_{qd}^1 + 0.048c_{dt}^1 + 0.047c_{qu}^1 - 0.038c_{qq}^{1,1}$

$$-0.037c_{qd}^8 + 0.036c_{\varphi\Box} + 0.035c_{ut}^1 - 0.033c_{dt}^8 - 0.033c_{qt}^1 + 0.030c_{qu}^8 - 0.027c_{qq}^{8,3} - 0.015c_{tZ} + 0.014c_{ut}^8 - 0.014c_{qt}^8 - 0.011c_{c\varphi}$$

$$\textbf{PC 30 (7.78e-03): } +0.974c_{tZ} - 0.176c_{\varphi t} - 0.103c_{\varphi Q}^{(-)} - 0.061c_{t\varphi} + 0.049c_{\varphi B} + 0.045c_{\varphi Q}^3 - 0.043c_{\varphi\Box} + 0.011c_{\varphi W}$$

$$\textbf{PC 31 (3.82e-03): } -0.774c_{\varphi t} - 0.588c_{\varphi Q}^{(-)} - 0.206c_{tZ} + 0.111c_{\varphi Q}^3$$

$$\textbf{PC 32 (5.23e-04): } -0.787c_{tt}^1 - 0.459c_{Qt}^8 - 0.387c_{QQ}^1 - 0.144c_{QQ}^8$$

$$\textbf{PC 33 (2.04e-05): } +0.700c_{QQ}^8 + 0.572c_{Qt}^8 - 0.375c_{tt}^1 - 0.174c_{QQ}^1 + 0.111c_{Qt}^1$$

$$\textbf{PC 34 (1.28e-05): } -0.699c_{QQ}^8 + 0.669c_{Qt}^8 - 0.225c_{tt}^1 + 0.085c_{Qt}^1 - 0.075c_{QQ}^1$$

$$\textbf{PC 35 (1.28e-05): } +0.984c_{Qt}^1 - 0.115c_{Qt}^8 + 0.111c_{tt}^1 - 0.069c_{QQ}^1 - 0.019c_{QQ}^8$$

$$\textbf{PC 36 (1.28e-05): } +0.900c_{QQ}^1 - 0.421c_{tt}^1 + 0.106c_{Qt}^1 - 0.040c_{Qt}^8 + 0.014c_{QQ}^8$$