

Principal Components Analysis: ATLAS, NS

PC00 (9.68e+05): $+1.000c_{HVV,Vff}^{[1]}$

PC01 (3.98e+05): $+0.767c_{HG} -0.637c_{HVV,Vff}^{[2]} +0.074c_{bH} +0.029c_{tG} -0.013c_W$

PC02 (1.66e+05): $-0.770c_{HVV,Vff}^{[2]} -0.636c_{HG} -0.033c_{bH} -0.020c_{tG} +0.019c_{HVV,Vff}^{[4]} -0.015c_W +0.011c_{HVV,Vff}^{[3]}$

PC03 (2.27e+04): $-0.999c_{HVV,Vff}^{[3]} +0.039c_{HVV,Vff}^{[4]} +0.016c_{HVV,Vff}^{[5]}$

PC04 (1.09e+04): $+0.999c_{HVV,Vff}^{[4]} +0.039c_{HVV,Vff}^{[3]} +0.025c_{HVV,Vff}^{[5]} +0.016c_{HG} +0.012c_{HVV,Vff}^{[2]} -0.011c_{bH} -0.010c_{HVV,Vff}^{[7]}$

PC05 (4.20e+03): $+0.998c_{HVV,Vff}^{[5]} -0.047c_{bH} -0.026c_{HVV,Vff}^{[4]} -0.023c_{HVV,Vff}^{[8]} -0.015c_{HVV,Vff}^{[7]} +0.014c_{HVV,Vff}^{[3]} -0.014c_{HVV,Vff}^{[6]}$

PC06 (1.64e+03): $-0.997c_{HVV,Vff}^{[6]} +0.066c_{2q2l}^{[1]} -0.018c_{bH} -0.015c_{HVV,Vff}^{[5]}$

PC07 (9.41e+02): $+0.837c_{2q2l}^{[1]} -0.390c_{bH} +0.375c_{HVV,Vff}^{[7]} +0.066c_{HVV,Vff}^{[6]} +0.031c_{HG} -0.021c_{HVV,Vff}^{[10]} -0.016c_{HVV,Vff}^{[5]} -0.015c_{4q}^{[1]} +0.015c_{HVV,Vff}^{[11]} +0.014c_{HVV,Vff}^{[9]} +0.012c_{2q2l}^{[2]}$

PC08 (9.03e+02): $+0.595c_{bH} -0.589c_{HVV,Vff}^{[7]} +0.542c_{2q2l}^{[1]} -0.050c_{HG} -0.030c_{HVV,Vff}^{[10]} -0.024c_{HVV,Vff}^{[8]} +0.021c_{HVV,Vff}^{[6]} +0.016c_{HVV,Vff}^{[5]} +0.012c_{HVV,Vff}^{[2]} +0.011c_{HVV,Vff}^{[11]} -0.011c_{HVV,Vff}^{[9]}$

PC09 (5.83e+02): $-0.714c_{HVV,Vff}^{[7]} -0.693c_{bH} +0.053c_{HG} -0.044c_{HVV,Vff}^{[5]} -0.036c_{tG} +0.035c_{4q}^{[1]} -0.030c_{uH,dH,H\Box} +0.028c_{HVV,Vff}^{[9]} -0.022c_{2q2l}^{[2]} -0.016c_{HVV,Vff}^{[2]} +0.015c_{HVV,Vff}^{[10]} -0.014c_{HVV,Vff}^{[4]}$

PC10 (1.54e+02): $+0.995c_{4q}^{[1]} -0.081c_{HVV,Vff}^{[8]} +0.033c_{HVV,Vff}^{[7]} -0.032c_W +0.017c_{bH} +0.014c_{HVV,Vff}^{[11]} -0.013c_{tG} -0.011c_{HVV,Vff}^{[10]}$

PC11 (9.46e+01): $-0.990c_{HVV,Vff}^{[8]} +0.080c_{tG} -0.079c_{4q}^{[1]} +0.068c_{HVV,Vff}^{[9]} -0.033c_{2q2l}^{[2]} -0.023c_{HVV,Vff}^{[5]} +0.019c_{uH,dH,H\Box} -0.018c_{2q2l}^{[1]} +0.016c_{HVV,Vff}^{[7]} +0.013c_W +0.012c_{HVV,Vff}^{[10]} +0.011c_{top}^{[1]} +0.011c_{HVV,Vff}^{[11]}$

PC12 (3.11e+01): $+0.872c_{tG} +0.390c_{HVV,Vff}^{[9]} +0.220c_{top}^{[1]} -0.109c_W +0.096c_{HVV,Vff}^{[8]} +0.074c_{uH,dH,H\Box} -0.073c_{HVV,Vff}^{[11]} -0.056c_{tH} -0.033c_{HVV,Vff}^{[12]} -0.029c_{HG} +0.022c_{4q}^{[1]} -0.022c_{bH} +0.018c_{2q2l}^{[2]} -0.017c_{2q2l}^{[3]} -0.015c_{HVV,Vff}^{[7]} -0.014c_{HVV,Vff}^{[13]} -0.011c_{HVV,Vff}^{[10]}$

PC13 (2.44e+01): $+0.904c_{HVV,Vff}^{[9]} -0.376c_{tG} -0.138c_{top}^{[1]} +0.084c_{2q2l}^{[2]} +0.063c_{tH} -0.061c_{HVV,Vff}^{[10]} -0.054c_W +0.043c_{bH} +0.026c_{HVV,Vff}^{[8]} -0.026c_{2q2l}^{[3]} -0.016c_{HVV,Vff}^{[12]} +0.012c_{HVV,Vff}^{[11]} +0.012c_{HVV,Vff}^{[14]} +0.011c_{HVV,Vff}^{[7]} +0.011c_{HG}$

PC14 (1.72e+01): $-0.928c_W +0.316c_{HVV,Vff}^{[11]} +0.135c_{HVV,Vff}^{[10]} -0.100c_{2q2l}^{[2]} -0.066c_{HVV,Vff}^{[9]} -0.055c_{tG} +0.039c_{uH,dH,H\Box} -0.036c_{4q}^{[1]} +0.018c_{HVV,Vff}^{[2]} -0.014c_{eH} -0.011c_{top}^{[1]}$

PC15 (1.51e+01): $+0.818c_{HVV,Vff}^{[11]} -0.441c_{HVV,Vff}^{[10]} -0.246c_{2q2l}^{[2]} +0.237c_W +0.078c_{2q2l}^{[3]} +0.068c_{tG} +0.055c_{uH,dH,H\Box} +0.031c_{HVV,Vff}^{[9]}$

$$+0.029c_{top}^{[1]} -0.028c_{2q2l}^{[4]} -0.028c_{2q2l}^{[1]} +0.025c_{HVV,Vff}^{[8]} -0.024c_{HVV,Vff}^{[12]} -0.015c_{eH} -0.015c_{bH} -0.013c_{HVV,Vff}^{[13]} -0.013c_{tH} -0.010c_{HVV,Vff}^{[14]}$$

$$\textbf{PC16 (1.37e+01): } +0.832c_{HVV,Vff}^{[10]} -0.378c_{2q2l}^{[2]} +0.256c_{HVV,Vff}^{[11]} +0.247c_W +0.125c_{uH,dH,H\Box} +0.100c_{HVV,Vff}^{[9]} -0.070c_{2q2l}^{[3]} -0.038c_{eH} +0.037c_{HVV,Vff}^{[8]} +0.034c_{tH} -0.033c_{top}^{[1]} +0.027c_{2q2l}^{[1]} -0.024c_{HVV,Vff}^{[14]} +0.020c_{tG} +0.018c_{bH} +0.014c_{4q}^{[1]} -0.011c_{HVV,Vff}^{[12]}$$

$$\textbf{PC17 (7.13e+00): } -0.874c_{2q2l}^{[2]} -0.376c_{HVV,Vff}^{[11]} -0.250c_{HVV,Vff}^{[10]} +0.091c_{HVV,Vff}^{[12]} +0.083c_{2q2l}^{[3]} -0.074c_W -0.057c_{uH,dH,H\Box} +0.051c_{HVV,Vff}^{[9]} -0.043c_{HVV,Vff}^{[14]} -0.040c_{tG} +0.026c_{eH} +0.023c_{HVV,Vff}^{[7]} +0.021c_{HVV,Vff}^{[8]} +0.017c_{2q2l}^{[4]}$$

$$\textbf{PC18 (2.49e+00): } +0.987c_{HVV,Vff}^{[12]} +0.070c_{2q2l}^{[2]} -0.065c_{tH} +0.059c_{top}^{[1]} +0.058c_{HVV,Vff}^{[11]} -0.056c_{HVV,Vff}^{[13]} -0.050c_{uH,dH,H\Box} -0.036c_{2q2l}^{[3]} +0.030c_{HVV,Vff}^{[9]} +0.025c_{HVV,Vff}^{[10]} +0.018c_W -0.018c_{HVV,Vff}^{[14]} -0.016c_{eH} +0.013c_{tG}$$

$$\textbf{PC19 (1.14e+00): } +0.786c_{HVV,Vff}^{[13]} +0.430c_{top}^{[1]} -0.356c_{2q2l}^{[3]} -0.179c_{uH,dH,H\Box} -0.148c_{tH} -0.103c_{tG} +0.038c_{2q2l}^{[4]} +0.038c_{HVV,Vff}^{[11]} -0.030c_{eH} +0.030c_{HVV,Vff}^{[14]} -0.028c_{2q2l}^{[2]} +0.025c_{HVV,Vff}^{[9]} -0.013c_{HVV,Vff}^{[12]} +0.010c_W$$

$$\textbf{PC20 (8.63e-01): } -0.717c_{top}^{[1]} +0.557c_{HVV,Vff}^{[13]} +0.346c_{2q2l}^{[3]} +0.199c_{tG} -0.079c_{tH} +0.076c_{HVV,Vff}^{[12]} +0.033c_{eH} +0.029c_{2q2l}^{[2]} +0.026c_{2q2l}^{[4]} +0.023c_{HVV,Vff}^{[10]} -0.022c_{uH,dH,H\Box} +0.020c_{HVV,Vff}^{[14]} +0.011c_{HVV,Vff}^{[11]}$$

$$\textbf{PC21 (7.95e-01): } +0.829c_{2q2l}^{[3]} +0.438c_{top}^{[1]} -0.272c_{eH} +0.112c_{HVV,Vff}^{[10]} -0.104c_{tG} +0.096c_{HVV,Vff}^{[13]} -0.088c_{uH,dH,H\Box} +0.056c_{2q2l}^{[2]} +0.046c_{HVV,Vff}^{[9]} +0.012c_{tH} -0.012c_{HVV,Vff}^{[14]} -0.012c_{2q2l}^{[4]}$$

$$\textbf{PC22 (4.08e-01): } +0.931c_{uH,dH,H\Box} +0.189c_{HVV,Vff}^{[13]} +0.183c_{eH} +0.125c_{top}^{[1]} -0.103c_{tG} -0.096c_{HVV,Vff}^{[14]} -0.089c_{HVV,Vff}^{[11]} -0.077c_{HVV,Vff}^{[10]} +0.065c_{HVV,Vff}^{[12]} +0.065c_{2q2l}^{[3]} +0.056c_{tH} +0.028c_{2q2l}^{[2]} -0.022c_{HVV,Vff}^{[9]} -0.021c_{bH} -0.016c_{HVV,Vff}^{[7]} -0.013c_{4q}^{[2]} -0.011c_{2q2l}^{[4]}$$

$$\textbf{PC23 (3.18e-01): } +0.919c_{eH} -0.215c_{uH,dH,H\Box} +0.191c_{2q2l}^{[3]} -0.188c_{HVV,Vff}^{[14]} +0.129c_{top}^{[1]} +0.083c_{HVV,Vff}^{[10]} -0.073c_{tH} +0.055c_{HVV,Vff}^{[11]} -0.040c_{2q2l}^{[4]} -0.031c_{tG} +0.029c_{HVV,Vff}^{[9]} -0.025c_{4q}^{[2]} +0.022c_{2q2l}^{[2]} -0.013c_{HVV,Vff}^{[12]} +0.012c_{bH}$$

$$\textbf{PC24 (1.93e-01): } -0.956c_{HVV,Vff}^{[14]} +0.204c_{2q2l}^{[4]} -0.182c_{eH} -0.054c_{2q2l}^{[3]} -0.053c_{uH,dH,H\Box} -0.045c_{top}^{[1]} +0.043c_{2q2l}^{[2]} -0.026c_{HVV,Vff}^{[12]} -0.016c_{HVV,Vff}^{[10]} -0.012c_{4q}^{[2]}$$

$$\textbf{PC25 (5.50e-02): } +0.901c_{tH} -0.357c_{2q2l}^{[4]} +0.152c_{HVV,Vff}^{[13]} -0.100c_{uH,dH,H\Box} -0.099c_{4q}^{[2]} +0.078c_{tG} -0.069c_{HVV,Vff}^{[14]} +0.062c_{HVV,Vff}^{[12]} -0.036c_{2q2l}^{[3]} -0.032c_{HVV,Vff}^{[9]} +0.028c_{eH} +0.019c_{top}^{[1]} -0.016c_{HVV,Vff}^{[10]}$$

$$\textbf{PC26 (3.61e-02): } -0.867c_{2q2l}^{[4]} +0.333c_{4q}^{[2]} -0.312c_{tH} -0.174c_{HVV,Vff}^{[14]} -0.078c_{eH} -0.031c_{HVV,Vff}^{[11]} -0.027c_{top}^{[1]} -0.022c_{tG} -0.021c_{2q2l}^{[3]} -0.015c_{HVV,Vff}^{[12]} +0.014c_{uH,dH,H\Box} +0.011c_{HVV,Vff}^{[10]}$$

$$\textbf{PC27 (4.29e-10): } -0.937c_{4q}^{[2]} -0.272c_{2q2l}^{[4]} -0.204c_{tH} -0.053c_{eH} -0.036c_{HVV,Vff}^{[14]} -0.024c_{HVV,Vff}^{[13]} -0.023c_{top}^{[1]} -0.013c_{2q2l}^{[3]} -0.012c_{HVV,Vff}^{[12]} -0.012c_{tG} -0.011c_{HVV,Vff}^{[11]} +0.011c_{uH,dH,H\Box}$$