

List of coefficients

2. Coriolis matrix

Name	Expression	Multiplies matrix term	Multiplies velocity variable	Index in matrix
σ_2	$2l_1m_w - m_b x_G$	$\dot{\alpha} c_{\alpha-\varphi_p}$	$\dot{\alpha}$	1,3
		$\dot{\alpha} s_{\alpha-\varphi_p}$	$\dot{\alpha}$	2,3
	$-2l_1m_w + m_b x_G$	$\dot{\phi}_p c_{\alpha-\varphi_p}$	$\dot{\alpha}$	1,3
		$\dot{\phi}_p s_{\alpha-\varphi_p}$	$\dot{\alpha}$	2,3
		$(\dot{\alpha} - \dot{\phi}_p) c_{\alpha-\varphi_p}$	$\dot{\phi}_p$	1,6
		$(\dot{\alpha} - \dot{\phi}_p) s_{\alpha-\varphi_p}$	$\dot{\phi}_p$	2,6
σ_3	$-m_p x_F$	$\dot{\alpha} c_{\alpha}$	$\dot{\alpha}$	1,3
		$\dot{\alpha} s_{\alpha}$	$\dot{\alpha}$	2,3
σ_4	$m_p y_F$	$\dot{\alpha} s_{\alpha}$	$\dot{\alpha}$	1,3
	$-m_p y_F$	$\dot{\alpha} c_{\alpha}$	$\dot{\alpha}$	2,3
σ_5	$m_b y_G$	$\dot{\alpha} s_{\alpha-\varphi_p}$	$\dot{\alpha}$	1,3
		$\dot{\phi}_p s_{\alpha-\varphi_p}$	$\dot{\alpha}$	1,3
		$\dot{\phi}_p c_{\alpha-\varphi_p}$	$\dot{\alpha}$	2,3
		$\dot{\alpha} c_{\alpha-\varphi_p}$	$\dot{\alpha}$	2,3
		$(\dot{\alpha} - \dot{\phi}_p) c_{\alpha-\varphi_p}$	$\dot{\phi}_p$	2,6
	$-m_b y_G$	$(\dot{\alpha} - \dot{\phi}_p) s_{\alpha-\varphi_p}$	$\dot{\phi}_p$	1,6