TABLE I. The extracted nucleon resonance pole mass (M_R) and πN elastic residue ($R_{\pi N,\pi N}$). M_R is listed as $(\mathrm{Re}(M_R), -\mathrm{Im}(M_R))$ in units of MeV, while $R_{\pi N,\pi N} = |R_{\pi N,\pi N}|e^{i\phi}$ is listed as $(|R_{\pi N,\pi N}|, \phi)$ in units of MeV for $|R_{\pi N,\pi N}|$ and degree for ϕ. The range of ϕ is taken to be $-180^\circ \leq \phi < 180^\circ$. The N^* resonances for which the asterisk (*) is marked locate in the complex energy plane slightly off the sheet closest to the physical real energy axis, yet are still expected to visibly affect the physical observables.

	$J^P(L_{2I2J})$	M_R	$R_{\pi N,\pi N}$
N^*	$1/2^-(S_{11})$	(1490, 102)*	(70, −42)
		(1652, 71)	(45, −74)
	$1/2^+(P_{11})$	(1376, 75)	(38, −70)
		(1741, 139)	(15, 80)
	$3/2^+(P_{13})$	(1708, 65)	(9, −4)
		(1765, 160)	(30, −105)
	$3/2^-(D_{13})$	(1509, 48)	(30, −10)
		(1702, 148)*	(< 1, −161)
	$5/2^-(D_{15})$	(1651, 68)	(26, −27)
	$5/2^+(F_{15})$	(1665, 52)	(36, −22)
Δ^*	$1/2^-(S_{31})$	(1597, 69)	(21, −111)
		(1713, 187)	(20, 73)
	$1/2^+(P_{31})$	(1857, 145)	(11, −118)
	$3/2^+(P_{33})$	(1212, 52)	(55, −47)
		(1733, 162)	(16, −108)
	$3/2^-(D_{33})$	(1577, 113)	(13, −67)
	$5/2^-(D_{35})$	(1911, 130)	(4, −30)
	$5/2^+(F_{35})$	(1767, 88)	(11, −61)
	$7/2^+(F_{37})$	(1885, 102)	(49, −30)