MRN028

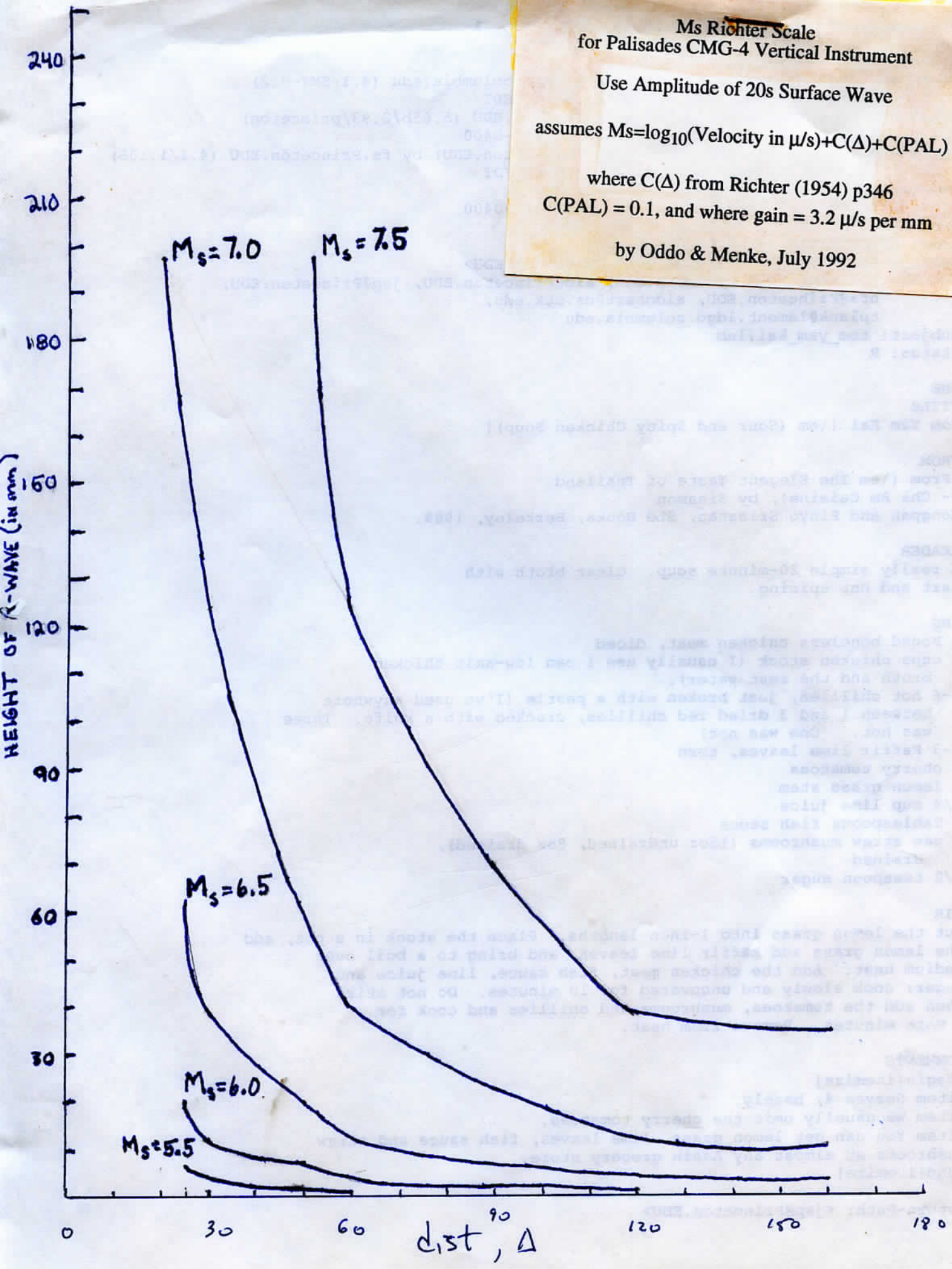
Ms Richter Scale
for Palisades CMG-4 Vertical Instrument

Use Amplitude of 20s Surface Wave

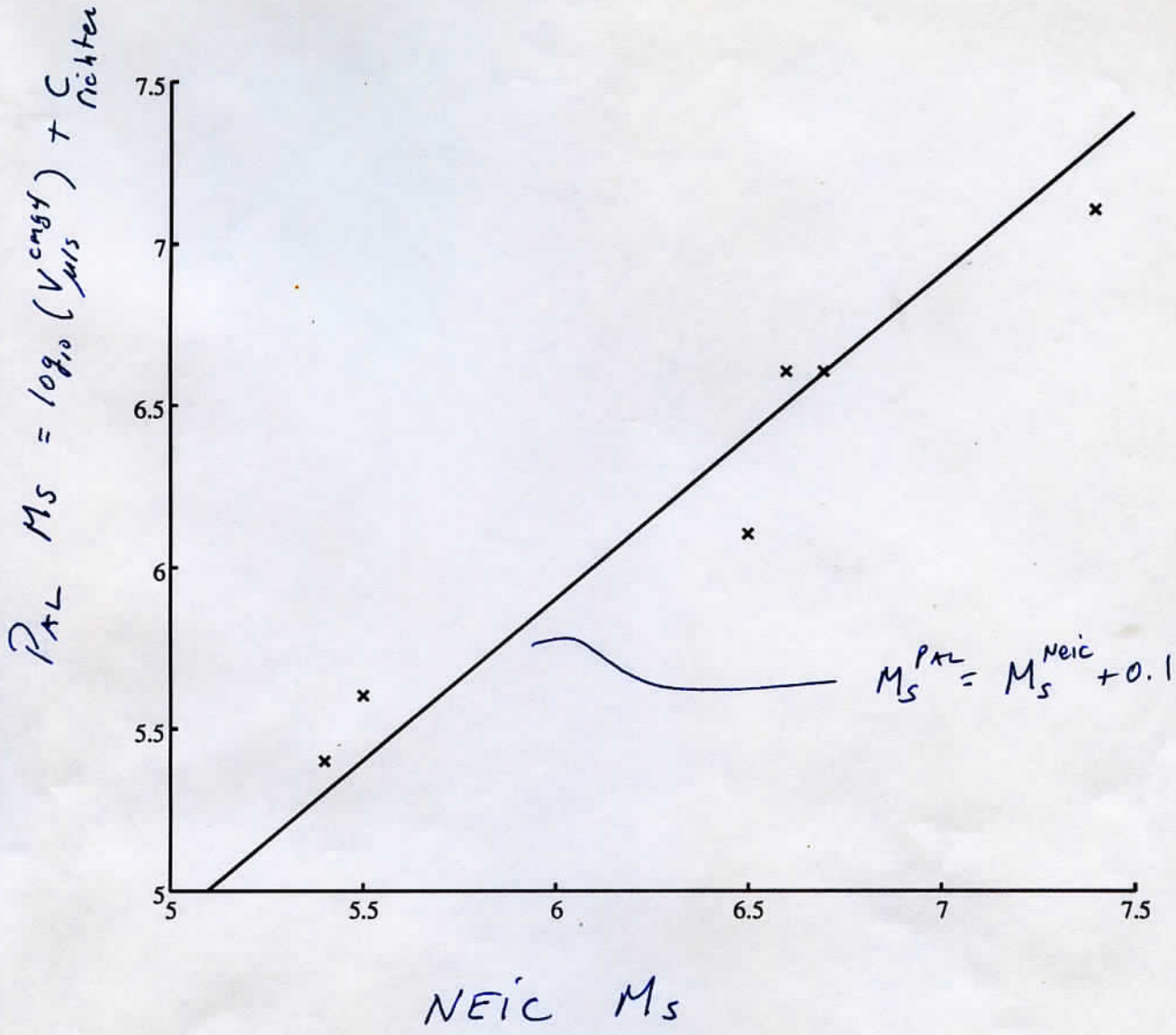
assumes $Ms=\log_{10}(\text{Velocity in } \mu/s)+C(\Delta)+C(PAL)$

where $C(\Delta)$ from Richter (1954) p346
$C(PAL) = 0.1$, and where gain = 3.2 μ/s per mm

by Oddo & Menke, July 1992



date	H_{mm}	$V_{\mu/s}$	dist	C	our M_s $\log_{10}(V) + C$	gout M_s
		$\times 3.2$				
2-21	6	19.2	30.6°	4.3	5.6 (5.57)	5.5
6-28	46	147.2	34.4°	4.4	6.6	6.6
7-20	30	96	48°	4.6	6.6	6.7
3-4	3.5	11.2	87.8°	5.05	6.1	6.5
6-29	3.5	11.2	31°	4.3	5.4	5.4
12-21-91	35	112	85°	5.05	7.1	7.4


PAL $M_S = \log_{10}(V_{\mu m/s}^{cm/s}) + C_{richter}$
7.5
7
6.5
6
5.5
5
5
5.5
6
6.5
7
7.5
$M_S^{PAL} = M_S^{NEIC} + 0.1$
NEIC M_S