

Freewave transmission analysis - Based on memo from G. Malby to D. Edgington

	MOOS L1 @915MHz 1300m loc.	MOOS L2 @915MHz 1850m loc.	Freewave @915MHz 20mi (spec.)	FGR Series @915MHz 60mi (spec.)
Link Distance	63.90km	75.30km	32.19km	96.56km
Mt. Toro Transmitter Power	29.8dBm	29.8dBm	29.8dBm	29.8dBm
Antenna Gain	20.7dBm	20.7dBm	20.7dBm	20.7dBm
Coax and Misc losses	-3.0dBm	-3.0dBm	-3.0dBm	-3.0dBm
Buoy Antenna gain	0.0dBm	0.0dBm	0.0dBm	0.0dBm
Coax and Misc losses	-3.0dBm	-3.0dBm	-3.0dBm	-3.0dBm
Path loss (Toro to buoy loc.)	-127.8dBm	-129.2dBm	-121.8dBm	-131.4dBm
Atmospheric loss	-0.4dBm	-0.4dBm	-0.4dBm	-0.4dBm
Receive Signal Level (best case)	-83.7dBm	-85.1dBm	-77.7dBm	-87.3dBm
Receiver Sensitivity - Freewave Spec @ 10E-6 BER	-108.0dBm	-108.0dBm	-108.0dBm	-108.0dBm
Link Margin	24.3dBm	22.9dBm	30.3dBm	20.7dBm
Desired Link Margin	40.0dBm	40.0dBm	40.0dBm	40.0dBm