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RESUN: Radio EVLA Search for UHE Neutrinos

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We present new flux limits for UHE neutrinos derived from radio searches using a lunar target. The RESUN search used three 4-antenna sub-arrays of the Expanded Very Large Array at an observing frequency of 1.4~GHz to search for short duration Cerenkov emission from the lunar limb. Each antenna's down-converted waveform was sampled every 10 nsec, with all pulses exceeding a 4-sigma threshold time-stamped and recorded for post-processing. For each sub-array, the data were searched for 4-antenna coincidences using differential delay windows corresponding to sources of lunar origin. We detected no coincident pulses during 250 observing hours. This implies upper limits to the differential neutrino flux $E^2dN/dE < 0.0001EeVkm^{-2}s^{-1}sr^{-1}and < 0.00001EeV/km2/sat90$

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