

This system is an airborne downlooking radar for the measurement of biomass in tons/acre in heavily wooded areas. The system uses an unmodulated radar pulse of 2.0 microseconds with a PRF of 166 KHz. The aircraft flies at 300 meters with the resulting half power footprint on the ground being ~ 600 meters in diameter. The antenna looks directly down with an antenna beamwidth of 120 degrees along the flight line and 90 degrees in the across track dimension. The receiver processor measures the magnitude of the returned energy from each pulse. Doppler processing is used in the along track dimension. The data is converted to biomass in tons/acre.