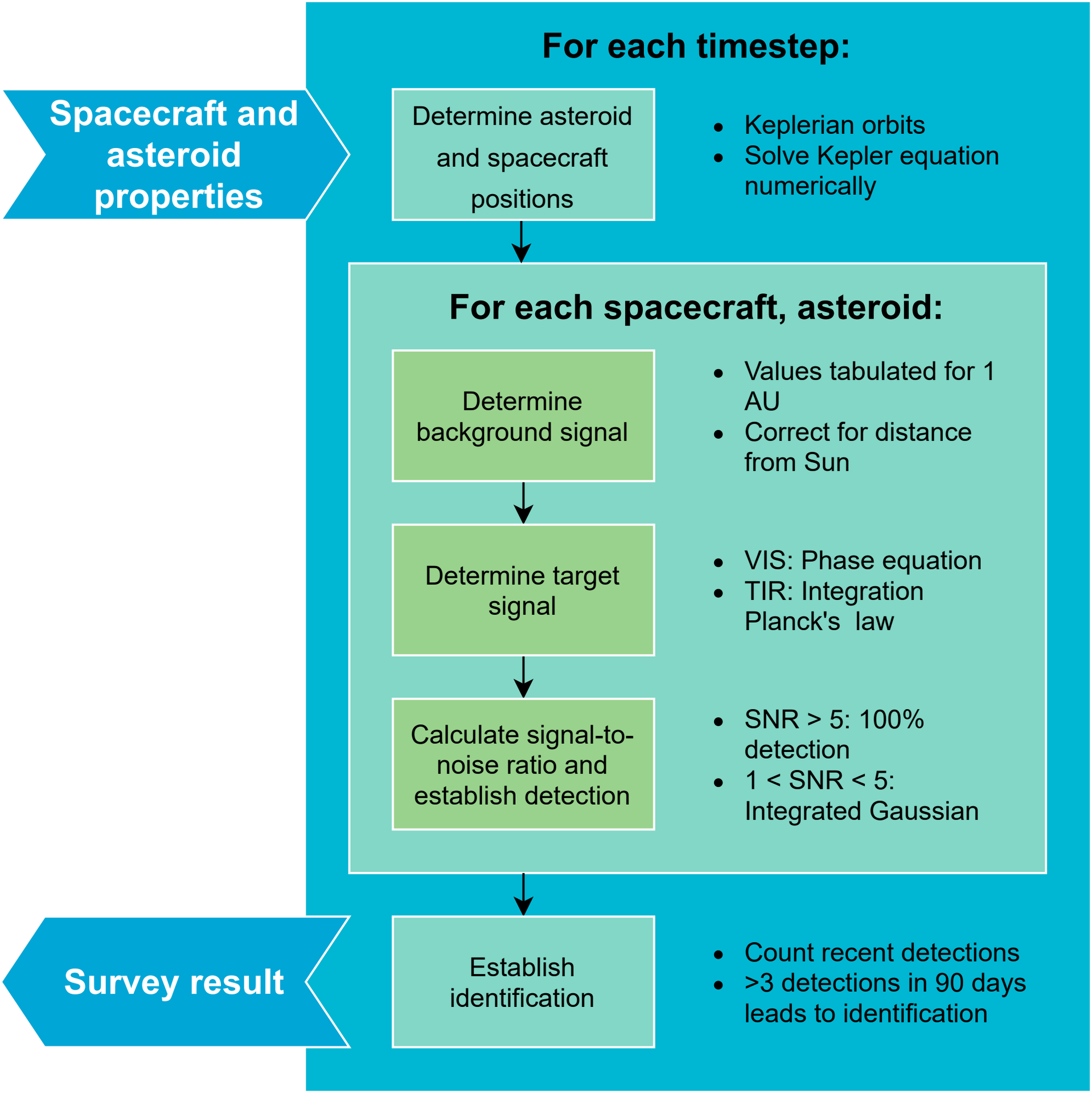
For each timestep:
Spacecraft and asteroid properties
Determine asteroid and spacecraft positions
Keplerian orbits
Solve Kepler equation numerically
For each spacecraft, asteroid:
Determine background signal
Values tabulated for 1 AU
Correct for distance from Sun
Determine target signal
VIS: Phase equation
TIR: Integration Planck's law
Calculate signal-to-noise ratio and establish detection
SNR > 5: 100% detection
1 < SNR < 5: Integrated Gaussian
Survey result
Establish identification
Count recent detections
>3 detections in 90 days leads to identification