# ROI_PAC - A Repeat Orbit Interferometry Package

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A package of repeat orbit radar interferometry software known as ROI_PAC has been developed over the years at the Jet Propulsion Laboratory and Caltech. ROI_PAC is a collection of Fortran and C code flexibly connected with Perl scripts to perform the main data reductions of repeat orbit interferometry, from basic interferogram formation through geocoded topography and deformation measurements. The package has been used extensively at JPL and Caltech to generate and analyze topography and deformation signatures in data acquired by the C-band synthetic aperture radars (SARs) on the ERS satellites, and to a lesser extent in L-band JERS data, and L- and C-band SIR-C data. Preconditioning software reformats raw signal data from the various sensors to a common format, allowing the image formation and interferometry reduction to be common for all sensors. Spacecraft orbit information is required to automate the process, and several publically available ephemeris sources are recognized by the package, particularly for ERS orbits.

ROI_PAC is in the process of being licensed for academic use in the United States at no cost. The possibility of international licensing is being investigated.