IGARSS 2000 ABSTRACT SUBMISSION TEMPLATE

CORRESPONDING AUTHOR: ___Bruce Chapman__

AFFILIATION: Jet Propulsion Laboratory

ADDRESS: 4800 Oak Grove Drive

CITY: Pasadena   STATE: CA   POSTAL CODE: 91109

COUNTRY: usa

TELEPHONE: 818-354-3603   FACSIMILE: 818-393-5285

EMAIL: bruce.chapman@jpl.nasa.gov

ABSTRACT TITLE:

Filling gaps in Landsat coverage using GRFM JERS-1 SAR imagery

AUTHOR(S):

List names only...if subsequent authors have different mailing addresses, please use a second sheet to provide data

Bruce Chapman, Sasan Saatchi, and Greg McGarragh

ABSTRACT TEXT:

Text block boundaries are fixed. Abstract cannot exceed boundaries.

Often, SAR and optical data are complimentary, but suitable techniques must be employed in combining the imagery in order to derive a significant new product. Derived products, such as classification maps, are sometimes more suitable when merging different data sets, especially when considering the analysis of data that requires manual interpretation. The techniques involved in data fusion range from accurate co-registration of the image products to merging classification products from different sensors. In this paper, we will examine examples of JERS-1 SAR imagery and derived products resampled to the Landsat WRS row/path, discuss the value of these "gap filling" products, and compare them with underlying Landsat imagery and products. In addition, we will discuss SAR observation strategies to maximize the role of SAR in filling gaps in optical remote sensing coverage.
This work was performed at the Jet Propulsion Laboratory under contract to the National Aeronautics and Space Administration.

TOPIC PREFERENCE: GRFM special session