Subject: Speckle reducing filters
Posted by knipp on Wed, 08 Sep 1993 08:27:03 GMT
View Forum Message <> Reply to Message

Hi,

I'm currentely involved in studying the effects of several
speckle-removing-filters applied to 8-bit- vs. 16-bit-data
(SAR Images, ERS-1).

Has anybody implementations of the following filters in IDL/Wave?

1) Lee's Sigma Filter - Lee, "Speckle suppression and anaysis ...",
Optical Engineering, May 1986

{ 2) Lee's Local Statistics - " }

3) Kuan's generelization of Lee's
Local Statistics - Kuan, et.al. "Adaptive noise smoothing ..",
IEEE Trans. Pattern Anaysis, 1985

I know that due to their adaptive nature implementations of these filters in
IDL/Wave are computational inefficient, however I want to be able to easy include
additional features to the code. Furthermore it's easier to apply the same filter
to 8 AND 16-bit data in IDL/Wave than in p.e. C.

to 2): I'm fully aware of the LEEFILT-routine in the user-library, but to be honest,
I do not understand this implementation and so doubt it's correctness.

Thank you all,
Karl

__ _____ __
/ // _ \ / / Karlheinz Knipp Tel. 0511 - 762 4922
/ // /_/ // / Uni Hannover Fax. 0511 - 762 2483
/ // ____// / Institut f. Photogrammetrie
/ // / / / Nienburger Str.1 email knipp@ipi.uni-hannover.de
/_//_/ /_/ FRG 30167 Hannover 1