

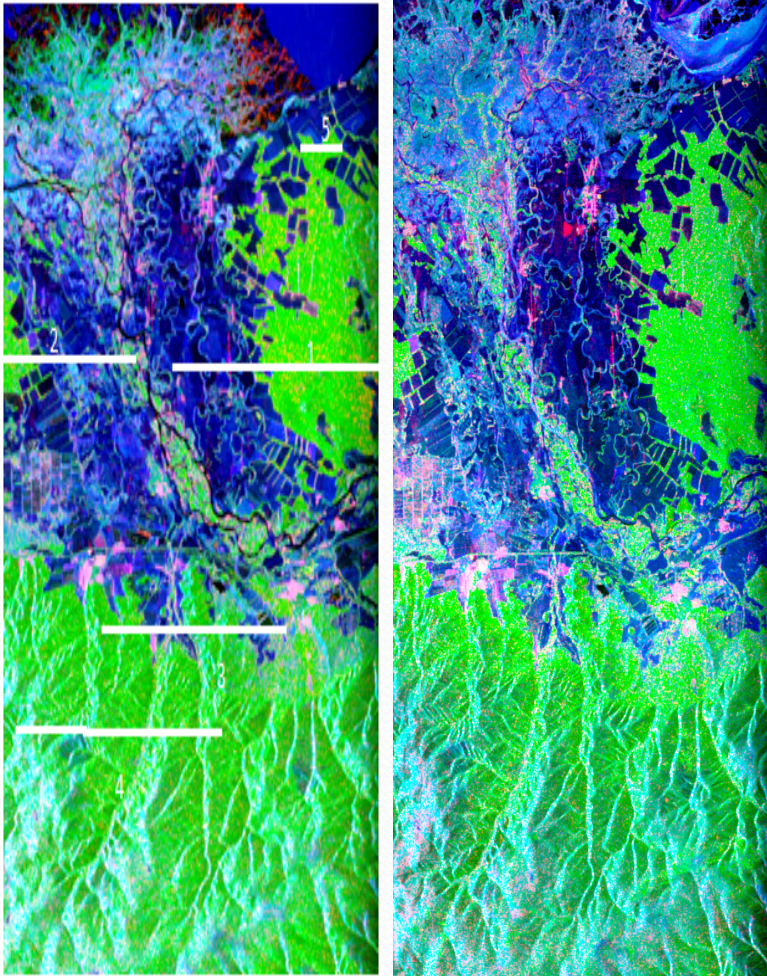
Seasonal variations polarimetric characteristics of
coniferous and mixed forests according to the data ALOS
PALSAR

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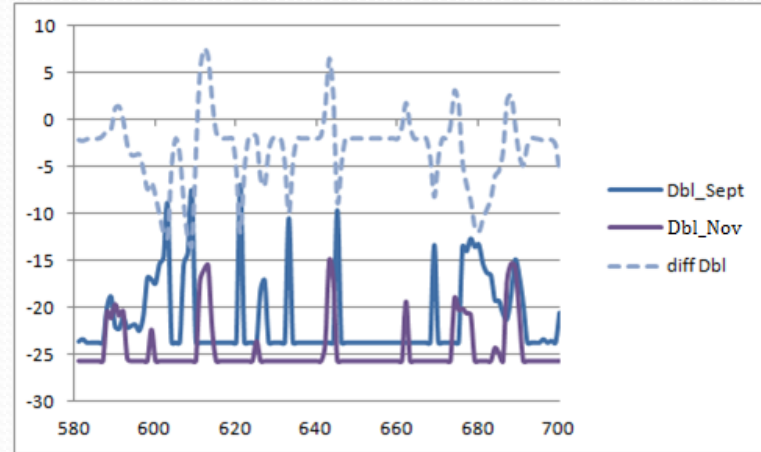
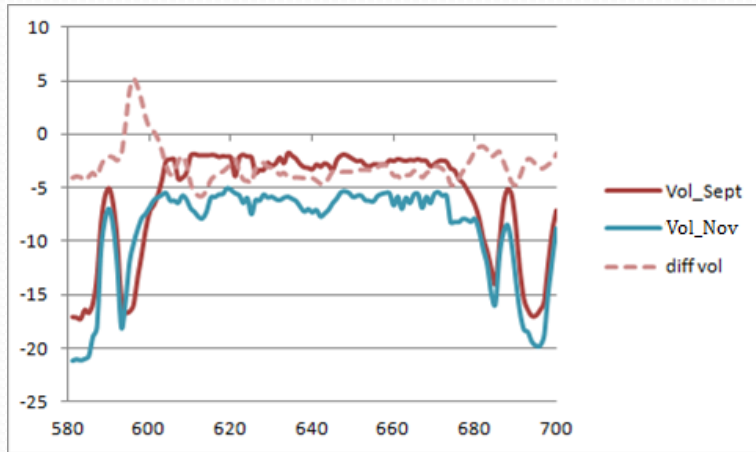
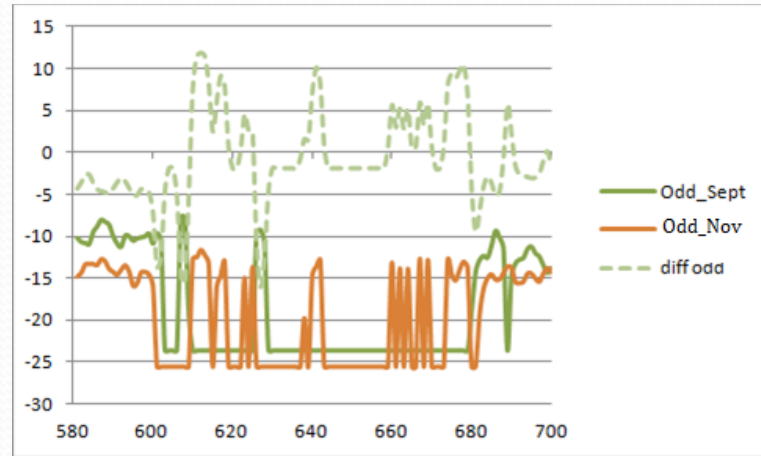
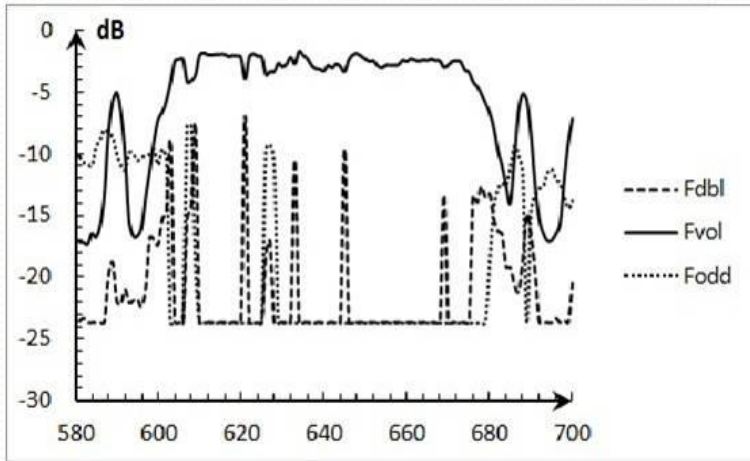
Polarimetric data for the Baikal region

- Polarimetric radar remote sensing data (RDZ) in the Baikal region are scanner images in the microwave range of C-and L-bands (5 and 25 cm), obtained with a synthetic aperture radar during a mission in the Shuttle in 1994 and in the L-band - ALOS PALSAR c 2006 to 2011.
- To display and analysis of remote data protection software used by ENVI and PolSARPro.

Freeman decomposition



Seasonal changes in Freeman components



Seasonal changes in components of the Freeman

	Fvol	Fodd	Fdbl
28/09/2006	$-2,76 \pm 0,13$	$-22,04 \pm 0,35$	$-21,75 \pm 0,61$
13/11/2006	$-6,24 \pm 0,09$	$-22,32 \pm 0,74$	$-24,76 \pm 0,35$
	$3,48 \pm 0,15$	$0,28 \pm 0,85$	$3,00 \pm 0,58$

Conclusion

- Comparison of the polarimetric characteristics showed seasonal changes in scattering processes. In particular, for the forest in winter there is a decrease of such indices as the radar vegetation index and the proportion of the volume scattering due to the overall decrease in biomass and growth of the role of surface scattering.
- For the test area of pine forest on the basis set expansion Freeman reducing the bulk and two-time component to 3-3.5 dB, and the stability of the surface components.



**Thank you
for your attention**