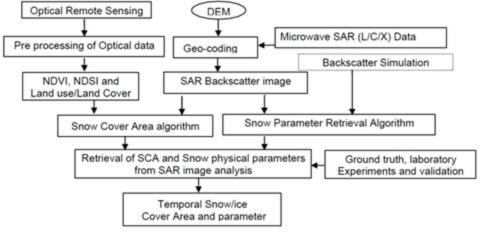
ISRO/DOS Projects, a): RISAT-Utilization Project (UP): "Estimation of snow cover area, snow physical parameters and glacier related studies in parts of Western Himalayas using microwave and optical remote sensing" (2010-2014), completed in March 2014.

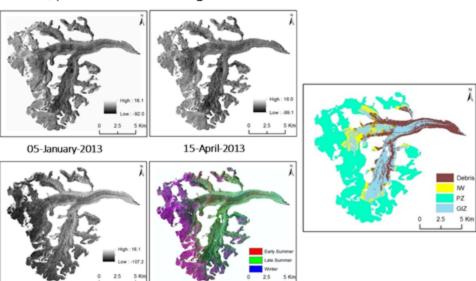
## a) Overall approach

18-August-2013



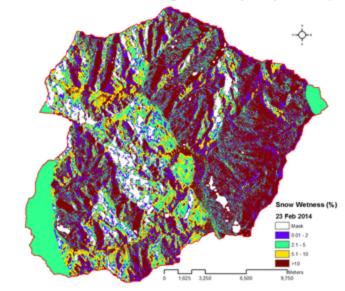
## c) Glacier zones identified using time series of RISAT-1 data

Glacier zones mapped using RISAt-1 data such as debris covered ice, ice wall, percolation zone and glacier ice zone



RGB Image using multi date RISAT-1 data

## b) Snow wetness estimation using RISAT-1 quad pol data, Feb 2014



## d) RISAT-1 MRS HV based SCA for Beas basin upto Thalot

