List of Symbols and Abbreviations

Acronyms

RS	Remote Sensing
GIS	Geographical Information System
MRS	Multispectral Remote Sensing
HRS	Hyperspectral Remote Sensing
VIs	Vegetation Indices
EO1	Earth Observing-1
OLI	Operational Land Imager
TM	Thematic Mapper
FHR	Forest Health Risk
MIOM	Meghahataburu Iron ore Mine
KIOM	Kiriburu iron-ore mine
SAIL	Steel Authority of India Limited
IDW	Inverse Distance Weighting
Max Tem	Maximum Temperature
Min Tem	Minimum Temperature
MSL	Mean Sea Level
DEM	Digital elevation model
FSI	Forest Survey of India
PM	Particulate matter
1GST	Geometrically corrected
L1R	Radiometrically corrected
L1T	Terrain corrected
VIR	Visual infrared
NIR	Near infrared region
SWIR	Short infrared region
FWHM	Full width at half maximum
FOV	Field of view
FLAASH	Fast line of atmospheric sight analysis of spectral hypercube
UTM	Universal Transverse Mercator
MNF	Minimum Noise Fraction
PCA	Principal Components Analysis)
PPI	Pixel Purity Index
SAM	Spectral Angle Mapper
SFF	Spectral Feature Fitting
SAM	Spectral Angle Mapper
JM	Jeffries Matusita
USGS	United States Geological Survey
GPS	Global Positioning System
DGPS	Differential GPS
DT	Decision Tree
IPCC	Intergovernmental Panel on Climate Change
LULC	Land use and Land cover
MOLUSCE	Modules for Land Use Change Simulations
DS	Deforestation susceptibility
NBSS	National Bureau of Soil Survey

GSI	Geological Survey of India
NCEP	National Canters for Environmental Prediction
LST	Land surface temperature
NDVI	Normalized difference vegetation index
AHP	Analytical hierarchy process
MDCA	Multi criterion decision analysis
PCM	Pair comparison matrixes
ROC	Receiver operating characteristic
AUC	Area under the curve

Symbols

R^2	Coefficient of determination
S	Separability
μ	Standard deviation
σ	Mean
i &j	Denote classes
L	Wilk's lambda
SS	Sum of squares
α	Spectral angle
°C	Centigrade
g/m^2	Grams per square metre
VI	Vegetation indices
VI_{diff}	Vegetation differences
γ	Constant value
VI_{cross}	Image difference
R	Correlation coefficient
RMSE	Root Mean Square Error
D	Dust volume
L	Coefficient
VIs com	Vegetation Combination
γσ	NDVI differences
M	Meter
H	Shannon Index
SSE	Sum squared error
S^w_i	Normalized-weigh
MS_i^j	Sensitivity analysis
p	Spearman Correlation
T	Kendal Correlation
y	Area under the curve