

FPAR/LAI

2-1
Myneni 3-θ model \Rightarrow LUT

- Model testing - Fife, Boreas, crops
- Other Models
- MYI vs Reflectance
- ACCURACY / ERROR BUDGET

LAND COVER INFORMATION:

0.5x0.5

① Type

primary canopies:

Grass

Crops

Leaf Forest

Needle Forest

Savannah

Mixtures ?

② Ground cover
(x, y, t)

③ Ht / Leaf size (x, y)

④ phenology (x, y, t)
└ LOP
└ LAD

BACKGROUND: (x, y)

┌ SOIL sand, clay
└ VEGETATION
Litter etc

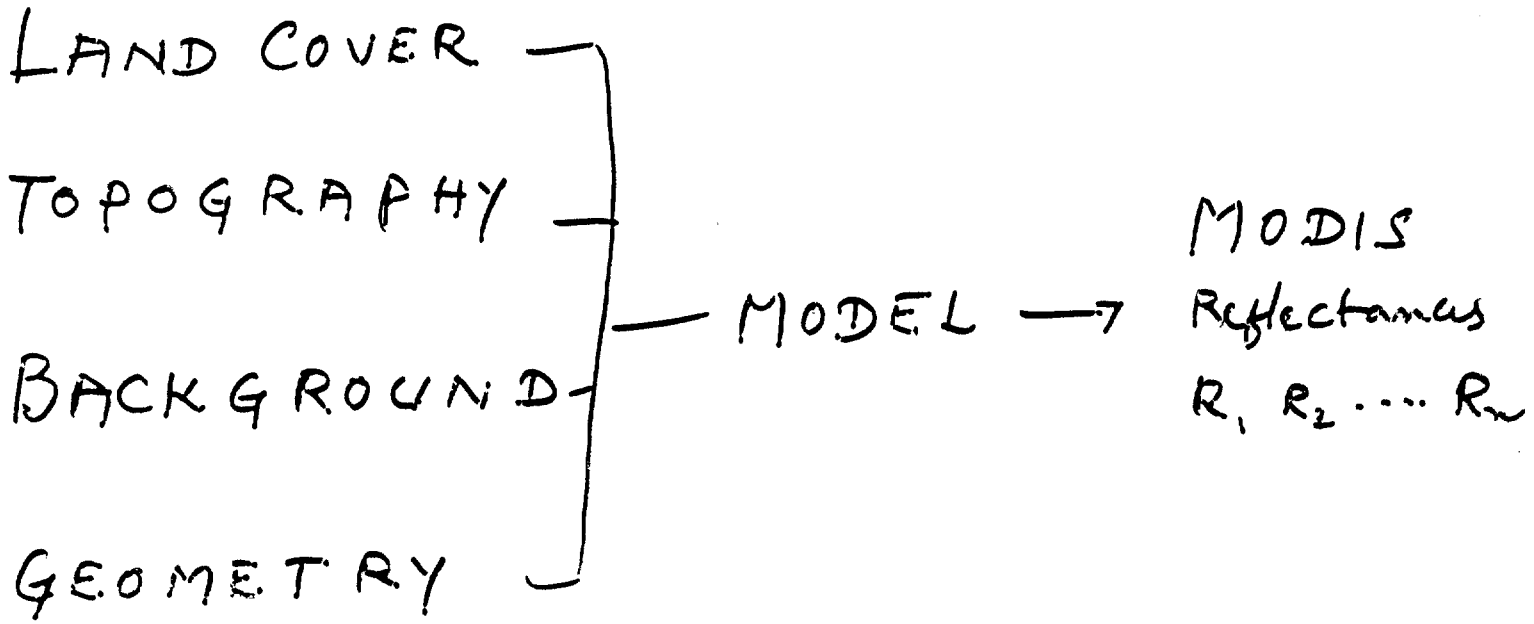
TOPOGRAPHY: (x, y)

Slope

Aspect

ASSUMPTIONS:

- Cloud Screened
- Atmospherically corrected
- Geometric, Radiometric
Topographically corrected

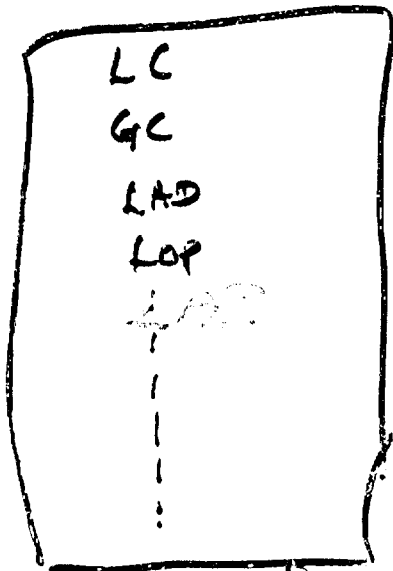


0.5×0.5^0 Starting point

LUT

Quasi-dynamic / UPDATED

Mixtures after 1 yr MODIS data



MODIS



LAI - 9. Flag

FPAR - 9. Flag

STRENGTHS:

ACCOUNTS FOR:
DIRECTIONAL
STRUCTURAL
BACKGROUND EFFECTS

WEAKNESS:

EXTENSIVE PRE-PROCESSING
DEPENDS ON MODIS REFLECTANCES
(CORRECTIONS)

Ancillary Info... Land cover
etc.

Lack of Signal
e.g. LAI 7 7-8