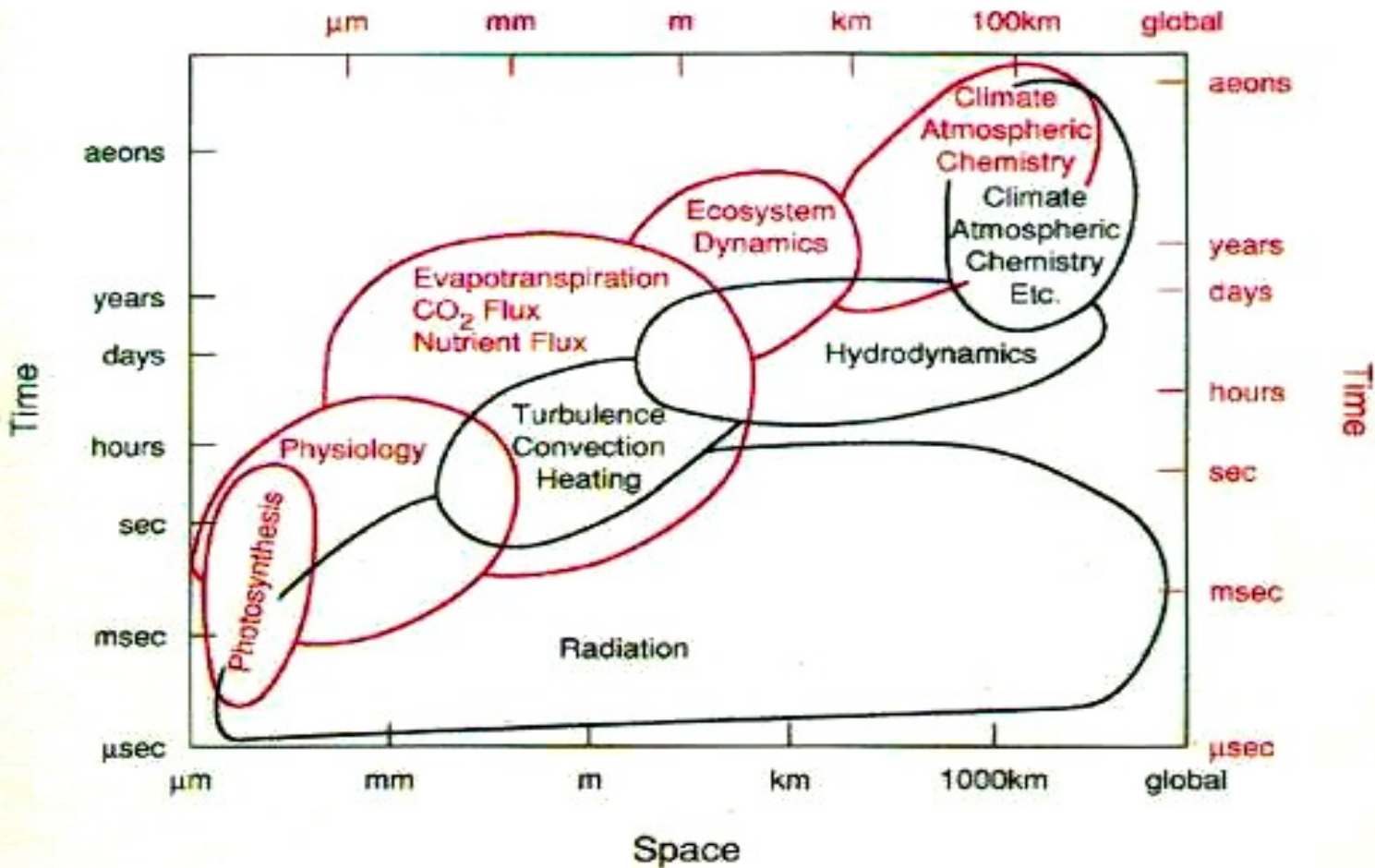


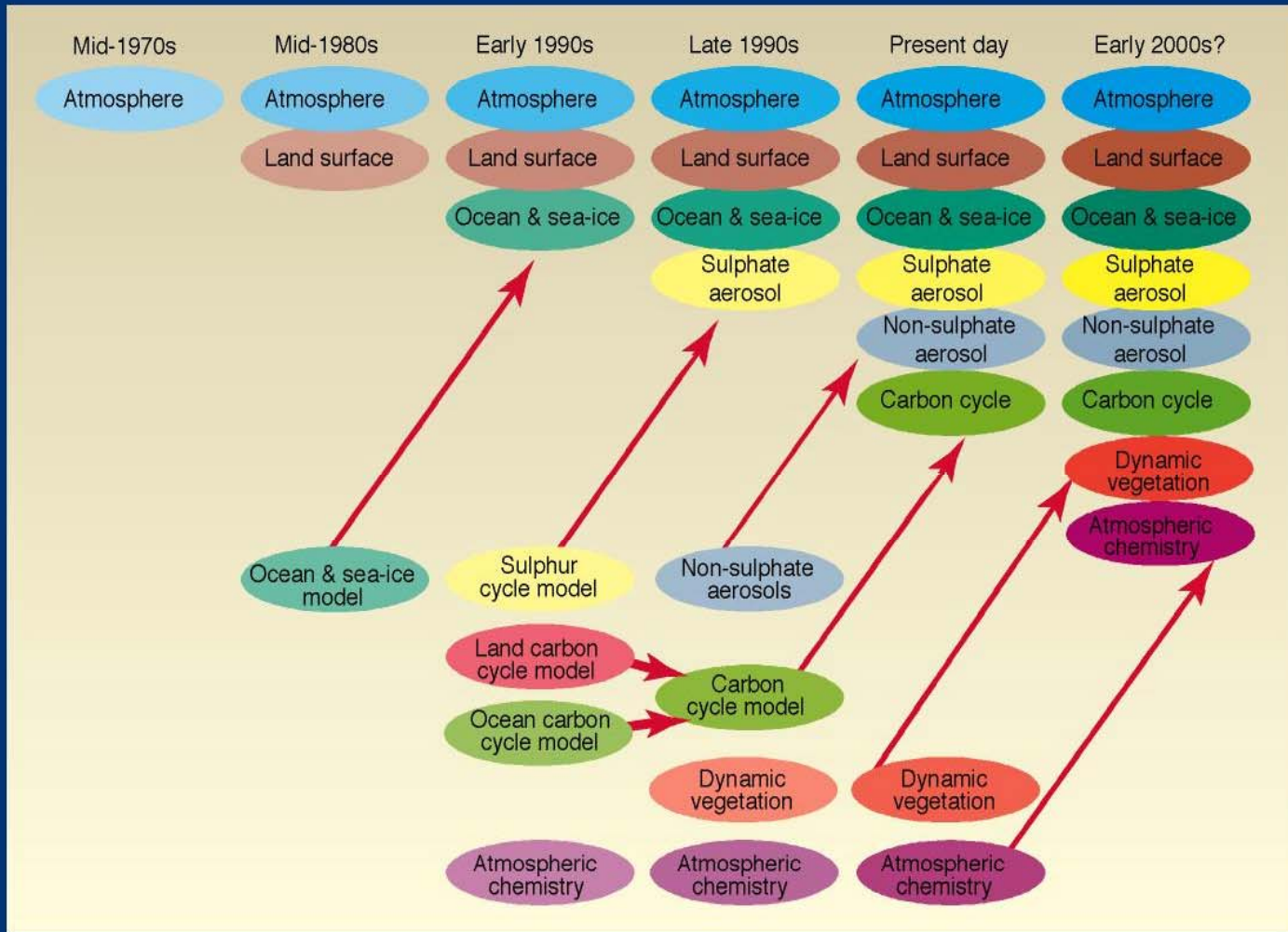
Space



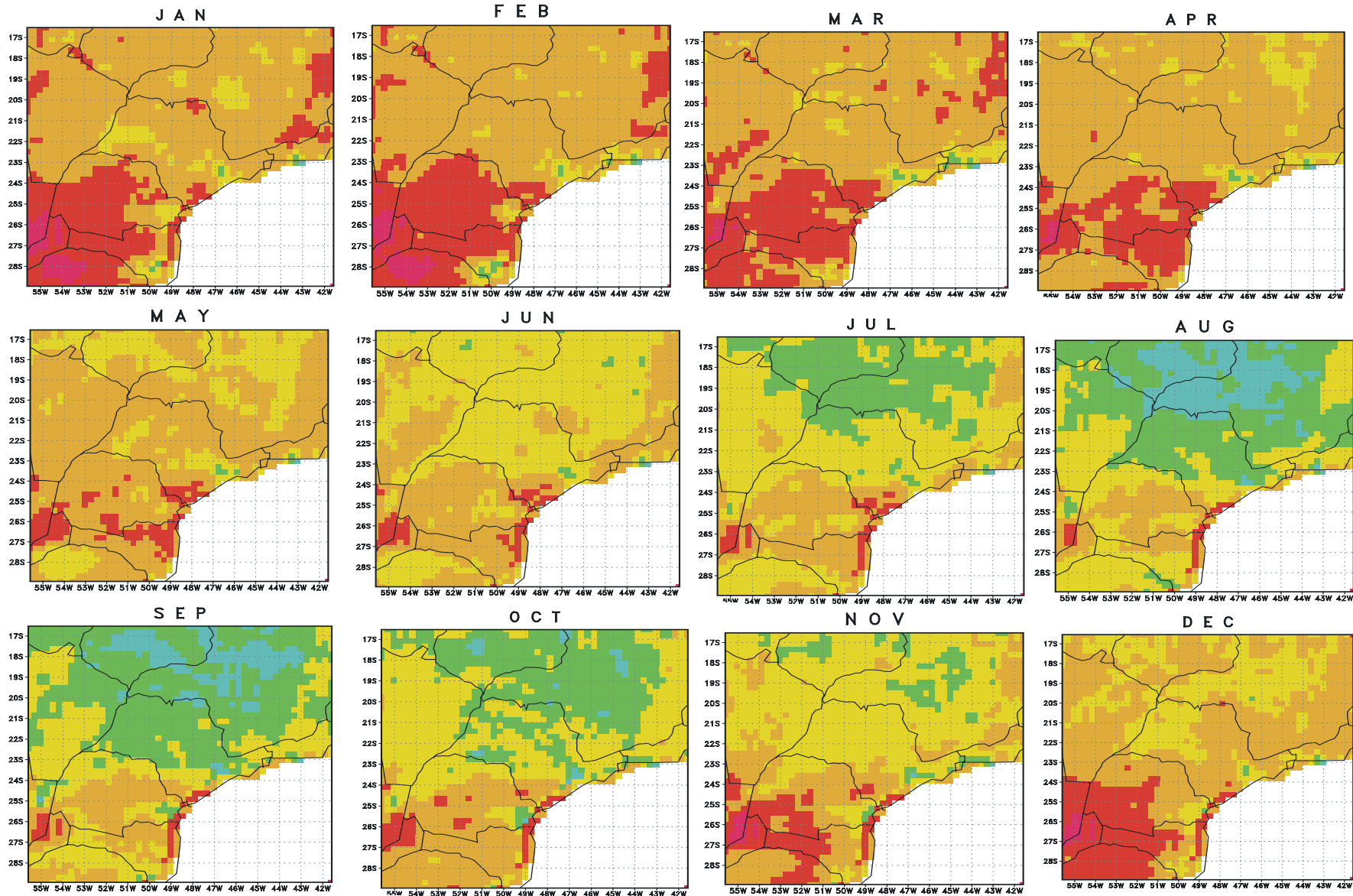
- Atmospheric Process
- Biospheric Process

fonte : Sellers (1992)

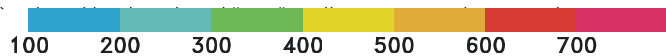
The development of climate models, past, present and future



WG1 - TS BOX 3
FIGURE 1



NDVI



• **Parâmetros biofísicos derivados do NDVI**
Algoritmo MAPPER (Sellers et al 1994)

$$SR = (1 + NDVI) / (1 - NDVI)$$

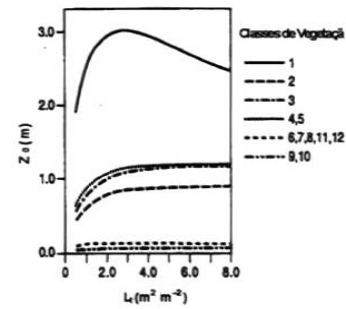
$$FPAR = \frac{(SR - SR_{min})(FPAR_{max} - FPAR_{min})}{(SR_{max} - SR_{min})}$$

fração de PAR absorvido

$$L_g = L_{g,max} \frac{\ln(1 - FPAR)}{\ln(1 - FPAR_{max})}$$

L_d, L_s (literatura, met. indiretos)
 $L_t = L_g + L_d + L_s$ **índice de área foliar**

z_0, d, C_1, C_2



$$N = \frac{L_g}{L_t}$$

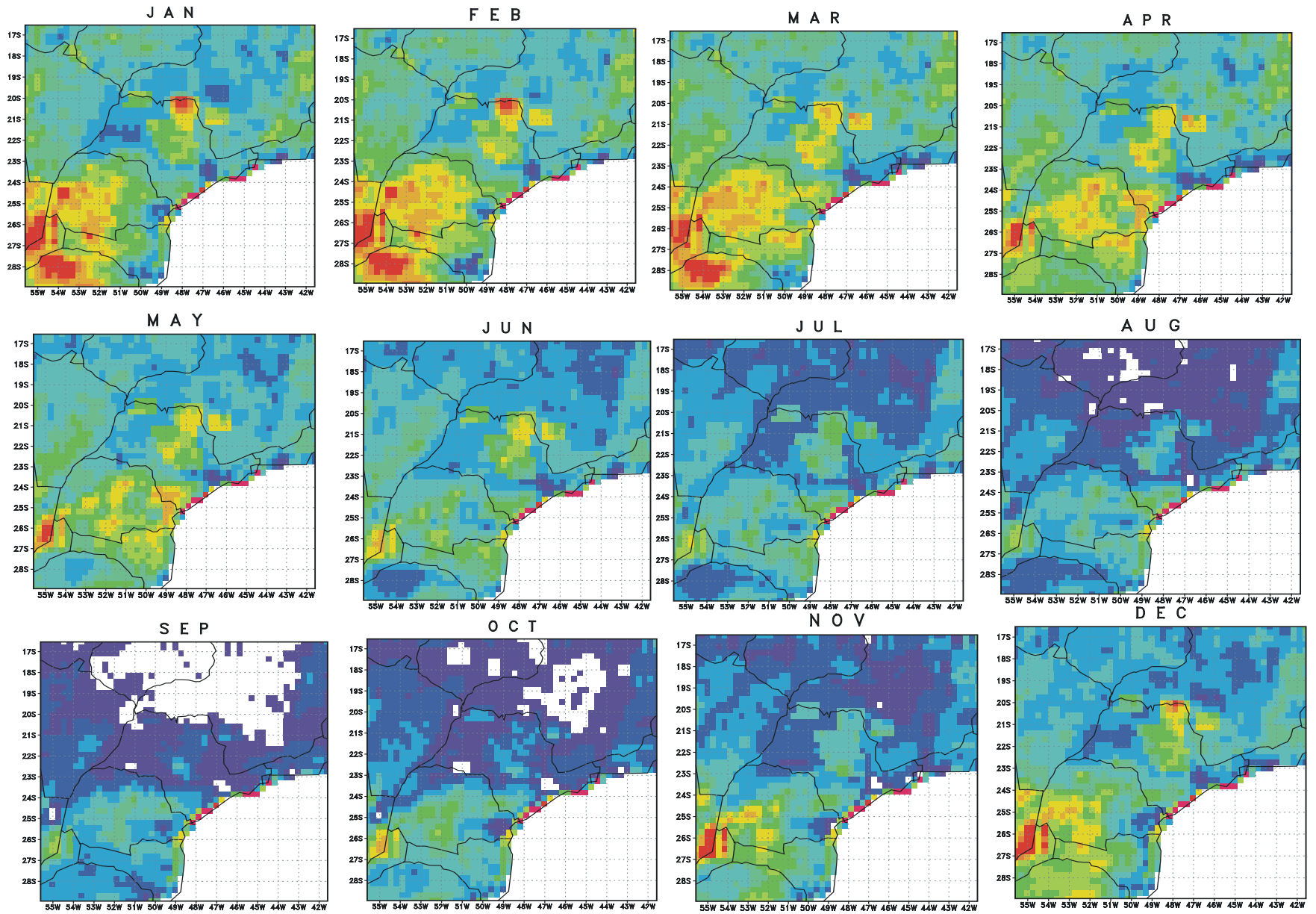
fração folhas verdes

$$V_{veg(i)} = \frac{L_{max,f}}{L_{max,i}} (r) + (1 - r), \quad r \leq 1$$

$c_{cel(f)}$

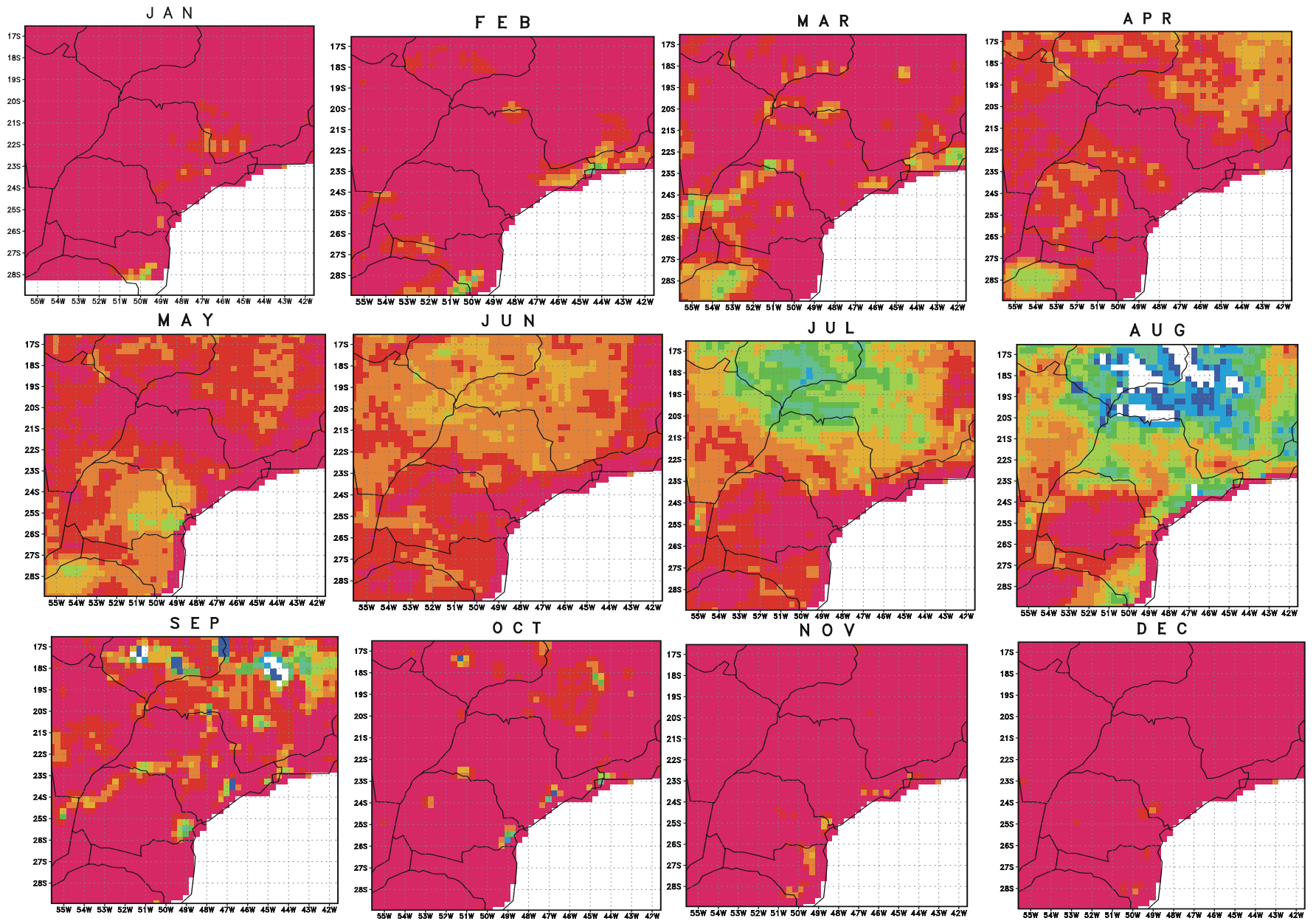
fração de cobertura

$$FPAR = V_{c,f} \left[1 - \exp\left(\frac{-kL_t}{V_{c,f}}\right) \right]$$



LAI





GREEN FRACTION



Seasonal variability of satellite-derived surface parameters in Southeast Brazil

