

# GASS-GLASS Discussion on Systematic Errors

1

**GLASS: Michael Ek** (National Center for Atmospheric Research)

**GASS: Daniel Klocke** (Max Planck Institute for Meteorology)

38th session of the Working Group on Numerical Experimentation (WGNE-38)

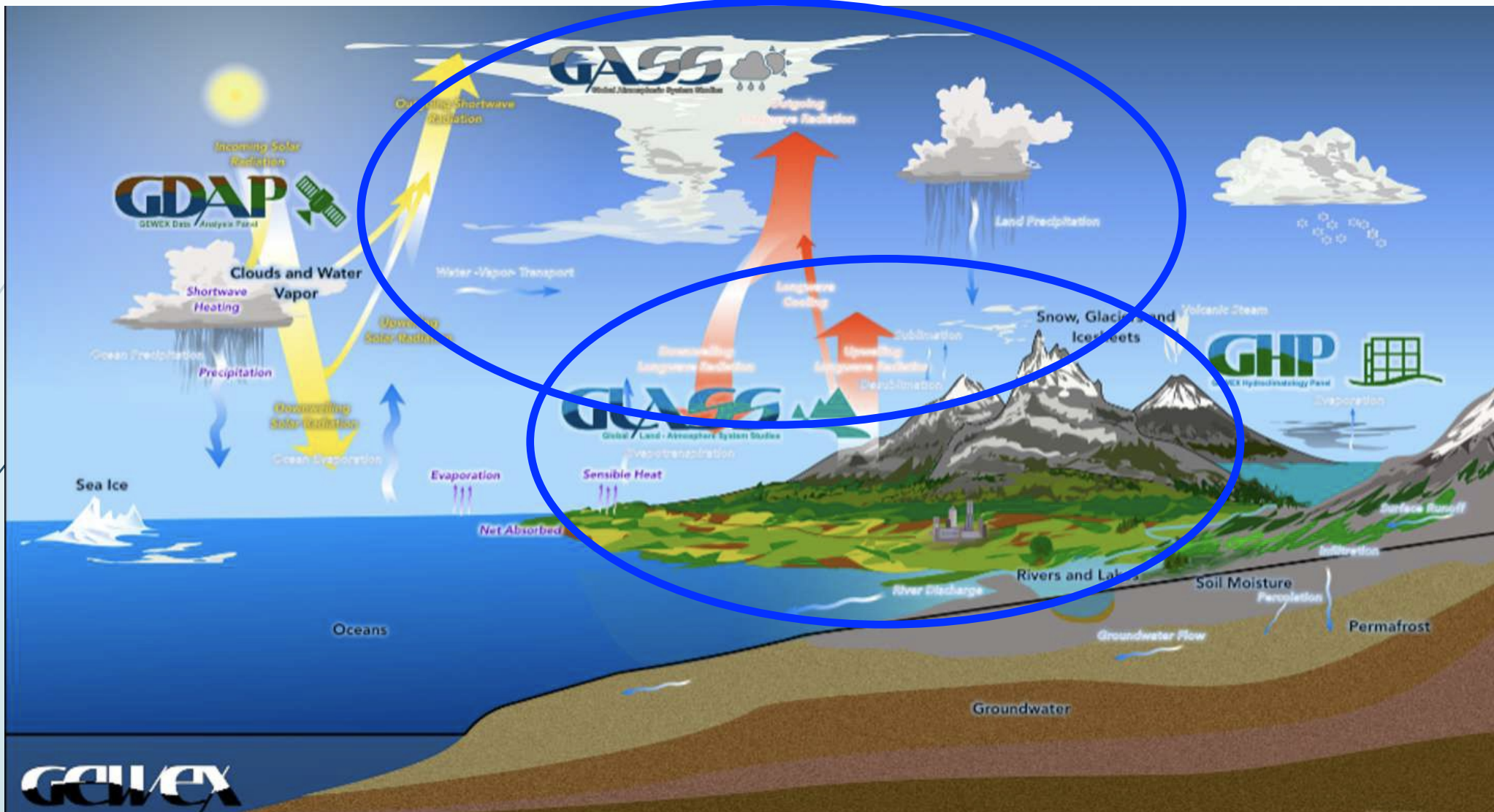
São José dos Campos, SP, Brazil, 27 November – 01 December 2023

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# GEWEX's Four Panels

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- **GDAP:** GEWEX Data Analysis Panel
- **GASS:** Global Atmospheric System Studies
- **GLASS:** Global Land-Atmosphere System Studies
- **GHP:** GEWEX Hydroclimatology Panel

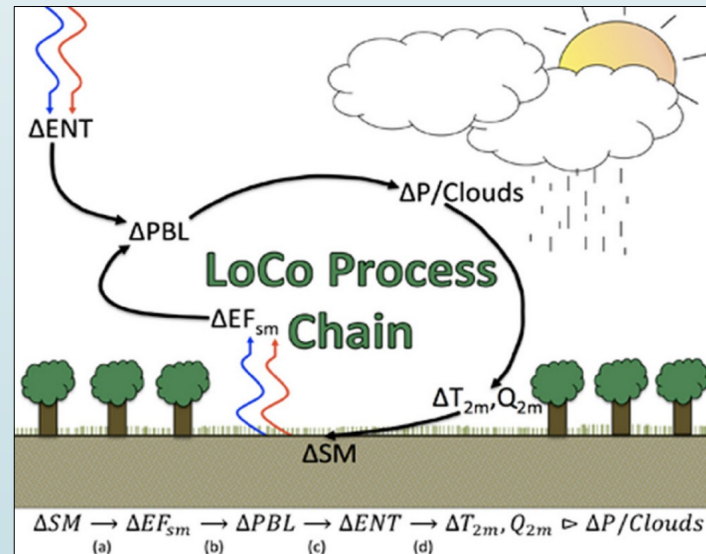
*Global Datasets Analysis and Assessments  
 Atmospheric Processes - Dynamics  
 Land Processes and Land-Atmosphere Interactions  
 Regionally Focused Processes and Hydroclimate Projects*

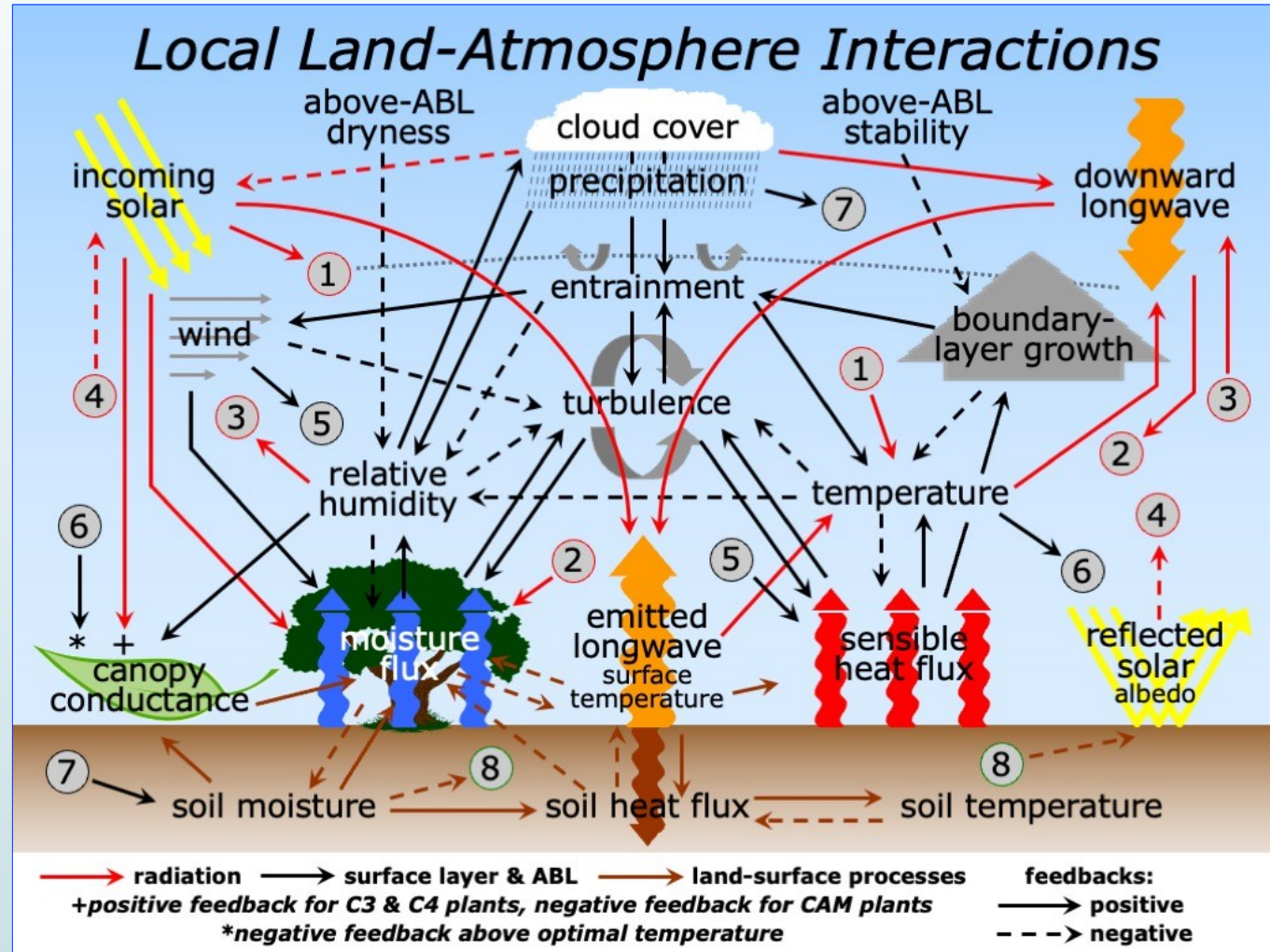


# GLASS perspective:

- Refer [to the WGNE Systematic Error Survey Results Summary \(11 February 2019\).](#)
- Land-related systematic errors (diurnal to seasonal):
  - Forcings: precipitation, low-level T, RH, U, incoming solar/longwave, pressure.
  - Surface fluxes (H, LE, Rnet, G).
  - Surface temperature.
  - Subsurface land states (T,  $\Theta$ ,  $\Theta_{ice}$ ).
  - Vegetation fraction/cover.
  - Boundary-layer depth/evolution, BL clouds
  - Streamflow/water table

**Address errors in all processes and interactions**



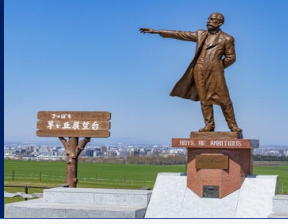


# GASS perspective:

- Referring to the [WGNE Systematic Error Survey Results Summary \(11 February 2019\)](#):
- Atmospheric-related systematic errors (diurnal to seasonal):
  - 1
  - 2
  - etc



# 9<sup>th</sup> The Global Energy and Water Exchanges Open Scientific Conference



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