## Panel discussion topics?

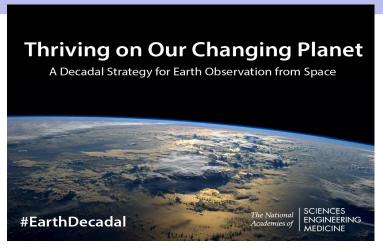
- How do we address continuity purely on reliance on operational systems; <u>research systems?</u> <u>e.g. NASA ventures</u> <u>continuity, SMOS</u>?
- How might an international body like GEWEX help individual agencies reach goals (one example is ISCCP-nex-gen → program of record specific contribution to the A-CCP Decadal survey recommended designated observable)
- GEWEX could offer a wider view of real and perceived gaps in
  EO Sentinel GEWEX -related Gaps?
- How might a GEWEX help develop a more integrative approach to setting science and applications objectives?
  - Variable versus system approach to science and EO specifically?
  - EU Copernicus is this the model for Earth science and applications, other approaches(like NEWS.

## Some ways GEWEX might help the space agencies

- 1) **Data record stewardship** refer to for example GDAP highlights GEWEX is able to bring an independent international community together to assess data records and define independent errors (essential for integrated analysis).
- 2) **Coordinate** across agencies to develop new, improved data records –e.g. ISCCP Next gen as a direct contribution to different agencies goals
- 3) **Gap identification** from a GEWEX perspective e..g. hydrology with sentinel



# 4) A more integrated, Earth system focus rather than a variable centric approach?



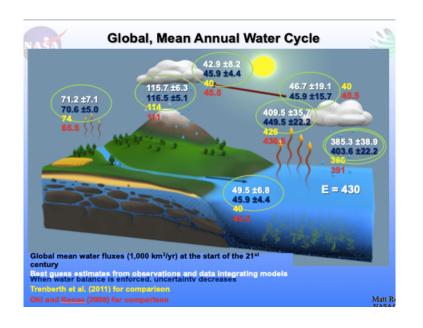
Community definition of most important objectives of the next decade

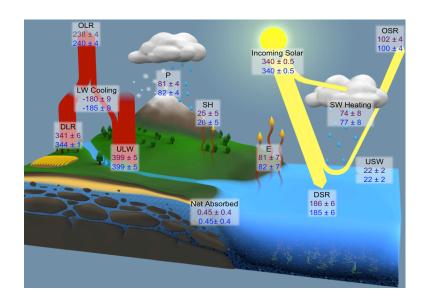
#### The Hydrology panel Most Important objective:

(H-1a) Interaction of Water and Energy Cycles. Develop and evaluate an integrated Earth System analysis (water + energy) – an objective that address directly the water/energy IT. Most hydrological variables require an advance analysis system -the multifaceted character of precipitation is one example where duration of precipitation events and total water output requires the integration of snap-shot observations into a dynamic analysis system. ET is another example. This energy flux explicitly couples the water and energy cycles at the surface and is a net result of a number of complex processes that cannot be synthesized from any single remote sensing measurement alone.



### NASA NEWS example





NASA NEWS project was one example of how integration can be done integration – this integration s central to GEWEX broad objectives –now as 'process teams'

