GigaLES 2 Update

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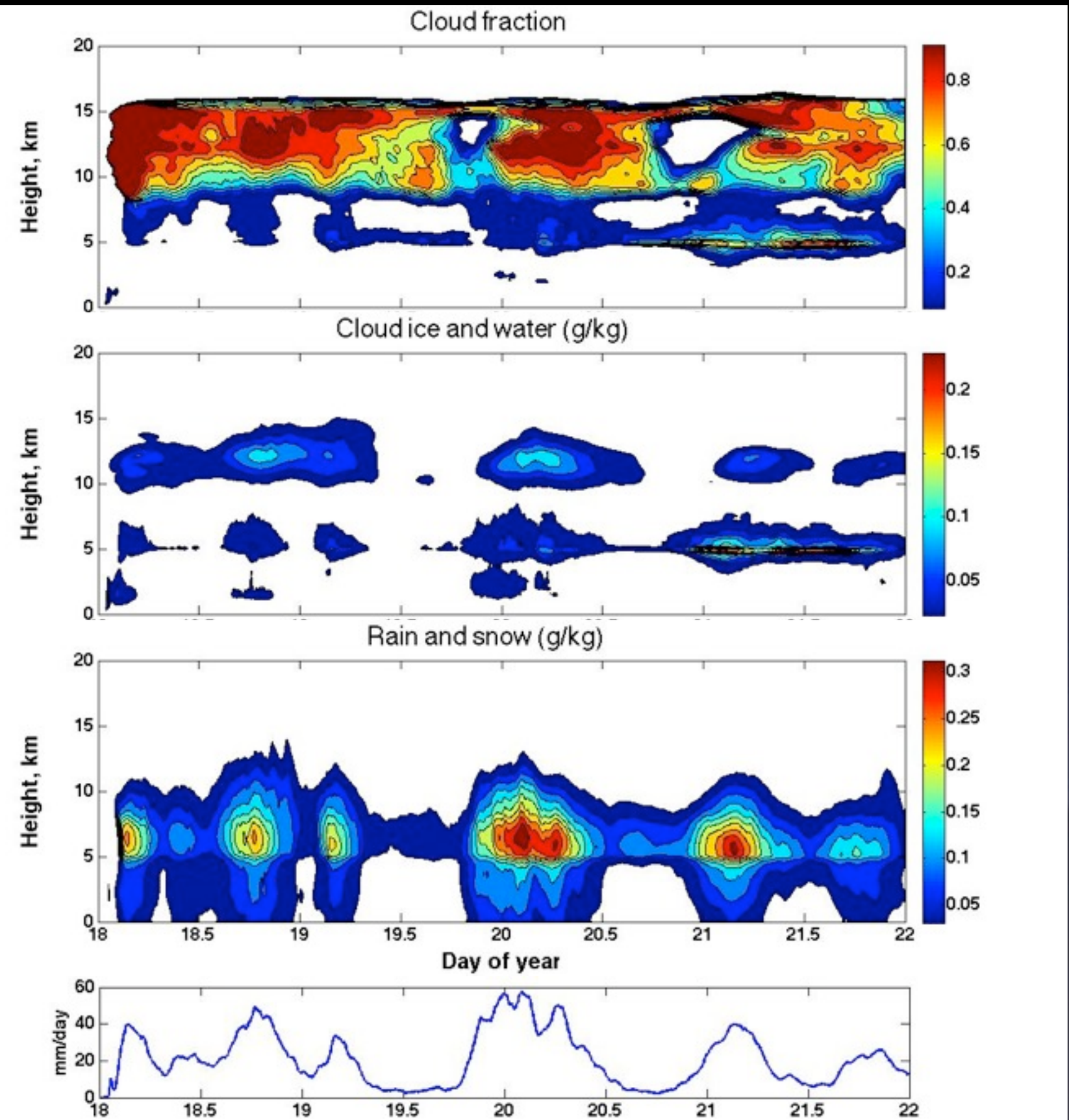
CMMAP Mtg January 7-9, 2014, Newport Beach
Cyber Infrastructure Breakout

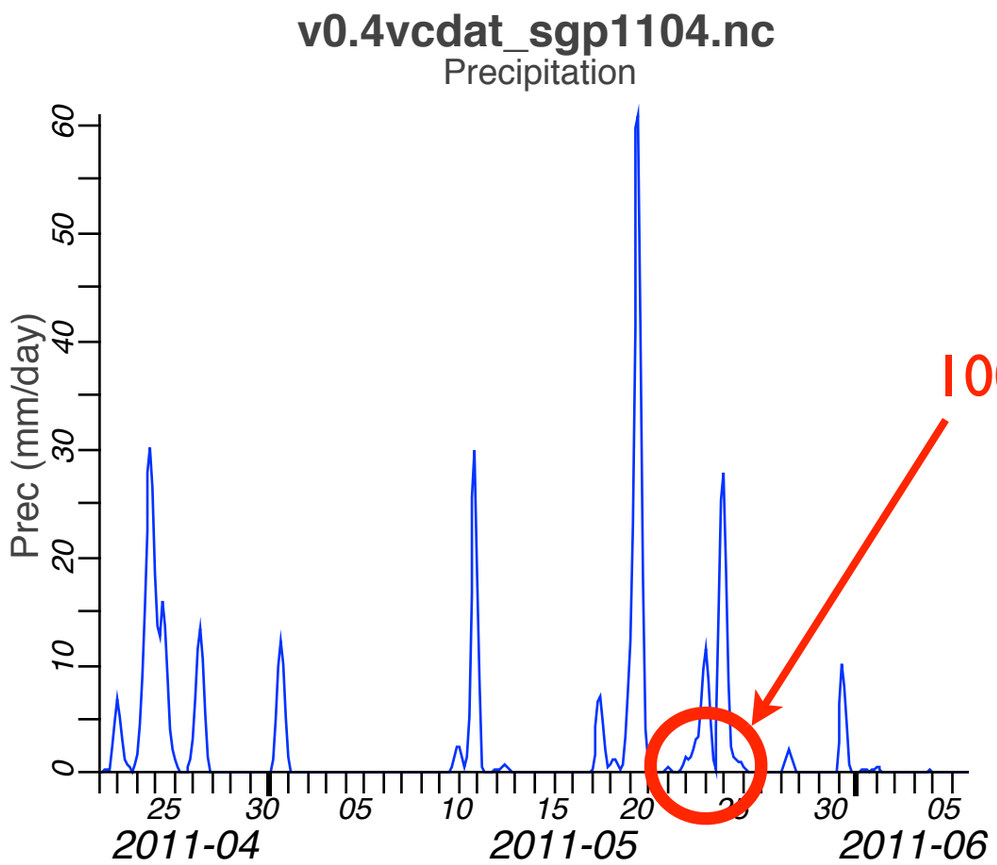
GigaLES TWP-ICE



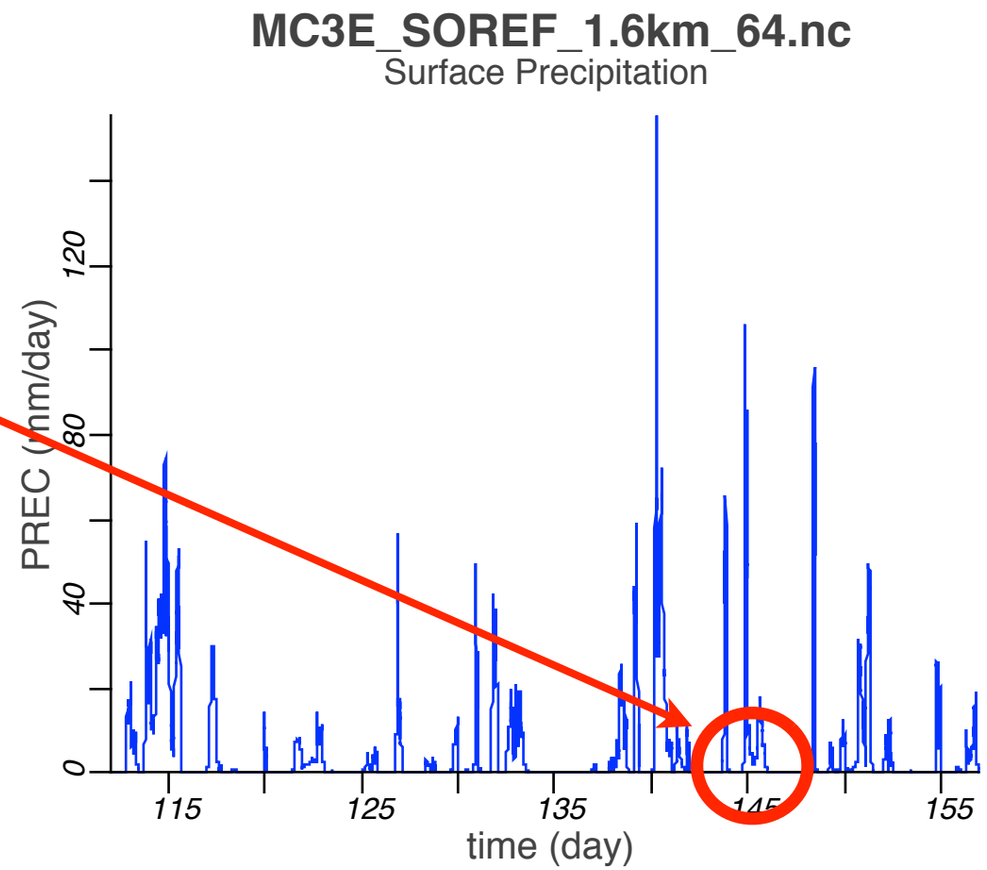
- 4 day integration to date.
- More in Physical Processes breakout tomorrow

MC3E Plan

- Ian Baker has evaluated the land surface behavior in the 1600m run and is pretty satisfied.
- Precipitation event timing looks good at 1600m.
- Evaluate an updated forcing data set at 1600m.
- Run 800m, 256L for campaign period. Take 0600 UTC 22 May land-surface state to initialize 100m run.



100m period



Run Status

Experiment	simulation length	output volume	machine
TWPICE - 1600m, 64L Control	17 days: 0z 18 Jan - 0z 4 Feb	138GB	desktop
TWPICE - 1600m, 64L Radsnow	17 days: 0z 18 Jan - 0z 4 Feb	138GB	desktop
TWPICE - 800m, 256L Control	17 days: 0z 18 Jan - 0z 4 Feb	2.15TB	gordon
TWPICE - 800m, 256L Radsnow	17 days: 0z 18 Jan - 0z 4 Feb	2.15TB	stampede
TWPICE - 100m, 256L Radsnow	96 hours: 0z 18 Jan - 0z 22Jan	13.2 TB (no LPT)	stampede/ kraken/ gordon
MC3E - 1600m, 64L Radsnow	44 days - evaluating		gordon
MC3E - 800m, 256L Radsnow			
MC3E - 100m, 256L Radsnow			
???			

Allocation Usage

machine	allocated	remaining (Aug 4)
gordon	1,700,000 (minus 250,000 moved to stampede)	760578 (52%)
stampede	500,000 (plus 250,000 from gordon)	265,714 (35%)
kraken	1,600,000	242,806 (15%)

Storage

system	output stored	storage space
SDSC	TWP-ICE 800m control TWP-ICE 800m radsnow TWP-ICE 100m radsnow (incomplete)	4.4TB 4.6TB 56TB
CMMAP Raid /pond	TWP-ICE 800m radsnow (duplicate) TWP-ICE 100m radsnow (incomplete, partial duplicate)	4,4TB 45TB

Lion's share of storage is OUT_3D data - 20 fields, 80GB per .nc file, every five minutes

Issues and questions

- How far to integrate TWP-ICE? - change in regime at about day 8.
- Do we want to request more time for longer integrations?
- How much data do we want to store? Where? What form and frequency?
- How do we arrange distribution of GigaLES-2 output?