

RCE Paper

1. Cloud feedback dependencies on SHOC, microphysics, SST, grid size.

2. Comparing other convective aspects' dependencies on SHOC, microphysics, SST, grid size.

SHOC results tend to be more mixed while microphysics, SST, and grid size effects clearer.

RCE Runs

x* = 128km and 256km			Microphysics	
x = 256, * = 128, **= 128&64			1M	2M
NOSHOC	301K	16km	x*	x
		8km	x	x
		4km	x	x
		2km	x	x
		1km	x*	x
	305K	16km	x	x
		8km	x	x
		4km	x	x
		2km	x	x
		1km	x*	x
SHOC	301K	16km	x*	x*
		8km	x*	x*
		4km	x*	x**
		2km	x*	x**
		1km	x*	x**
	305K	16km	x*	x*
		8km	x*	x*
		4km	x*	x**
		2km	x	x**
		1km	x*	x**

Also a set of 8 64km domain 1km runs that had ISCCP files saved.

Potential issue: domain size may influence results.

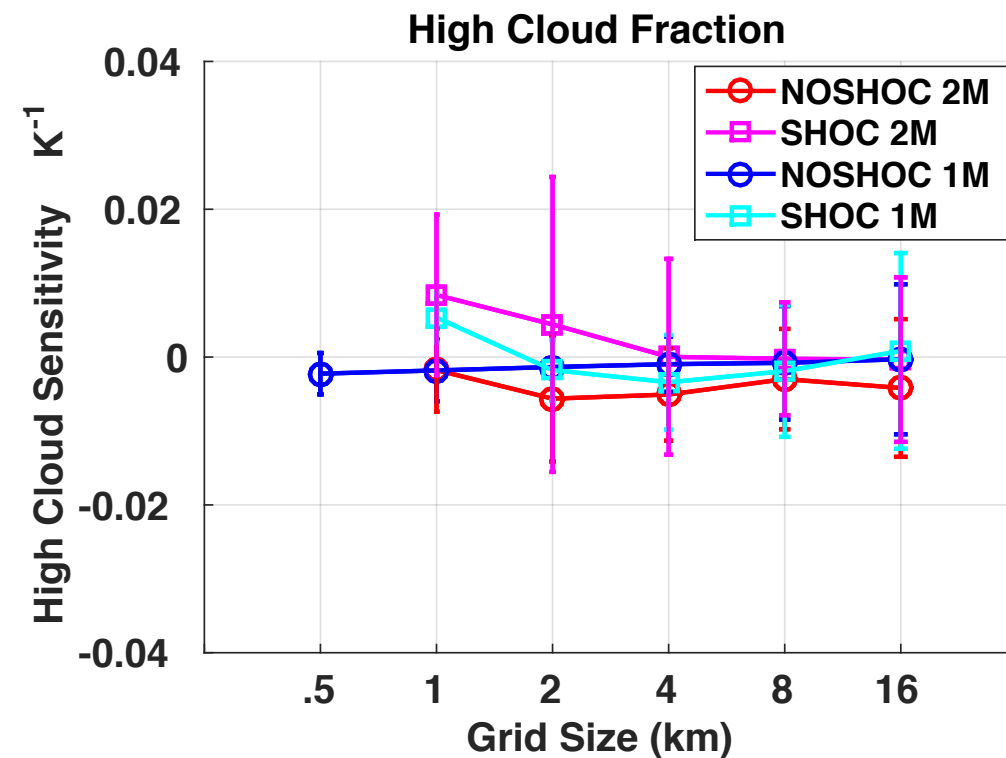
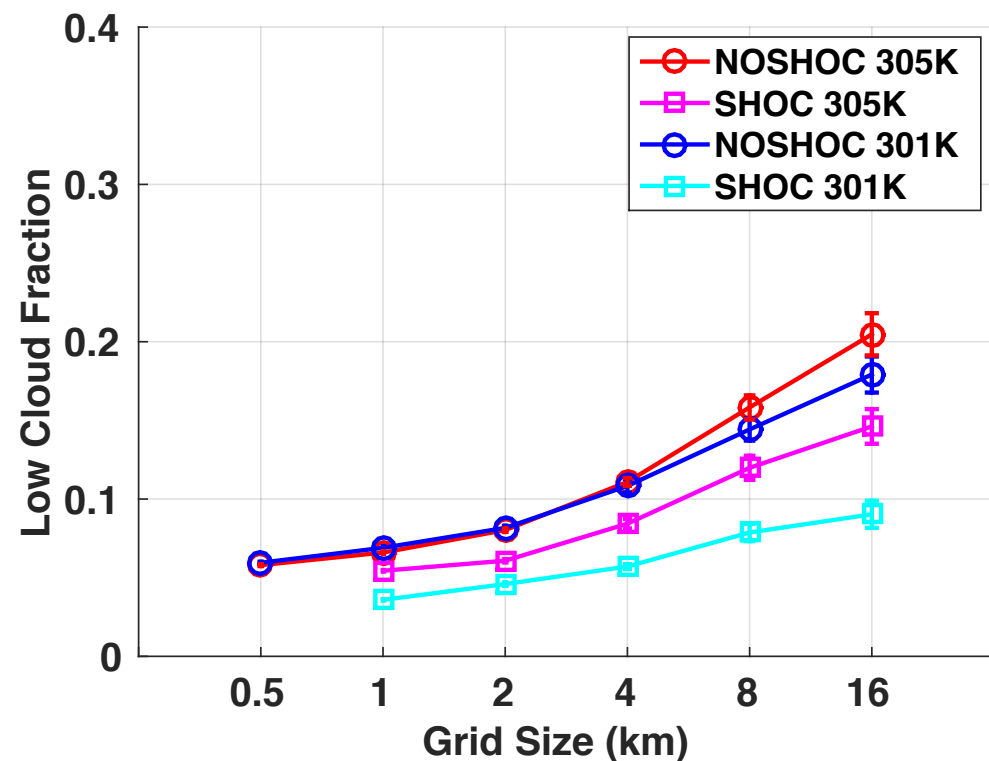
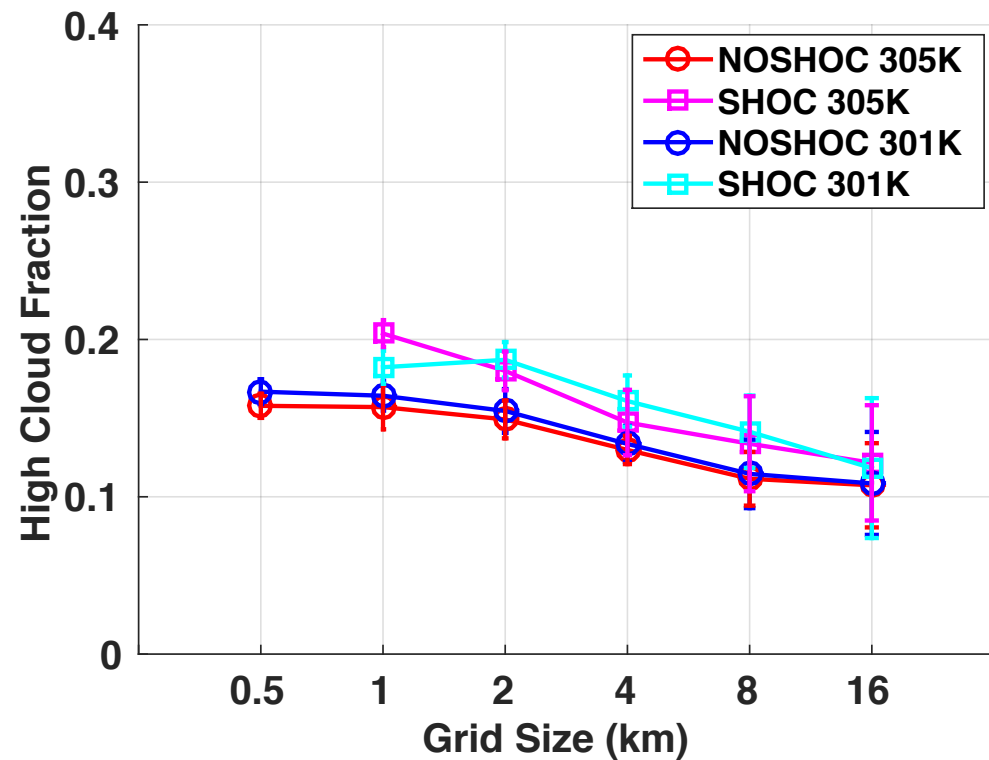
Have 256km domains for all but aggregation is an issue for most runs that have lower domain size runs.

What do I have for figures?

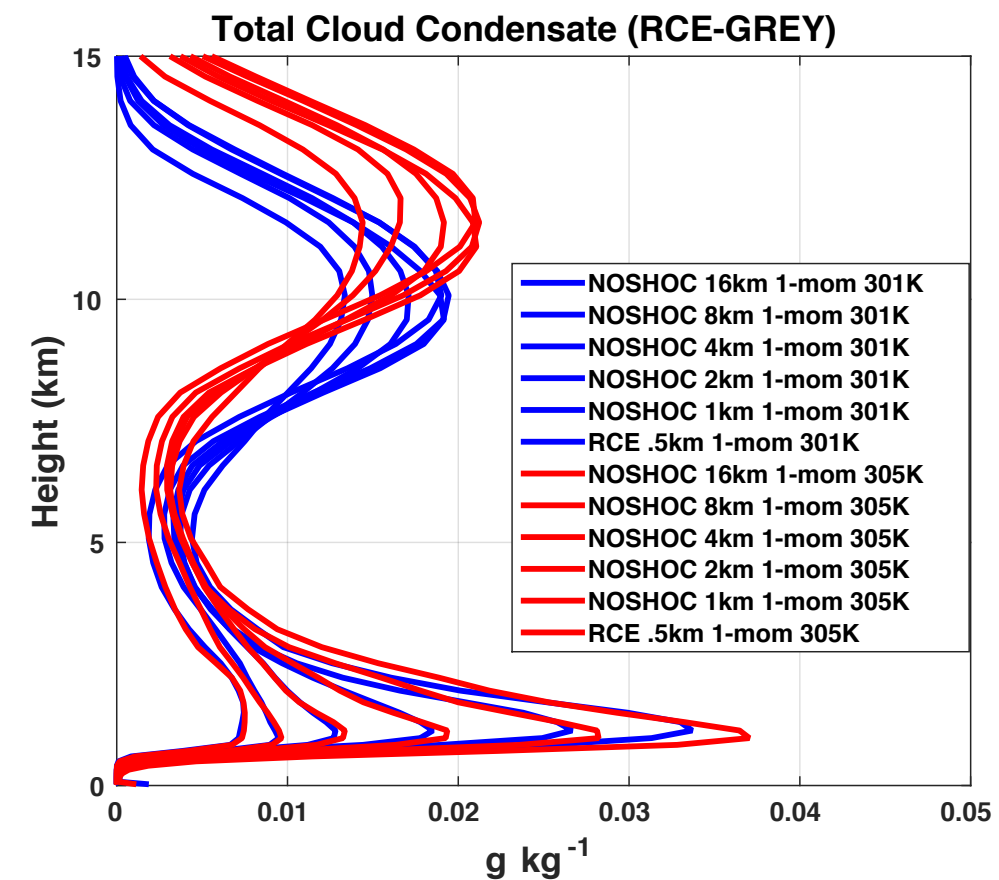
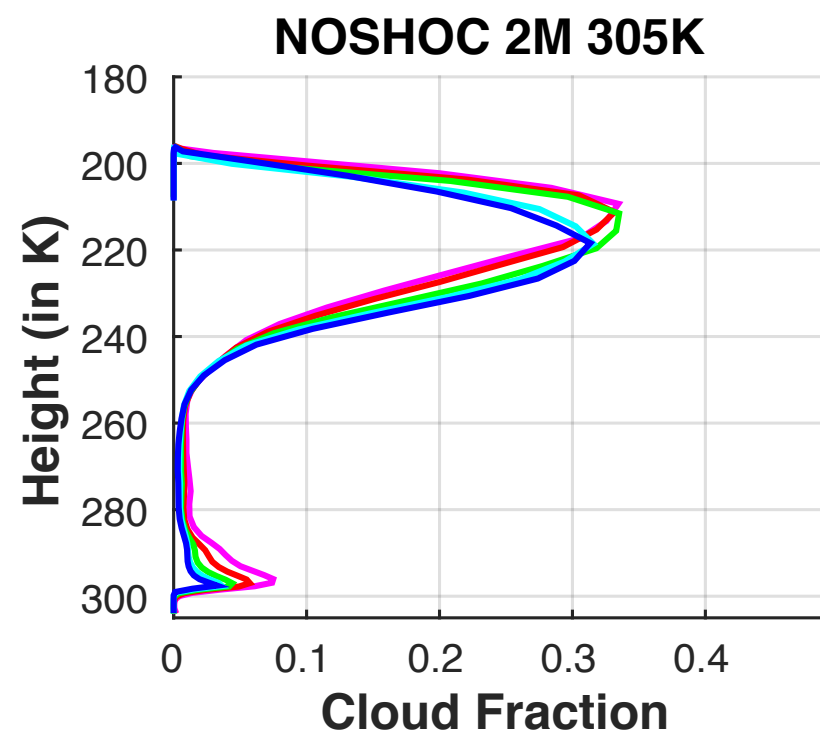
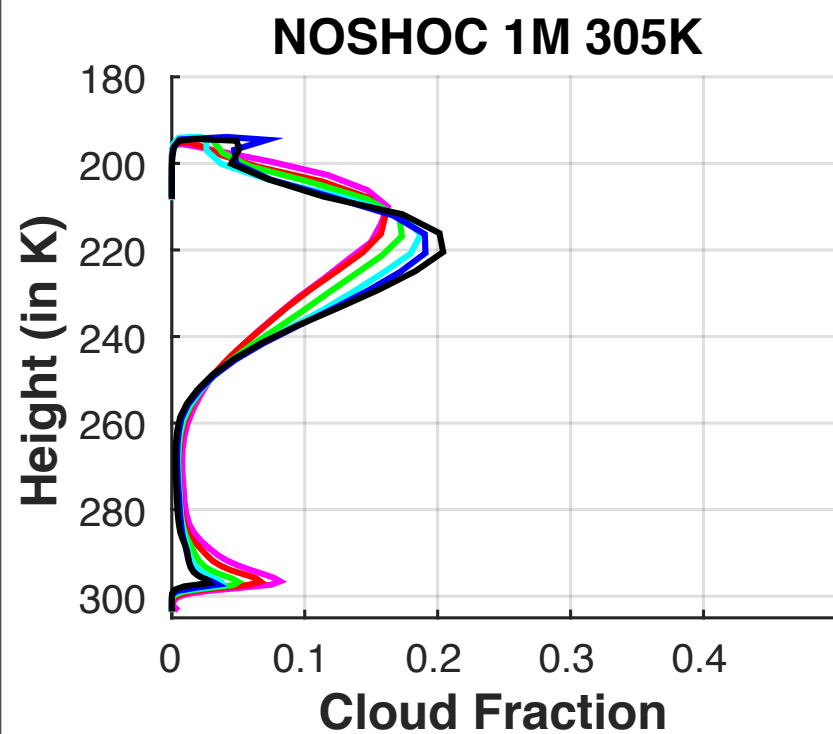
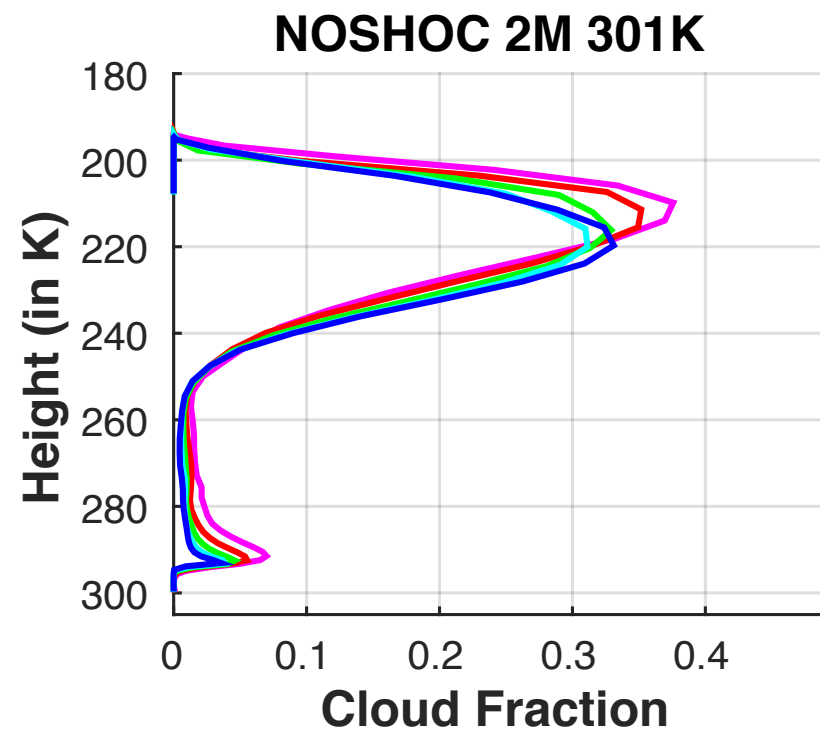
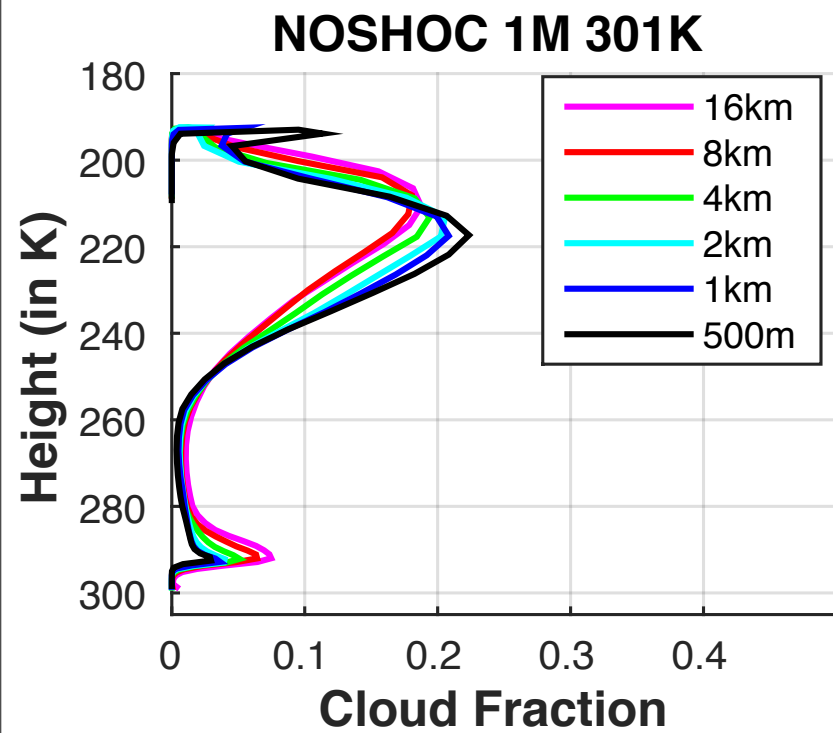
- Model run comparisons of variables.
- Profiles.
- Kernel results, Feedback plots.
- Miscellaneous other plots.

Model run comparisons of variables.

PW, Precip
CWP, IWP
Cld fractions
LWCF, SWCF, NCF

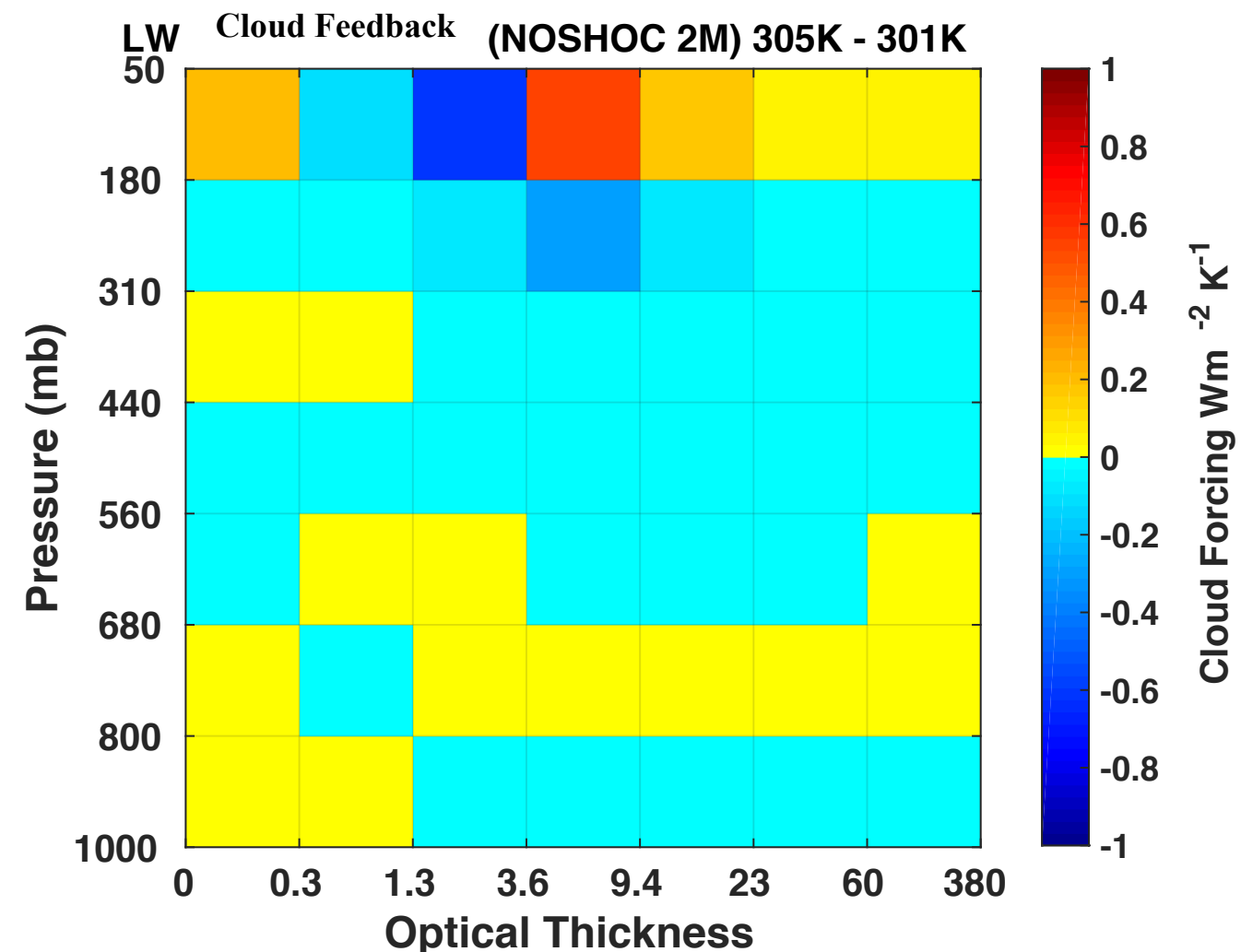
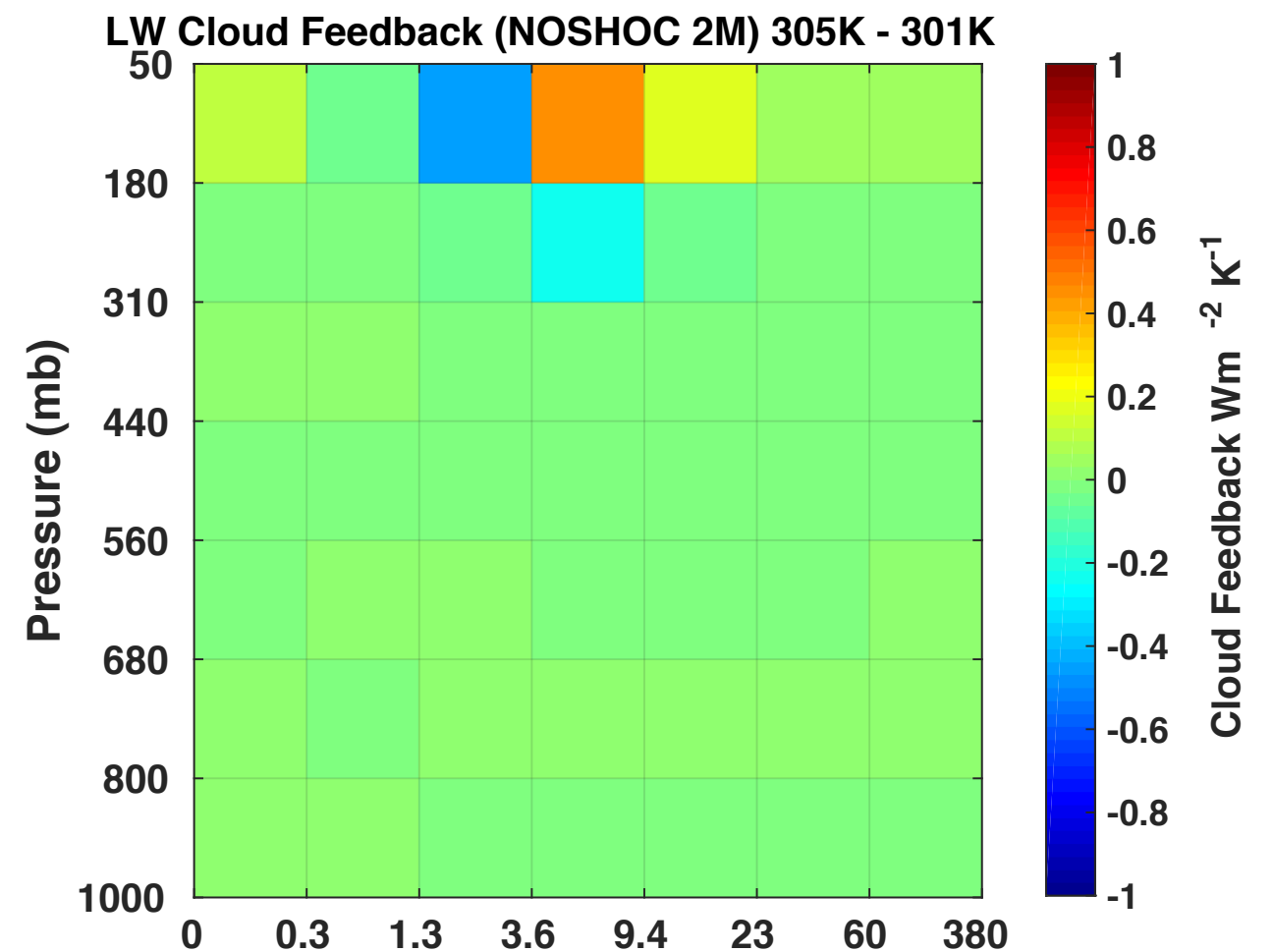


Profiles

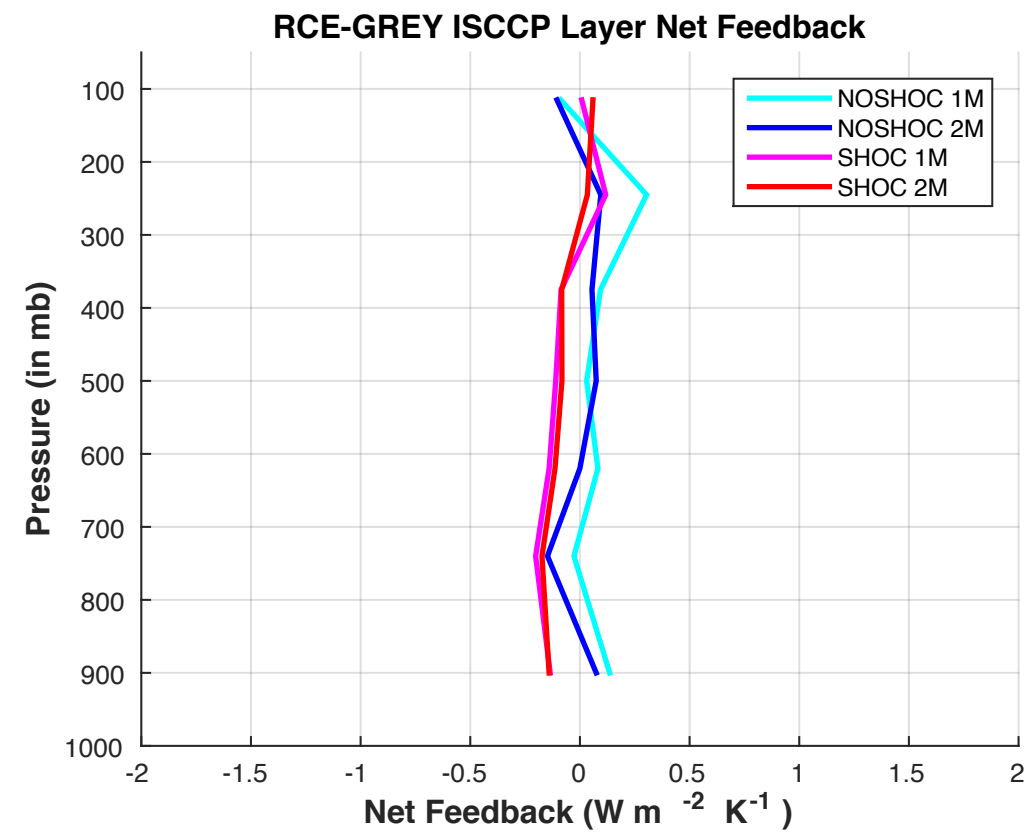
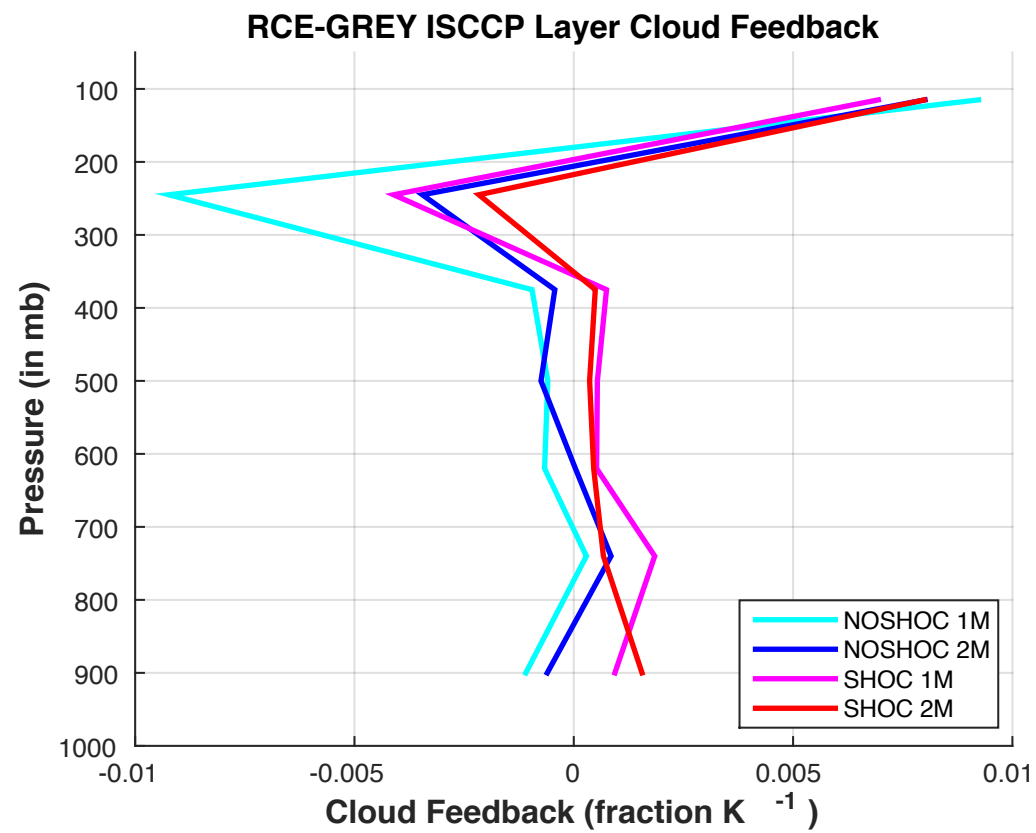


Kernels

25-day avg feedback		(W/m2 per K)			
1M NOSHOC	Model	Climate	C/M %	Obs	O/M %
LWCF	-0.225	0.15	1.25%	0.15	1%
SWCF	0.425	0.375	0.25%	0.375	0.25%
NCF	0.2	0.5		0.525	
1M SHOC	Model	Climate	C/M %	Obs	O/M %
LWCF	0.975	1.45	0%	1.275	0.50%
SWCF	-1.75	-1.825	-0.50%	-1.825	-0.75%
NCF	-0.775	-0.375		-0.55	
2M NOSHOC	Model	Climate	C/M %	Obs	O/M %
LWCF	-0.3	-0.25	1%	-0.125	0.75%
SWCF	0.225	0.175	0.25%	0.175	0.25%
NCF	-0.075	-0.075		0.05	
2M SHOC	Model	Climate	C/M %	Obs	O/M %
LWCF	0.8	1.15	-1%	1	0
SWCF	-1.475	-1.5	-0.75%	-1.5	-1%
NCF	-0.675	-0.35		-0.5	

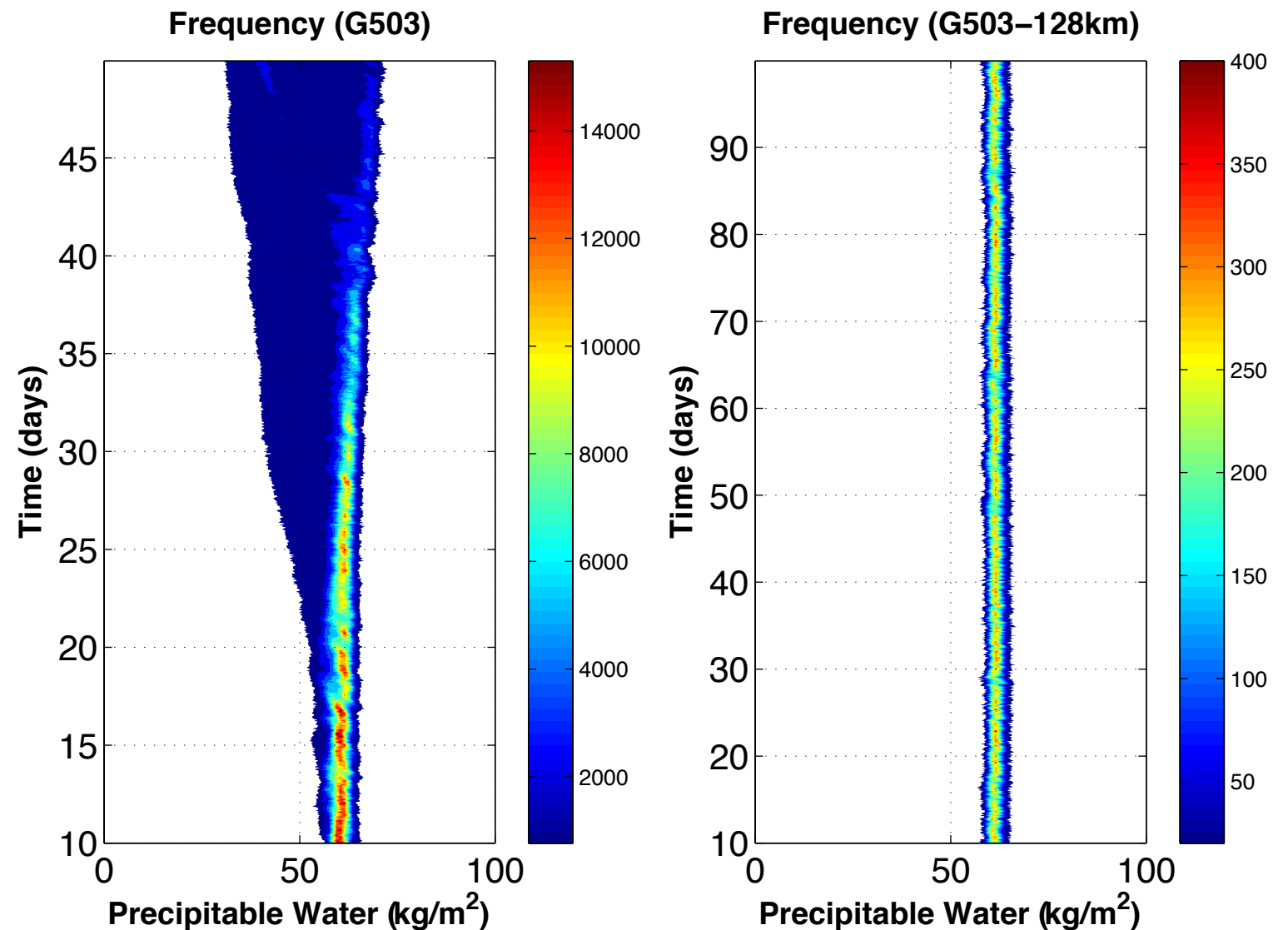


Kernels



Miscellaneous: PW Hovmoller plots

- These aren't used for anything other than a visual to show aggregation.



Miscellaneous: Other

CAPE vs WMAX RCE-GREY 1km Runs

