

Snowmap Error

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ADM Working Group Presentation

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GFDL, Princeton, NJ

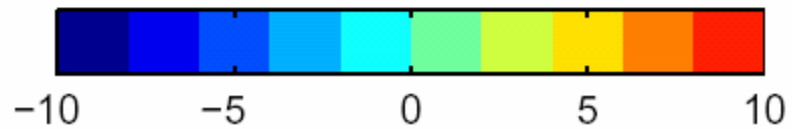
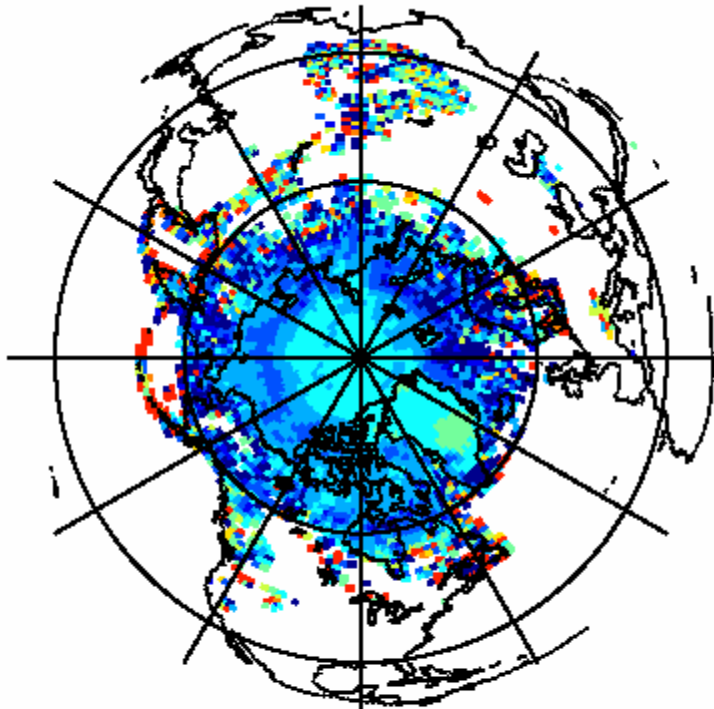
Objective

- Understand the effect of the snowmap error (index of snowmap was shifted by 1) to the irradiance in the SSF Terra Ed2 product.

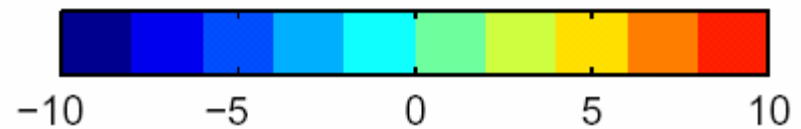
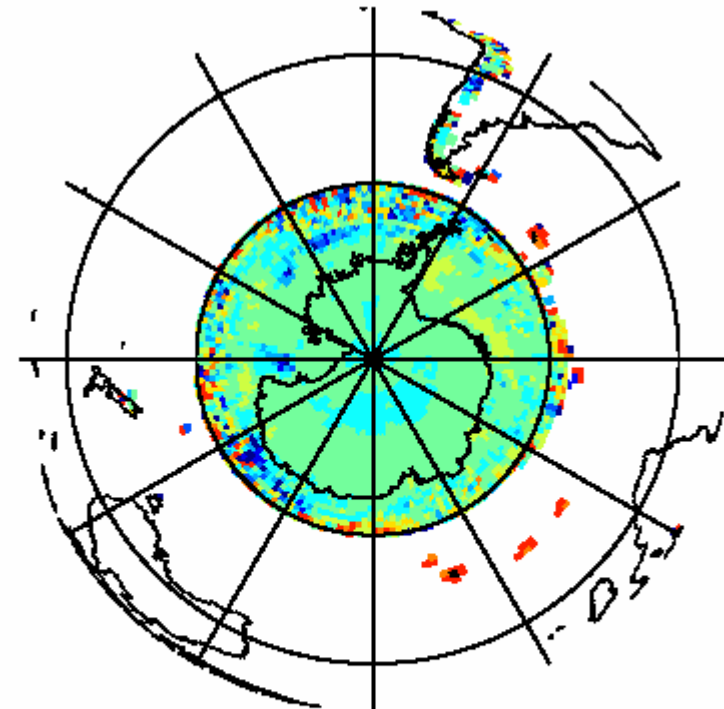
All-sky Flux difference NH

June 2000

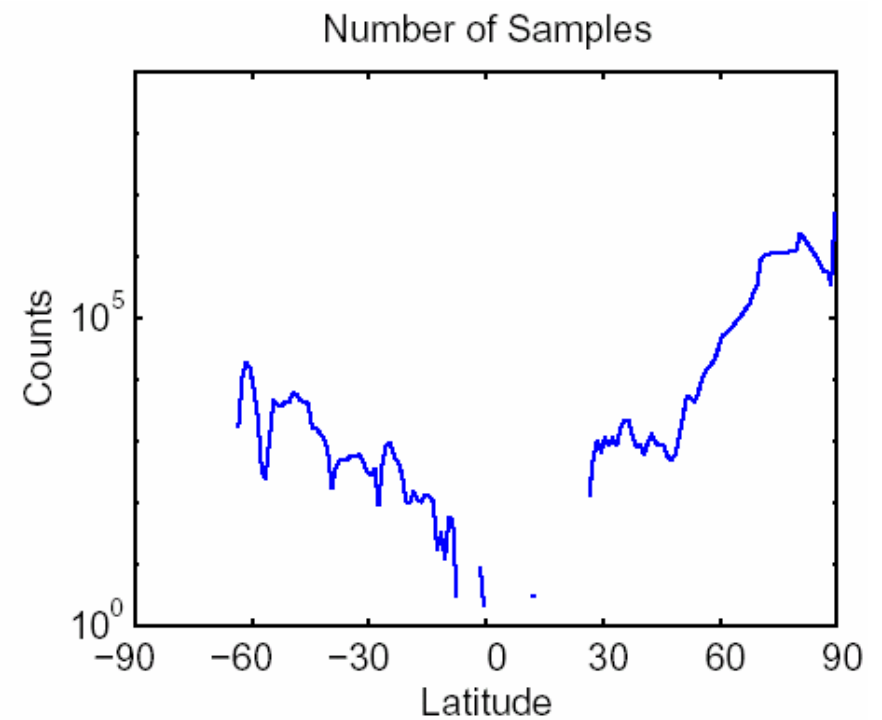
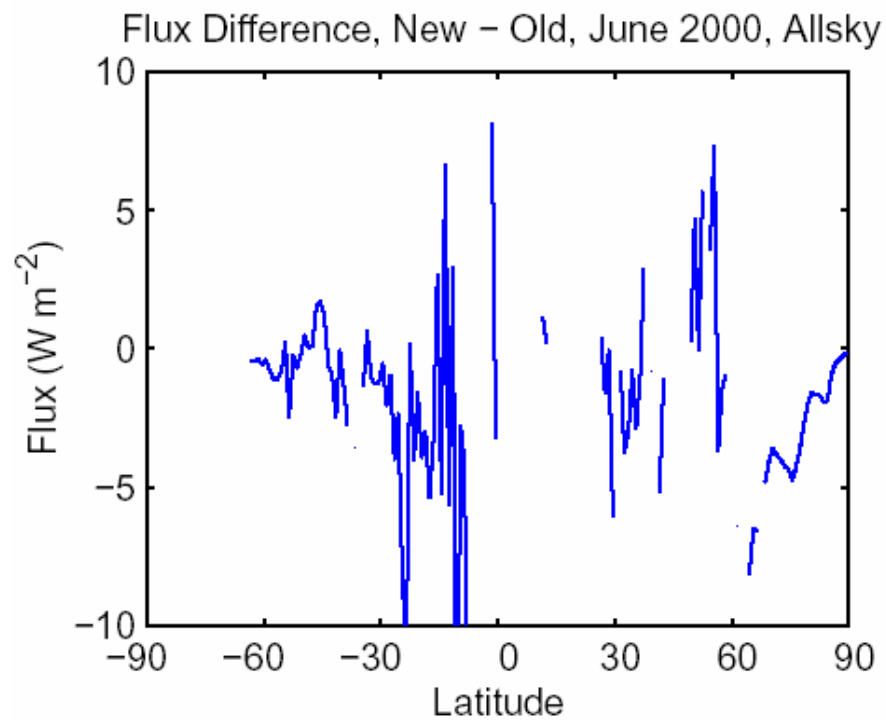
Flux New - Flux Old, (W m^{-2})



Dec. 2001

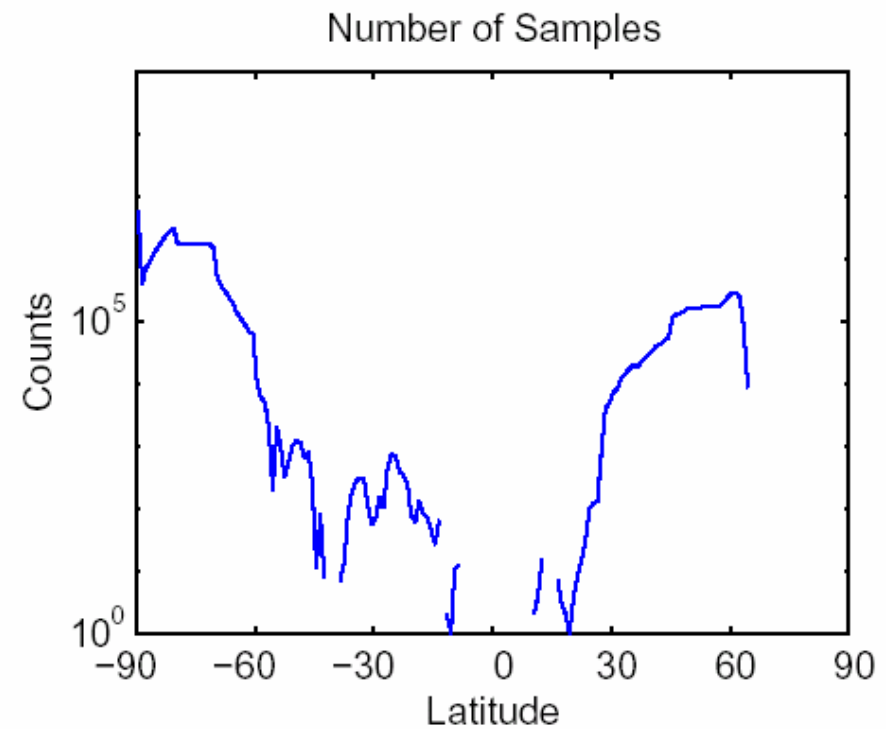
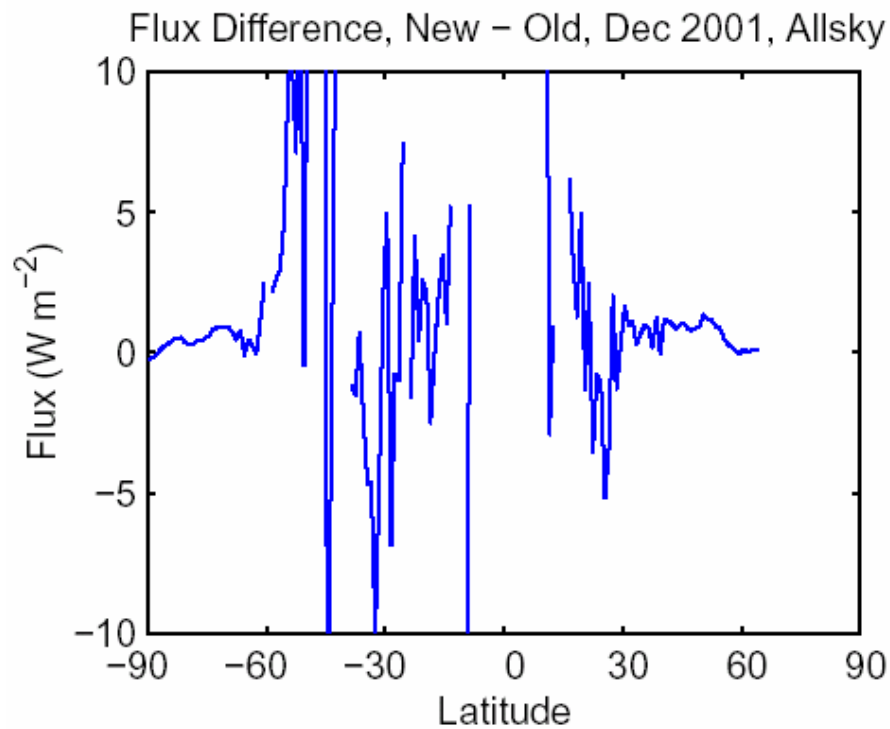


All-sky Zonal Flux Difference, June 2000



Only fluxes derived from snow/sea ice ADMs are used

All-sky Zonal flux difference, Dec. 2001

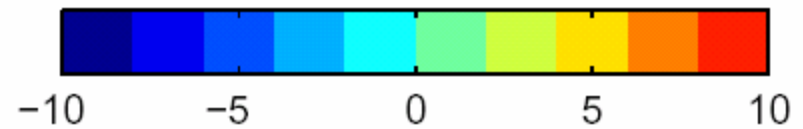
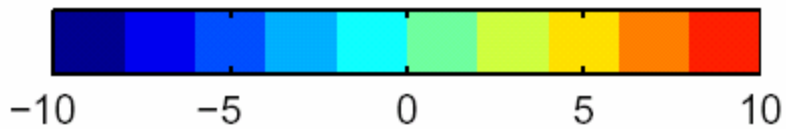
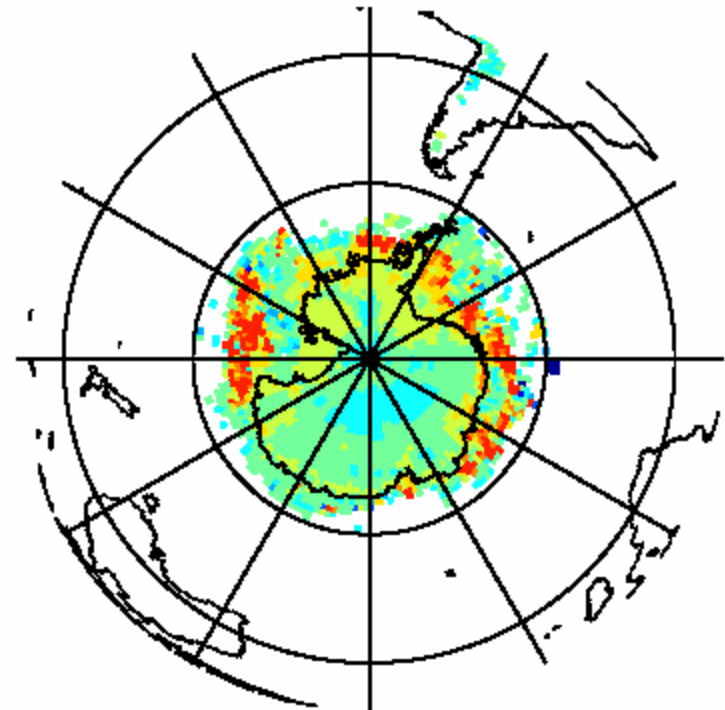
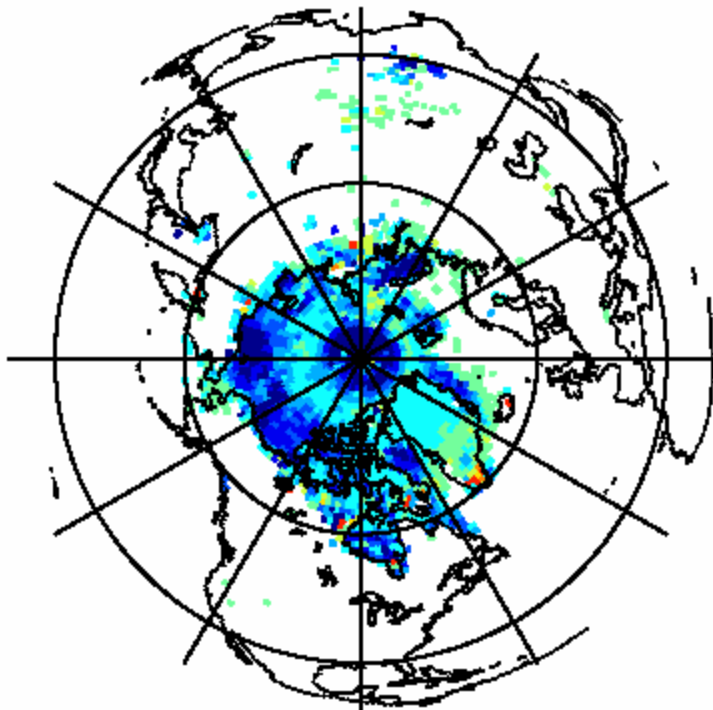


Clear-sky Flux difference

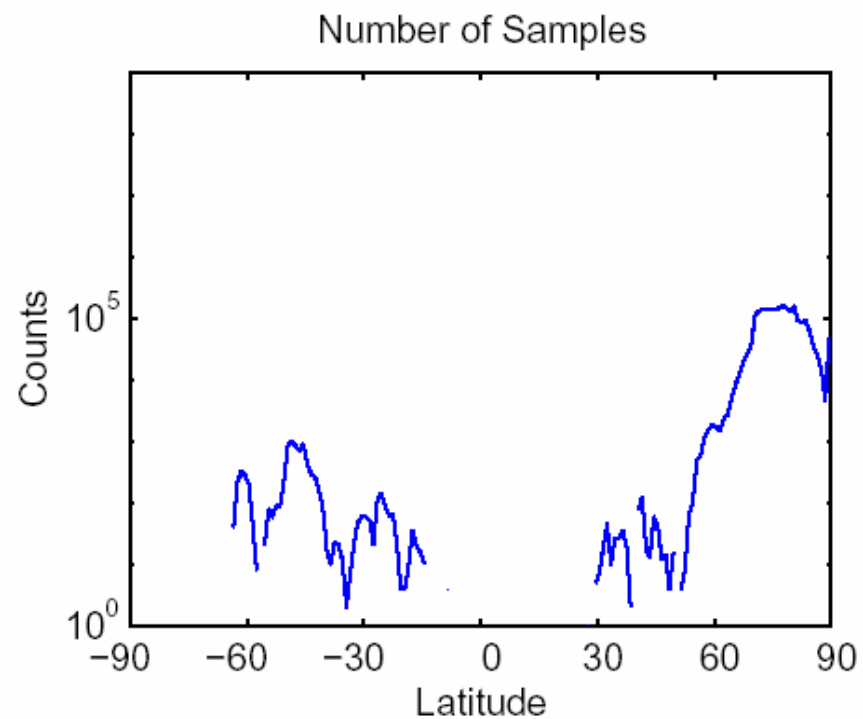
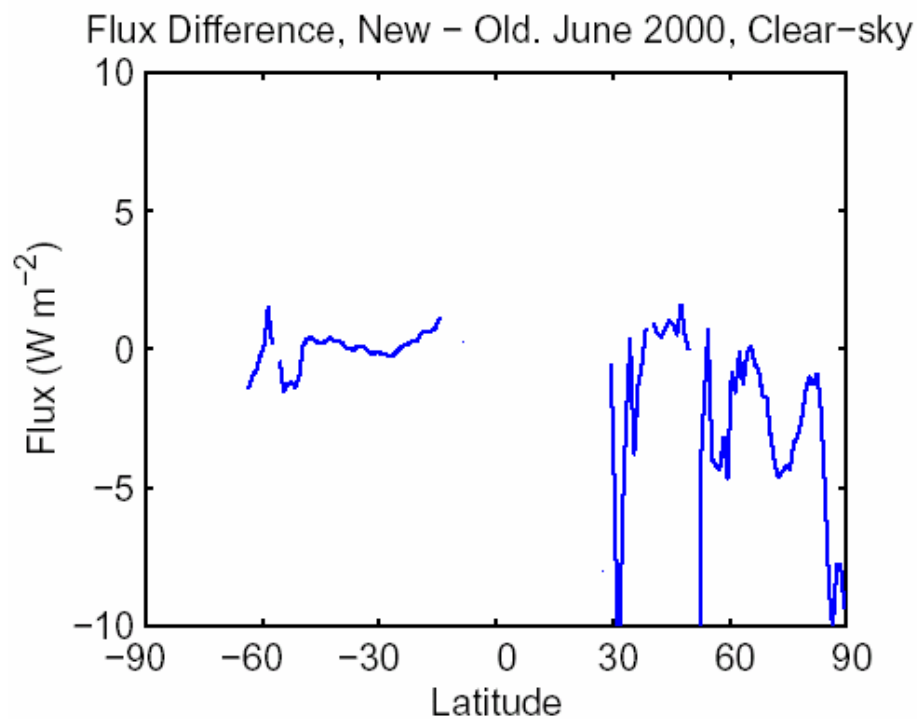
June, 2000

Dec. 2001

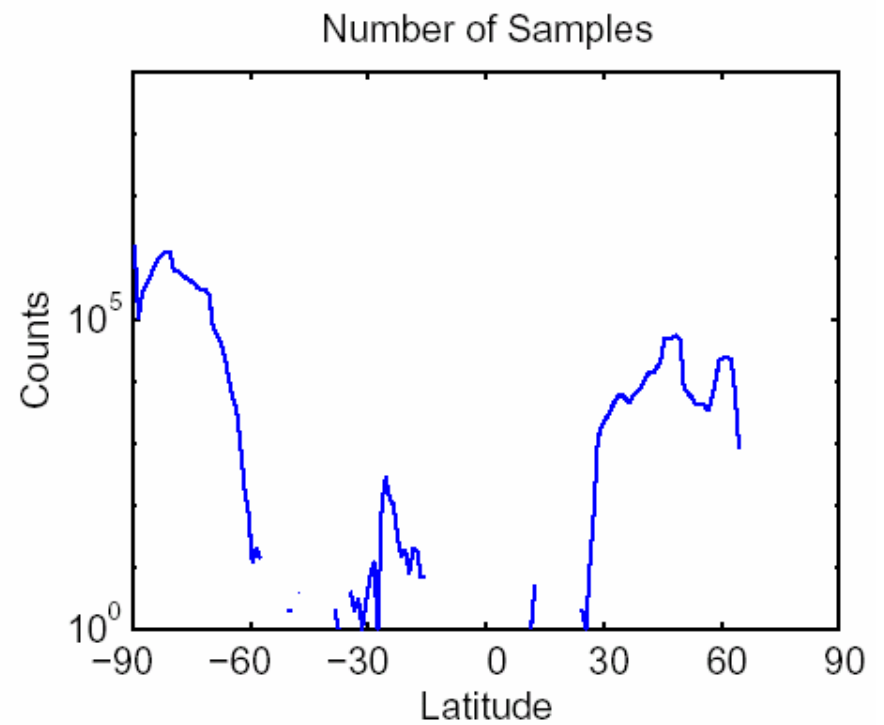
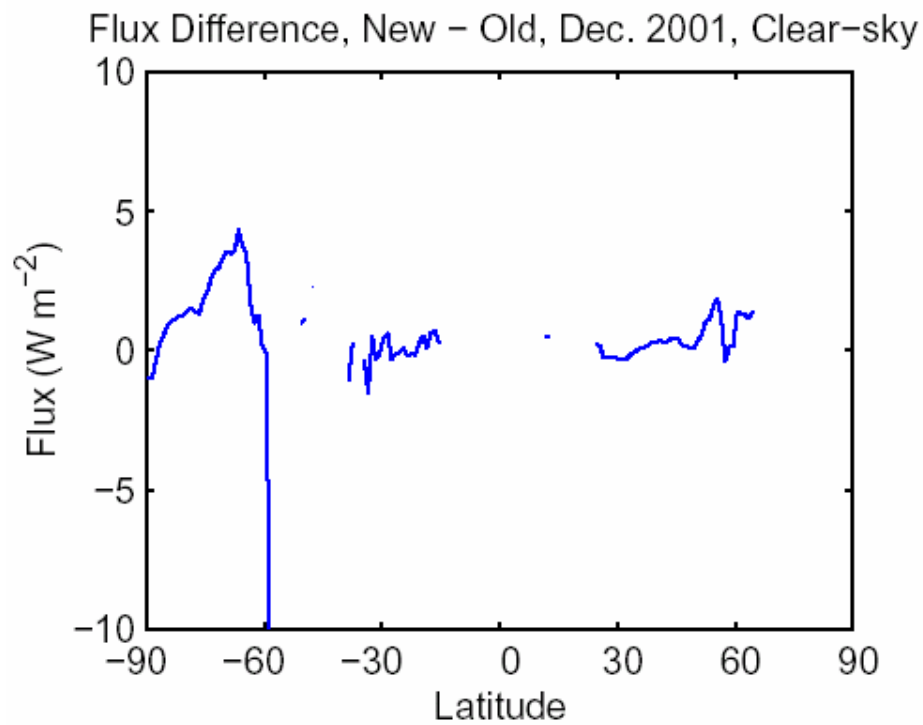
Flux New - Flux Old, (W m^{-2})



Clear-sky Zonal Flux Difference, June 2000

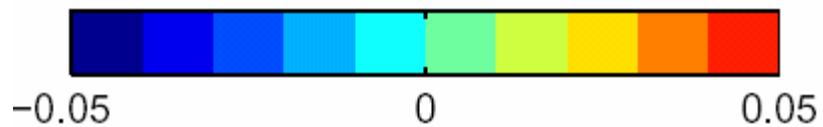
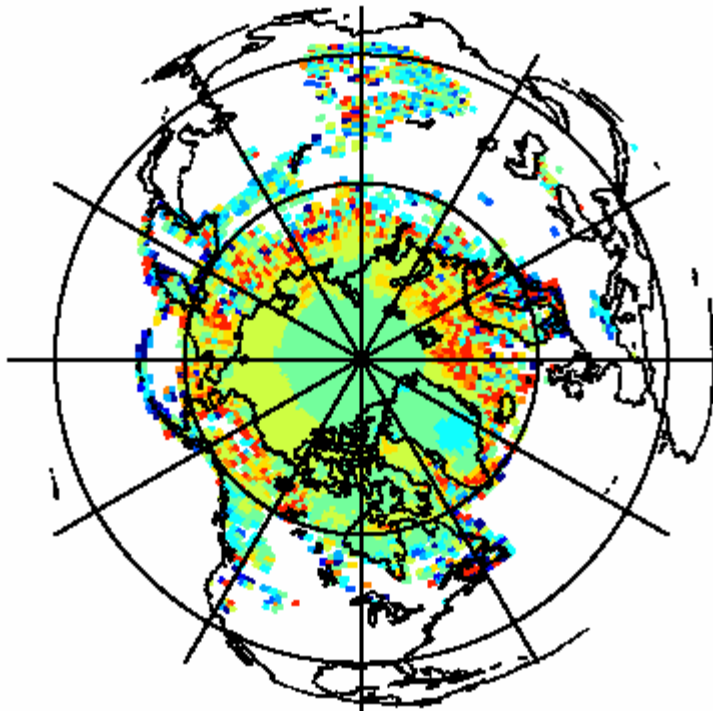


Clear-sky Zonal Flux Difference, Dec. 2001

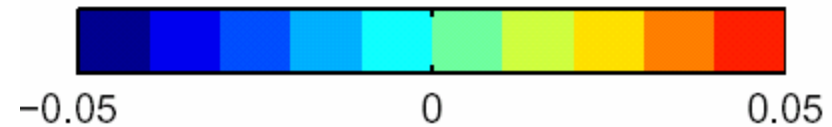
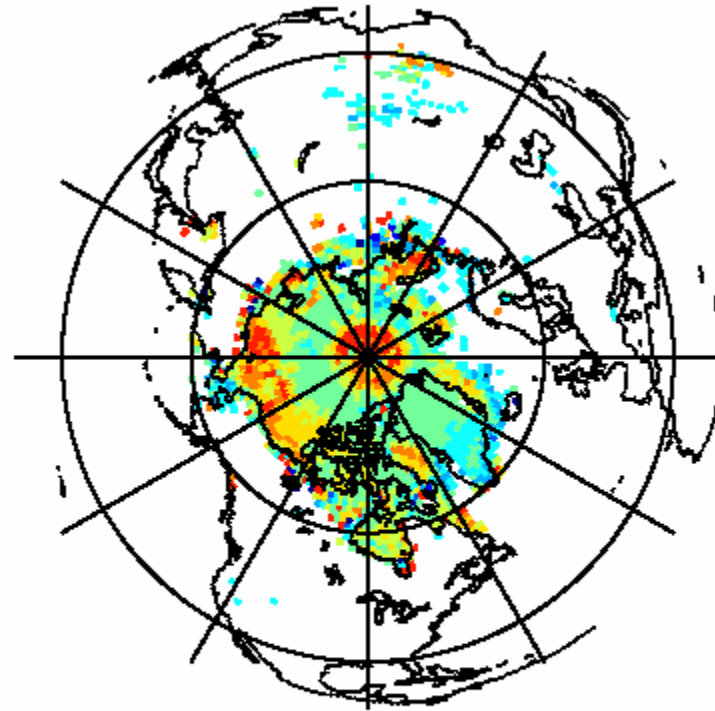


Relative Difference, NH

(Old - New) / New, Allsky, June 2000

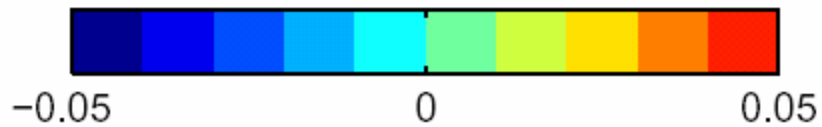
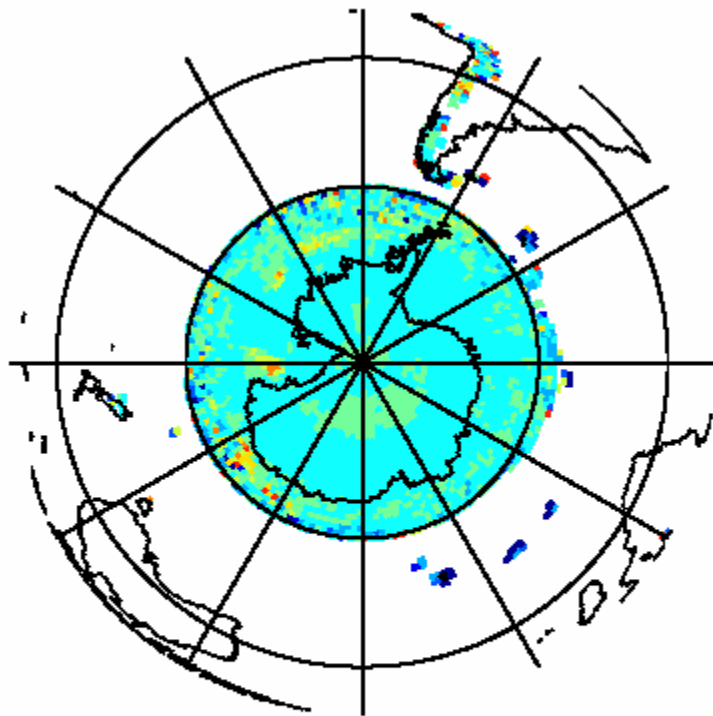


(Old - New) / New, Clear-sky, June 2000

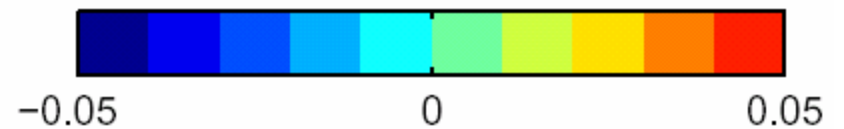
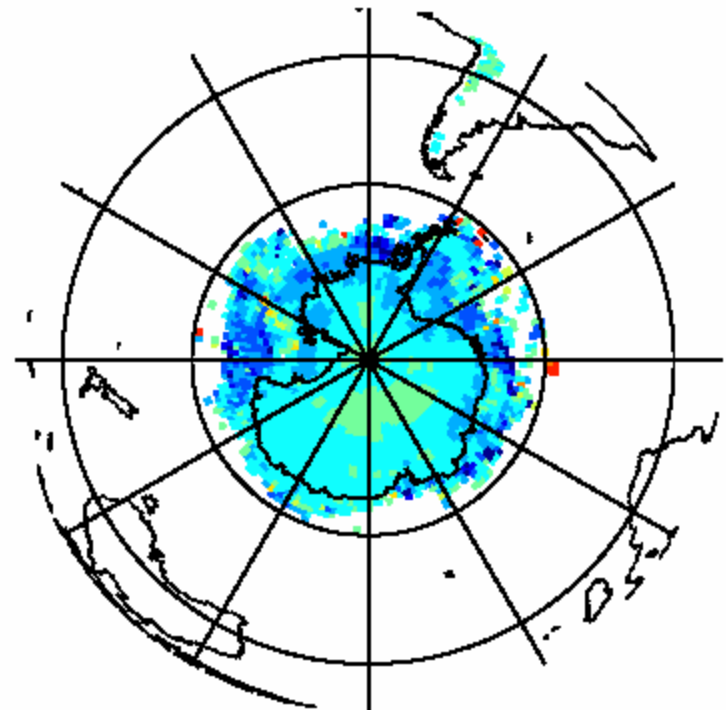


Relative Difference

(Old - New) / New, Allsky, Dec. 2001



(Old - New) / New, Clear-sky, Dec. 2001



Regional Irradiance Error Estimate

Surface and Scene Type	Mean Error (%)	RMS Error (%)
Permanent Snow, Clear-sky	0.6	2.8
Fresh snow, All-sky		
Bright Snow	0.2	4.3
Dark Snow	-0.4	3.8
Sea Ice, All-sky		
Bright Snow	0.3	2.7
Dark Snow	-1.1	5.1