Sunglint filling: status update

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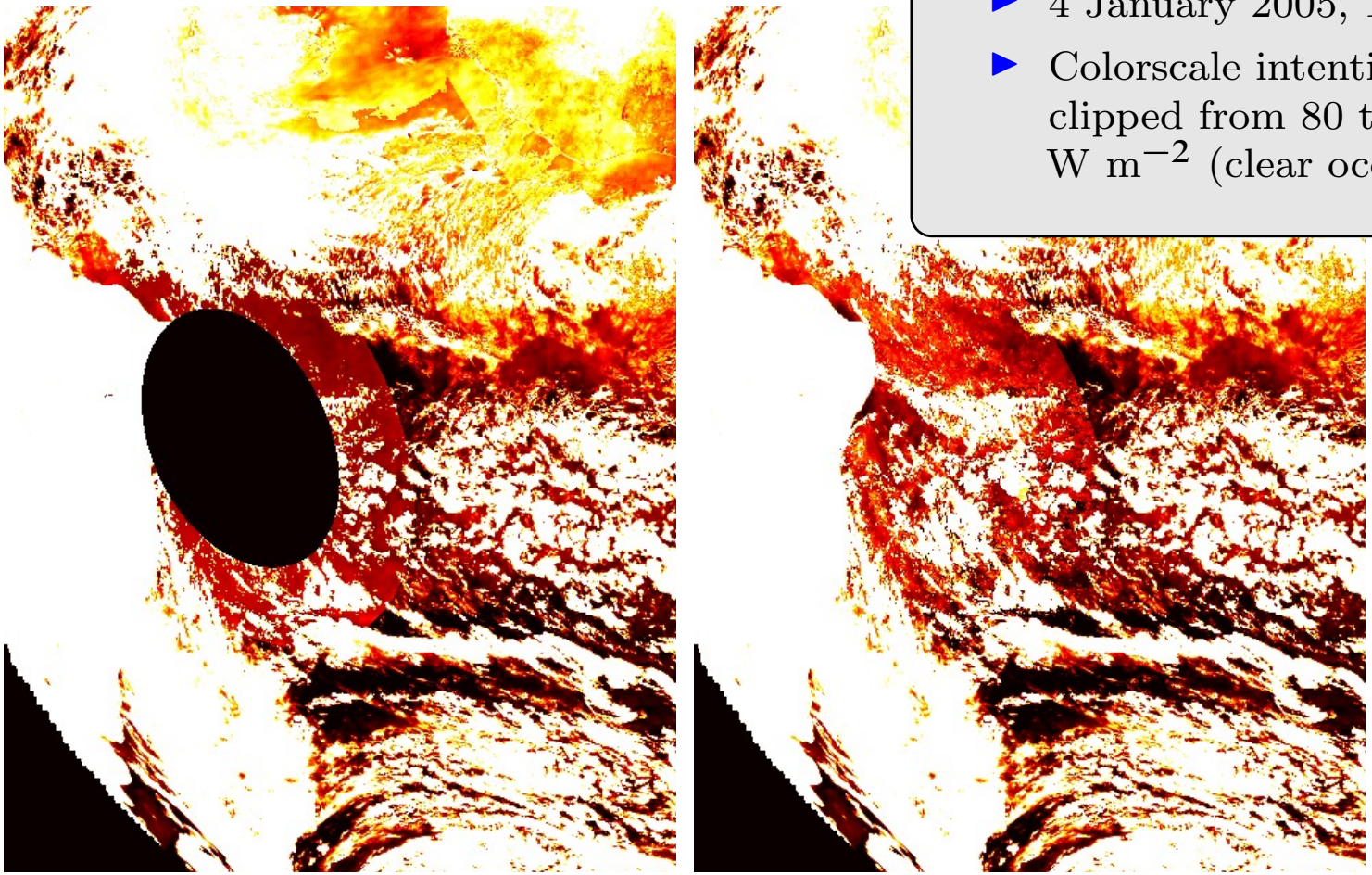
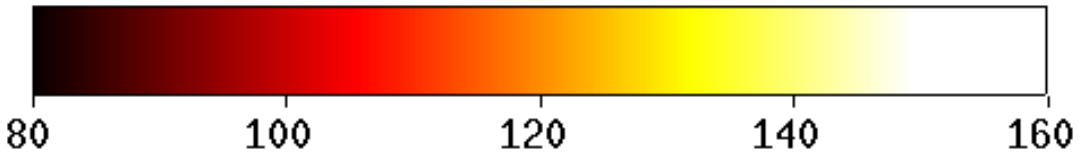
Outline

Clear ocean flux

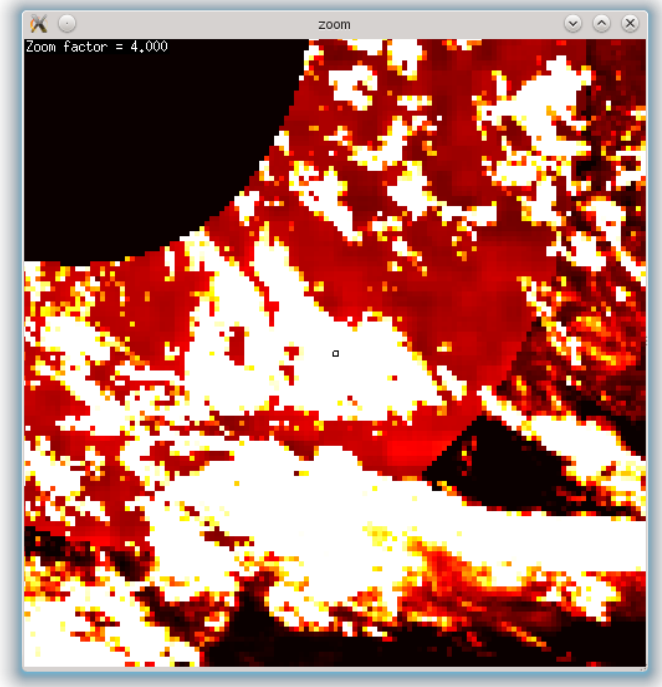
- 4 January 2005, 16:30
- Colorscale intentionally clipped from 80 to 160 W m^{-2} (clear ocean)

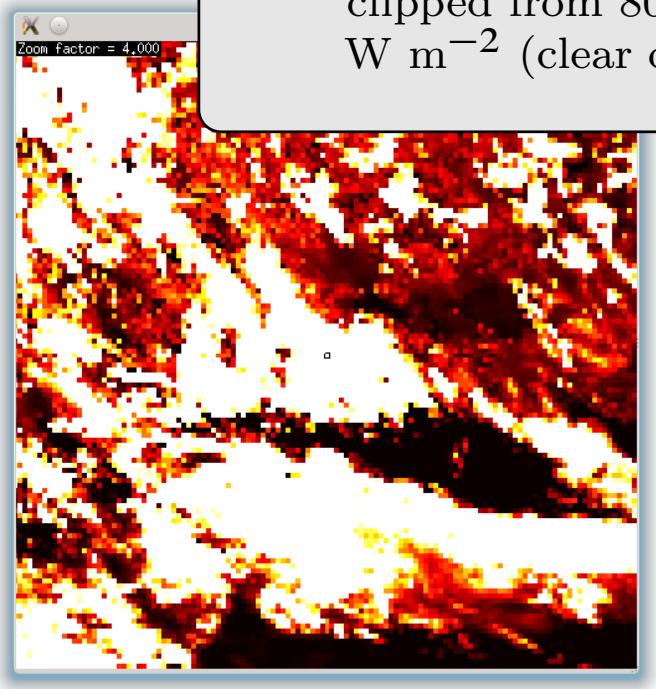


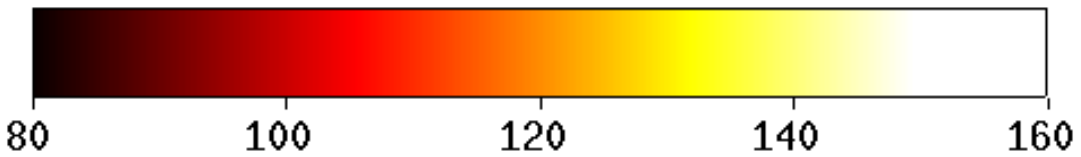


Clear ocean flux: detail

- 4 January 2005, 16:30
- Colorscale intentionally clipped from 80 to 160 W m^{-2} (clear ocean)







Clear ocean flux: detail

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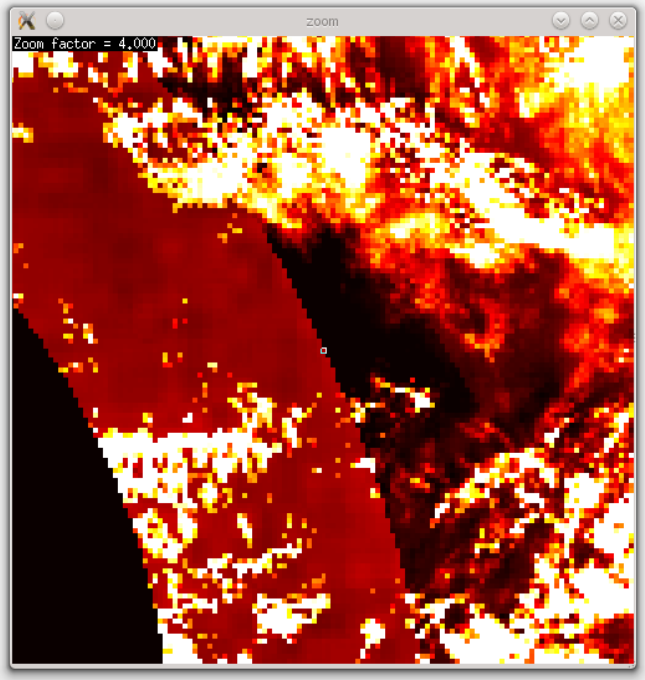
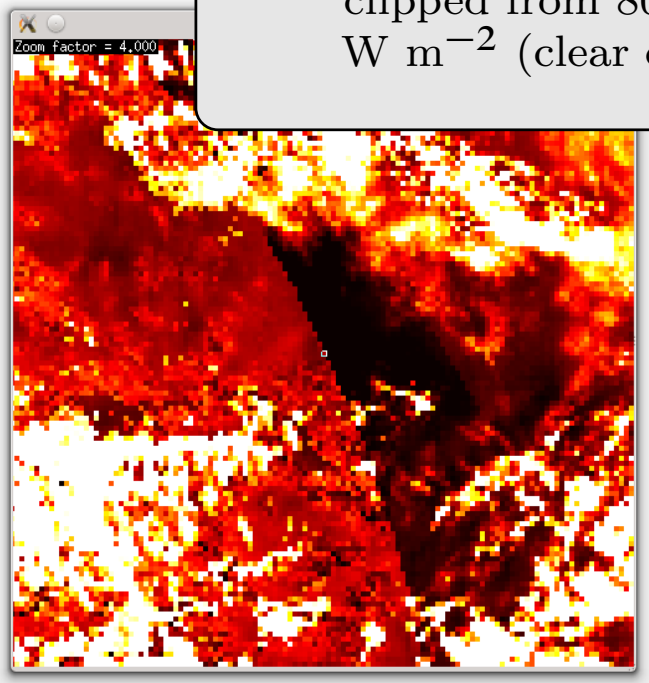
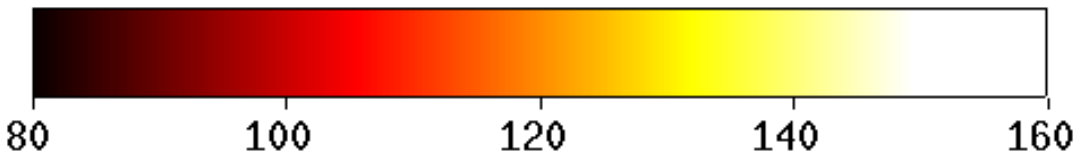
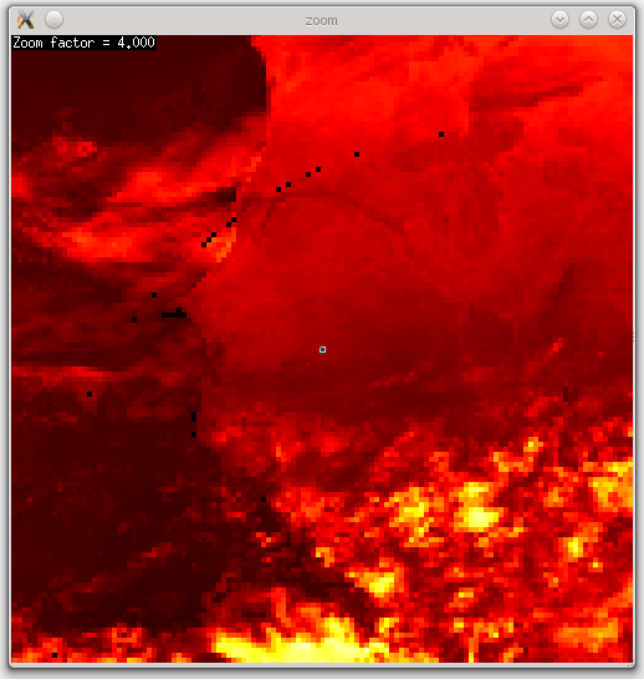


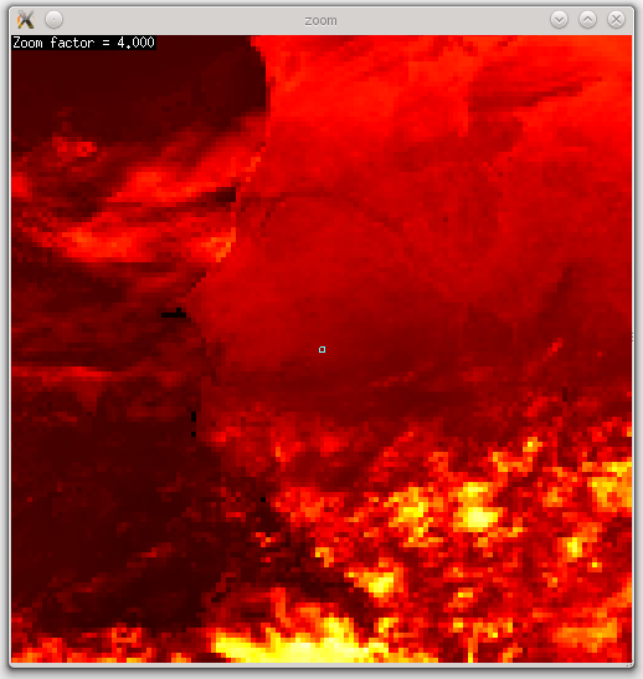




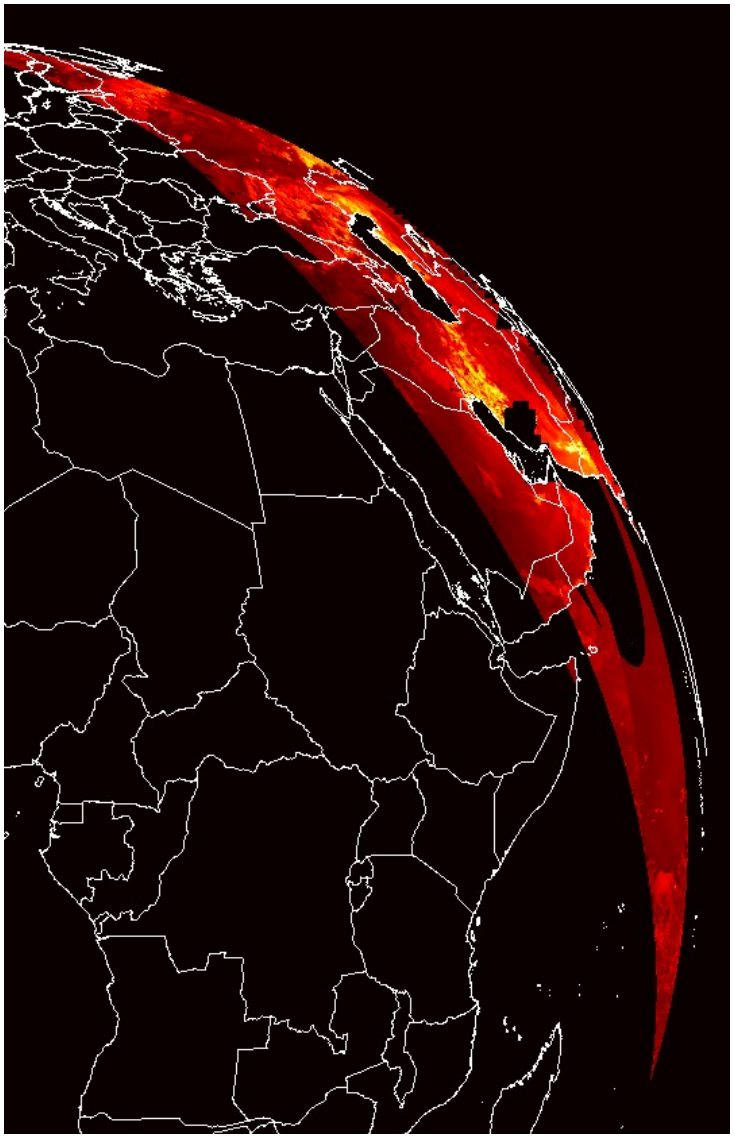
Missing pixels at 15 degrees sun glint angle

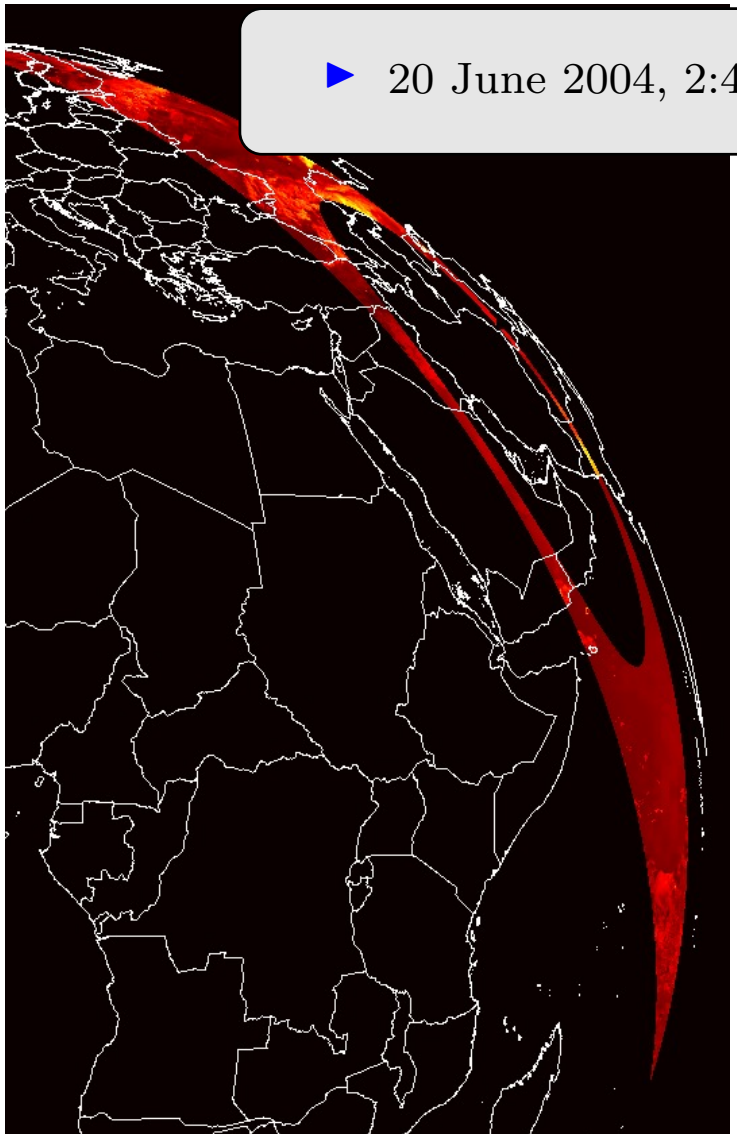
- 4 July 2004, 13:30





No application at VZA > 70, SZA > 70





- 20 June 2004, 2:45

RMI

Other bug fixes

- Scene ID age limited to 86400 seconds (one day)
- Use correct adjustment images for clear ocean flux
- Try to remove bad fluxes
- No extrapolation of scene ID outside of inner sun glint area (15 degrees sun glint angle)
- Now able to generate filled data for G1 and G2 in overlap period (useful for validation)

RMI

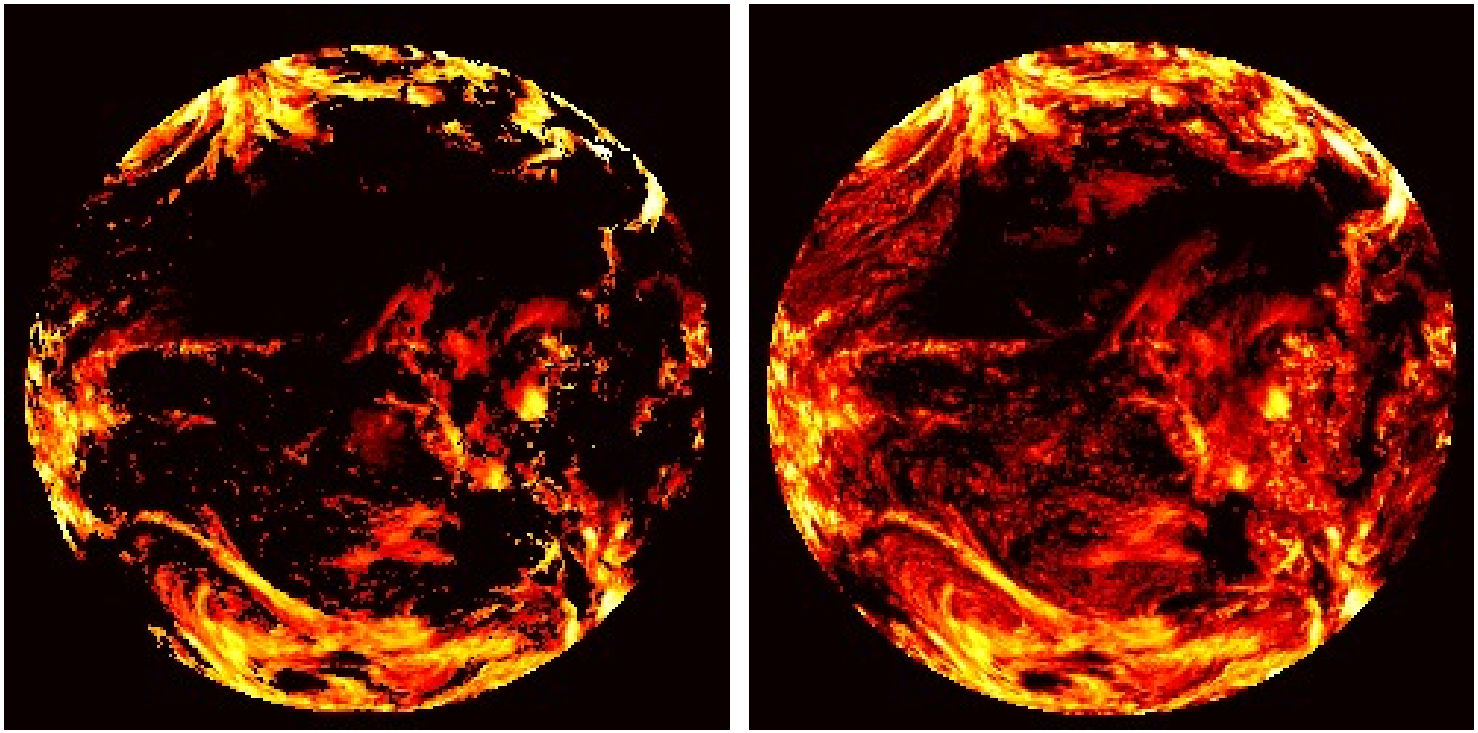
Outline

1. Changes HR
2. Changes BARG
3. Changes HDF
4. In progress
5. Future work

Bug fix: negative Cloud Optical Depth

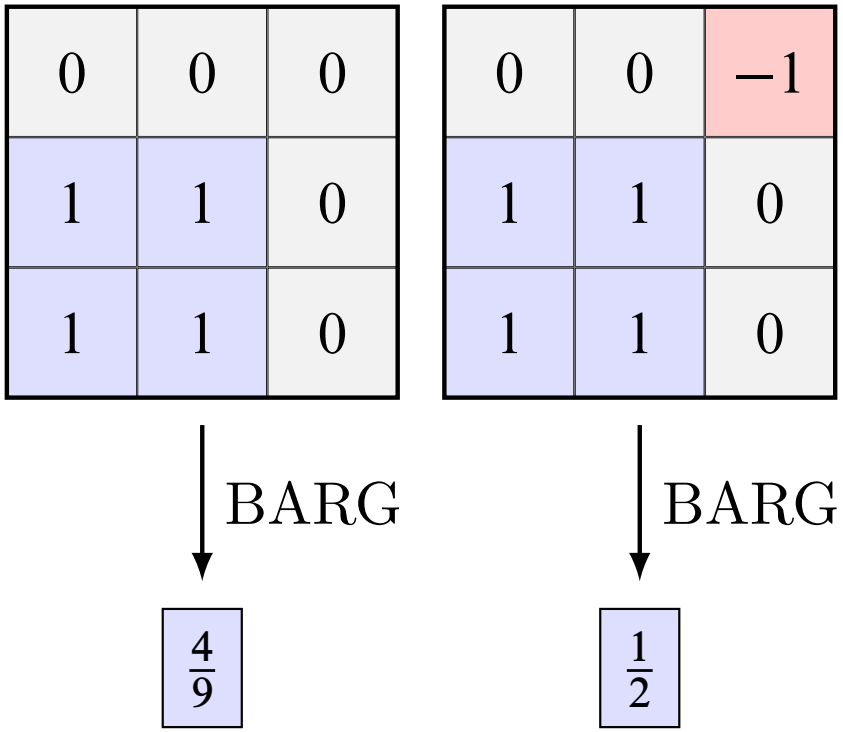
Showing log(Cloud Optical Depth)

23 January 2005, 11:30

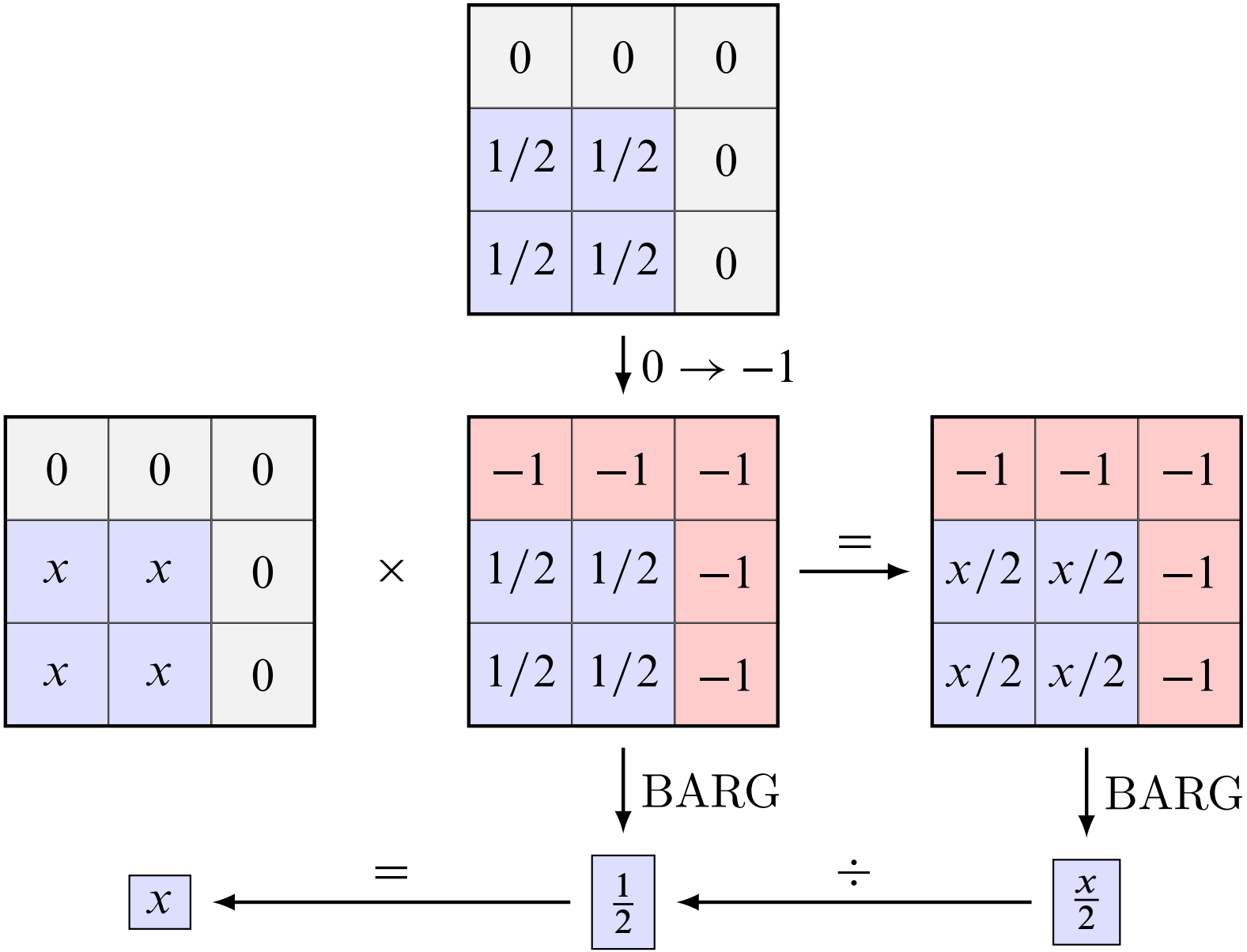


BARG spatial averaging: flux, cloud cover

- Same procedure as in GERB-like



BARG spatial averaging: cloud optical depth, cloud phase



Other bug fixes

- Now storing the right scene ID (time extrapolation) in BARG instead of old scene ID

Outline

Structure of HDF files: Filled (+modified) flux


```
/Radiometry
/Radiometry/Solar Flux
/Scene Identification
/Scene Identification/Cloud Cover
/Scene Identification/Cloud Optical Depth (logarithm)
/Scene Identification/Cloud Phase
/Scene Identification/Data Age
```

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Splitting restoration land flux/filling ocean flux

A Restored land fluxes stored in separate file

B Filled and modified ocean fluxes stored in separate file

- Restored land fluxes (A) could be joined to the currently archived products (no change in algorithm).
- Restored ocean fluxes (B) are obtained using a different algorithm than the current edition processing.

Outline

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RMI

Future work

- A first check has been done by Dr Russell
- Separate land pixel treatment from ocean pixels: also in BARG
- Need to decide: preferable to separate filled fluxes into land/ocean?
- Need to decide: should we do anything with the 'Loeb correction'?
- Need to decide: what to do with bad (negative) fluxes in HR?

Structure of HDF files: Restored land flux


```
/Radiometry
/Radiometry/Solar Flux
```

RMI

Acknowledgements

- Dr. Jacqueline E. Russell, Imperial College
- GERB team at RMIB
- RMIB