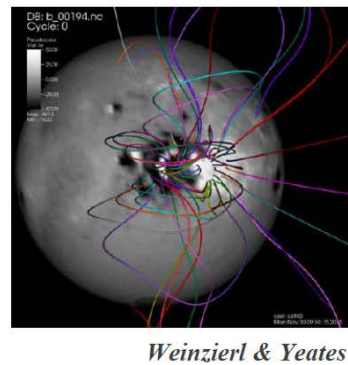
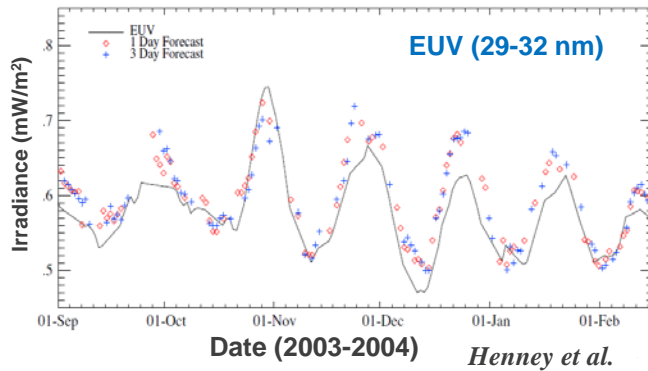
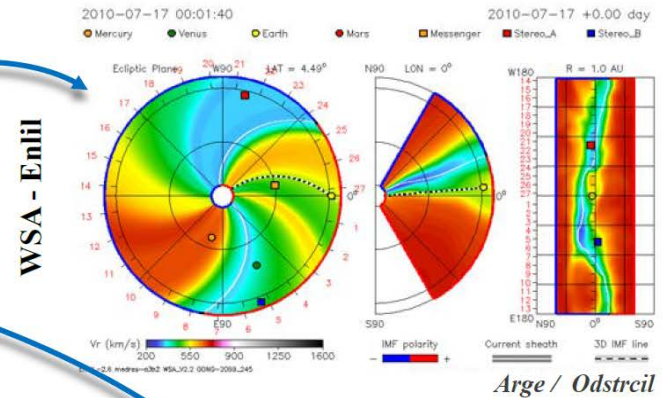
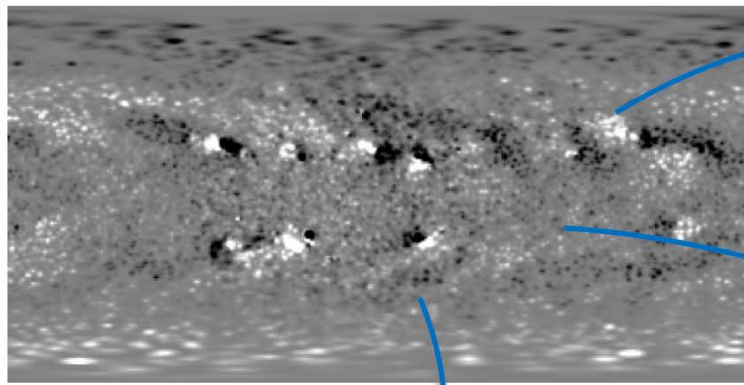


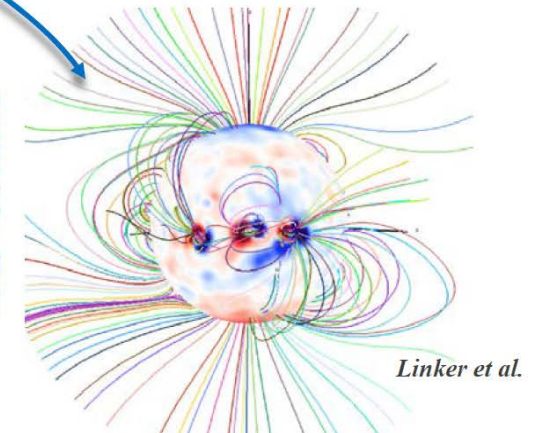
# Global Solar Magnetic Maps: *coronal & irradiance model drivers*

- Global maps are utilized to drive coronal & solar wind models, plus the global maps are now used to drive irradiance predictions.

Global Solar Magnetic Map



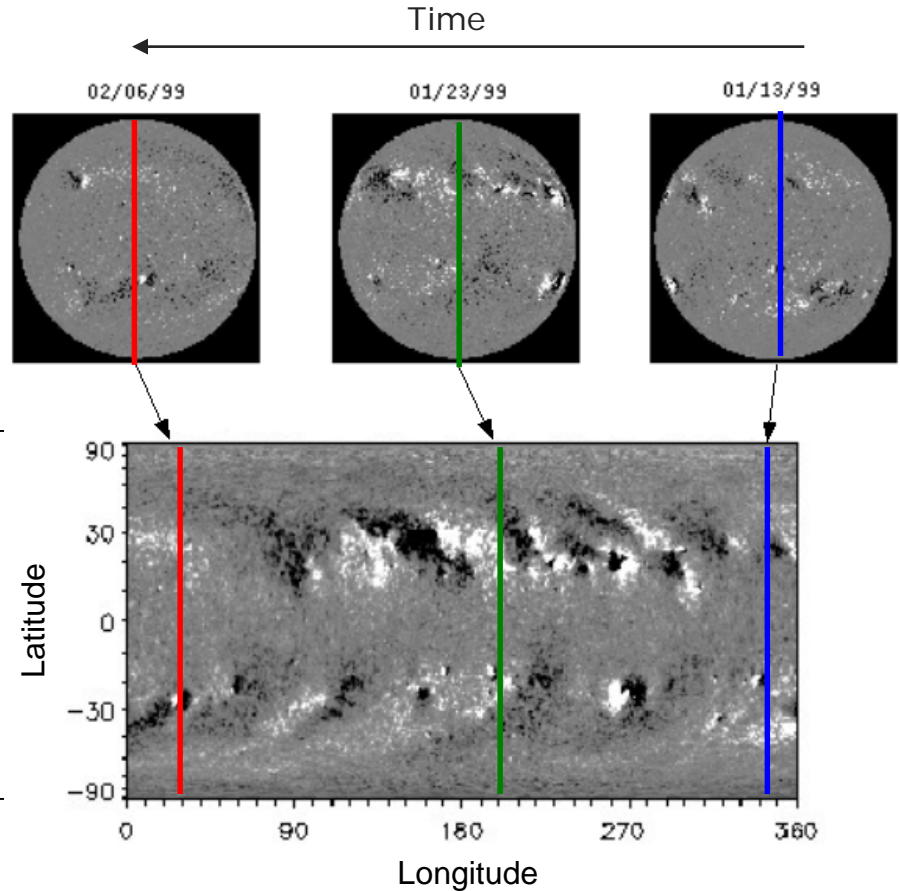
MAS - CORHEL



# Global Solar Magnetic Maps: *types*

## Input Data

- Magnetograms, and global maps, are typically aligned with solar rotational north at the top of the image, with “east limb” to the left.



## Diachronic Synoptic Map

- solid body rotation
- central meridian biased
- space & time mixed

## Synchronic Synoptic Map

- account for flux transport (e.g., differential rotation and meridional flow)

## Carrington Rotation Number

- # of rotations since Nov 9, 1853, assuming rotational rate of 27.2753 days.

# Global Solar Magnetic Maps: *issues*

## Remapping

- maps are commonly created by remapping  $B_r$  estimates from vector or LOS full-disk magnetograms into heliographic coordinates.
- maps are observationally “valid” for only  $\sim 1/3$  of the total solar surface at any given time.

## Issues

- How best to account for the “missing”  $\sim 2/3$  of a map?
- How best to set the map mean to zero?
- How are coronal & solar wind models affected ?

