

Joint Working Group 1-2 Summary

Summary:

- **Global magnetic field is very important.**
 - **Our representation is much improved.**
 - **Further work still needed.**
- **Source of open flux variable and uncertain.**
- **Tracking open flux and individual field lines is important.**
- **Stochastic, statistically tuned flux emergence may explain cycle.**
- **The motion of flux elements is not the same as the plasma.**

Challenges:

- **Need a global solar magnetic field model that assimilates observations.**
- **Need to track individual field lines in time – photosphere corona – heliosphere.**
- **Need to characterize motions of magnetic elements even better and independent of plasma.**
- **Need to find a way to verify origin of open field lines.**
- **Need to understand how stochastic flux emergence truly is.**