

NOAA AR 10134

* Evaluation of the energy-helicity formula in the linear force-free approximation

* Observations obtained by BBSO/VMG on 09/28/02

Time (UT)	lff alpha value (Mm ⁻¹)	Potential magnetic energy E _{pot} (x 10 ³² erg)	Free magnetic energy E _{free} (x 10 ³² erg)	(E _{free} /E _{total})	Total magnetic helicity (x 10 ⁴² Mx ²)
20:32	-0.007 +- 0.01	4.72	0.17	0.03	-6.54 +- 10
20:50	-0.011 +- 0.007	5.05	0.59	0.11	-13.59 +- 9
21:09	-0.018 +- 0.017	4.74	0.37	0.07	-5.22 +- 5
21:30	-0.018 +- 0.010	4.64	1.31	0.22	-18.06 +- 9
21:50	-0.028 +- 0.020	5.15	1.12	0.18	-10.03 +- 10
22:10	-0.011 +- 0.007	4.72	0.50	0.10	-11.25 +- 7
22:30	-0.016 +- 0.010	5.36	1.45	0.21	-22.88 +- 14
Averages:	-0.016 +- 0.012	4.91	0.79	0.13	-12.51 +- 9

- Conclusions:**
- Left-handed overall magnetic structure as expected for the northern hemisphere
 - Typical total magnetic helicity
 - Moderate-to-high (E_{free}/E_{total}) ratio
 - Leaning toward an AR that can give flares and trigger CMEs