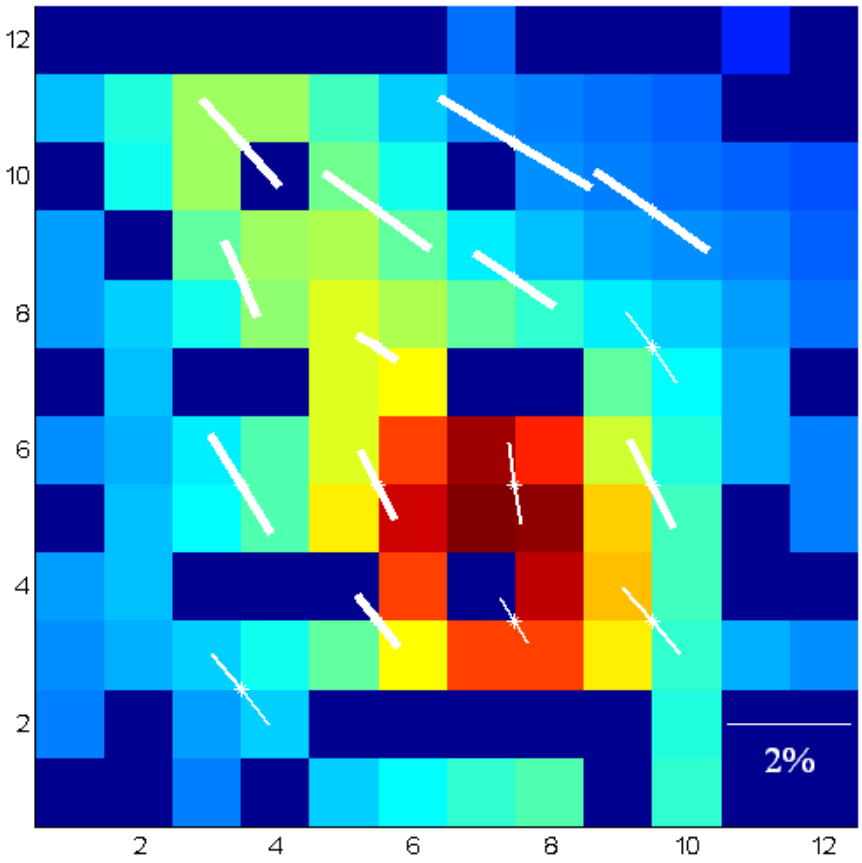

P =

0.0189	0.0214	0.0288	0.0225
0.0138	0.0078	0.0158	0.0141
0.0191	0.0127	0.0137	0.0161
0.0148	0.0107	0.0089	0.0139

Phi_Inst_cor =

41.7	53.7	59.2	54.1
24.2	56.1	56.0	35.0
31.1	26.9	8.7	26.0
38.7	39.0	32.1	40.7

P_error =

0.0030	0.0007	0.0020	0.0016
0.0018	0.0025	0.0010	0.0063
0.0061	0.0022	0.0051	0.0032
0.0093	0.0034	0.0047	0.0087

Phi_error =

4.6	1.0	2.0	2.1
3.6	9.2	1.8	12.7
9.2	4.9	10.7	5.7
18.0	9.1	15.1	17.9

Data : Three cycles from 1/11

All 1/12 data are with bad pointing

Method :

1. Ignore the changing of EL, PAR, and pointing drift during three cycles.

   For each cycle i:
2. Focus on the 16 positions with vectors in the figure. (Dark blue stands of the dead pixels, from both h and v)
3. For each position, bin the surrounding four or three (in case of dead pixel) pixels.
4. For each bin, polarization signal (PS) is defined as
   $PS(\theta) \equiv (f \bullet H(\theta) - V(\theta)) / \text{median}(f \bullet H+V)$,
   where θ is HWP angle, f = sum(V)/sum(H).
5. Get q_i and u_i from PS as described in
   http://lennon.astro.northwestern.edu/CSOpol/collaborators/analysis/angle_conventions.html

   Combine three cycles:
6. $Q \equiv \text{mean}(q_i)$, $U \equiv \text{mean}(u_i)$
   $Q\_error \equiv (\text{variance}(q_i)/3)^{0.5}$, $U\_error \equiv (\text{variance}(u_i)/3)^{0.5}$
7. Get P and Phi(raw) from Q and U as described in
   http://lennon.astro.northwestern.edu/CSOpol/collaborators/analysis/IP_jupiter.pdf
   , then fix them with IP from
   http://lennon.astro.northwestern.edu/CSOpol/collaborators/analysis/IP_saturn.pdf
   with EL = 66°.
8. Phi_Inst_cor = -Phi(raw) + 60°
9. Thicker vectors in the figure stand for 3σ detections.