

Y191A Correlation Report

General information

- The purpose of this observation was to test the new Ys dual-pol receiver.
- Only two antennas participated, Pico Veleta and Yebes.
- Test time: 14 March (day 73) 2019, 10:00-12:50UT
- Two sources observed, 3C345 (scans No0001-4) and 3C84 (scans No0005-12)

Status

Parts of a few scans were correlated, test is a success.

Fringes

Baseline	Code	Fringes	Plots	Comments
Pv-Ys	PY	Yes	<p>New dual-pol receiver:</p> <p>Scan No0003:</p> <p>y191a No0003 3C345 PY LL.pdf y191a No0003 3C345 PY LR.pdf y191a No0003 3C345 PY RL.pdf y191a No0003 3C345 PY RR.pdf</p> <p>Scan No0009:</p> <p>y191a No0009 3C84 PY LL.pdf y191a No0009 3C84 PY LR.pdf y191a No0009 3C84 PY RL.pdf y191a No0009 3C84 PY RR.pdf</p> <p>Returned to old single-pol receiver (RCP duplicates the LCP signal)</p> <p>Scan No0010:</p> <p>y191a No0010 3C84 PY LL.pdf y191a No0010 3C84 PY LR.pdf y191a No0010 3C84 PY RL.pdf y191a No0010 3C84 PY RR.pdf</p>	<p>Strong parallel-hand fringes, no or weak cross-hand fringes. SNR of RR fringe is somewhat larger than the one for LL fringe.</p> <p>The amplitude vs channels plots of both LL and RR exhibit a strange "bowl" shape, with amplitudes in edge channels up to 4 times higher than the amplitude in the central ones.</p> <p>After the return back to the old single-pol receiver the problem persists (see LL and LR plots of scan No0010).</p>

Notes