

## Definitions

XP: From external reference to 1PPS in

XO: From 1PPS in to internal reference (definition depending on receiver)

XC, XD: Cables etc... from antenna to receiver (typically XC is long cable, XD is short cable(s) + splitter if needed)

XR: receiver internal delay; XS antenna delay

Reference values for BP0U (provisional 15/09/2008): XR1+XS1 = -3.0 ns XR2+XS2 = -3.0 ns

## Set-up at NIM December 2009

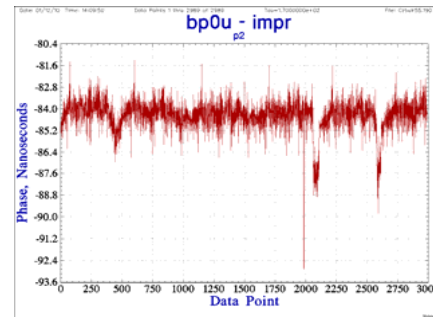
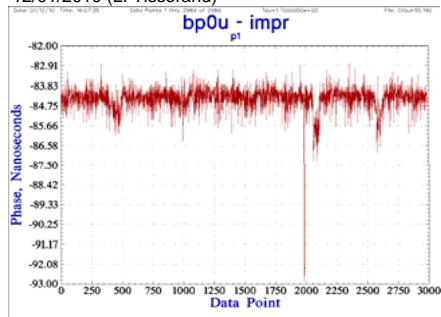
	ITRF 97						
	x	y	z	Ref - PPSin / ns	Meas 3.1 (3.3) / ns	Meas 3.2 / ns	Ant. Cable / ns
BP0U (GTR50)				28.8 / 29.4	N/A		XC = 182.0 ns (C134)
INT_DLY0 = -99.07 ns				XP = 28.8 ns	Int ref - 1PPSin (XO) = N/A ns REF DLY = 28.8 ns		XC+XD = 182.0 ns CAB DLY = 128.5 ns
IMPR (PolaRx2)				22.4 / 23.3	237.2 / 237.3 (before/after)		XC = 152.1 ns; XD = 28.1 ns
				XP = 22.4 ns	Int ref - 1PPSin (XO) = 245.9 ns		Short baseline: XC+XD = 180.2 ns

## Observations

Short baseline: 55188-55194, doy 357-363 (23-29 December 2009)

## Measurement results

12/01/2010 (L. Tisserand)



IMPR Short baseline:

Delta (-XP-XO+XR1+XC+XD+XS1) (IMPR - BP0U) = 84.3 ns

Delta (-XP-XO+XR2+XC+XD+XS2) (IMPR - BP0U) = 84.3 ns

## Calibration results

21/01/2010 (G. Petit)

BP0U: -XP-XO+XR1+XC+XD+XS1 = 50.5 ns

BP0U: -XP-XO+XR2+XC+XD+XS2 = 50.5 ns

IMPR: -XP-XO+XC+XD = -88.1 ns

Therefore

IMPR: XR1+XS1 = 222.9 ns

IMPR: XR2+XS2 = 222.9 ns

For BP0U, XC+XD-XP-XO is the difference between the actual value (153.2 ns) and the value entered in the receiver (128.5-28.8 = 99.7 ns)