

# **List of outputs obtained from fx\_cor and fx\_cor\_all**

Note: Updated for EOP and side-band information.

FORMAT7 on (2003-07-18).

Line	Content (underline indicates the content not contained in FORMAT6.)
1	"#FORMAT7" ---- Type of format (fixed)
2	HOST                      Name of PC host
3	Observation code
4	Scan number
5	Baseline ID
6	Date of data processing (year, day of the year, hour, min, sec, month, day)
7	Name of X-station
8	Terrestrial coordinate (x, y, z) at X-station location
9	Filename of X-station data
10	Name of Y-station
11	Terrestrial coordinate (x, y, z) at Y-station location
12	Filename of Y-station data
13	Name of radio source on the scan
14	Right Ascension of the radio source (hour, min, sec)
15	Declination of the radio source (deg, min, sec)
16	Reference epoch of the source coordinate
17	Greenwich sidereal time at Processing reference time (PRT) (hour, min, sec)
18	Epoch UT at scan start (year, day of the year, hour, min, sec)
19	Epoch UT at scan finish (year, day of the year, hour, min, sec)
20	Processing reference time (PRT) (year, day of the year, hour, min, sec)
21	A-priori delay (sec)
22	A-priori delay rate (sec/sec)
23	A-priori delay acceleration (sec/sec^2)
24	A-priori delay acceleration rate (sec/sec^3)
25	Clock offset assumed (sec)
26	Clock rate offset assumed (sec)
27	<u>Earth Orientation Parameters (UT1-UTC in sec, Wob X in as, Wob Y in as)</u>
28	Number of base band channels (N=1 or 4) (defined in the variable "numch")
29	Local radio frequency of channel #1 (Hz),
..	P-cal tone frequency of channel #1 (Hz),
..	<u>Side-band information of channel #1 (1: USB, 0: LSB)</u>
30	Local radio frequency of channel #2 (Hz),
..	P-cal tone frequency of channel #2 (Hz),
..	<u>Side-band information channel #1 (1: USB, 0: LSB)</u>
..	
..	(repeated N-times for N base-band channels)
..	
29+N	Sampling frequency (Hz)

30+N	Quantum bit number in A/D conversion (1,2,4 or 8)
31+N	Duration of a parameter period (s)
32+N	Integration duration (s)
33+N	Size of delay window (idsize)
34+N	Number of parameter periods (kpp), "PP#" n (where n is pp-number),
..	d and m in real and imaginary parts of a correlation coefficient
..	d : lag index, m: index
..	
..	(hereafter repeated numch x idsize lines)
..	
..	"VALIDITY FLAG, FRACTIONAL BIT and FRINGE PHASE (APRIORI)"
..	vflag dtime ibit fbit frphase1 [frphase2 frphase3 frphase4]
..	vflag -- validity flag.
..	dtime -- epoch at the begin of PP (BOPP) (s).
..	ibit -- Integer part of the delay bits at BOPP.
..	fbit -- decimal part of the delay bits at BOPP.
..	frphase1 -- a-priori fringe phase at BOPP for BB ch1 (deg).
..	frphase2 -- a-priori fringe phase at BOPP for BB ch2 (deg).
..	frphase3 -- a-priori fringe phase at BOPP for BB ch3 (deg).
..	frphase4 -- a-priori fringe phase at BOPP for BB ch4 (deg).
..	
..	Note: about "vflag"
..	It indicates the failure in sync detection in the processed PP.
..	1: Detection, 0: Non detection
..	Very likely the PP data prior to that with vflag=0 cannot be processed.
..	
..	"X-PCAL" (the beginning of the X-station P-cal information)
..	m ns PCALR PCALI AMP PHASE
..	where
..	m: the channel index.
..	ns: number of samples used for detecting a P-cal signal.
..	PCALR: real part of the P-cal signal.
..	PCALI: imaginary part of the P-cal signal.
..	AMP: amplitude of the P-cal signal.
..	PHASE: phase of the P-cal signal (deg).
..	
..	(hereafter repeated n times, where n is number of BBCs.)
..	
..	"Y-PCAL" (the beginning of the Y-station P-cal information)
..	The contents are same as those in the Y-station.
..	
..	(hereafter repeated n times, where n is number of BBCs.)
..	
..	"PP#" n (where n is number of PPs.)
..	hereafter repeated npp times, where npp is the total number of PPs.