4.5cm broad band C/X secondary focus receiver (4000-9300 MHz)

This is a broad-band receiver with two orthogonal linear polarizations (at a 45°-angle with the horizon). The receiver (in most setups simultaneously) delivers 4 basebands (each with two polarizations):

Baseband	Center Frequency	Bandwidth	Comment
1	5.250 GHz	2500 MHz	beware of strong RFI at frequencies < 4.5 GHz!
2	6.750 GHz	2500 MHz	
3	6.668 GHz	200 MHz	for methanol observations
4	4.829 GHz	200 MHz	for formaldehyde observations

Calibration Information

Frequency [GHz]	Channel	Polarisation	Tcal [K]	Tsys [K]	Sensitivity [K/Jy]	SEFD [Jy]	Aperture Eff. [%]	TMB/S [K/Jy]	Main Beam Eff. [%]	HPBW [arcsec]	Last update
5.250	1+2	lin	3.1	35	1.60	22	56	2.0	71	140	Oct 2019
6.750	1+2	lin	4.5	37	1.40	26	49	1.6	58	105	Oct 2019
6.668	1+2	lin	3.6	34	1.39	24	49	1.7	60	109	Oct 2019
4.829	1+2	lin	2.8	42	1.59	26	56	1.8	65	146	Oct 2019

normalized Gain curve (G = A0 + A1·Elv + A2·Elv2)			Observed in	confirmed
A0 = 0.9928	A1 = 4.212E-4	A2 = -6.158E-6	Jun 2016	Oct 2019

Comments:

- The gain curve was corrected for opacity (though it is small, < 0.02 throughout the band).

Version description for OBSINP

Channel assignment in the MBFITS data files

Tcal and Tsys measurements