

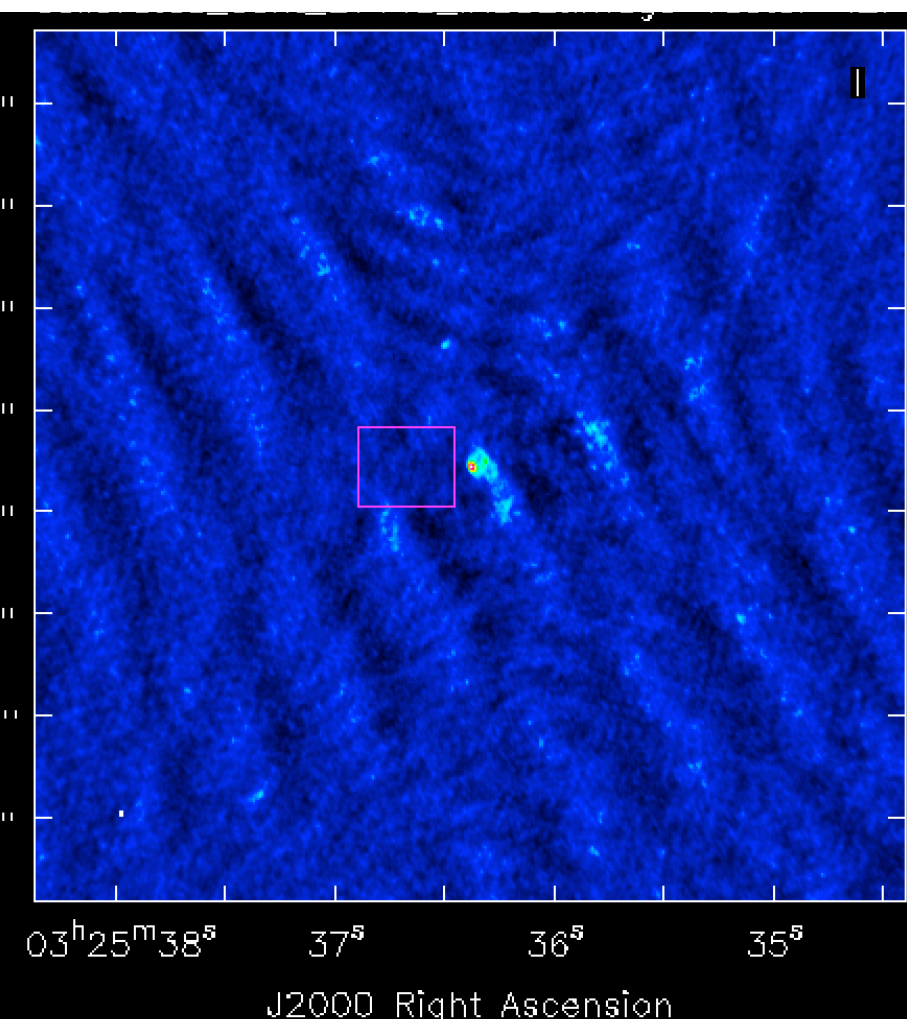
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ID	Code	Name	RA	Decl	Epoch	SrcId	nRows
0	none	Per33_L1448_IRS3B	03:25:36.381000	+30.45:14.71000	J2000	0	103530

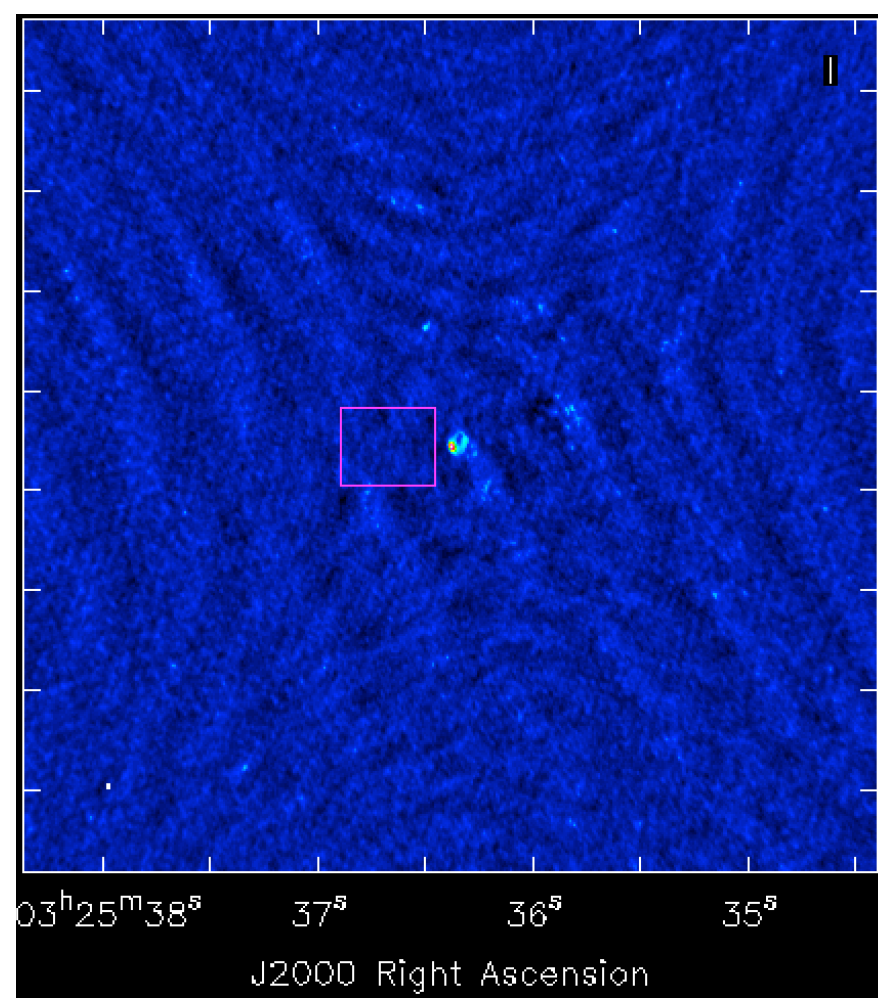
SpwID	Name	#Chans	Frame	Ch0(MHz)	ChanWid(kHz)	TotBW(kHz)	CtrFreq(MHz)	BBC	Num	Corrs
0	ALMA_RB_06#BB_1#SW-01#FULL_RES	1920	TOP0	219597.709	-30.518	58593.8	219568.4275		1	XX YY
1	ALMA_RB_06#BB_1#SW-02#FULL_RES	1920	TOP0	220436.088	-30.518	58593.8	220406.8064		1	XX YY
2	ALMA_RB_06#BB_2#SW-01#FULL_RES	960	TOP0	218259.496	-61.035	58593.8	218230.2292		2	XX YY
3	ALMA_RB_06#BB_2#SW-02#FULL_RES	960	TOP0	219986.791	-61.035	58593.8	219957.5242		2	XX YY
4	ALMA_RB_06#BB_3#SW-01#FULL_RES	1920	TOP0	230487.929	61.035	117187.5	230546.4920		3	XX YY
5	ALMA_RB_06#BB_4#SW-01#FULL_RES	128	TOP0	231549.641	15625.000	2000000.0	232541.8290		4	XX YY

ID	Name	SpwId	RestFreq(MHz)	SysVel(km/s)
0	Per33_L1448_IRS3B	0	219560.358	6
0	Per33_L1448_IRS3B	1	220398.6842	6
0	Per33_L1448_IRS3B	2	218222.192	6
0	Per33_L1448_IRS3B	3	219949.442	6
0	Per33_L1448_IRS3B	4	230538	6
0	Per33_L1448_IRS3B	5	232537	6

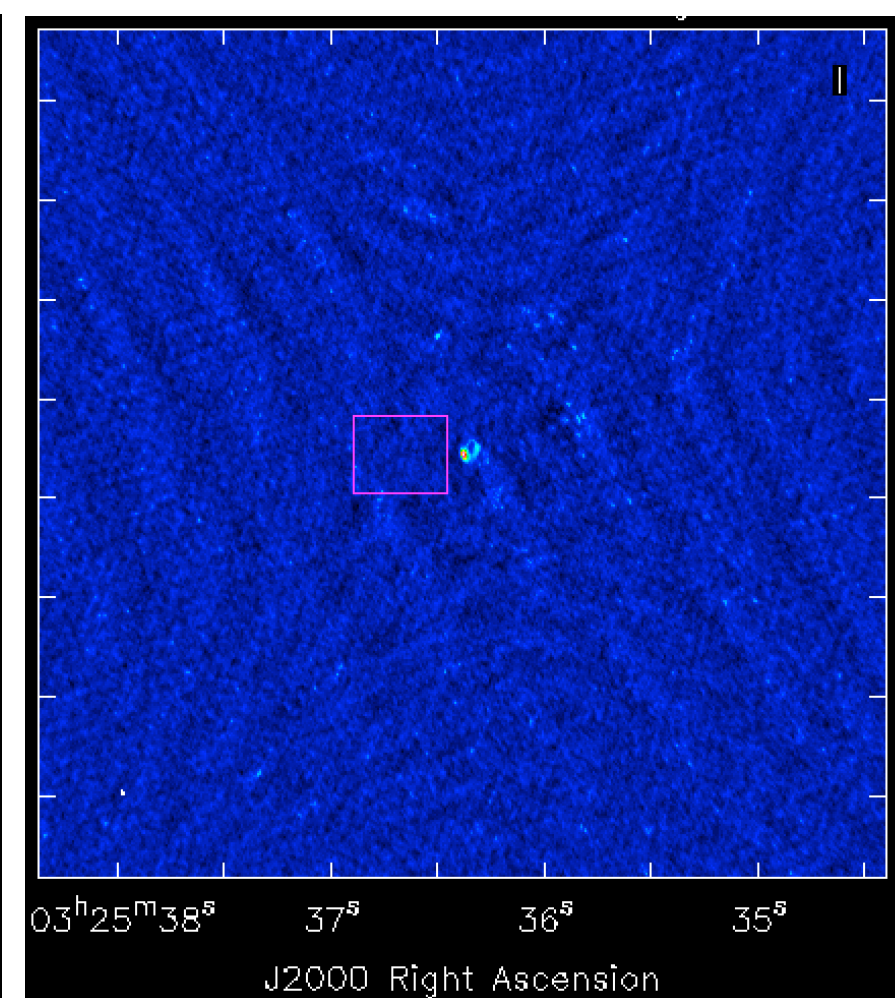
Natural
rms~ $1.39\text{e-}03$

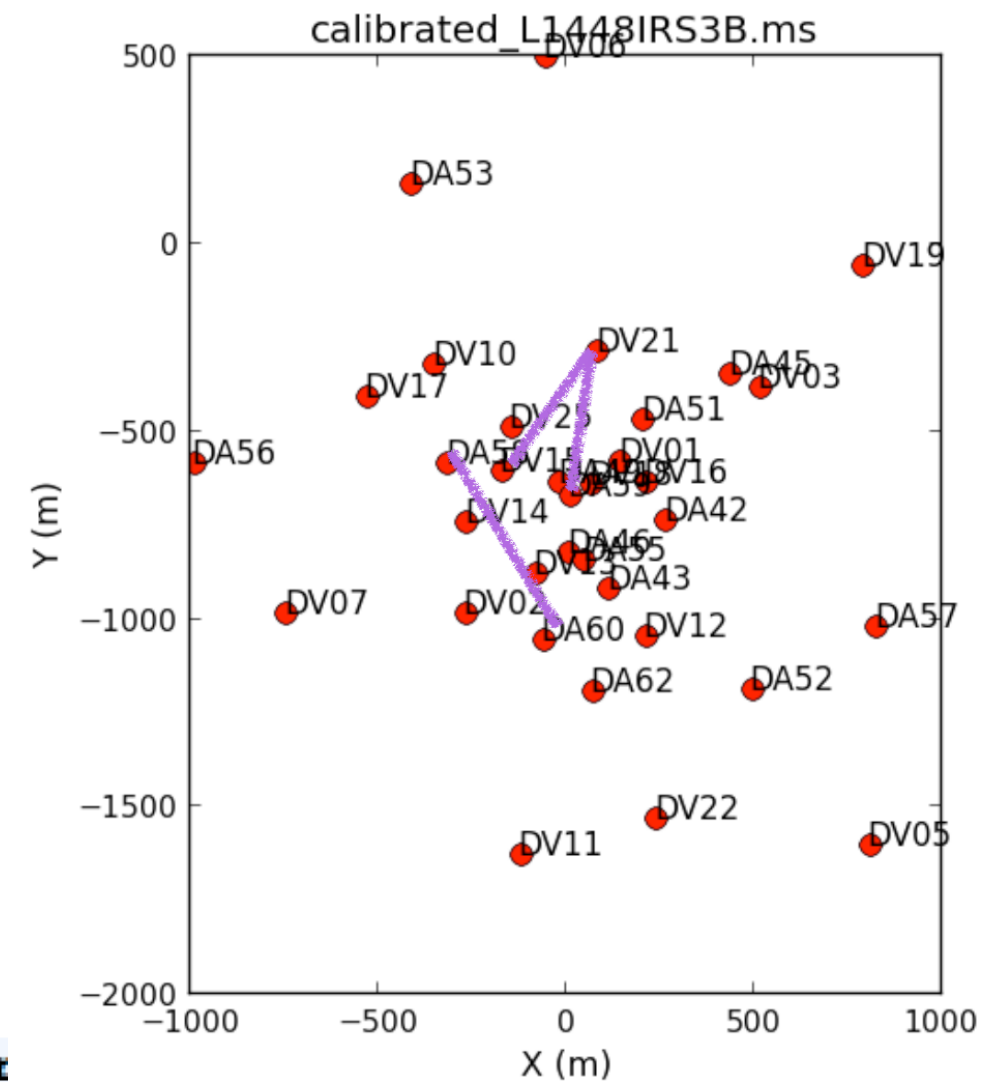
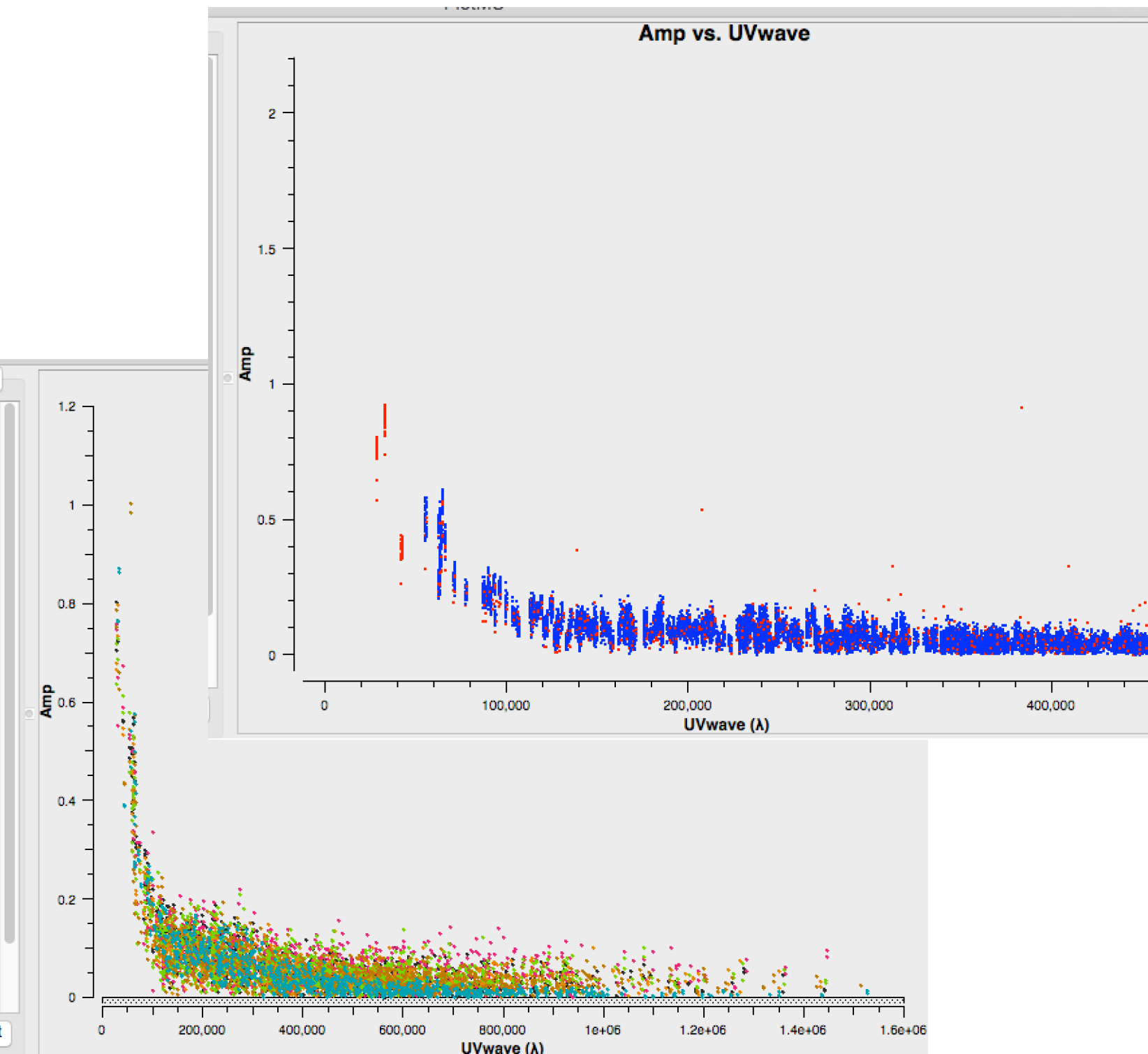


Robust 0.5
rms~ $1.06\text{e-}03$



Uniform
rms~ $9.65\text{e-}04$





9097.8], Amp in [0.359136 0.912608] or [-0.0335297 0.908147] or .

20 BL=DA46@A058 & DA55@A060 [3&8] Spw=0 Chan=<0~1919> Avg Freq=219.568 Corr=XX X=30876.7 Y=0.72378

20 BL=DA46@A058 & DA55@A060 [3&8] Spw=0 Chan=<0~1919> Avg Freq=219.568 Corr=YY X=30876.7 Y=0.72794

20 BL=DA49@A029 & DA59@A021 [4&12] Spw=0 Chan=<0~1919> Avg Freq=219.568 Corr=XX X=26948.5 Y=0.8032

20 BL=DA49@A029 & DA59@A021 [4&12] Spw=0 Chan=<0~1919> Avg Freq=219.568 Corr=YY X=26948.5 Y=0.7045

20 BL=DA59@A021 & DV18@A015 [12&29] Spw=0 Chan=<0~1919> Avg Freq=219.568 Corr=XX X=40150.2 Y=0.563

20 BL=DA59@A021 & DV18@A015 [12&29] Spw=0 Chan=<0~1919> Avg Freq=219.568 Corr=YY X=40150.2 Y=0.561

(robust0.5)

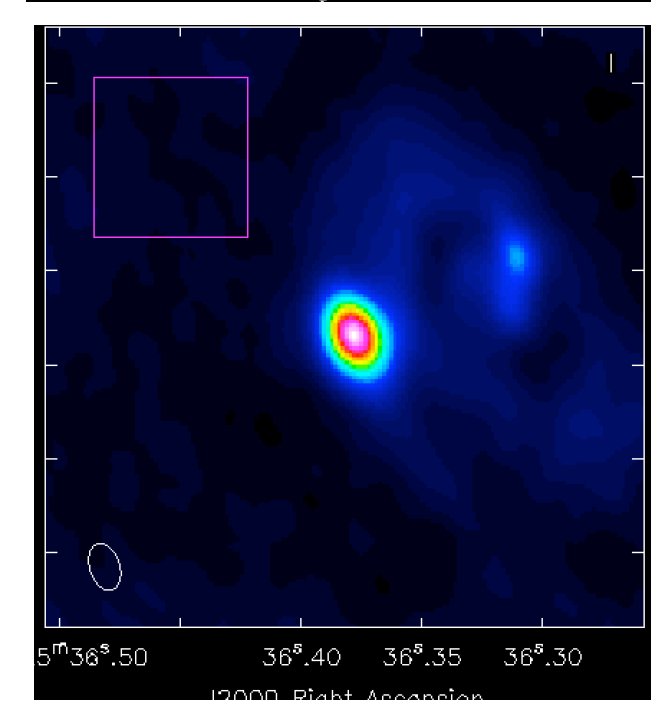
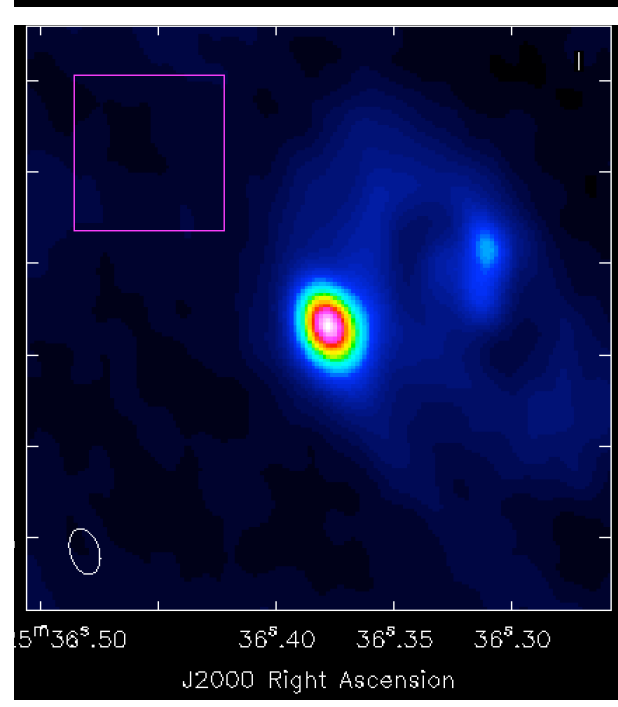
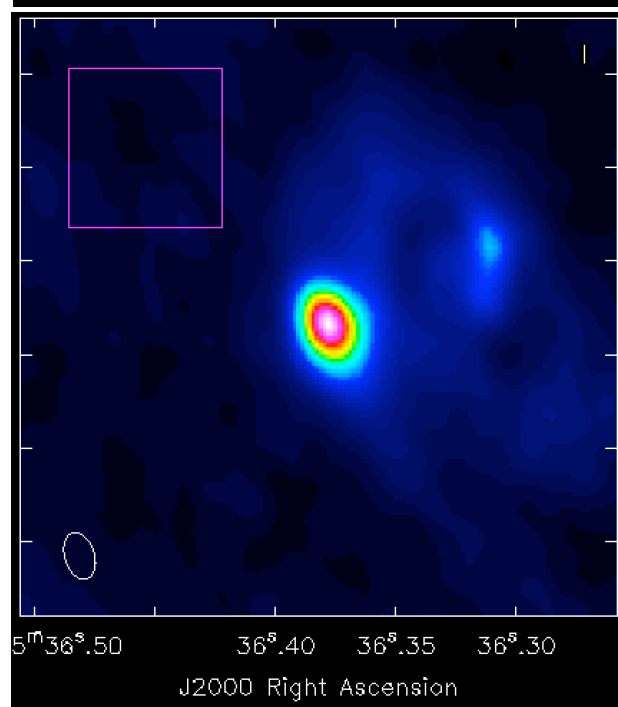
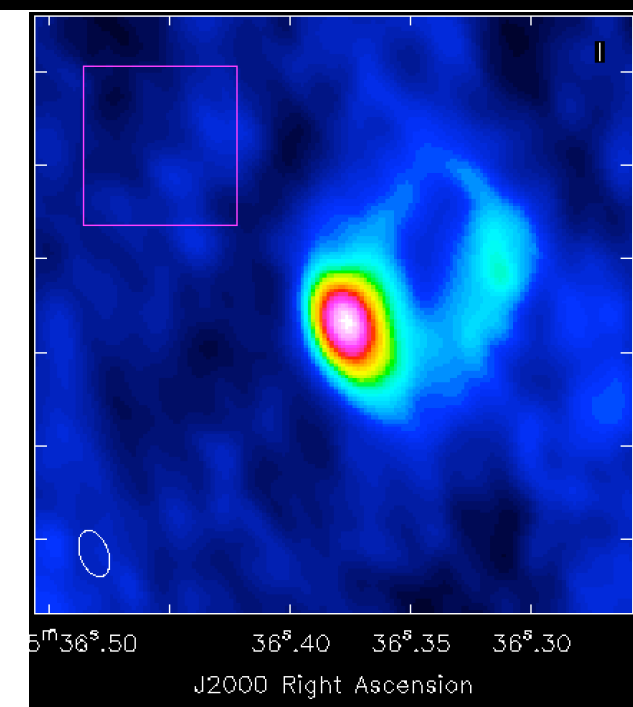
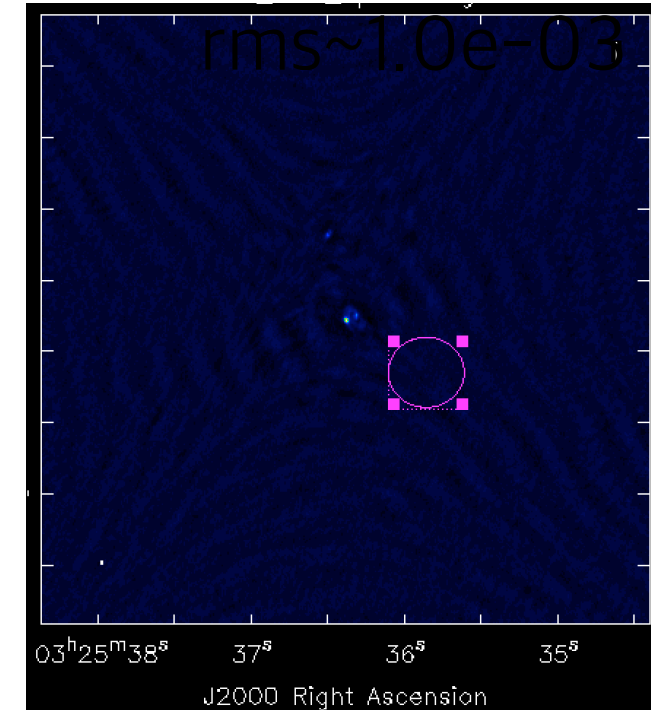
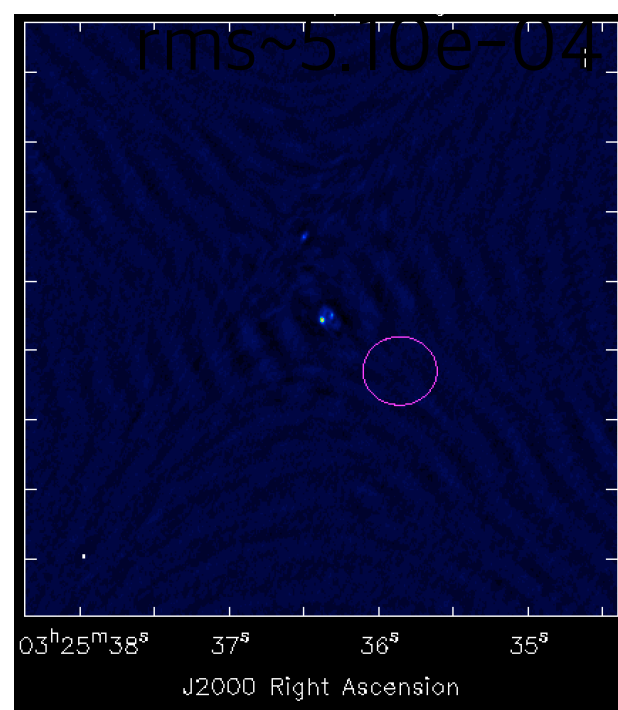
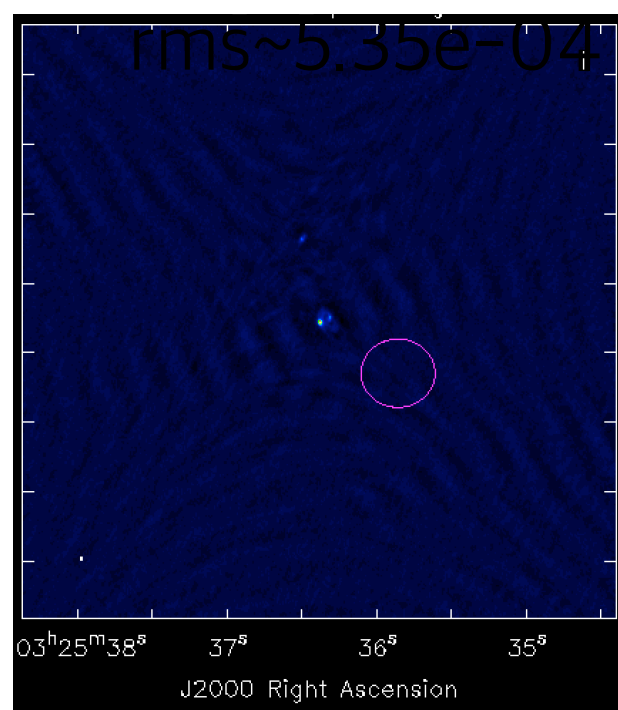
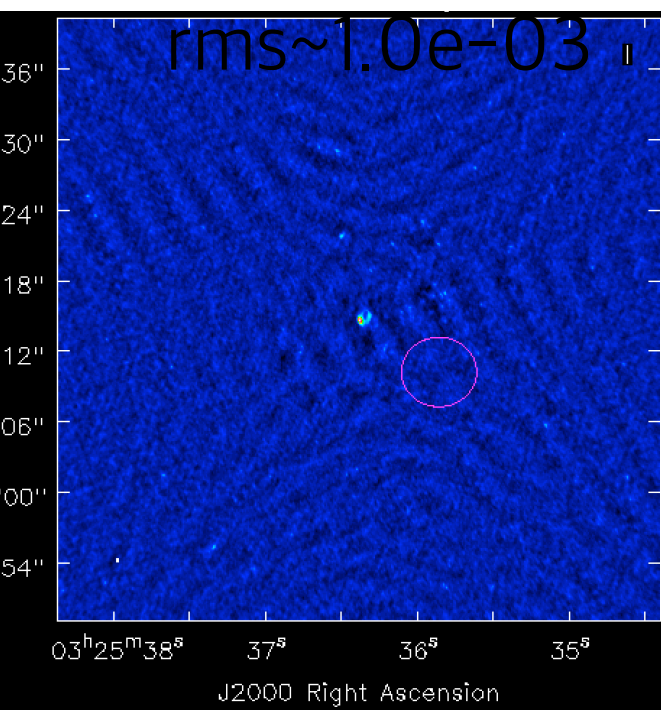
self-calibration

orig

1pcal

2pcal

apcal



rms~1.22e-03
peak~2.5e-02

rms~1.01e-03
peak~6.92e-02

rms~9.80e-04
peak~7.28e-02

rms~8.18e-04
peak~6.7e-02

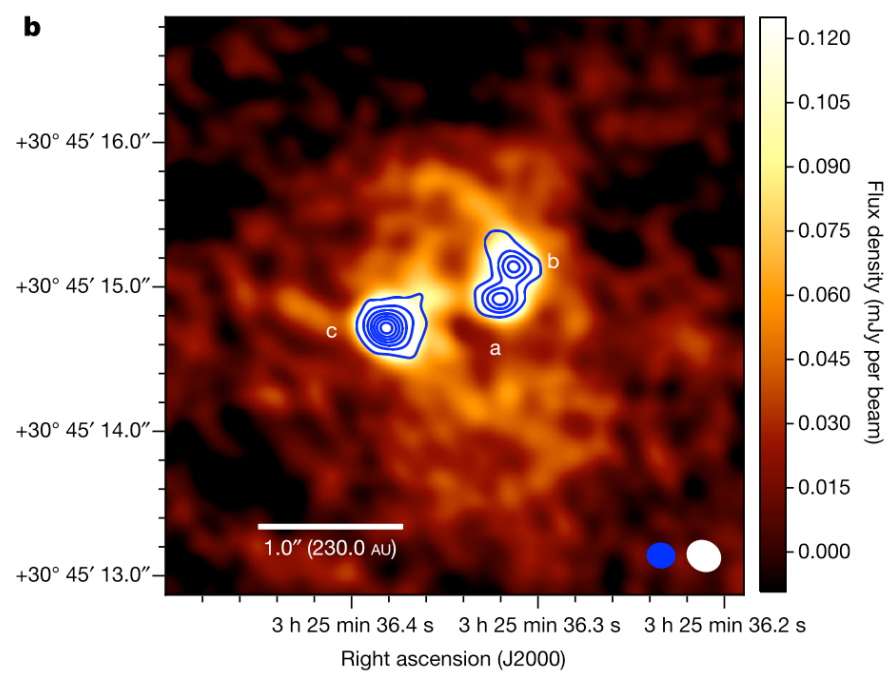
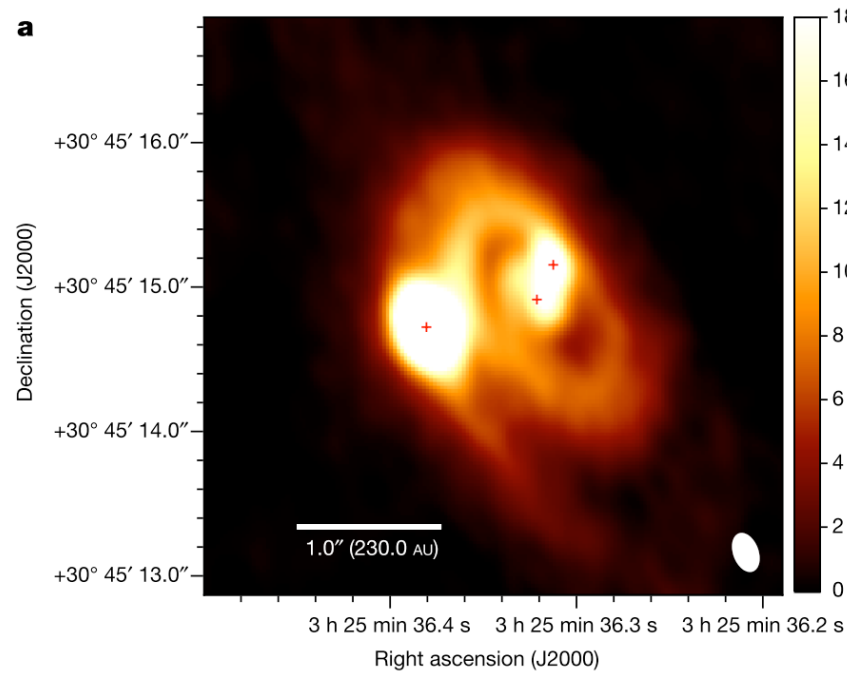
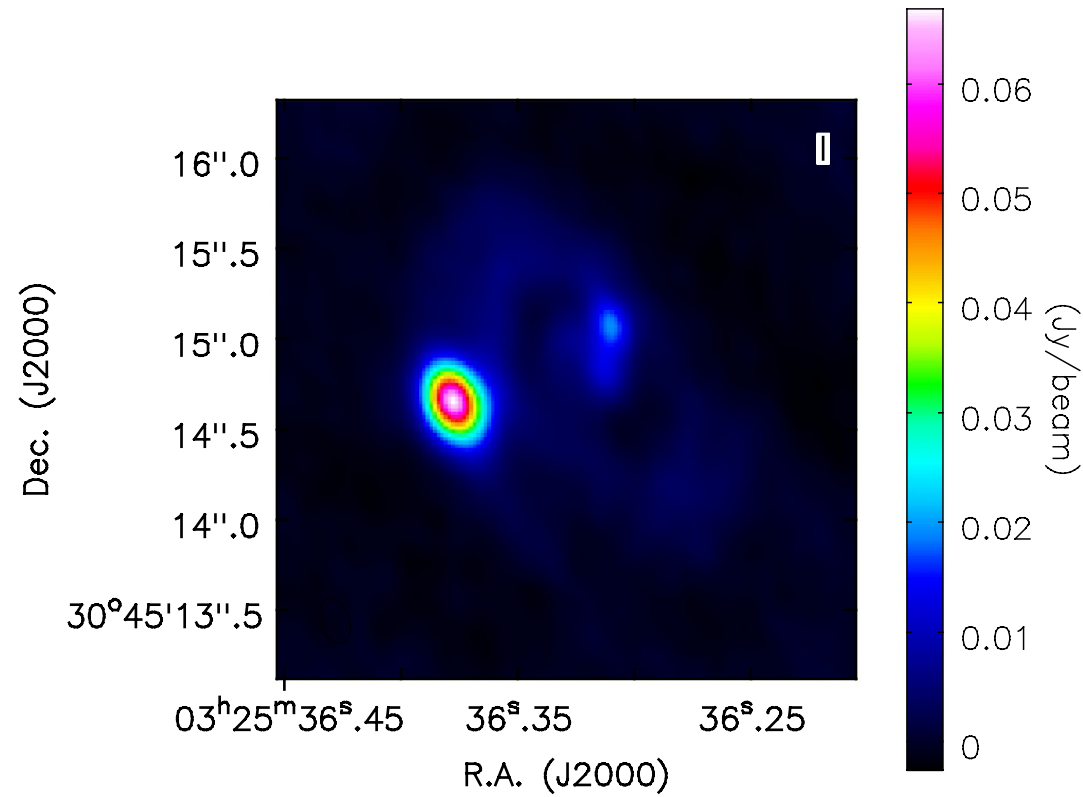


Figure 1 | ALMA and VLA images of the disk and triple protostar system L1448 IRS3B. **a**, ALMA 1.3 mm image of the extended disk, showing an evident bright source on the left (IRS3B-c) in the outer disk and another blended source on the right near the centre of the disk (IRS3B-a and IRS3B-b). The positions of the three protostars identified from the VLA data are shown by red crosses. **b**, VLA 8 mm image smoothed to a similar resolution as the ALMA image, capturing some of the faint, extended disk at longer wavelengths. The contours in **b** are from a higher-resolution VLA 8 mm image and clearly show the individual

protostars with corresponding designations. All three protostars are embedded within apparent spiral arms that emerge from IRS3B-a/IRS3B-b and extend to IRS3B-c in the outer disk. The contours start at and increase by 5σ , where $\sigma = 0.009$ mJy per beam. The resolution of each image is shown with an ellipse(s) drawn in the lower right corner: $0.27'' \times 0.16''$ (62 AU $\times$ 37 AU) for the ALMA image in **a**, $0.24'' \times 0.20''$ (55 AU $\times$ 46 AU) for the VLA image in **b** and $0.18'' \times 0.16''$ (41 AU $\times$ 37 AU; blue ellipse) for the contour image in **b**. J2000 refers to the coordinate epoch.

