

Appendix H

EC2 observations at the MPIfR 100m

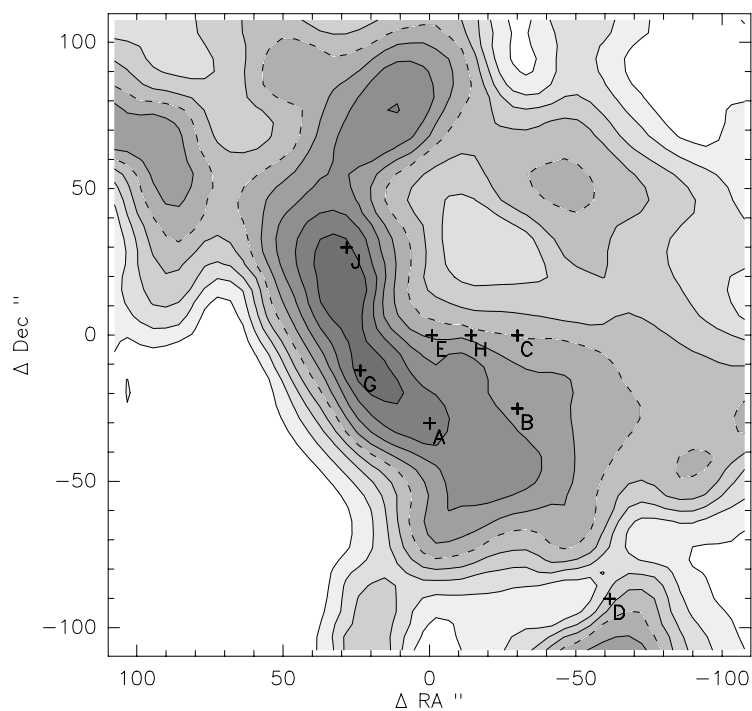
Dec 2002, May 2004, and Nov 2005

Figure H.1: ^{12}CO (2–1) map of EC2 showing observed positions A, B and C:

A. $\alpha_{1950} = 02:44:52.6$, $\delta = 58:16:00.0$, $v_{\text{rad}} = -103.70 \text{ km s}^{-1}$ (EDGE2A).

B. $\alpha_{1950} = 02:44:48.8$, $\delta = 58:16:05.0$, $v_{\text{rad}} = -103.70 \text{ km s}^{-1}$ (EDGE2B).

C. $\alpha_{1950} = 02:44:48.8$, $\delta = 58:16:30.0$, $v_{\text{rad}} = -103.70 \text{ km s}^{-1}$ (EDGE2C).



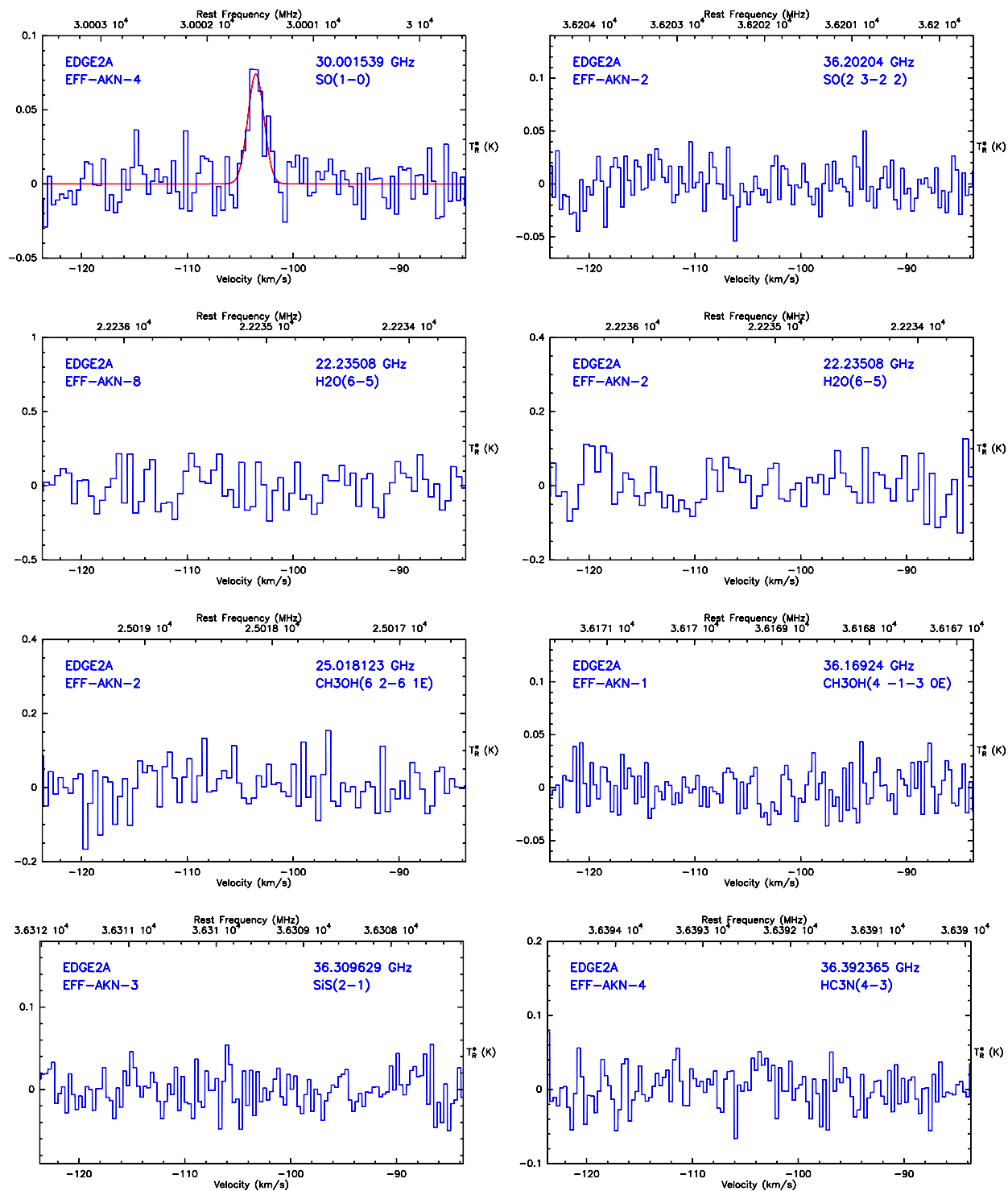


Figure H.2: EC2 position A: SO, H₂O, CH₃OH, SiS and HC₃N spectra observed at the MPIfr Effelsberg 100m December 2002, May 2004 and November 2005.

EDGE2A: $\alpha_{1950} = 02:44:52.6$, $\delta = 58:16:00.0$, $v_{\text{rad}} = -103.70 \text{ km s}^{-1}$.

Table H.1: EC2 position A: SO, H₂O, CH₃OH, SiS and HC₃N spectra observed at the MPIFR Effelsberg 100m December 2002, May 2004 and November 2005. Line spectra summary for Fig. H.2 (where ● = $I > 3\sigma$ and ○ = $I > 2\sigma$).

I	Source	Line	Trans.	Frequency (GHz)	Position (km s ⁻¹)	Width (km s ⁻¹)	Area (K km s ⁻¹)	T_R^* (K)	rms (K)	Resol. (km s ⁻¹)	Time (min)	UT	LST	T_{sys} (K)	Receiver
●	EDGE2A	SO	1-0	30.001539	-103.53 ± 0.11	1.80 ± 0.27	0.14 ± 0.02	0.074	0.014	0.390	646	23:07	05:04	136	AKN-4
	EDGE2A	SO	2 ₃ -2 ₂	36.202040	—	—	—	—	0.018	0.323	143	03:23	09:20	153	AKN-2
	EDGE2A	H ₂ O	6-5	22.235080	—	—	—	—	0.119	0.527	25	21:51	01:45	173	AKN-8
	EDGE2A	H ₂ O	6-5	22.235080	-119.32 ± 0.38	2.00 ± 0.57	0.22 ± 0.08	0.104	0.054	0.527	13	05:15	20:32	134	AKN-2
	EDGE2A	CH ₃ OH	6 ₂ -6 ₁ E	25.018123	—	—	—	—	0.055	0.468	10	05:40	20:57	143	AKN-2
	EDGE2A	CH ₃ OH	4 ₋₁ -3 ₀ E	36.169240	—	—	—	—	0.018	0.323	143	03:23	09:20	150	AKN-1
	EDGE2A	SiS	2-1	36.309629	—	—	—	—	0.022	0.323	143	03:23	09:20	180	AKN-3
	EDGE2A	HC ₃ N	4-3	36.392365	-103.53 ± 0.29	1.58 ± 0.58	0.08 ± 0.03	0.045	0.026	0.323	143	03:23	09:20	227	AKN-4

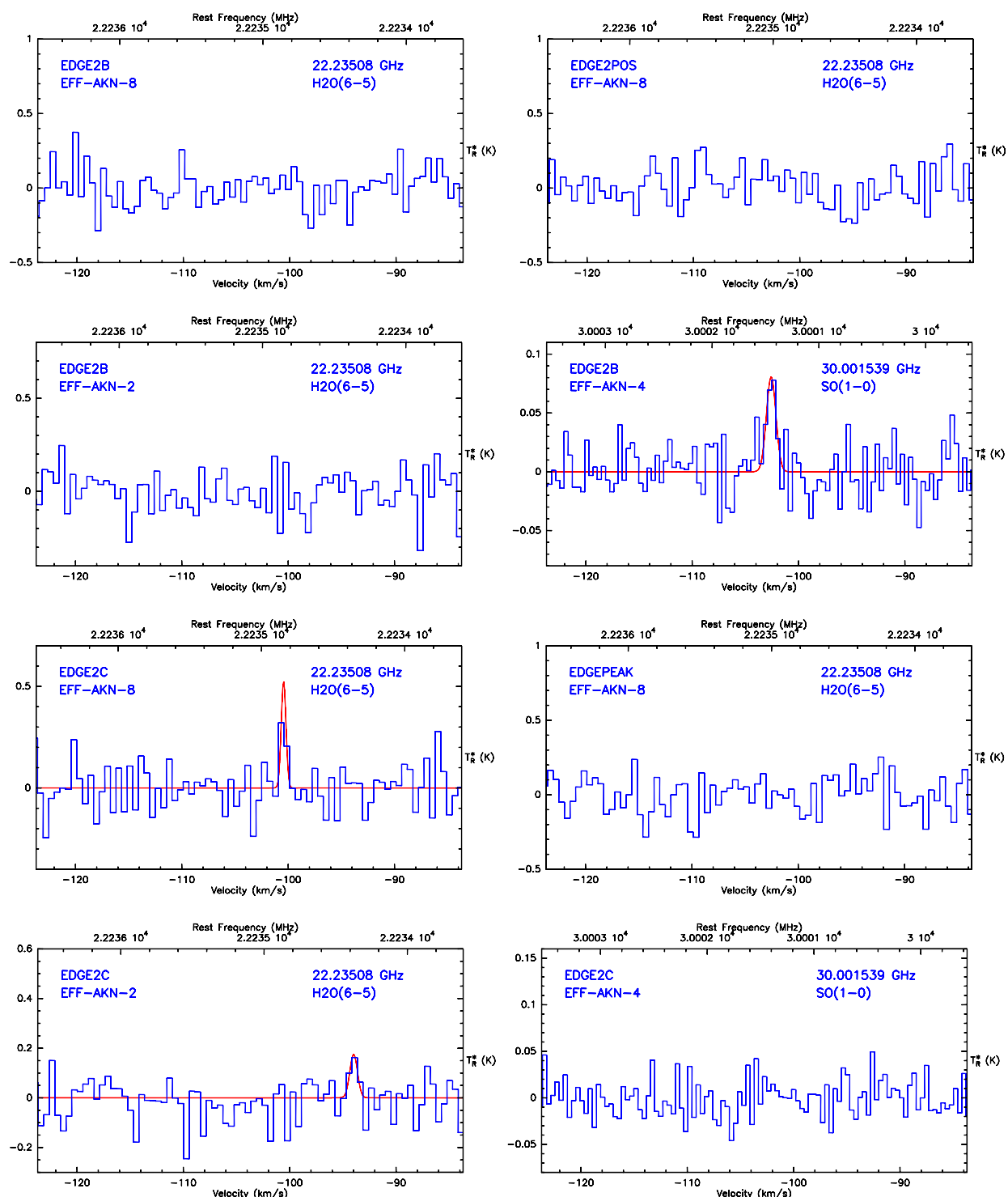


Figure H.3: EC2 positions B and C: H₂O and SO spectra observed at the MPIFR Effelsberg 100m December 2002, May 2004 and November 2005.

EDGE2B: $\alpha_{1950} = 02:44:48.8$, $\delta = 58:16:05.0$, $v_{\text{rad}} = -103.70 \text{ km s}^{-1}$.

EDGE2C: $\alpha_{1950} = 02:44:48.8$, $\delta = 58:16:30.0$, $v_{\text{rad}} = -103.70 \text{ km s}^{-1}$.

Table H.2: EC2 positions B and C: H₂O and SO spectra observed at the MPIFR Effelsberg 100m December 2002, May 2004 and November 2005. Line spectra summary for Fig. H.3 (where ● = $I > 3\sigma$ and ○ = $I > 2\sigma$).

I	Source	Line	Trans.	Frequency (GHz)	Position (km s ⁻¹)	Width (km s ⁻¹)	Area (K km s ⁻¹)	T_R^* (K)	rms (K)	Resol. (km s ⁻¹)	Time (min)	UT	LST	T_{sys} (K)	Receiver
	EDGE2B	H ₂ O	6-5	22.235080	—	—	—	—	0.121	0.527	25	21:56	01:50	172	AKN-8
	EDGE2POS	H ₂ O	6-5	22.235080	—	—	—	—	0.119	0.527	25	22:08	02:03	180	AKN-8
	EDGE2B	H ₂ O	6-5	22.235080	—	—	—	—	0.109	0.527	3	04:45	20:00	137	AKN-2
●	EDGE2B	SO	1-0	30.001539	-102.58 ± 0.12	1.04 ± 0.31	0.09 ± 0.02	0.081	0.020	0.390	383	19:04	00:59	133	AKN-4
●	EDGE2C	H ₂ O	6-5	22.235080	-100.43 ± 0.06	0.53 ± 2.70	0.29 ± 0.08	0.524	0.103	0.527	25	22:01	01:56	180	AKN-8
	EDGEPEAK	H ₂ O	6-5	22.235080	—	—	—	—	0.124	0.527	29	22:14	02:09	190	AKN-8
○	EDGE2C	H ₂ O	6-5	22.235080	-93.99 ± 0.24	0.85 ± 0.17	0.16 ± 0.06	0.176	0.079	0.527	6	04:55	20:10	136	AKN-2
	EDGE2C	SO	1-0	30.001539	—	—	—	—	0.019	0.390	383	21:25	03:21	131	AKN-4

H: EC2 OBS. AT THE MPIFR 100M TELESCOPE DEC 2002, MAY 2004, NOV 2005