



# Example of the Observing Molecular Lines Band 6 (IF 5 - 10 GHz)



## Setting 1

### Base-Band 1

SiO (5-4) 217.104984 GHz

DCN (3-2) 217.238530 GHz

*or* N<sub>2</sub>D<sup>+</sup> (3-2) 231.321635 GHz

### Base-Band 2

C<sup>18</sup>O (2-1) 219.560358 GHz

SO (6-5) 219.949433 GHz

### Base-Band 3

<sup>13</sup>CO (2-1) 220.398684 GHz

### Base-Band 4

CO (2-1) 230.538000 GHz

## Setting 2

### Base-Band 1

CN (2-1) 226.874764 GHz

### Base-Band 2

CO (2-1) 230.538000 GHz

### Base-Band 3

CH<sub>3</sub>OH (5-4) 241.791367 GHz

### Base-Band 4

CS (5-4) 244.935556 GHz



# Example of the Observing Molecular Lines Band 7 (IF 4 - 8 GHz)



## Setting 1

### Base-Band 1

C<sup>18</sup>O (3-2) 329.330552 GHz

### Base-Band 2

<sup>13</sup>CO (3-2) 330.587965 GHz

### Base-Band 3

HC<sup>18</sup>O<sup>+</sup> (4-3) 340.63070 GHz  
*or* HC<sup>15</sup>N (4-3) 344.200109 GHz

### Base-Band 4

CS (7-6) 342.882857 GHz  
<sup>29</sup>SiO (8-7) 342.980848 GHz

## Setting 2

### Base-Band 1

CS (7-6) 342.882857 GHz  
<sup>29</sup>SiO (8-7) 342.980848 GHz

### Base-Band 2

H<sup>13</sup>CN (4-3) 345.339756 GHz  
CO (3-2) 345.795990 GHz

### Base-Band 3

SO (9-8) 346.528587 GHz  
*or* HCN (4-3) 354.505473 GHz

### Base-Band 4

HCO<sup>+</sup> (4-3) 356.734242 GHz



# Example of the Observing Molecular Lines



## Band 3 (IF 4 - 8 GHz)

### Base-Band 1

$C_3H_2$  ( $2_{12}-1_{01}$ ) 85.338906 GHz

$CH_3CCH$  (5-4) 85.457299 GHz

$C_4H$  ( $17/2 - 15/2$ ) 85.67257 GHz

### Base-Band 2

$HC^{13}O^+$  (1-0) 86.754288 GHz

$SiO$  (2-1) 86.846995 GHz

### Base-Band 3

$CH_3OH$  (2-1) 96.741377 GHz

### Base-Band 4

$CS$  (2-1) 97.980953 GHz

Or  $^{13}CO$  (1-0; 110.201354 GHz) and  $C^{18}O$  (1-0; 109.782176 GHz) can be observed with  $CS$  and  $CH_3OH$

## Band 9 (IF 4 - 12 GHz)

### Base-Band 1

$CS$  (14-13) 685.435929 GHz

or  $HCO^+$  (8-7) 713.34137 GHz

### Base-Band 2

$HC^{15}N$  (8-7) 688.273790 GHz

$SO$  (17-16) 688.735700 GHz

or  $SiO$  (16-15) 694.295863 GHz

&  $H^{13}CO^+$  (8-7) 693.87633 GHz

### Base-Band 3

$CO$  (6-5) 691.473076 GHz

### Base-Band 4

$HCN$  (8-7) 708.877001 GHz