





ssh

```
I-BACKEND , no receiver name specified as parameter
I-BACKEND , no 2nd receiver name specified as parameter
I-BACKEND , Continuum total hardware used [%]: 0.0
I-BACKEND , 100kHz total hardware used [%]: 0.0
I-BACKEND , 1MHz total hardware used [%]: 0.0
I-BACKEND , 4MHz total hardware used [%]: 100.0
I-BACKEND , USB total hardware used [%]: 0.0
I-BACKEND , WILMA total hardware requested [%]: 100.0
I-BACKEND , VESPA total hardware used [%]: 33.3
I-BACKEND , 4MHz 1 4.000 4024.0 248.0 E090 horiz U0 none 100.0 none
I-BACKEND , 4MHz 2 4.000 4024.0 -248.0 E090 verti UI none 100.0 none
I-BACKEND , WILMA 1 2.000 3720.0 265.0 E090 horiz U0 none 100.0 none
I-BACKEND , WILMA 2 2.000 3720.0 -265.0 E090 verti UI none 100.0 none
I-BACKEND , WILMA 3 2.000 3720.0 265.0 E230 horiz LI none 100.0 none
I-BACKEND , WILMA 4 2.000 3720.0 265.0 E230 verti LI none 100.0 none
I-BACKEND , VESPA 1 0.040 40.0 0.0 E090 horiz U0 none 90.0 CO-1-0
I-BACKEND , VESPA 2 0.040 40.0 0.0 E090 verti UI none 90.0 myLine2
I-BACKEND , VESPA 3 0.040 40.0 0.0 E230 horiz LI none 90.0
I-BACKEND , VESPA 4 0.040 40.0 0.0 E230 verti LI none 90.0 LIL0
```

PAKO> show

```
I-SHOW , paKo Revision v 1.1.1 2009-04-14
I-SHOW , Level. For standard output: 0. For file: 0
I-SHOW , Queue. doSubmit: F
I-SHOW , Project "111-22"
I-SHOW , PI "Dr. Jane D. Doe"
I-SHOW , Observer "John Doe"
I-SHOW , Operator "Pako"
I-SHOW , Topology "LOW"
I-SHOW , Pointing. azimuthCorrection: 0.0000000E+00
I-SHOW , Pointing. elevationCorrection: 0.0000000E+00
I-SHOW , Focus. focusCorrection: 0.0000000E+00
```

PAKO>















2020-2021

1999



*Love is a force\**

1992









100



|               |      |            |              |              |              |      |              |        |
|---------------|------|------------|--------------|--------------|--------------|------|--------------|--------|
| <b>SOURCE</b> | name | system     | longitude    | latitude     | velocity     |      |              |        |
|               | W30H | eq J2000.0 | 02:27:03.881 | +61:52:24.57 | LSR 0.000    |      |              |        |
|               |      | [h]        | 2.451078     |              | SET Topology | low  | SET doSubmit | NO (F) |
|               |      | [deg]      | 36.766172    | 61.873492    | SET Pointing | 0.0  | 0.0          |        |
|               |      | [rad]      | 0.64169075   | 1.07989616   | SET Focus    | 0.00 | [mm]         |        |

# OFFSETS

CATALOG SOURCE iram-J2000-LSR.sou

CATALOG LINE model.lin

|                 |           |                 |             |                |              |           |             |         |
|-----------------|-----------|-----------------|-------------|----------------|--------------|-----------|-------------|---------|
| <b>RECEIVER</b> | lineName  | frequency [GHz] | SB /doppler | /width         | /gain [dB]   | /tempLoad | /efficiency | /scale  |
| E090            | 12C0(1-0) | 115.271204      | U0 Doppler  | /Horizontal U0 | 0.050 -13. L | L         | 0.95 0.75   | antenna |
| E230            | 12C0(2-1) | 230.537990      | LI Doppler  | /Horizontal LI | 0.050 -13. L | L         | 0.91 0.52   | antenna |
|                 |           |                 |             |                |              |           |             | LI      |

# OTFMAP

(On-The-Fly OTF Map)

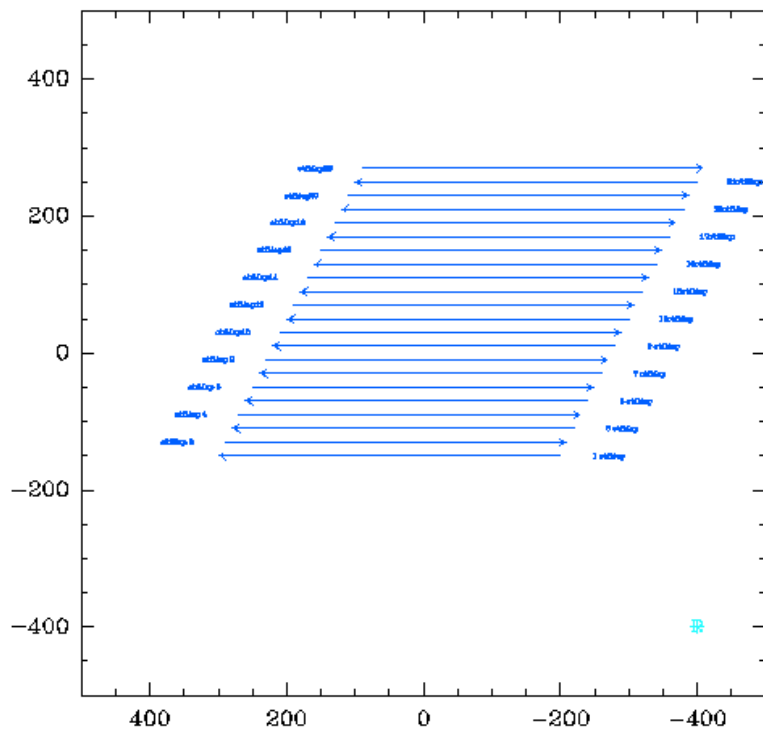
[arcsec]

SWFREQUENCY (Frequency Switching)

|                    |               |          |          |
|--------------------|---------------|----------|----------|
| xStart             | yStart        | -300.000 | -300.000 |
| xEnd               | yEnd          | 300.000  | -300.000 |
| --> lengthOtf      |               | 600.000  |          |
| /system            | projection    | F        |          |
| /reference         | xOffsetR      | -600.000 | 0.000    |
|                    | yOffsetR      | 0.000    |          |
| /croLoop           | systemNameRef | 0.000    |          |
| /nOtf              |               | 12       |          |
| /step dx dy        |               | 0.000    | 10.000   |
| /speed sStart sEnd |               | 5.000    | 5.000    |
| /tOtf              |               | 120.000  |          |
| /tReference        |               | 10.000   |          |
| /zigzag            |               | T        |          |

|          |          |                |
|----------|----------|----------------|
| fOffset1 | fOffset2 | [MHz]          |
| -3.900   | 3.900    | /receiver E090 |
| -11.700  | 11.700   | /receiver E230 |
| /tPhase  |          | 0.100          |

|                |       |         |        |        |             |      |       |           |
|----------------|-------|---------|--------|--------|-------------|------|-------|-----------|
| <b>BACKEND</b> | nPart | resolu. | bandw. | fShift | /receiver   | /mod | /perc | /lineName |
| 4MHz           | 1     | 4.000   | 4024.0 | 248.0  | E090 hor U0 |      |       |           |
| 4MHz           | 2     | 4.000   | 4024.0 | -248.0 | E090 ver UI |      |       |           |
| WILMA          | 1     | 2.000   | 3720.0 | 265.0  | E090 hor U0 |      | 100.0 |           |
| WILMA          | 2     | 2.000   | 3720.0 | -265.0 | E090 ver UI |      | 100.0 |           |
| WILMA          | 3     | 2.000   | 3720.0 | 265.0  | E230 hor LI |      | 100.0 |           |
| WILMA          | 4     | 2.000   | 3720.0 | 265.0  | E230 ver LI |      | 100.0 |           |
| VESPA          | 1     | 0.040   | 40.0   | 0.0    | E090 hor U0 |      | 90.0  | CO-1-0    |
| VESPA          | 2     | 0.040   | 40.0   | 0.0    | E090 ver UI |      | 90.0  | myLine2   |
| VESPA          | 3     | 0.040   | 40.0   | 0.0    | E230 hor LI |      | 90.0  |           |
| VESPA          | 4     | 0.040   | 40.0   | 0.0    | E230 ver LI |      | 90.0  | LIL0      |





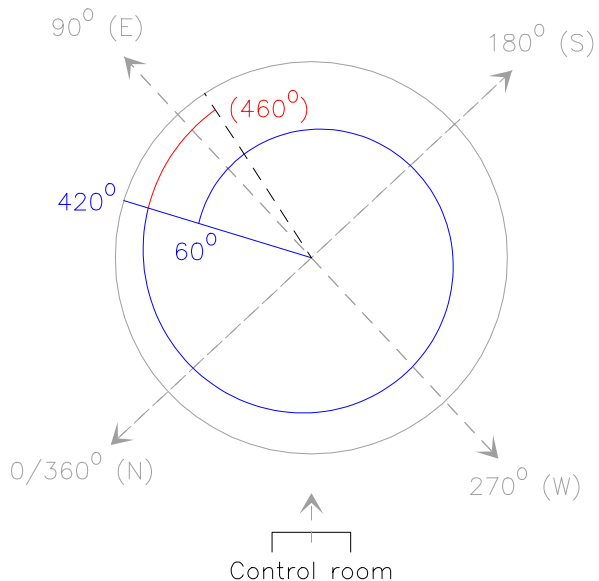




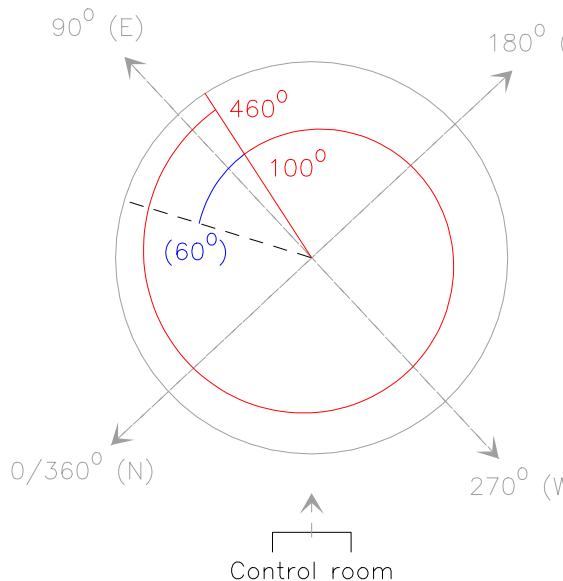
300



TOPO LOW : Az [ $60^{\circ}$ ,  $420^{\circ}$ ]



TOPO HIGH : Az [ $100^{\circ}$ ,  $460^{\circ}$ ]







120%



