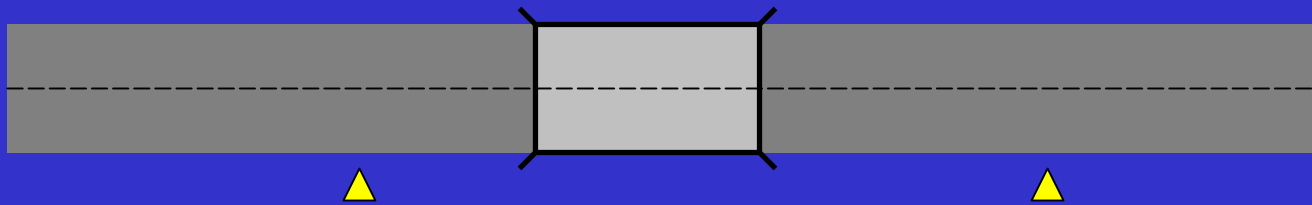


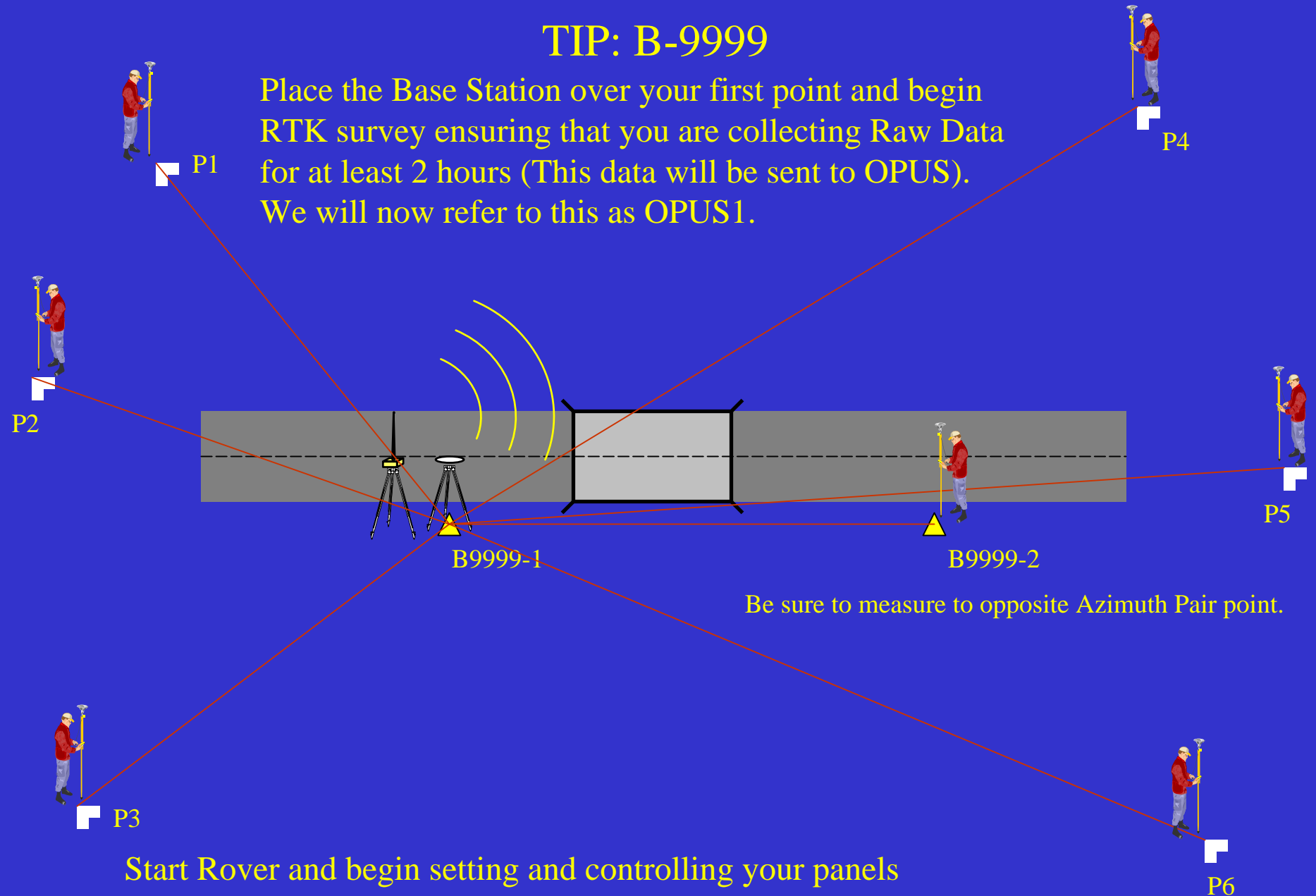
- Using OPUS to control small Standalone Projects such as Bridges



On a typical Bridge job we set an azimuth pair and have approximately 6-7 panels to control. Following is an example of how we can effectively control this site with 2 receivers.

TIP: B-9999

Place the Base Station over your first point and begin RTK survey ensuring that you are collecting Raw Data for at least 2 hours (This data will be sent to OPUS). We will now refer to this as OPUS1.

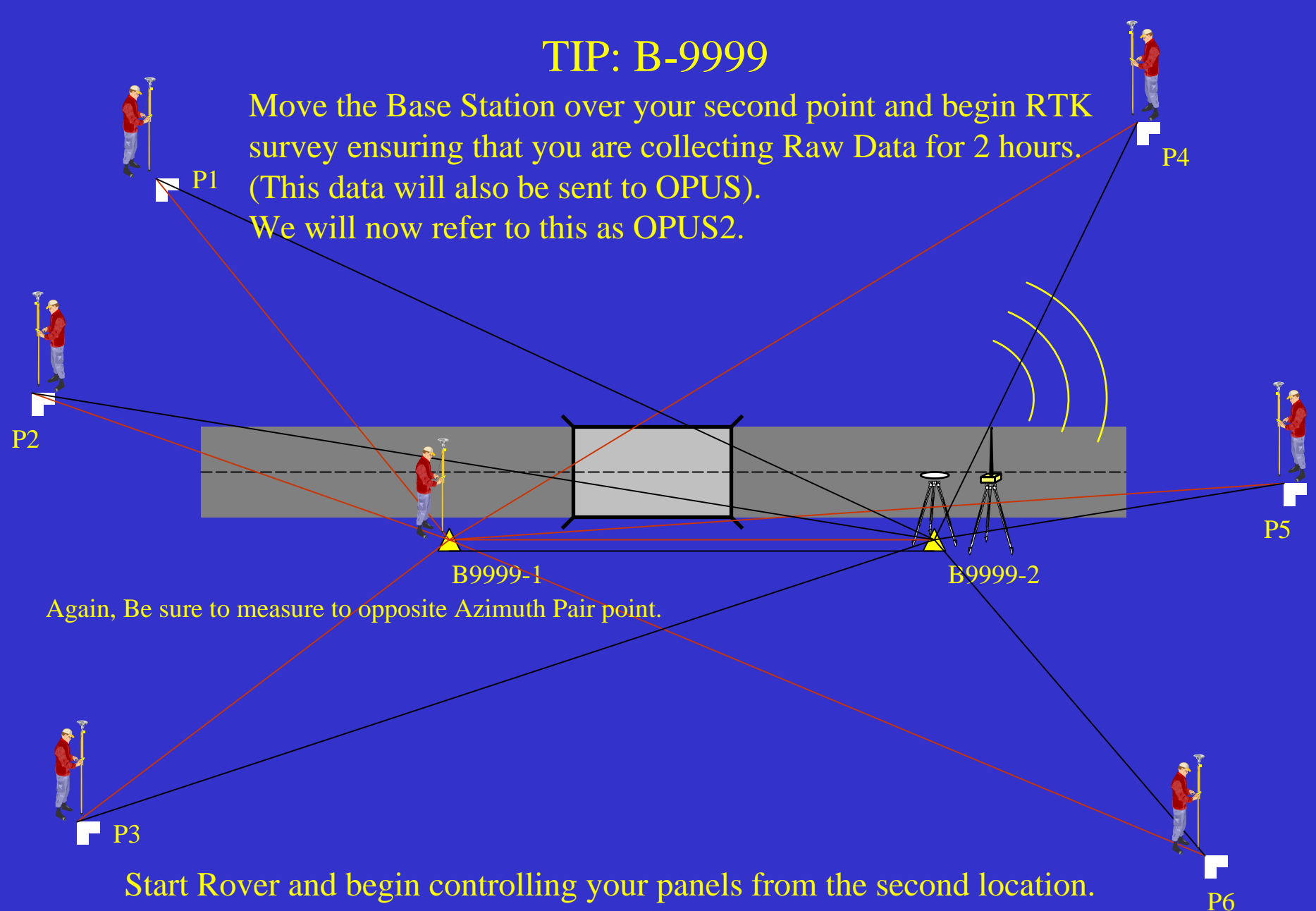


Be sure to measure to opposite Azimuth Pair point.

Start Rover and begin setting and controlling your panels

TIP: B-9999

Move the Base Station over your second point and begin RTK survey ensuring that you are collecting Raw Data for 2 hours. (This data will also be sent to OPUS). We will now refer to this as OPUS2.



Again, Be sure to measure to opposite Azimuth Pair point.

Start Rover and begin controlling your panels from the second location. If you use one controller and name the points the same the controller will provide comparisons in the field.

Field Work is now complete.

The following steps need to be taken to
finish the process.

Office Process

- Download Raw Data and RTK dc file.
- Convert both blocks of raw data to rinex format using Trimble's utility.
- Go to <http://www.ngs.noaa.gov/OPUS/> to upload files.
- Results should be back via email from OPUS in minutes.

Continued...

- Import dc file into Trimble Geomatics Office
- Update the initial base position for the first base to the coordinates provided by OPUS1.
- After a recompute everything in the dc file should be corrected relative to the first base location (OPUS1).

Continued ...

- The position for OPUS2 is only used for comparison to what was derived from OPUS1.
- Coordinates can now be utilized as needed.

NOTE: The coordinate values you get will be in Grid and will need to be localized !