

Illustration 4.37a and 4.37b Further dolphining explanation: Under the darker cloud areas we reduce speed (and descend) to take advantage of the lift, and if the cloud base comes too close we speed up again. When there's no lift we fly at the speed for best glide (hands up). If the descent increases we speed up even more by using the speed bar, and when we again meet lifting air we slow down, but we don't thermal.

We only start thermalling again when we have lost contact to the good lift band and need to get back up where the best lift is.

Sailplane pilots use dolphining to optimise their distance/time ratio, just like we do. But they go further whilst doing it – flights of more than 3000km have been logged using dolphin technique in wave conditions.

Blue line: min descent, red line: accelerated

Cloud streets over flatlands

If the conditions are right, cloud streets may even form over flatlands. Just as in the mountains these are the days when the lucky pilot can really go far in a short time.

The necessary conditions for cloud street formation in flatlands are as follows (according to M. Kreipl, see the bibliography in the back)

- While the wind direction must remain pretty constant at all levels the wind speed should increase with altitude
- The wind strength should be highest in the upper 1/3 of the space between the ground and the top of the cloud

