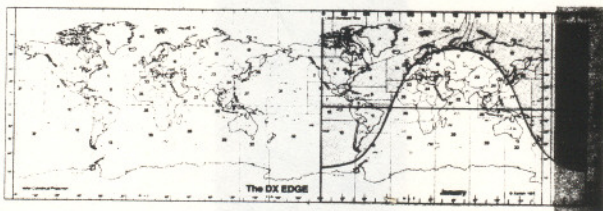


The DX Edge is a new device for determination of times of sunset (LSS) sunrise (LSR), and the location of the terminator (also known as the gray line or twilight zone). It is intended primarily for hams, but can be just as useful for medium-wave DXers. We BCB'ers need this info for three main purposes. First, to determine the times of daytimer s/on and s/off, pattern/power changes etc. This really only counts with U.S. stations as we're the only country to exploit the possibilities of D-layer absorption, at least with any precision. Second, to get a general idea of when to try for stations, either due to a darkness path or to a twilight path. Third, as another tool for IDing weak carriers which don't produce audio.

Until now, DXers have had a variety of ways to disclose sunlight times. The traditional IRCA LSS/LSR monthly maps (available separately or in the Almanac) are very convenient for domestics, since they are graduated in 15 minute intervals, just like the FCC rules. Another method, also in the IRCA Almanac, Foreign Log, and elsewhere is tables of monthly LSR/LSS for selected cities. This method has two obvious problems: it can't cover all target cities, and it doesn't give any idea of the shape of the gray line, or what general areas are light or dark. The most tedious method is to use formulae and a calculator; the advantage is precision and the ability to determine sunset or sunrise at the height of the ionosphere, which is what really counts for propagation. I recall Gordon Nelson's IDing of a rare Mozambique TA carrier in the 1960's using this method. Lastly, there is the deluxe, and very expensive, route--the map and globe which have internal moving shadow devices, available commercially, though I can't recall where.

Now there is the DX Edge, which costs \$14.95 postpaid, and is essentially a slide-rule device. It consists of a 12" x 4 3/4" plastic carrier, imprinted with a double map of the world, plus 12 monthly transparent slides showing the gray line and shaded in the areas of darkness. A time-zone scale is at the top, and it is equally easy to use PST, PDT, UTC, EST etc. By sliding the insert along you can see the motion that BCB propagation will have as the day progresses. In addition, it provides a quick visual way to determine local times worldwide.



Although the world map is finely detailed, it doesn't have U.S. states or cities marked, so the usefulness of the DX Edge is nil for determining U.S./FCC s/on/off times etc. The IRCA maps are ideal for this. However, for foreign long-haul DX, the DX Edge is a dream-come-true. The map detail, and time precision are both superior to the IRCA maps (did you ever try to

locate Kiribati on the IRCA maps? hi). Also, there are two additional features to the DX Edge: it shows all of the polar zones (albeit distorted by the modified-Mercator projection), and the double-map eliminates the mid-Pacific break of the IRCA maps.

The ability to slide the overlay back and forth is especially helpful in visualizing potential signal paths. The shape of the terminator stands out, unlike the cluttered IRCA maps; I feel like I'm dealing with a rotating planet, not just a moving local zone of sunset/sunrise. The DX Edge is nicely made and would probably stand up well at fog-bound coastal Beverage sites, hi. The achievable resolution is 5 or 10 minutes, although for best precision the formula method is still probably tops. A slight play exists between the sliding parts, but amounts to less than 5 or 10 minutes.

How would I improve the DX Edge? First it might be better to have all time zones labelled, especially UTC, rather than having the user write in the zones of his/her choice (the plastic is not easily marked with pen or pencil). I would make another version for SWLs, replacing the ham zones and prefixes with some country names. It would be nice to have 24 sliders or 2 lines per slider, so the accuracy would be higher at beginning/end of month periods. And finally, as an aesthetic improvement, I'd color water bodies light blue (the water/earth distinction being so important at MW)

All in all, the DX Edge is a joy to use. As the reviewer in QST (July '81) stated, it's such a "natural" that it makes you wonder why someone didn't do something like this before. I look forward to its constant use this fall as I try to figure out just when the Europe/Africa path to WCNA will produce some sweet DX.

It is available direct from the DX Edge, P.O. Box 834, Madison Square Station, New York, NY 10159. Gilfer Shortwave, P.O. Box 239, Park Ridge, NJ 07650 appears to be the only distributor, but the manufacturer writes that they may sell to other distributors sometime next year.