Issue with light leg lines (really anything that extends beyond the dataCoverage boundary, could be symbols or text):


Two countries have different tiling / cataloging schemes
Datasets $A$ and $B$ have different scales
Red line $=$ light leg line
If leg line originates from $B$ it will be obscured by skin of the earth in $A$

- In S-52 the leg line is not obscured because the two datasets will have a common nav purpose

Note: To ensure seamless presentation of a single intended usage (navigational purpose) all objects of same display priority from all cells in same intended usage must be drawn together.

Issue with insets:


Dataset A has inset a1 (two dataCoverages)
Dataset B has inset b1 (two dataCoverages)

MSVS = 22k
Results for S-57:

- Dataset A - not displayed
- Not loaded initially because CSCALE of a1 is $\sim 8 \mathrm{k}$
- Not loaded to fill the display because A likely does not have a more general navigational purpose
- Dataset B - displayed
- Loaded initially because CSCALE of $B$ is $\sim 22 k$

Results for S-101:

- Dataset A - displayed
- Loaded initially because MSVS intersects scale band of a1
- Even if the previous bullet was not true, it would be loaded to fill because 90 k min scale of a1 > MSVS
- Dataset B - displayed
- Loaded initially because MSVS intersects scale band of B
- There are also issues with displaying scale boundaries (S-52 rules rely on nav purpose)

More light leg line issues:

$\mathrm{L}=$ Light. Feature exists in A and C .
Red line $=$ leg line
Rectangles = datasets
In S-57/S-52 the red line is visible when:

- The leg line originates from a dataset with the same or better navigational purpose
- Visible in $A$ because $C$ has a better nav purpose, and because a generalized version of $L$ is duplicated in $A$
- Note that there may be two slightly offset lines if the positions of $L$ in $A$ and $C$ don't match exactly
- Visible in B because B and C share the same nav purpose (regardless of individual scales)
- Visible in $C$ because it is the originating dataset

In S-101, the red line is visible when:

- The leg line originates from a dataset with the same or larger maximum display scale
- Visible in A because C has larger max scale
- Visible in B when $\operatorname{maxDS}(\mathrm{B})<=\operatorname{maxDS}(\mathrm{C})$
- How is maxDS defined when multiple data coverages are present?
- What happens when B has a large scale inset chart?
- What happens if $A$ has a large scale inset chart?
- What happens if $A, B$, and $C$ have large scale insets?

