

## TES Daily Level 3 products

The algorithm for generating Daily L3 data is Delaunay triangulations on a latitude/longitude plane followed by 2-D interpolations of TES L2 data values for a fixed TES pressure level. The triangles across the poles are not used for interpolations at L3 points near the poles. The extrapolations are used instead for these points. The L2 global survey data are down-selected based on the L2 master quality flag before feeding to this L3 process. This algorithm should not introduce anomalous data values at L3 grids.

## TES Monthly Level 3 products

The algorithm for generating Monthly L3 data is binning averages inversely weighted by distances between L2 and L3 locations and retrieval errors in L2 profiles. The maximum, minimum, number of points, and the standard deviations of the data values in the lat/lon bin-box are provided in L3 data. These additional data quantify the variability of the data values for the given month. The L2 global survey data are down-selected based on the L2 master quality flag before feeding to this L3 process. This algorithm should not introduce anomalous data values at L3 grids.

## Usage

It is important to note that the main advantage of TES L3 data and image is for data browsing. For the Daily products, horizontal interpolation is done to fill unknown data gaps and no time interpolation is considered. For the Monthly products, horizontal bin-average is done and there are unknown data gaps in time and location for the month. Most scientific analysis therefore should treat TES Level 2 data as the primary data source.

## References

- [TES Level3 \(L3\) Data/Plot User's Guide](#) (PDF)
- [TES Level3 Algorithms, Requirements and Products](#) (PDF)