Below is a description of specific variables in the t=0-h, t=12-h and T=24-h SHIPS format data files.

Column             Description

  A                     Storm name

  B                     year

  C                     month

  D                     day

  E                     time (UTC)

  H                     Best track latitude (N)

  I                      Best track longitude (W)

  J                     Best track maximum 1-min wind (kt)

  K                    Best track pressure (mb)

  L                    dv\_t-24= t0h - t -24 h intensity change (from best track) (kt)

  M                   dv\_t-18 = t0h - t -18 h intensity change (kt)

  N                   dv\_t-12= t0h - t- 12 h intensity change (kt)

  O                   dv\_t-6 = t0h - t - 6 h intensity change (kt)

  P                   dv\_t0 = t0h - t0h intensity change (kt) (always should be 0)

  Q                   dv\_t+6 = t6h - t0h intensity change (kt)

  R                   dv\_t+12 = t12h - t0 h intensity change (kt)

  S                   dv\_t+18 = t18h - t0 h intensity change (kt)

  T                   dv\_t+24 = t24h- t0 h intensity change (kt)

  U                   dv\_t+30 = t30h - t0 h intensity change (kt)

  W                   dv\_t+36 = t36h - t0 h intensity change (kt)

  X                   dv\_t+42 = t42h - t0 h intensity change (kt)

  Y                   dv\_t+48h = t48h - t0 h intensity change (kt)

Z dv\_t+60h = t60h - t0 h intensity change (kt)

AA dv\_t+66h = t66h - t0 h intensity change (kt)

AB dv\_t+72h = t72h - t0 h intensity change (kt)

 AE                  Reynolds analysis observed (ambient) SST (deg. C)

 AH                   Cione cooled SST (no. 3) used in SHIPS (deg. C)

AJ Maximum potential intensity (MPI) determined from SST (kt)

AK Potential intensity= MPI - current storm intensity (kt)

 AQ                  Shallow SHIPS shear (850-500 mb) from 200-800 km radius (kt)

 AR                  Heading of above shallow SHIPS shear vector (90.0 deg. heading

indicates pure westerly shear) (deg)

 AT                Heading of 850-200 mb shear vector within 500 km radius after vortex

removal that is used in the operational SHIPS model (associated with

variable BU described below)

 BA                  Low-level (850-700 mb) RH from 200-800 km radius (%)

 BB                  Mid-level (700-500 mb) RH from 200-800 km radius (%)

 BC                 Upper-leave (500-300mb) RH from 200-800 km radius (%)

 BH               1000 mb RH (%)

 BI                1000 mb T (° C)

BJ 1000 mb height deviation (m)

 BT              Shear magnitude from 850-200 mb after vortex removal from 0-500 km

used in operational SHIPS /LGEM models (kt)

 BU               Shear magnitude from 850-200 mb of generalized shear takes into account all mandatory levels from 0-500 km after vortex removal (kt)

CL Std. deviation of GOES-IR brightness temperature from 50-200km (° C).

Below are microwave predictors that were evaluated and provided by Chris Rozoff formerly of CIMSS and now of NCAR/RAL. Predictors were evaluated from the horizontal polarization of 37-GHz MW data (not time dependent). The 23 MW predictors (along with the column where they can be found) are as follows:

IQ) Time (hr) of the MW image, relative to this case

IR Min BT from 0 to 30 km radius (deg K)

IS) radius of min BT from 0 to 30 km radius (km)

IT) max BT from 30 to 130 km radius (deg K)

IU) radius of max BT from 30 to 130 km radius (km)

IV) avg. BT from 30 to 130 km radius (deg K)

IW) avg. BT from 0 to 100 km (deg K)

IX) Stan. Dev. of BT (deg K\*10), r=0-100 km

IY) Avg. BT from 100 to 300 km (deg K)

IZ) Std. Dev. of BT (deg K), r=100-300 km)

JA) Percent area r=50-200 km of BT > 275

JB) min eye BT (deg K)

JC) max eye BT (deg K)

JD) Avg. eye BT (deg K)

JE min ring BT (deg K)

JF) max ring BT (deg K)

JG) Avg. ring BT (deg K)

JH) Stan. Dev. ring BT (deg K)

JI) Difference between eye and ring BT (deg K)

JJ) Eye radius (km)

JK) Ring width (km)

JL) Percent of eye with PCT >= 270 K and Tb (V pol) < 265 K (%)

JM) Percent of ring with PCT < 270 K or (PCT >= 270 K and Tb >= 265 K) (%)