TSI Model Output routines

1. We notice a repeat ‘1’ at the start of the ‘DOY’ column in the tis\_mod\_mr2\_13Feb13.txt file. Most likely this is just an indexing event.
   1. Judith will look into this indexing.
2. Header: Does the header have everything you would like to have? We can automate the creation of the header, so, for example, if multiple regression coefficients changed, these would automatically be imported without needing to change the hardcoding in the header.
   1. Judith?
3. Time: Currently, there is Year, DOY, and Day number. We will need to add an ISO compliant ‘Calendar Time’. Would you like to have all four time variables, or just a subset? Would you like to continue having the other ascii columns with the TSI\_data, ps function and px functions?
   1. Format it so the NOAA folks get Year/month/date (ISO format), model TSI, uncertainty, quality indicator flag (0/1 – indicative of concern in sunspot blocking file). This would be different than how data file is currently structured (Judith provided it to us in this way, so we could more easily understand the individual code steps).
   2. Uncertainty, for now, we could have a statistical uncertainties of the coefficients in the model based on TIM (assumed perfect).Judith will provide this for us for starts.
   3. In future versions, as validation efforts ramp up, we can include more realistic uncertainties than b. (and managed by version number).
4. Missing data: What do you think about exchange -99 for NaN? We have noticed that for SORCE-era data, missing data is a ‘0.’ We would be consistent (either -99 or NaN) based on decision above.
   1. Judith prefers will keep as -99. No NaN’s, please.
   2. The ‘0’ values in SORCE-era TSI data: Judith will update code so these are reflected as -99. There is no significance to the -99, or -999; we can pick either to be consistent.