

Sat. Photogr. CE697 Homework 3  
assigned 13 Feb 2017, due 1 week (20<sup>th</sup>).

1. Fix errors (if necessary) in HW2 to get same results as published
2. put in the form of a function with syntax:

$$\begin{bmatrix} x \\ y \\ z \end{bmatrix} = \text{fixg}(l, s, h)$$

with support data in global variables as:

global ephdata attdata  
global eph-start-time first-hrs-time avg-hrs-rate dtl dte  
global X<sub>0</sub> Y<sub>0</sub> Z<sub>0</sub> det-pitch (note: Z<sub>0</sub> just Princ. Dist.)  
global scan-direction

3. construct main script to

- (a) import support data & measurements
- (b) call function
- (c) compute + show misclosure for GCP

4. add to function:

- (a) atmospheric refraction correction, and
- (b) velocity aberration correction

for GCP1, run revised function on measurement of GCP1 (use my measurement!) and show misclosure  $e, n, h$

note: There will be a surprise, give your hypothesis about the surprising results.