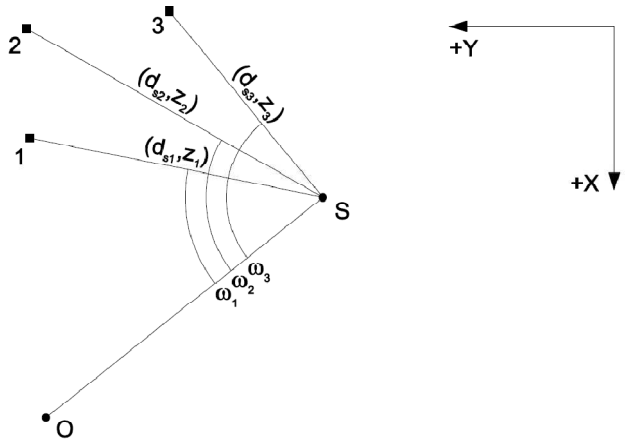
Spatial polar method

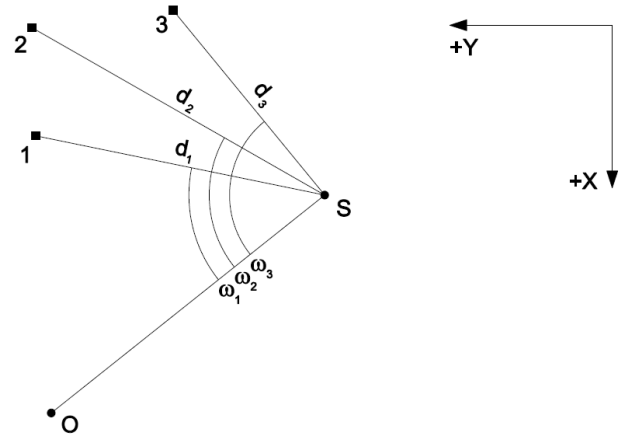
Total station was centered and levelled over the standpoint ***S***. Height of the instrument v_p was determined, point ***O*** was set as orientation point and then measuring of new points ***1***, ***2*** and ***3*** was done. During the measuremnet of the characteristic points the height of the target v_c was changed. Calculate spatial coordinates (X_i, Y_i, H_i) of new points ***1***, ***2*** and ***3*** from known standpoint coordinates X_S, Y_S, H_S, from orientation point coordinates X_O, Y_O, H_O and from measured horizontal angles ω_i, zenith angles z_i and slope distances d_{si}.



Picture is only ilustrative and doesn´t correspond with specific task

Setting-out elements

Calculate polar setting-out elements ω_i (setting-out angle) and d_i (setting-out distance) from known standpoint coordinates X_S, Y_S, H_S, from orientation point coordinates X_O, Y_O, H_O and from coordinates X_i, Y_i, H_i of points ***1***, ***2*** and ***3.***



Picture is only ilustrative and doesn´t correspond with specific task