==========
 Description of the content of the directory:
ftp://geoftp.ibge.gov.br/SIRGAS/Resultados/Combinacao/
==========

The files of this directory are the weekly results, in SINEX (SNX) format, of combined solutions from results provided by four processing centres:

CIMA : Instituto de Geodésia y Geodinámica de la Faculdad de Ingeniería de la Universidad Nacional de Cuyo (Mendoza, Argentina)
DGFI : Deutsches Geodätisches Forschungsintitut (Alemanha)
IGM-Ec: Instituto Geográfico Militar de Ecuador (Equador)
IBGE : Instituto Brasileiro de Geografia e Estatística (Brasil)
IGAC : Instituto Geográfico Agustín Codazzi (Colômbia)
LUZ   : Laboratorio de Geodesia Física y Satelital, Universidad del Zulia (Venezuela)
SGM-Uy: Servicio Geográfico Militar del Uruguay (Uruguay)

 Each Processing Centre is responsible for the processing of a group of stations that belong to SIRGAS-CON network.
More information about SIRGAS-CON network is available at www.sirgas.org.

In this directory can be found two types of solutions: loosely constrained weekly solutions (which can be used for future computations) and constrained weekly solutions (the solutions is highly constrained to a set of IGS05 stations). The following identification are adopted for SINEX files:

CCCwwwwS.SNX   ==> loosely constrained weekly solutions
CCCyyPwwww.SNX ==> constrained weekly solutions
 where:
  CCC = identification of the Center of Processing
  wwww = GPS week
  yy = year with 2 digits, p.ex: 2010 = 10

Strategy of Combination:
(1) Constraints are removed from the weekly solutions of each Processing Center, using free network solution strategy;
(2) The free network solution of each processing center of is aligned to a set of stations that belong to IGS05 (2000.0) Reference network applying the conditions of “no net rotation” and “no net translation”. The IGS05 stations are: BRAZ, CHPI, CONZ, CRO1, GOLD, ISPA, LPGS, MANA, MDO1, OHI2, PIE1, SANT, SCUB, UNSA and VESL.

(3) The coordinates from step (2) of each processing center, are compared with IGS05 (IGSyyPwww.SNX solutions) and between them to identify possible high residues. The stations with residuals bigger than 10 mm in the horizontal components and 20 mm in the vertical component will be analised. In the case of station exclusion the stages (1) and (2) will be repeated in order to refine the final solution and consequently the estimate the variance factor.
(4) Covariance matrix of each solution is scaled by the variance factor or factor of scale.
(5) The normal equations of each solution are combined to produce the loosely constrained weekly solution applying the weight of 1 meter in all the stations (OUTPUT: IBGwwwwS.SNX).
(6) The normal equations of each solution are combined to produce the constrained solution applying a weight of 1E-04 meters for IGS05 stations mentioned in the step (2) (OUTPUT: IBGyyPwwww.SNX).