## Accepted Manuscript

Interference fold patterns in regional unidirectional stress fields: A result of local kinematic interactions

Sergio P. Neves, Tiago A.S. Santos, Paulo C. Medeiros, Laís Q. Amorim, Dionísio C.G. Casimiro

PII: S0191-8141(17)30317-6

DOI: 10.1016/j.jsg.2018.04.012

Reference: SG 3631

To appear in: Journal of Structural Geology

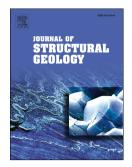
Received Date: 22 December 2017

Revised Date: 23 March 2018

Accepted Date: 6 April 2018

Please cite this article as: Neves, S.P., Santos, T.A.S., Medeiros, P.C., Amorim, L.Q., Casimiro, D.C.G., Interference fold patterns in regional unidirectional stress fields: A result of local kinematic interactions, *Journal of Structural Geology* (2018), doi: 10.1016/j.jsg.2018.04.012.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



## ACCEPTED MANUSCRIPT

1	Interference fold patterns in regional unidirectional stress fields: A result
2	of local kinematic interactions
3	Sergio P. Neves, Tiago A. S. Santos, Paulo C. Medeiros, Laís Q. Amorim, Dionísio C.
4	G. Casimiro
5	Departamento de Geologia, Universidade Federal de Pernambuco, 50740-530, Recife,
6	Brazil
7	
8	Abstract
9	Folds are commonly found in association with ductile shear zones. However,
10	superimposed folding contemporaneous with shearing is rarely reported. Here, we
11	describe a macroscopic fold interference pattern with geometry intermediate between
12	types 1 and 2 related to development of adjacent transcurrent shear zones. The
13	interference fold pattern is located in a compartment bounded, on the eastern side, by an
14	ENE-trending, dextral shear zone that connects with a NE-trending, sinistral shear zone,
15	and, on the western side, by a NE-trending sinistral shear zone. A first folding episode
16	produced NW-trending, SW-verging inclined folds and a later one NE-trending, upright
17	folds. Folds of the first event are attributed to a local contractional strain field induced
18	by the growth of the shear zones with opposed kinematics whereas the later folding
19	episode and nucleation of the western shear zone reflects regional NW-SE contraction.
20	Folding of a macro-scale NW-trending fold by NE-trending folds produced the fold
21	interference structure. In contrast with most cases of types 1 and 2 fold interference
22	patterns, in the present case no change on the orientation of regional stress axes is

23 required.

Download English Version:

## https://daneshyari.com/en/article/10120757

Download Persian Version:

https://daneshyari.com/article/10120757

Daneshyari.com