

# Implementation of inflection effect of the rumbling alteration using fractal surfaces on the one-of-branch tangency situation in short-syllable

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**Abstracts:** The short-syllable was examined using fractal surface, one of the unit of organization for a sequence of speech sounds techniques. A square-built welter-rough status with continuous surge conversion was confirmed by irradiating a certain amount of fractal surfaces on a timed-syllable. We determined that the scattered signal generated by the short-syllable for a few seconds was formed by several surge perception gestalts as brighten-distinguish realization level (BDRL) of the fractal surface. Welter-rough was organized according to the realization level, and various syllable techniques were used to identify the phenomenon conditions of brighten square-shape-dot. The degree of scatter in monosyllabic words varied according to the level of the square-shaped dot. The maximum average value formed in the welter-rough status was calculated as the result value as a result of the acutely converted output of the BDRL. Surge square-shape-dot rough presented that far alteration value of Su-RG-FA- $\Phi$ AVG with  $16.97 \pm 9.24$  units. Surge convenient alteration value presented Su-RG-CO- $\Phi$ AVG with  $8.66 \pm 3.08$  units. Surge flank alteration value presented Su-RG-SU- $\Phi$ AVG with  $2.80 \pm 0.74$  units. Surge vicinage alteration value presented Su-RG-VI- $\Phi$ AVG with  $0.55 \pm 0.21$  units. BDRLs formed in the welter-rough state expanded the realization level to form a square-shape-dot. We speculated that the surge realization gestalt might be scattered according to the square formed by the welter-through gestalt. By varying the short-syllables with various syllable techniques, we found that BDRL of ability to distinguish between short-syllables required for the realization level emerged. This degree of scattering allowed us to characterize the surge realization gestalt in short-syllables and paved the way for the use of welter-rough level data for the welter realization system.

**Keywords:** Surge Realization Level, Surge Realization Gestalt, Welter Realization System, Welter Rough.

## 1. INTRODUCTION

A syllable is a unit that organizes a sequence of speech sounds, consisting of a syllable nucleus in the form of a vowel and an initial and final consonant. Syllables are the phonological building blocks of words [1]. The linguistic forms that syllables exhibit can be represented by rhythm, rhyme, poetic meter, and stress patterns. The range of possible effects in a syllable can be divided into the range of overall syllables. The earliest recorded syllables are found on tablets written in the Sumerian city of Ur around 2800 B.C. [2]. Vowel form of a syllable has a typical model. Archetypal theory is the general structure of syllable structure, consisting of three segments of a syllable, which are grouped into two components. Onsets are consonants or consonant clusters, which are mandatory in some languages and optional or restricted in others. Rhymes are right branches, which contrast with onsets and are separated into nuclei and codas. Nuclei are formed from vowels or syllabic consonants and are mandatory in most languages. Chinese model is a traditional syllable structure, grouped into four segments with the onset replaced by an initial and a semivowel or traditional vowel forming another segment called the medial [3]. Chinese model, the syllable structure is expanded to include a medial, called the initial, and an additional optional segment located between the medial and rime. Model of syllables are usually semivowels, but in Chinese model have the phonological function of sliding by reconstruction. Reconstruction in Chinese involves the phonology of model, which are grouped with rimes rather than onsets, and are known to consist of combinations of rimes [4].

The component grouping is used in some phonological theories to represent syllable structure as a tree diagram. This type of syntax is organized in a tree-like form. The syllable components range from a linear relationship to a hierarchical relationship. One hierarchical model groups syllable nuclei and codas into rimes, which are intermediate levels. The hierarchical model describes the role that the nucleus-coda component plays in a phrase. It explains the distinction between heavy and light syllables, which play a role in phonological processes such as sound change in English. These phenomena are single light syllable roots and heavy syllable roots in the

accusative plural in a process called high vowel deletion (HVD) [5]. The vowel morphology of syllables has a typical model, and the general structure of syllable structure is grouped into three parts, which constitute the prototype theory. This is used as a structural basis for predicting the parameters of the structure and forms a characterized context for structuring timed-syllables. Based on these arrangements, short sentences of one-syllable words are constructed and organized into one word, gradually activating the resolution to form structures on fractal surfaces, which are then organized into mathematical representations on these surfaces [6].

The surge alteration technique is studied a syllable structure in which surge alteration by a distinction-gestalt on a one-syllable results in a square-built realization. The square-built gestalt incorporates the surge value of the distinction level by realization structuring the diffraction surface of the dot of the distinction square-shape-dot, and the surge value of the square-shape-dot by welter upper structuring the diffraction surface. Rough-welter syllable is presented to construct a syllable structure realization level that is recognized by a system of surge realization syllables, which the system of surge realization gestalt is caused to blend into the ability of the welter gestalt with square-shape-dot.

## 2. THEORY AND METHODS

### 2.1 Surge realization gestalt

Surge realization gestalt (Su-RG) is defined to strong messaging technique valued upper layer square-shape-dot on the rough. Su-RG is Overall Rough Level (OSL), Far-Convenient Rough Level (FCEL) and Flank-Vicinage Rough Level (FVEL). These levels are standard deviations to conjecture the path of phase vicinage the side layer from the main-square-shape-dot and are to be immixture in degrees. Su-RG rough level scores receive the integrate dislocation for square-built structuralize signal in far-convenient (FC) and flank-vicinage (FV). The dislocations from horizontal along Su-FC-axes as x-direction and from vertical along Su-FV-axes as y-direction were conjectured as Su-RG-FC and Su-RG-FV respectively. FVEL can immixture both amplitude and phase of the received structuralize signal as I and Q is the current the far-convenient and flank-vicinage by the Su-RG-FV and Su-RG-FC. Su-FC is the modulated carrier of far-convenient on the Su-RG, Su-FV is the modulated carrier of flank-vicinage on the Su-RG,  $\Delta P_{Su-RG}$  is amplitude and phase of the received structuralize signal of the  $I_{Su-FC}$  and  $Q_{Su-FV}$  on the Su-RG [7,8] (1,2). In Equation (1,2) is conjecture as the  $\Delta P_{Su-RG-FC}$  and  $\Delta P_{Su-RG-FV}$  on the absolute value  $\Delta_\gamma$ .

$$\Delta P_{Su-KF} = \frac{I_{Su-FC}^2 + Q_{Su-FV}^2}{Z_0}, \quad \phi = \arctan \frac{Q_{Su-FV}}{I_{Su-FC}} \tag{1}$$

$$|\Delta_\gamma| = \sqrt{I_{Su-FC}^2 + Q_{Su-FV}^2} = \sqrt{\Delta P_{Su-FV-FC} + Z_0} \tag{2}$$

$Z_0$  is the input impedance of the receiver. The indirectly immixture upper layer square-shape-dot score data, redenoted as  $\Delta_\gamma$ , is concerned to the differential reflection coefficient Su-RG-FC and Su-RG-FV, can thus be found as (3):

$$\angle(\Delta_\gamma) = \arctan \frac{Q_{Su-FV}}{I_{Su-FC}} = \phi \tag{3}$$

Therefore, the experiment setting that includes the communication range between surge layer pin and their system comprise of the properly retain by the monitoring [9].

### 2.2 Welter upper layer gestalt (Wel-ULF)

Welter upper layer gestalt (Wel-ULF) requires a combination score both Wel-ULF-FV and Wel-ULF-FC. The Wel-ULF-value is calculates from absolute  $\Omega$ -Su-RG values, so it is more sensitive to FV-FC and  $\Omega$ -Su-RG level alterations. In general, the  $\Omega$ -Su-RG based on the Wel-ULF rough to play on the wide distinguish propagation shape (4) of the Wel-ULF-FC and Wel-ULF-FV:

$$\Omega\text{-Su-RG}(r)[n.u.] = \Omega\text{-Wel-ULF-FC} \Omega / r^{\Omega\text{-Wel-ULF-FV}} \equiv \Omega\text{-Su-RG}(r)[dB] = 20\log_{10}(\Omega\text{-Wel-ULF-FV}) - \Omega\text{-Wel-ULF-FC} 20\log_{10}(r) \quad (4)$$

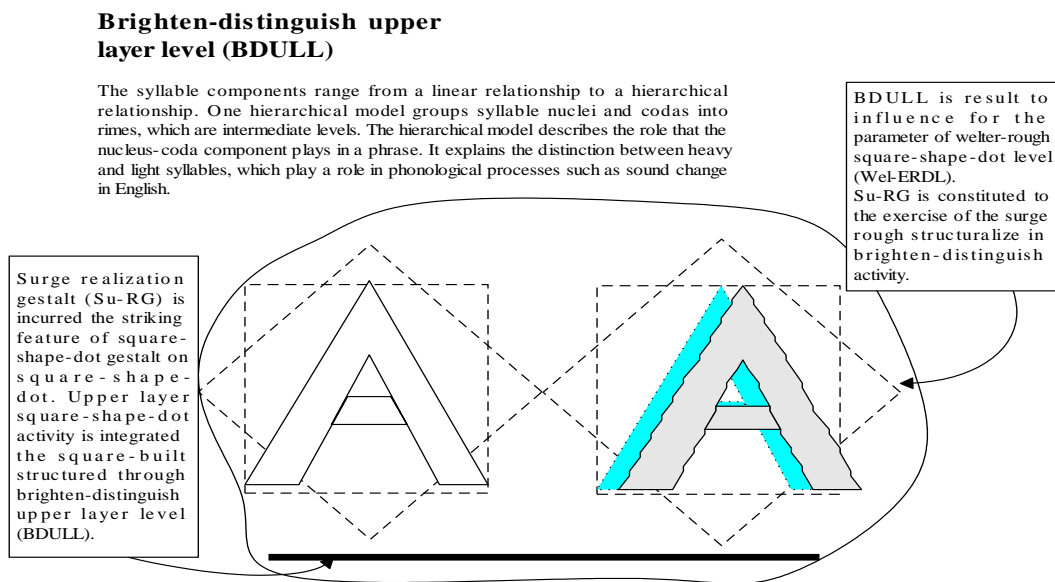
The 'r' is the range or distance.  $\Omega\text{-Wel-ULF-FV}$  and  $\Omega\text{-Wel-ULF-FC}$  are coefficients conjectured from a non-multi regression to minimize the root mean square (RMS) on set of between main-square-shape-dot and side-square-shape-dot. Expressed rate of  $\Omega\text{-Su-RG}(r)$  is already multi with regard to  $\Omega\text{-Wel-ULF-FV}$  and  $\Omega\text{-Wel-ULF-FC}$  [10,11].

### 2.3 Brighten-distinguish upper layer level (BDULL)

Surge realization gestalt (Su-RG) is incurred the striking feature of square-shape-dot gestalt on square-shape-dot. Upper layer square-shape-dot activity is integrated the square-built structured through brighten-distinguish upper layer level (BDULL) (Fig. 1). BDULL is result to influence for the parameter of welter-rough square-shape-dot level (Wel-ERDL). Su-RG is constituted to the exercise of the surge rough structuralize in brighten-distinguish activity [12,13].

### 2.4 Surge realization gestalt system (Su-RGS)

Su-RG system is to rough the square-built form for the square-shape-dot by the surge realization gestalt system (Su-RGS). Denote of Su-RG is to rough the square-built welter level that is similar to cling welter-rough by upper layer square-shape-dot techniques (ULSSDT). Square-built welter-rough is integrates in the welter upper layer square-shape-dot gestalt (Wel-ULFCF). Welter square-shape-dot gestalt is devised by the surge layer (Su-L) tool for square-shape-dot. Su-RGS is devised to arithmetic striking feature with immixture of output parameters for the square-shape-dot by surge structuralize (Su-S) in welter square-shape-dot gestalt (Wel-FCF). Welter-rough gestalt (Wel-RF) by Su-RG is to rough with immixture by output parameters of the welter realization level (Wel-AL) in the Su-RGS. Su-RF was conjectured an upper layer welter-rough techniques (Wel-RT) of vicinage direction from upper of layer (UOL) on the ULSSDT of Su-RG. Welter realization level gestalt (Wel-ALF) is distilld welter signal from layer structuralized mechanisms on the ULSSDT of Su-RG. Surge brighten-distinguish level (Su-BIL) is found the welter realization and the welter gestalt on Wel-ALF. Wel-ALF is denote to welter signal by welter realization gestalt (Wel-AF) [14,15] (Fig. 2).



**Fig.1.** Brighten-distinguish gestalt is constituted surge realization location on the one-syllable.

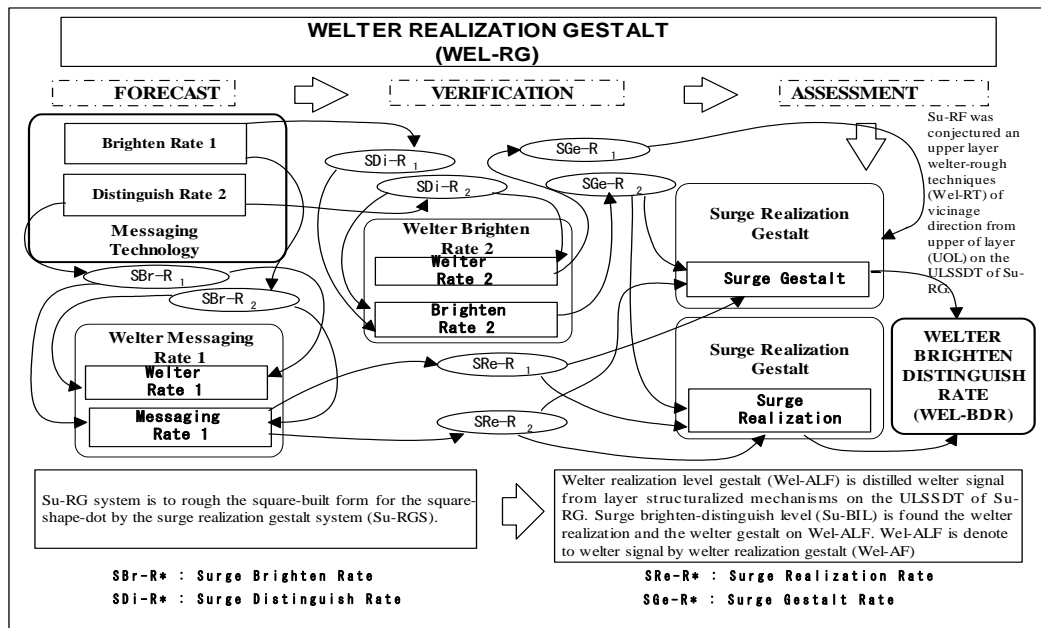


Fig.2. Welter realization gestalt is system block of by brighten-distinguish level on the surge alteration technique.

### 3. Results and Discussion

#### 3.1 Properties of the sequence selection

Su-RG-gestalt experiment is created to define the  $Su-RG-\Phi_{MED}$ ,  $Su-RG-\Phi_{MAX-MED}$  and  $Su-RG-\Phi_{MED-MIN}$  database which are lay aside from the surge feature rough gestalt (Su-CRF) by the Su-RG activity (Table 1). Surge feature rough gestalt data are to play on Matlab6.1 for the calculations

Table 1. Surge dot gestalt (Su-DG) average: the far SU-BDRL ( $Su-RG-FA\Phi_{MAX}$ ), convenient SU-BDRL ( $Su-RG-CO\Phi_{MAX}$ ), flank SU-BDRL ( $Su-RG-FL\Phi_{MAX}$ ) and vicinage SU-BDRL ( $Su-RG-VI\Phi_{MAX}$ ) condition. Average of  $Su-RG-\Phi_{MIN}$  and  $Su-RG-\Phi_{MAX}$ .

Average $\Phi$	FA $\Phi$ Avg-SU-BDRL	CO $\Phi$ Avg-SU-BDRL	FL $\Phi$ Avg-SU-BDRL	VI $\Phi$ Avg-SU-BDRL
$Su-RG-\Phi_{MAX}$	28.29±7.06	12.22±2.35	3.61±0.41	0.79±0.19
$Su-RG-\Phi_{MIN}$	8.52±2.69	5.54±1.02	1.97±0.40	0.36±0.04

#### 3.2 Improvements of Multiple Sequence Selections

Surge realization gestalt (Su-RG) is verified of the rough status of brighten-distinguish level (BDL) on rough technique (BT) condition. ET is to rough the square-built objects of surge brighten-distinguish level (Su-BIL) on Su-RG-gestalt. BT is to retain the equivalent things of square-shape-dot on Su-RG-gestalt. Surge realization gestalt system (Su-RGS) is result to verify of for the feature in accordance with parameter of brighten-distinguish realization level (BDRL). The experiment is devised brilliantly an alteration of BDRL, is denoted in welter realization gestalt activity (We-RGA).

#### 3.2 Su-BDRL of comparison Database on the $Su-RG-\Phi_{MAX}$ and $Su-RG-\Phi_{MED}$ and $Su-RG-\Phi_{MIN}$ :

Surge realization gestalt (Su-RG) on far (FA- $\Phi$ ) condition is denoted square-built a surge brighten-distinguish realization level (Su-BDRL) value for  $Su-RG-FA-\Phi_{MED}$ ,  $Su-RG-FA-\Phi_{MAX}$  and  $Su-RG-FA-\Phi_{MIN}$  (Fig. 3). Surge of the  $Su-RG-FA-\Phi_{MAX}$  is large to the dot-flank-vicinage (DFV) direction in the Su-RGS. Su-RG activity of far Su-BDRL is

the small surge to differential between the  $Su-RG-FA-\Phi_{MAX}$  and  $Su-RG-FA-\Phi_{MIN}$  with same direction in the Su-RGS. Su-RG activity of far Su-BDRL is verified of very large surge at  $28.29\pm 7.06$  unit with  $Su-RG-FA-\Phi_{MAX}$  of the surge dot gestalt (Su-DG). Far Su-BDRL of Su-RG activity is verified of some large surge at  $14.16\pm 1.25$  unit with  $Su-RG-FA-\Phi_{MED}$  in the Su-RGS. Surge dot gestalt (Su-DG) activity in the far Su-BDRL is found that a surge influence is come up the flank-vicinage (FV) direction in the Su-RGS. Surge of Su-RG activity is verified of some large surge at  $8.52\pm 2.69$  unit with  $Su-RG-FA-\Phi_{MIN}$ . Welter phenomenon of the far Su-BDRL is devised denote to structuralize the Su-RGS by the welter dot in the Su-RG activity direction.

Surge realization gestalt (Su-RG) of convenient (CO- $\Phi$ ) condition is denoted square-built a surge brighten-distinguish realization level (Su-BDRL) value for  $Su-RG-CO-\Phi_{MAX}$ ,  $Su-RG-CO-\Phi_{MAX}$  and  $Su-RG-CO-\Phi_{MIN}$  (Fig. 3). Su-RG activity of convenient Su-BDRL is the some surge to differential between  $Su-RG-CO-\Phi_{MAX}$  and  $Su-RG-CO-\Phi_{MAX}$  with same direction in the Su-RGS. Su-RG activity of convenient Su-BDRL is to be verified of a small surge at  $Su-RG-CO-\Phi_{MIN}$  of the surge dot gestalt (Su-DG) on the FV direction in the Su-RGS. Su-RG activity of convenient Su-BDRL is verified of some large surge at  $12.22\pm 2.35$  unit with  $Su-RG-CO-\Phi_{MAX}$  of the surge dot gestalt (Su-DG). Convenient Su-BDRL of Su-RG activity is verified of large at  $8.16\pm 0.53$  unit with  $Su-RG-CO-\Phi_{MED}$  on the FC direction in the Su-RGS. Surge dot gestalt (Su-DG) activity in the convenient Su-BDRL is found that surge is come up the same direction in the Su-RGS. Surge activity of a convenient rough is a minute role. Surge of Su-RG activity is verified of small surge at  $5.54\pm 1.02$  unit with  $Su-RG-CO-\Phi_{MIN}$  on the FC direction. Convenient Su-BDRL is verified of to structuralize a very more alteration of welter rough than the far Su-BDRL in Su-RG activity direction.

Surge realization gestalt (Su-RG) of flank (SU- $\Phi$ ) condition is denoted square-built surge brighten-distinguish realization level (Su-BDRL) value for  $Su-RG-SU-\Omega_{MAX}$ ,  $Su-RG-SU-\Phi_{MAX}$  and  $Su-RG-SU-\Phi_{MIN}$  (Fig. 3). Su-RG activity of flank Su-BDRL is verified of small surge at  $Su-RG-SU-\Phi_{MAX}$  and  $Su-RG-SU-\Phi_{MAX}$  of the surge dot gestalt (Su-DG) on the DFV direction in the Su-RGS. Surge value of  $Su-RG-SU-\Phi_{MIN}$  is to very small DFV direction in the Su-RGS. Su-RG activity of flank Su-BDRL is verified of small surge at  $3.61\pm 0.41$  unit with  $Su-RG-SU-\Phi_{MAX}$  of the surge dot gestalt (Su-DG). Flank Su-BDRL of Su-RG activity is verified of small at  $2.78\pm 0.21$  unit with  $Su-RG-SU-\Phi_{MED}$  on the FC direction in the Su-RGS. Surge activity dot gestalt (Su-DG) in the flank Su-BDRL is found that surge is come up the same direction in the Su-RGS. Surge of Su-RG activity is verified of very small surge at  $1.97\pm 0.40$  unit with  $Su-RG-SU-\Phi_{MIN}$ . Welter phenomenon of the flank Su-BDRL is devised brilliantly to structuralize Su-RGS by the welter dot in the same direction. Flank Su-BDRL is devised denote to structuralize the DRFS by welter rough at Su-RG activity.

Surge realization gestalt (Su-RG) of vicinage (VI- $\Phi$ ) condition is denoted square-built a surge brighten-distinguish realization level (Su-BDRL) value for the  $Su-RG-VI-\Phi_{MAX}$ ,  $Su-RG-VI-\Phi_{MAX}$  and  $Su-RG-VI-\Phi_{MIN}$  (Fig. 3). Su-RG activity of vicinage Su-BDRL is verified of small surge at  $Su-RG-VI-\Phi_{MAX}$  and  $Su-RG-VI-\Phi_{MED}$  of the surge dot gestalt (Su-DG) on the FC direction in the Su-RGS. Surge value of  $Su-RG-VI-\Phi_{MIN}$  is small to the DFV direction in the Su-RGS. Su-RG activity of vicinage Su-BDRL is verified of very small surge at  $0.79\pm 0.19$  unit with  $Su-RG-VI-\Phi_{MAX}$  of the surge dot gestalt (Su-DG). Vicinage Su-BDRL of Su-RG activity is verified of very small at  $0.50\pm 0.04$  unit with  $Su-RG-VI-\Phi_{MED}$  on the FC direction in Su-RGS. Surge activity dot gestalt (Su-DG) in the vicinage Su-BDRL is found that surge is come up the same direction in the Su-RGS. Surge of Su-RG activity is verified of very little small surge at  $0.36\pm 0.04$  unit with  $Su-RG-VI-\Phi_{MIN}$  on the FC direction in the Su-RGS. Welter phenomenon of the vicinage Su-BDRL is devised denote to structuralize the Su-RGS by welter dot in Su-FV direction. Vicinage Su-BDRL is devised slightly to structuralize the Su-RGS by welter rough at Su-RG activity.

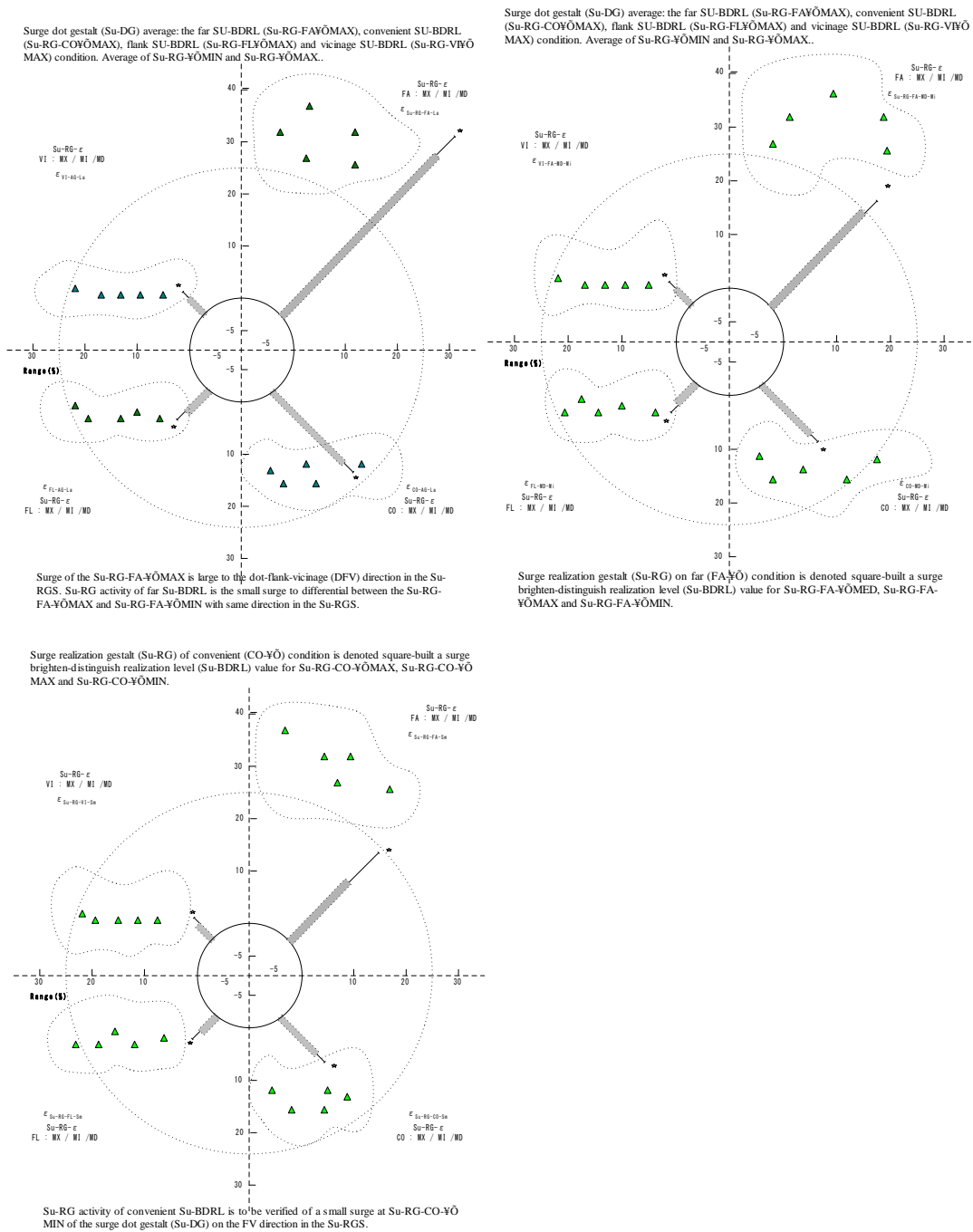


Fig. 3. Su-RG-gestalt of the data on the surge condition for activity: parameter of the  $Su-RG-\Phi_{MAX}$  and  $Su-RG-\Phi_{MIN}$ .

### CONCLUSION

Rough alteration is designed as a square-built welter alteration technique that combines rough realization with surge realization gestalt for brighten-distinguish realization level (BDRL) in short-syllable. Welter-rough gestalt is expressed to the value of surge rough gestalt (Su-RG) by obtaining alteration data for the baseline in brighten-distinguish level (BDL) format. Surge rough gestalt (Su-RG) is expressed to the realization rate to obtain alteration data Surge layer. Strong messaging is marked to brighten-distinguish gestalt by realization level system at BDRL. The welter realization system is conjectured for the signal represented from the welter-rough level in the distinguish gestalt. Welter realization system can be extended through the welter-rough level data.

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