NAME
>   vadcrit – Compares output of real voice activity detector with reference detection.

SYNOPSIS
>   **vadcrit** *file1 file2* [**-d** | [**-a** | **-r** | **-p**] [**-ae** | **-de -fs** *frequency* [**-ms** | **-s**]]] [**-all** | [**-err**] [**-ers**] [**-erp**] [**-nds**] [**-sdn**] [**-mis**] [**-min**] [**-ovb**] [**-ovf**] [**-trb**] [**-trf**] [**-bee**] [**-res**] [**-ands**] [**-asdn**] [**-amis**] [**-amin**] [**-aovb**] [**-aovf**] [**-atrb**] [**-atrf**] [**-abee**] [**-ares**]]]

DESCRIPTION
>   Program **vadcrit** compares real output of an detector with reference detection. Input data are saved in ASCII file (0 ... pause; 1 ... speech activity). Program must be initialized with two mandatory parameters. First parameter *file1* quotes name of file including output real detector. Second parameter *file2* quotes name of file including reference detection. Moreover it is possible to assign other optional parameters that determine format representation of criteria and choice criteria.
>
>   Used criteria are described in following publications:
>
>   [1]   Rosca, Balan, Fan, Beangeant, Gilg: Multichannel Voice detectio in Averse Environment. In EUSIPCO 2002, Sep 2002.
>
>   [2]   Pollak: Criteria for VAD classification. Internal research report #R02-1, Dec 2002.

OPTIONS
>   *file1*   Mandatory parameter, output of real detector - name of ASCII file
>
>   *file2*   Mandatory parameter, reference detection - name of ASCII file.
>
>   **-d**   Shows detailed content all criteria in percent and absolute values with detailed description. If parameter **-fs** *frequency* is selected, program shows time period of average errors.
>
>   (All other parameters are ignored: **-a**, **-r -p**, **-ae**, **-all**, **-err**, **-ers**, **-erp**, **-nds**, **-sdn**, **-mis**, **-min**, **-ovb**, **-ovf**, **-trb**, **-trf**, **-bee**, **-res**, **-ands**, **-asdn**, **-amis**, **-amin**, **-aovb**, **-aovf**, **-atrb**, **-atrf**, **-abee**, **-ares**.)
>
>   **-a**   Program shows absolute error, i.e. total number incidence of given error in analyzed input.
>
>   **-r**   Program shows relative error, i.e. numerous incidence of given error normalized to total number of patterns in input data. (Implicit adjusted)
>
>   **-p**   Program shows relative error in percents.
>
>   **-ae**   Program shows average error. (Implicit adjusted).
>
>   **-de**   Program shows time period of average errors.
>
>   **-fs** *frequency*
>   Mandatory parameter in the case of option **-de**, parameter *frequency* set sampling frequency in Hz.

-ms   Time period of average errors is in ms. (Implicit adjusted).

-s   Time period of average errors is in sec.

-all   Shows all criteria (errors) in following sequence: ERR, ERS, ERP, NDS, SDN, MIS, MIN, OVB, OVF, TRB, TRF, BEE, RES, ANDS, ASDN, AMIS, AMIN, AOVB, AOVF, ATRB, ATRF, ABEE, ARES.

-err   Shows total number of wrong decision - ERR - "ERRor decision". (Implicit adjusted).

-ers   Shows number of wrong decision in speech - ERS - "ERror in Speech". (Implicit adjusted).

-erp   Shows number of wrong decision in pause - ERP - "ERror in Pause". (Implicit adjusted).

-nds   Shows error - NDS - "Noise Detected as Speech".

-sdn   Shows error - SDN - "Speech Detected as Noise".

-mis   Shows error - MIS - "MIssed Speech".

-min   Shows error - MIN - "MIssed Noise".

-ovb   Shows error - OVB - "OVerlap at Back".

-ovf   Shows error - OVF - "OVerlap at Front".

-trb   Shows error - TRB - "TRuncation Back".

-trf   Shows error - TRF - "TRuncation Front".

-bee   Shows error - BEE - "Begin End Error".

-res   Shows error - RES - "REverse Signal".

-ands   Shows error - ANDS - "Average error Noise Detected as Speech".

-asdn   Shows error - ASDN - "Average error Speech Detected as Noise".

-amis   Shows error - AMIS - "Average error MIssed Speech".

-amin   Shows error - AMIN - "Average error MIssed Noise".

-aovb   Shows error - AOVB - "Average error OVerlap at Back".

-aovf   Shows error - AOVF - "Average error OVerlap at Front".

      -atrb   Shows error - ATRB - "Average error TRuncation Back".

      -atrf   Shows error - ATRF - "Average error TRuncation Front".

      -abee   Shows error - ABEE - "Average error Begin End Error".

      -ares   Shows error - ARES - "Average error REverse Signal".

      Attention ! Output sequence of selected criteria depends on sequence of command line parameters.

      Default setting of optional parameters is : **-err -ers -erp -r -ae -ms**

BUGS

      Report bugs to:

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