

# CoDET: A Benchmark for Contrastive Dialectal Evaluation of Machine Translation

Md Mahfuz Ibn Alam<sup>α</sup> Sina Ahmadi<sup>α,β</sup> Antonios Anastasopoulos<sup>α,γ</sup>

<sup>α</sup>Department of Computer Science, George Mason University <sup>β</sup>University of Zurich

<sup>γ</sup>Archimedes AI Research Unit, RC Athena, Greece

{malam21, sahmad46, antonis}@gmu.edu

## Abstract

Neural machine translation (NMT) systems exhibit limited robustness in handling source-side linguistic variations. Their performance tends to degrade when faced with even slight deviations in language usage, such as different domains or variations introduced by second-language speakers. It is intuitive to extend this observation to encompass dialectal variations as well, but the work allowing the community to evaluate MT systems on this dimension is limited. To alleviate this issue, we compile and release CoDET, a contrastive dialectal benchmark encompassing 891 different variations from twelve different languages. We also quantitatively demonstrate the challenges large MT models face in effectively translating dialectal variants. All the data and code<sup>1</sup> has been released.

## 1 Introduction

Progress in natural language processing (NLP) and other varieties of human language technology throughout the 2010s has been undeniably swift. However, such advances are limited to a set of languages with largely available resources (Joshi et al., 2020; Blasi et al., 2022); they have focused solely on dominant, "standard" language varieties. But no language is a monolith; languages vary richly across countries, regions, social classes, and other factors<sup>2</sup>.

For modern *linguae francae* such as English, Spanish, or French, some commercial systems apply coarse localization, e.g., Google Assistant supports speech recognition for English in at least seven locales.<sup>3</sup> This, however, is not the case for

<sup>1</sup>[https://github.com/mahfuzibnalam/dialect\\_mt](https://github.com/mahfuzibnalam/dialect_mt)

<sup>2</sup>In this paper, we will use the terms "dialect" and "language variety" interchangeably for readability reasons. The distinction between what is named a language and what a dialect or variety is a complex socioeconomic phenomenon rather than a purely linguistic one. We add a bit of discussion in Section 3 for each variety/language we work with.

<sup>3</sup>(AU, CA, GB, IN, BE, SG, US)

---

Standard Italian Variant:

Source:	<i>Hanno rubato il quadro</i>	
GTranslate:	They stole the painting	✓

Alassio Variant:

Source:	<i>I han rubbau u quaddru</i>	
GTranslate:	I han rubbau u quaddru	✗

Table 1: While it properly translates standard Italian into English, a popular translation system utterly fails to translate the Alassio variety. *Contrastive dialectal* examples like this one, even if short, can reveal and properly quantify such inadequacies in MT performance.

the majority of the world's languages, even if they exhibit large variations across dialects and regions, often corresponding to millions of speakers. As a result, we have a limited understanding of how well modern NLP systems can handle (or not) such data. It is crucial that we first quantify such disparities in as many languages as possible before we explore ways of mitigating any performance imbalances we identify.

Language variants can vary along several dimensions. In this work, we focus on the robust *understanding* of lexical and morphosyntactic variations, which show up in the written form of languages and hence can be evaluated through a downstream task like text-based machine translation. If one wanted to capture phonological variation additionally, one should work directly on audio and tasks like automatic speech recognition or speech translation; we leave this vein of work for the future.

Consider the case study presented in Table 1: given two sentences that have the same meaning,<sup>4</sup> Google Translate produces very different results. In the first, in "standard" Italian, it produces a perfect translation. The second, from the variety spoken in Alassio in Northwest Italy, the MT system fails to produce any English translation, simply copying the source. Our assumption for evaluating the

<sup>4</sup>Correct translation: "They stole the painting".

system is that both inputs should yield the same translated output. This example effectively illustrates the limitations of general MT systems in comprehending and accurately translating dialectal variations.

To properly evaluate such inadequacies in the context of machine translation, one needs *contrastive* examples between varieties so that the evaluation metrics are comparable. Our work attempts to fill this gap. In summary, our contributions are:

- We extract contrastive data from previous dialectology studies in three languages: Italian (439 locales), Basque (39 locales), and Swiss German (368 locales);
- We re-purpose contrastive data from various sources in seven languages: Arabic (25 vernaculars), Occitan (2 varieties), Tigrinya (2 varieties), Farsi (2 varieties), Malay-Indonesian (2 varieties), Swahili (2 varieties), and Greek (1 variety);
- We create a limited amount of contrastive data in additional languages: Bengali (5 varieties) and Central Kurdish (4 varieties).
- We benchmark the selected distinct dialects of the target language using state-of-the-art machine translation models and quantify the performance discrepancies across language varieties.

## 2 Related Work

MT is one of the most studied and pioneering tasks in the NLP realm. Many previous studies have focused on proposing more efficient methods, particularly with recent advances in sequence-to-sequence models (Sutskever et al., 2014), attention mechanism (Bahdanau et al., 2014), and transformers (Vaswani et al., 2017) that have left their impact on other tasks in NLP as well. Although creating MT models for languages around the globe has received much attention, as in FLORES-200 benchmark and No Language Left Behind (NLLB) models (Costa-jussà et al., 2022), we have a considerable stretch remaining to create models that can translate dialects and varieties efficiently.

Most of the previous work on developing MT technologies for dialects and varieties address Arabic (Zbib et al., 2012; Harrat et al., 2019), Swiss German (Garner et al., 2014; Honnet et al., 2017), Kurdish (Ahmadi et al., 2022), Portuguese (Fancellu et al., 2014) and French (Garcia and Firat, 2022). In this regard, one of the main challenges is finding possible translation sources and creat-

ing corpora and datasets for the translation of varieties and dialects (Zampieri et al., 2020). In the same vein, exploring the translation of varieties in a few-shot or zero-shot setting has received attention (Riley et al., 2022). Similarly, fine-tuning translation models trained on closely related languages has been proposed as a remedy (Kumar et al., 2021).

Given that there is currently no benchmark for the existing data on MT of dialects and varieties, our paper aims to provide one with the sole objective of evaluating varieties and the performance and resilience of MT models to dialectal variations. We also believe this work will increase awareness of this task and motivate future efforts.

## 3 The CODET Benchmark

Given a sentence in one dialectal variant and another in the standard variant of the same language as in Table 1, if these two sentences have the same meaning, we can call this *contrastive* of each other. While these data are also *parallel*, we prefer to point to the contrast between the two, as is common in the comparative dialectology literature. The term "parallel" has been widely used to refer to the interlingual aspect of translation, so we wanted to avoid confusion.

Given that little has been done in this vein, we focus on creating constructive datasets following three approaches, namely repurposing previous dialectological work on syntactic variations for Basque, Italian, Swiss German, and Central Occitan; manual translation by native dialect speakers for Bengali, Modern Greek, Central Kurdish; and finally, exploiting some existing resources for Arabic, Farsi, Malay-Indonesian, Tigrinya, and Swahili. Table 2 provides the number of sentences along with the number of varieties that the dataset covers.

**Utilizing Existing Datasets** A small amount of work has already provided contrastive examples for varieties of some languages. Some were created as part of dialectological work, which we manually scraped from dissertations and theses; some were created as part of other efforts, such as the TICO-19 and the MADAR corpora.<sup>5</sup>

**Scraping Syntactic Atlases** Traditionally, researchers and fieldworkers employ questionnaires to individuals fluent in specific dialects to gather the necessary data for dialectological studies. The

---

<sup>5</sup>See details below.

Languages/Varieties	# Sents	# Varieties
Italian Varieties	792	439
Swiss German Varieties	118	368
Basque Varieties	370	39
Arabic Vernaculars	12,000	25
Bengali Varieties	200	5
Central Kurdish Varieties	300	4
Farsi Varieties	3071	2
Malay-Indonesian	3071	2
Swahili	1919	2
Tigrinya Varieties	3071	2
Aranese	476	1
Central Occitan	379	1
Griko	163	1

Table 2: Number of contrastive sentences in CoDET.

questionnaires are designed to elicit responses regarding how a particular sentence or phrase would be expressed in their respective dialects, as in “how do you say this sentence... in your dialect?” where the speaker fills the gap based on the target dialect.<sup>6</sup> This systematic approach allows for the collection of dialectal data that serves as a valuable resource for investigating the linguistic changes in different varieties and for comprehensively examining and analyzing the variations between the dialects.

Although describing and documenting dialectal variations in most languages have received limited attention in the research landscape, notable efforts<sup>7</sup> have been made to study variations in some European languages, such as Italian, Basque, and Swiss German, through the creation of syntactic atlases.

**New Data Creation** For a handful of languages, namely Central Kurdish, Bengali, Griko, and Occitan, we did not find any existing dialectal contrastive data, but we were able to construct small evaluation benchmarks by online data scraping (Occitan) and by reaching out to native speakers and translators of these varieties (for the others).

### 3.1 The Languages of CoDET

We direct the interested reader to Appendix A, where we discuss each of the languages/varieties included in our benchmark. Due to space limitations, below we only briefly list the languages and varieties included in CoDET.

First, the data sourced from Syntactic Atlases:

- **Basque Varieties:** Our Basque data is sourced

<sup>6</sup>An alternative approach pre-constructs sentence examples and elicits grammatical responses from the informants.

<sup>7</sup>We talk about these efforts in Section 3.1

from the Basque Syntactic Database.<sup>8</sup> The data are  $n$ -way parallel between 39 varieties of the Northern Basque Country in France and come with translations in French and English.

- **Italian Varieties and Languages:** We obtain data from the Italian Syntactic Atlas<sup>9</sup> which provides a rich collection of 439 varieties from almost all regions of Italy. We note that many vernaculars spoken around Italy are recognized as officially distinct languages (e.g., Neapolitan, Ligurian, and Venetian, to name a few). Some of these also have a distinct online presence (e.g., with decent Wikipedias), and some MT research is devoted to them (NLLB Team et al., 2022). However, this “discretization” of the language continuum observed in the Italian peninsula, where each city/village is said to have its dialect, is far from realistic.

- **Swiss German Varieties:** We obtain data by scraping the Syntactic Atlas of German Switzerland (SADS).<sup>10</sup> The SADS website hosts a total of 118 questionnaires, each accompanied by answers provided in 368 different locales, all  $n$ -way parallel along with standard Swiss German.

Second, we repurpose an existing dataset:

- **Arabic Vernaculars:** While Modern Standard Arabic (MSA) is the standardized form of the language used across various regions, MSA is not the native language of Arabic speakers. In informal and spontaneous settings where spoken MSA is typically expected, such as in TV talk shows, speakers often code-switch between their respective vernaculars and MSA. To examine MT performance in Arabic dialects, we repurpose the MADAR corpus (Bouamor et al., 2018), which consists of 12,000 sentences on varieties from 25 different Arabic-speaking cities, 2,000 of which are  $n$ -way parallel.

Third, we include data from existing MT benchmarks that encompass dialectal variations. In particular, we include some languages from the TICO-19 dataset (Anastasopoulos et al., 2020), which provides professionally created translations of the same 3071 English sentences related to the COVID-19 domain. We use the following language varieties (all of which are parallel):

- **Tigrinya:** Translations localized to both Ethiopia

<sup>8</sup><http://ixa2.si.ehu.eus/atlas2/index.php>

<sup>9</sup><http://svrims2.dei.unipd.it:8080/asit-maldura/pages/search.jsp>

<sup>10</sup><https://dialektsyntax.linguistik.uzh.ch>

and Eritrea.

- **Farsi and Dari:** We have translations into Farsi as spoken in Iran and Dari, one of the Farsi variants spoken in Afghanistan.
- **Malay and Indonesian:** We have data in Malay and one of its standardized variants, Indonesian.
- **Swahili:** The TICO-19 dataset provides Coastal Swahili translations (as spoken in Kenya/Tanzania). A follow-up project also provided Congolese Swahili ones ([Anastasopoulos et al., 2021](#)).

Last, we curate new datasets:

- **Bengali Varieties:** Anecdotally, Bangladesh witnesses a linguistic transition approximately every 10 miles. This work specifically focuses on five prominent dialects from five locales of Bangladesh: Jessore, Khulna, Kushtia, Barisal, and Dhaka. The selection of these dialects was strategic, encompassing regions both close to the origin of standard Bengali (Jessore, Kushtia) and those situated farther away.

Our approach involved initially gathering 200 standard Bengali sentences from the Bengali-English translation dataset presented in ([Hasan et al., 2020](#)), a high-quality dataset comprising 2.75 million parallel sentence pairs. From this dataset, we selected short sentences comprising 6 to 7 words, facilitating ease of translation for the language speakers. Initially, there were 200,000 sentences to choose from, and we randomly selected 200 sentences for our dataset.

Our initial step involved recruiting proficient annotators fluent in the standard and in one of the dialects. Subsequently, we requested these annotators to provide their respective dialectal renditions of specific sentences. Given that dialects primarily exist in spoken form without standardized orthography, we instructed the annotators to transcribe the sentences in Bengali script based on the acoustic signals they perceived. This process is called dialectal writing ([Nigmatulina et al., 2020](#)), which entails creating phonemic transcriptions that closely align grapheme labels with the acoustic signals, despite their inherent inconsistency. This approach, in our view, mimics what speakers of the varieties would do should they attempt to write them. It took the annotators about four hours to annotate 200 sentences each.

- **Griko:** We use a sample of existing Griko (*Italiano Greek*) data ([Anastasopoulos et al., 2018](#)). A speaker of both Griko and modern standard Greek created the “translations” into modern

standard Greek, ending with 163 sentences.

- **Central Kurdish Varieties:** Kurdish is known as a dialect continuum and is mainly classified into Northern, Central, and Southern dialects and is closely related to Zaza-Gorani languages, Laki and Lori ([Ahmadi et al., 2023](#)). In this project, we focus on the varieties of Central Kurdish, also known as Sorani, which are mainly spoken in Kurdistan of Iran, and Iraq. The following local names are generally and broadly used to refer to the dialects of Central Kurdish spoken in regions of the cities specified in parentheses: Babanî (Sulaymaniyah, Iraq) ([McCarus, 1956](#)), Ardalanî (Sanandaj, Iran), Cafî (Javanrud, Iran), Mukriyanî or Mukrî (Mahabad, Iran) ([De Chiara, 2018](#)) and Hewlêrî (Erbil, Iraq). Among these, the variant of Sulaymaniyah is the most studied one, which is also widely used as a standard variant of Central Kurdish in the press and media ([Thackston, 2006](#)).

According to various linguistic analyses of fieldwork data, [Matras \(2019\)](#) classifies Central Kurdish varieties into Northern and Southern Sorani, with their epicenters being based on the dialects of Erbil (*Hewlêr* in Kurdish) and Sulaymaniyah (*Silêmanî* in Kurdish). Based on this classification, Babanî, Ardalanî, and Cafî or Jafi belong to Southern Sorani, while Mukriyanî and Hewlêrî belong to Northern Sorani. Similarly, we believe that the selected varieties can further elucidate the distinctiveness of the varieties and the classification quantitatively.

Given that there are no corpora documenting varieties of Central Kurdish, we resort to movies where speakers of these varieties play a role. To that end, we transcribe movies in Babanî, Ardalanî, and Mukriyanî. Since none of these movies are available in other varieties, we perform a dialect translation by native speakers of Ardalanî, Mukriyanî, and Hewlêrî by randomly selecting and translating 300 sentences in Babanî transcriptions. To mitigate the impact of orthography on the dialect, we normalize and standardize the sentences based on the common orthography of Kurdish using KLPT ([Ahmadi, 2020](#)). This way, we create a parallel corpus containing sentences in four dialects of Central Kurdish along with their translations in English. It is worth noting that the collected sentences contain vocabulary of general parlance and capture interesting morphological variations across dialects.

- **Occitan Varieties:** We focus on two examples of the Occitan continuum, namely Central Occitan and Aranese. We use Central Occitan data from the dissertation of (Dansereau, 1985) who studied the syntax of central Occitan, providing additional translations of all examples to "standard" French (379 sentences). For Aranese (the standardized form of the Pyrenean Gascon variety of Occitan), we scraped a total of 476 sentences from a local news website<sup>11</sup> in Aranese and English. Note that the data in the two varieties are not parallel; thus, we do not have comparable results between these two varieties. We benchmark them for future work.

## 4 Evaluation

To assess the quality of any MT system on dialectal variations, it is crucial to compare its outputs with a reference standard. One approach is to have a gold, human-created translation representing the desired translation in a standard setting. Among the twelve languages considered, we only have gold translations for Basque, Bengali, Farsi, Central Kurdish, Malay-Indonesian, Swahili, Tigrinya, and Aranese. For the rest, we will need to be able to evaluate MT robustness without references.

**Evaluating Without References** Our goal is to evaluate the robustness of MT systems concerning dialectal variation. While access to human-created gold translations can certainly reveal a complete picture of the model's performance, thankfully, it is not a hard requirement.

In this work, we adapt the ideas of Michel and Neubig (2018) and Michel et al. (2019) which presented frameworks for evaluating the robustness of MT systems to adversarial or non-native noisy inputs. Concretely, consider the following notation:

- $x$ : the dialectal input sentence.
- $\tilde{x}$ : the contrastive sentence in the "standard" variety. This is deemed to be similar to what MT systems have been trained on and can likely decently translate.
- $y$ : the output of the NMT system when  $x$  is provided as input.
- $\tilde{y}$ : the output of the NMT system when  $\tilde{x}$  is provided as input.

The core of the idea is that we can treat  $\tilde{y}$ , the output of the MT system on the "standard" input, as a *pseudo-reference* for the translation. Intuitively,

a robust system should produce the same output for inputs with similar meanings regardless of the small dialectal variations. Hence, we can calculate any MT metric such as BLEU (Papineni et al., 2002) or COMET (Rei et al., 2020) by comparing  $y$  to  $\tilde{y}$ .

**Important Implementation Notes** In this work, we focus on two metrics, BLEU and COMET. BLEU compares the  $n$ -grams of the candidate translation's  $n$ -grams with the reference translation, counting the number of matches to determine similarity. We calculate BLEU using SacreBLEU (Post, 2018). For space constraints, we do not show the BLEU scores. On the other hand, COMET is a neural framework designed for training multilingual machine translation evaluation models. It leverages information from both the source input and a target-language reference translation to provide more accurate predictions of MT quality, correlating with human judgments. These metrics offer quantitative measures to evaluate and compare the quality of dialectal translations against the reference standards.

Note that both BLEU and COMET are corpus-level scores. For some collections of varieties, though, we have a different number of contrastive sentences ( $p$ ) for a particular dialectal variation compared to the number of standard dialectal sentences ( $n$ ). In such a case, we can still perform individual translations and score each sentence separately. Each contrastive sentence is translated and scored individually using the chosen evaluation metric. Once the scores for all the  $p$  contrastive sentences are obtained, we calculate an average metric score.

This approach enables us to evaluate the quality of translation on a sentence level. However, a limitation arises from the varying number of  $p$  for different dialects, resulting in variations in sentence combinations. Consequently, scores cannot be directly compared between dialects. This scenario applies to varieties in four languages: Arabic, Basque, Italian, and Swiss German. To establish comparability, one solution is to create a subset of sentences in all dialects. Unfortunately, the only case where this leads to a decently-sized test set is in Arabic (2000 sentences are shared among all vernaculars). The number of subset sentences among all dialects is presented in Appendix C.1.

We employ an alternative approach for the remaining three languages by selecting a subset of

<sup>11</sup><https://web.gencat.cat/en/actualitat/darreres-noticies/index.html>

sentences with high dialectal coverage and evaluating the translations exclusively on those dialects. In the case of Basque, we see 34 common sentences among the dialects. Similarly, for Swiss German, we see 87 common sentences. However, for Italian, the data intersection of all varieties is empty.

We argue that this small number of sentences cannot show the quality appropriately, so we implement an alternative approach for these three languages. First, we exclude dialects that consist of fewer than 100 sentences. This means excluding 50 Italian varieties. Next, for each of the remaining dialects, we randomly select 100 sentences and evaluate the translations based on these samples. We calculate the score for each set of 100 sentences, repeating this process 100 times. Subsequently, we compute the average of the 100 scores obtained from these different runs, representing the final score for that particular dialect.

## 5 Results and Analysis

**Preliminaries** For all language varieties, we benchmark MT systems in the X-to-English direction. The choice of English as a target language is a pragmatic one. Still, a more comprehensive evaluation should consider many other target languages for future work, especially since we do not require gold references to perform our analyses.

We present baseline results in all languages using four different-sized NLLB-200 (NLLB Team et al., 2022) models using the HuggingFace (Wolf et al., 2020) toolkit. The NLLB-200 can translate between 200 languages. This model has been trained using the teacher-student procedure to work on low-resource languages. To create a large amount of data for NLLB-200 training, the older LASER<sup>12</sup> (Language-Agnostic SEntence Representation) model was trained on 200 languages. For Italian, we also fine-tune the DeltaLM-large (Ma et al., 2021) model with Italian-English OPUS (Tiedemann, 2012) parallel data using the Fairseq (Ott et al., 2019) toolkit. As we see the superiority of the NLLB models, we do not fine-tune DeltaLM for the rest of the languages.

The COMET evaluation framework relies on XLM-RoBERTa (Conneau et al., 2020), a multilingual language model, to generate embeddings for each token in the input source, machine-translated (mt) sentence, and reference sentence. However, since XLM-RoBERTa was trained on texts of the

standard dialect, the quality of the embeddings created for source sentences in different dialectal variants may be compromised. To investigate this, an ablation study was conducted with and without the source sentence as input to the COMET scorer.

Figure 1 presents the results of this ablation study for 13 Basque dialects. The dialectal sentences were translated to English using the NLLB-200-dis-600M model. The blue bars represent COMET scores when the source sentences were replaced with blank sentences, while the orange lines represent COMET scores when the source sentences were included. In all cases, the COMET scores decrease when the source sentences are introduced, supporting the initial hypothesis. The general trends are very similar with and without using the source sentence. Based on these findings, the source sentence will not be used to ensure more reliable evaluations for all subsequent COMET calculations in this paper.

### 5.1 Quantitative Analysis

**Italian Varieties** The dataset used in this study comprises a total of 439 Italian dialects, which are associated with 290 communes. The COMET scores for four different NLLB-200 models, along with the number of contrastive sentences available for each commune compared to the standard variation, are presented in Table C.10 in Appendix C. As mentioned earlier, these results are not directly comparable but can be considered a rough estimation of the expected quality. We present the comparable results among all the dialects in Table C.11 in Appendix C.

These 290 communes are further categorized into 78 provinces. Additionally, these 78 provinces are distributed among 19 regions. The comparable COMET scores for these 19 regions can be found in Table C.15. We also provide the non-directly-comparable results using all the sentences in Table C.15 in Appendix C.

Examining the top five COMET scores of the NLLB-Dis-1.3B model, indicated in bold in the Table, it is evident that these dialects strongly resemble the standard variation. This is particularly true for the Tuscany variety, as standard Italian is based on this region. Similarly, the proximity of the other three regions (Umbria, Lazio, Marche) to Tuscany suggests that the similarity of these varieties to the now-standard one is reflected in the MT quality.

Based on the obtained scores, it is possible to

<sup>12</sup><https://github.com/facebookresearch/LASER>

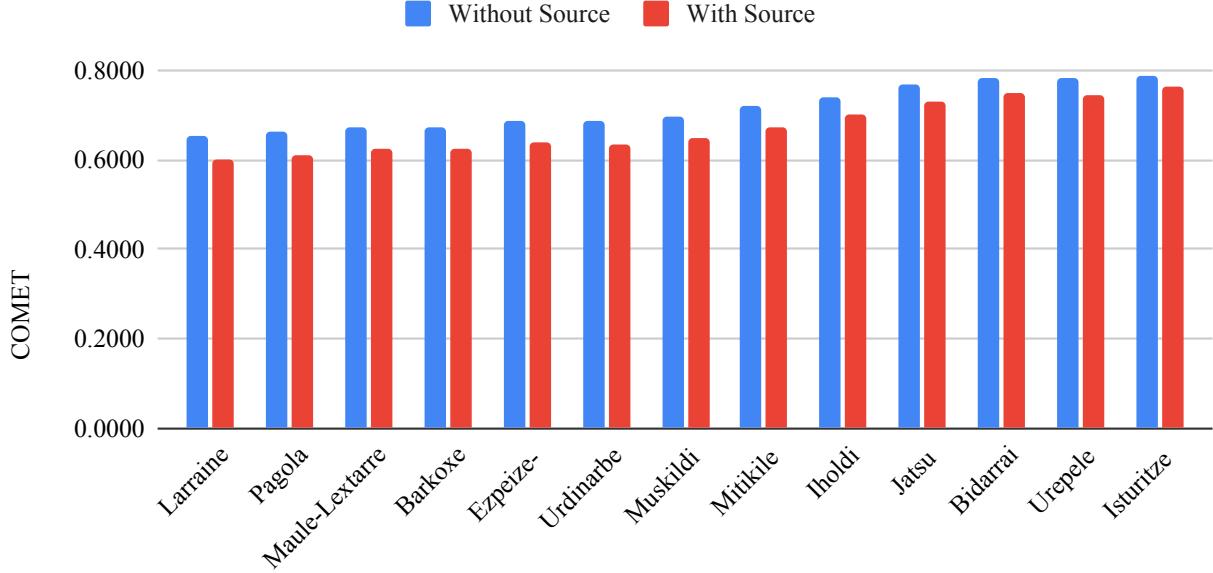


Figure 1: Ablation study of the source sentence usage in dialects of Basque during COMET measurement. COMET scores for Basque varieties when we use the source range from 0.60 to 0.76, but when we don't use the source, they range from 0.65 to 0.79

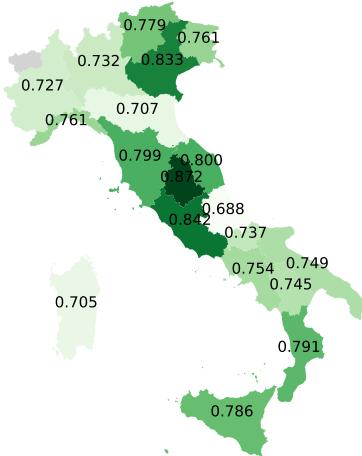


Figure 2: Map of Italy with COMET scores per region.

visualize them on the map of Italy using geojson information, such as the one available here.<sup>13</sup> Figure 2 illustrates the COMET scores of various regions represented on the map of Italy. A darker shade of green indicates a higher COMET score. The visualization shows that regions near Tuscany are darker green, indicating higher scores. However, the scores gradually decrease as we move further away from those regions.

**Swiss German Varieties** Similar to the approach taken with Italy, the regional MT quality scores can be geographically visualized on a map. We point the reader to Figure 3, which showcases the map of Switzerland. The map reveals a consistent pattern where the northern regions, being closer to Ger-

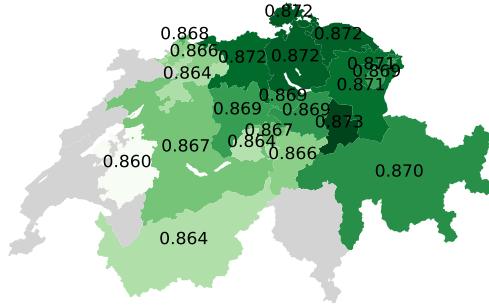


Figure 3: Map of Switzerland with COMET scores for different regions.

many (and consequently speaking varieties closer to High German), obtain higher COMET scores. In contrast, the scores gradually decrease as one moves further south. Tables C.18 and C.19 present the benchmark scores for Swiss German dialects in non-comparable and comparable formats, respectively. These Tables provide additional valuable information on the dialects and their respective regions. Last, Table C.22 and Table C.23 in the same appendix display the benchmark scores for different regions of Switzerland in non-comparable and comparable formats, respectively.

**Bengali Varieties** Table 3 presents the COMET scores of Bengali across the five varieties. These scores are comparable as they were evaluated using the same 200 sentences. These dialects are spoken in various regions of Bangladesh, and we visualize their distribution on a map in Figure C.1. Interestingly, a similar pattern emerges in this case as well. Jessore, one of the dialects from which stan-

<sup>13</sup><https://github.com/openpolis/geojson-italy>

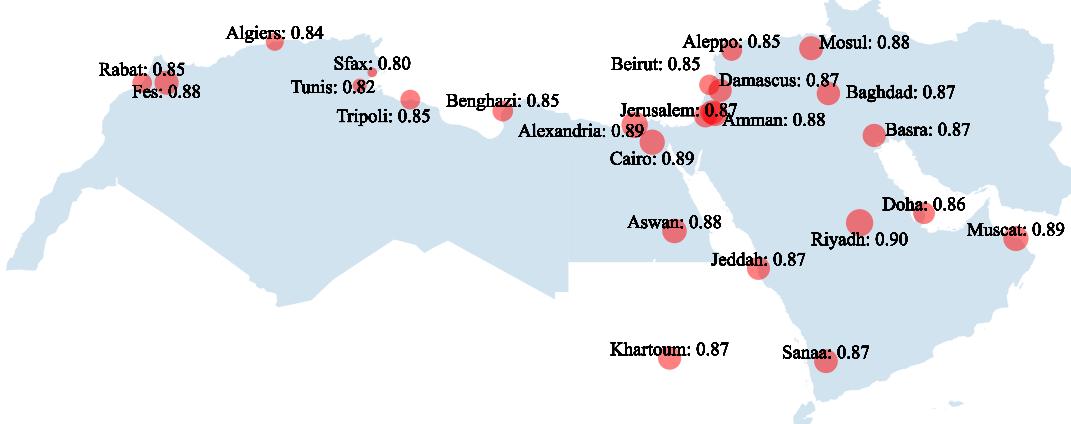


Figure 4: MT quality for Arabic vernaculars. Comet scores range from 0.8 (Sfax, Tunisia) to 0.9 (Riyadh, SA).

dard Bengali originated, exhibits relatively higher COMET scores. Conversely, as we move away from Jessore, the COMET scores gradually decrease, reflecting a relative decline in quality.

**Arabic Vernaculars** In this experiment, we compare a variant to the MSA. Figure 4, as well as Tables C.2 and C.3 showcase the benchmark scores for Arabic vernaculars as spoken in different cities. Focusing on the NLLB-3.3B model, we find that the worst-scoring city is Sfax, Tunisia, and the best-scoring city is Riyadh, Saudi Arabia. The difference is 0.1 COMET point, and all the scores are above 0.8. We can thus infer that the baseline systems represent most Arabic vernaculars fairly well. That said, it is worth noting that the top four scoring cities (Riyadh, Alexandria, Muscat, and Cairo) are close to the Middle East. On the other hand, the bottom no four scoring cities (Sfax, Tunis, Algiers, and Rabat) are all in the West Arab world (in North Africa).

**Central Kurdish Varieties** Table 3 displays the COMET scores for the different varieties of Central Kurdish, focusing on the dialects spoken in Iran and Iraq. These scores are comparable as they were evaluated using a consistent set of 300 sentences. The geographic distribution of these dialects is worth noting, with Sulaymaniyah located centrally within the region where Central Kurdish is spoken. An intriguing observation is that Sulaymaniyah, situated in the middle of the region, exhibits a higher COMET score. This suggests that the standard variation of Central Kurdish may have emerged from Sulaymaniyah or nearby locations. On the Iraq side, Mahabad stands out with the highest COMET score, indicating its similarity to Sulaymaniyah. The COMET scores gradually drop as we move from these two areas towards the

north or south.

Due to space constraints, we provide further quantitative analysis for the other languages in Appendix B with results presented in Table 3.

## 5.2 Qualitative Analysis

One of the major factors that affect the performance of NMT systems when dealing with dialects is the various lexical and morpho-syntactic variations among dialects and varieties. The standardization process of a language culminates in establishing linguistic homogeneity within its vocabulary, often to the detriment of regional dialects or linguistic varieties. We posit that the inadequate lexical representation of nonstandard dialects has a detrimental impact on the performance of NMT systems, including pre-trained ones.

Moreover, some selected languages, like Kurdish, spoken in different countries, deal with code-switching phenomena more prevalent than others due to socio-linguistic factors. This is particularly the case of loanwords and terminologies. For instance, words that pertain to automobile mechanics in the Kurdish spoken in Iran are mostly borrowed from Russian while the Kurdish spoken in Iraq relies more on the Arabic and English words in this domain. In the same vein, standard orthographies, if they exist for a language, implicitly create a bias in transcription and inaccuracy in translating vernaculars. Since this is not peculiar to the selected languages, we believe it affects NMT systems.

Table 4 shows example translations from our Central Kurdish data in comparison to the dialects in CODET. On the source side, the underlined morphosyntactic and lexical variations include the postposition ‘*da*’ marking locative case, the word for ‘elevator’, and the compound verb.

Standard Language	Variety	# Sentences	COMET			
			NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>Tigrinya</b>	<b>Ethiopian</b>	3071	0.8017	0.8232	0.8173	0.8245
	<b>Eritrean</b>	3071	0.7782	0.7998	0.7972	0.8039
<b>Farsi</b>	<b>Farsi</b>	3071	0.8458	0.8545	0.8532	0.8564
	<b>Dari</b>	3071	0.8387	0.8494	0.8480	0.8539
<b>Malay-Indonesian</b>	<b>Indonesian</b>	3071	0.8608	0.8666	0.7407	0.7330
	<b>Malay</b>	3071	0.8542	0.8625	0.8077	0.7965
<b>Swahili</b>	<b>Coastal</b>	1991	0.8508	0.8622	0.8611	0.8657
	<b>Congolese</b>	1991	0.8094	0.8253	0.8206	0.8229
<b>Occitan</b>	<b>Aranese</b>	476	0.7537	0.7743	0.7752	0.7841
	<b>Central</b>	379	0.7050	0.7400	0.7425	0.5439
<b>Central Kurdish</b>	<b>Sulaymaniyah</b>	300	0.7295	0.7427	0.7419	0.7436
	<b>Erbil</b>	300	0.6975	0.7133	0.7099	0.7167
	<b>Sanandaj</b>	300	0.6763	0.6941	0.6916	0.6969
	<b>Mahabad</b>	300	0.7201	0.7348	0.7237	0.7351
<b>Bengali</b>	<b>Barisal</b>	200	0.7038	0.7089	0.7176	0.7266
	<b>Dhakaiya</b>	200	0.7876	0.8006	0.7969	0.8012
	<b>Jessore</b>	200	0.8226	0.8395	0.8332	0.8365
	<b>Khulna</b>	200	0.8121	0.8193	0.8241	0.8295
	<b>Kushtia</b>	200	0.7922	0.7992	0.8144	0.8132
<b>Greek</b>	<b>Griko</b>	163	0.4877	0.4969	0.4964	0.5065

Table 3: COMET scores of different languages’ dialects for various model scales. There often exist significant differences between the varieties. Bigger models are better than smaller ones, but dialectal inequalities persist.

Standard Central Kurdish	S	لە ناو مەسەددا بەرچاوم سوور ئەخواتنەوە <i>Le naw mes' edda berçawim sùrr exwatewe.</i>
	T	In the elevator, I feel dizzy.
	H	I've been spinning around in the mosque.
Sulaymaniyah	S	لە ناو مەسەددا بەرچاوم سوور ئەخواتنەوە <i>Le naw mes' edda berçawim sùrr exwatewe.</i>
	H	I've been spinning a lot in the middle of the square.
Erbil	S	لە نیو مەسەدی سەرم دەسوورى. <i>Le new mes' edi serim desûrre.</i>
	H	I'm in a mosque.
Mahabad	S	دە نیو ئاسانسۆرەدا سەرم دەسوورى. <i>De new asansorêda serim desûrre.</i>
	H	I'm in the middle of a roller coaster.
Sanandaj	S	لە ناو ئاسانسۆرەدا بەرچاوم سوور ئەخواتنەوە <i>Le naw asansora berçawim sùrr exwatewe.</i>
	H	I've been spinning a lot in a roller coaster.

Table 4: A sentence (S) in Central Kurdish along with transliterations and translations (T) for the dialects in CODET. Underlined words specify morphosyntactic or lexical variations. H is the MT hypothesis.

## 6 Conclusion

This study compiles a benchmark of contrastive examples between standard and dialectal variants of twelve languages to facilitate the evaluation of MT systems’ robustness along this variation. Our

findings demonstrate that MT systems excel at handling standard variants, but as the dialectal varieties start differing from the standard, the quality of the translations declines. This work emphasizes the need for further research and development in dialectal MT. Excluding a significant portion of the population from the benefits of language translation cannot be considered a satisfactory solution, underscoring the importance of addressing dialectal variations within MT systems.

**Future Work** This study highlights the unequal support for different language dialects in MT systems. Some dialects exhibit impressive COMET scores due to their close relationship with the standard variant. However, this work primarily focuses on creating a dataset to assess the performance of various dialects rather than conducting experiments to enhance the MT system’s robustness. This limitation primarily stems from the scarcity of training data. The datasets created for this study are relatively small and mainly serve as test data.

For future research, the MT community needs to prioritize the development of training datasets for dialects. Several strategies can be explored with an adequate dataset, such as dialect-specific adaptation through fine-tuning or adapter approaches.

## 7 Limitations

One of the limitations of our study is the lack of classification which can describe the expected levels of dissimilarity across dialects of a given language. Such a classification can provide the words and labels that are used to denote each dialect. This, however, is not an easy task given the different classifications and various names used for dialects. On the other hand, we believe that other factors that determine the performance of NMT systems should be further studied in regard to dialects.

## Acknowledgments

This work was generously supported by the National Science Foundation under awards IIS-2125466 and BCS-2109578, and a Sponsored Research Award from Meta. The authors are also grateful to everyone who contributed to the resources to create the dataset, as well as to the Office of Research Computing at GMU, where all computational experiments were conducted. Sina Ahmadi acknowledges support of the Swiss National Science Foundation (MUTAMUR; no. 213976).

## References

- Sina Ahmadi. 2020. KLPT–Kurdish language processing toolkit. In *Proceedings of second workshop for NLP open source software (NLP-OSS)*, pages 72–84.
- Sina Ahmadi, Zahra Azin, Sara Belelli, and Antonios Anastasopoulos. 2023. Approaches to corpus creation for low-resource language technology: the case of Southern Kurdish and Laki. *arXiv preprint arXiv:2304.01319*.
- Sina Ahmadi, Hossein Hassani, and Daban Q Jaff. 2022. Leveraging Multilingual News Websites for Building a Kurdish Parallel Corpus. *Transactions on Asian and Low-Resource Language Information Processing*, 21(5):1–11.
- Antonios Anastasopoulos, Ondřej Bojar, Jacob Bremerman, Roldano Cattoni, Maha Elbayad, Marcello Federico, Xutai Ma, Satoshi Nakamura, Matteo Negri, Jan Niehues, Juan Pino, Elizabeth Salesky, Sebastian Stüker, Katsuhito Sudoh, Marco Turchi, Alexander Waibel, Changhan Wang, and Matthew Wiesner. 2021. **FINDINGS OF THE IWSLT 2021 EVALUATION CAMPAIGN**. In *Proceedings of the 18th International Conference on Spoken Language Translation (IWSLT 2021)*, pages 1–29, Bangkok, Thailand (online). Association for Computational Linguistics.
- Antonios Anastasopoulos, Alessandro Cattelan, Zi-Yi Dou, Marcello Federico, Christian Federmann, Dmitriy Genzel, Francisco Guzmán, Junjie Hu, Macduff Hughes, Philipp Koehn, Rosie Lazar, Will Lewis, Graham Neubig, Mengmeng Niu, Alp Öktem, Eric Paquin, Grace Tang, and Sylwia Tur. 2020. **TICO-19: the translation initiative for COvid-19**. In *Proceedings of the 1st Workshop on NLP for COVID-19 (Part 2) at EMNLP 2020*, Online. Association for Computational Linguistics.
- Antonios Anastasopoulos, Marika Lekakou, Josep Quer, Eleni Zimianiti, Justin DeBenedetto, and David Chiang. 2018. **Part-of-speech tagging on an endangered language: a parallel Griko-Italian resource**. In *Proceedings of the 27th International Conference on Computational Linguistics*, pages 2529–2539, Santa Fe, New Mexico, USA. Association for Computational Linguistics.
- Dzmitry Bahdanau, Kyunghyun Cho, and Yoshua Bengio. 2014. Neural machine translation by jointly learning to align and translate. *arXiv preprint arXiv:1409.0473*.
- Damian Blasi, Antonios Anastasopoulos, and Graham Neubig. 2022. **Systematic inequalities in language technology performance across the world’s languages**. In *Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 5486–5505, Dublin, Ireland. Association for Computational Linguistics.
- Houda Bouamor, Nizar Habash, Mohammad Salameh, Wajdi Zaghouani, Owen Rambow, Dana Abdurahim, Ossama Obeid, Salam Khalifa, Fadhl Eryani, Alexander Erdmann, and Kemal Oflazer. 2018. **The MADAR Arabic dialect corpus and lexicon**. In *Proceedings of the Eleventh International Conference on Language Resources and Evaluation (LREC 2018)*, Miyazaki, Japan. European Language Resources Association (ELRA).
- Alexis Conneau, Kartikay Khandelwal, Naman Goyal, Vishrav Chaudhary, Guillaume Wenzek, Francisco Guzmán, Edouard Grave, Myle Ott, Luke Zettlemoyer, and Veselin Stoyanov. 2020. **Unsupervised cross-lingual representation learning at scale**.
- Marta R Costa-jussà, James Cross, Onur Çelebi, Maha Elbayad, Kenneth Heafield, Kevin Heffernan, Elahe Kalbassi, Janice Lam, Daniel Licht, Jean Maillard, et al. 2022. No language left behind: Scaling human-centered machine translation. *arXiv preprint arXiv:2207.04672*.
- Diane Maria Dansereau. 1985. *Studies in the syntax of Central Languedocian (Occitan, Dialectology; France)*. University of Michigan.
- Matteo De Chiara. 2018. Ergin Öpengin. The Mukri Variety of Central Kurdish. Grammar, Texts, and Lexicon. *Abstracta Iranica. Revue bibliographique pour le domaine irano-aryen*, 37(38-39).
- Federico Fancellu, Andy Way, and Morgan O’Brien. 2014. Standard language variety conversion for content localisation via SMT. In *Proceedings of the 17th Annual conference of the European Association for Machine Translation*, pages 143–149.

- Xavier Garcia and Orhan Firat. 2022. Using natural language prompts for machine translation. *arXiv preprint arXiv:2202.11822*.
- Philip N. Garner, David Imseng, and Thomas Meyer. 2014. Automatic speech recognition and translation of a Swiss German dialect: Walliserdeutsch. In *Proc. Interspeech 2014*, pages 2118–2122.
- Salima Harrat, Karima Meftouh, and Kamel Smaili. 2019. Machine translation for Arabic dialects (survey). *Information Processing & Management*, 56(2):262–273.
- Tahmid Hasan, Abhik Bhattacharjee, Kazi Samin, Masmus Hasan, Madhusudan Basak, M. Sohel Rahman, and Rifat Shahriyar. 2020. Not low-resource anymore: Aligner ensembling, batch filtering, and new datasets for Bengali-English machine translation. In *Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, pages 2612–2623, Online. Association for Computational Linguistics.
- Pierre-Edouard Honnet, Andrei Popescu-Belis, Claudio Musat, and Michael Baeriswyl. 2017. Machine translation of low-resource spoken dialects: Strategies for normalizing Swiss German. *arXiv preprint arXiv:1710.11035*.
- Pratik Joshi, Sebastin Santy, Amar Budhiraja, Kalika Bali, and Monojit Choudhury. 2020. The state and fate of linguistic diversity and inclusion in the NLP world. In *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics*, pages 6282–6293, Online. Association for Computational Linguistics.
- Sachin Kumar, Antonios Anastasopoulos, Shuly Wintner, and Yulia Tsvetkov. 2021. Machine translation into low-resource language varieties. In *Proceedings of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing (Volume 2: Short Papers)*, pages 110–121, Online. Association for Computational Linguistics.
- Shuming Ma, Li Dong, Shaohan Huang, Dongdong Zhang, Alexandre Muzio, Saksham Singhal, Hany Hassan Awadalla, Xia Song, and Furu Wei. 2021. Deltalm: Encoder-decoder pre-training for language generation and translation by augmenting pretrained multilingual encoders.
- Yaron Matras. 2019. Revisiting Kurdish dialect geography: Findings from the Manchester database. *Current issues in Kurdish linguistics*, 1:225.
- Ernest Nasseph McCarus. 1956. *Descriptive analysis of the Kurdish of Sulaimaniya, Iraq*. University of Michigan.
- Paul Michel, Xian Li, Graham Neubig, and Juan Pino. 2019. On evaluation of adversarial perturbations for sequence-to-sequence models. In *Proceedings of the 2019 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, Volume 1 (Long and Short Papers)*, pages 3103–3114, Minneapolis, Minnesota. Association for Computational Linguistics.
- Paul Michel and Graham Neubig. 2018. MTNT: A testbed for machine translation of noisy text. In *Proceedings of the 2018 Conference on Empirical Methods in Natural Language Processing*, pages 543–553, Brussels, Belgium. Association for Computational Linguistics.
- Iuliia Nigmatulina, Tannon Kew, and Tanja Samardzic. 2020. ASR for non-standardised languages with dialectal variation: the case of Swiss German. In *Proceedings of the 7th Workshop on NLP for Similar Languages, Varieties and Dialects*, pages 15–24, Barcelona, Spain (Online). International Committee on Computational Linguistics (ICCL).
- Team NLLB Team, Marta R. Costa-jussà, James Cross, Onur Çelebi, Maha Elbayad, Kenneth Heafield, Kevin Heffernan, Elahe Kalbassi, Janice Lam, Daniel Licht, Jean Maillard, Anna Sun, Skyler Wang, Guillaume Wenzek, Al Youngblood, Bapi Akula, Loic Barrault, Gabriel Mejia Gonzalez, Prangthip Hansanti, John Hoffman, Semarley Jarrett, Kaushik Ram Sadagopan, Dirk Rowe, Shannon Spruit, Chau Tran, Pierre Andrews, Necip Fazil Ayan, Shruti Bhosale, Sergey Edunov, Angela Fan, Cynthia Gao, Vedanuj Goswami, Francisco Guzmán, Philipp Koehn, Alexandre Mourachko, Christophe Ropers, Safiyyah Saleem, Holger Schwenk, and Jeff Wang. 2022. No language left behind: Scaling human-centered machine translation.
- Myle Ott, Sergey Edunov, Alexei Baevski, Angela Fan, Sam Gross, Nathan Ng, David Grangier, and Michael Auli. 2019. fairseq: A fast, extensible toolkit for sequence modeling.
- Kishore Papineni, Salim Roukos, Todd Ward, and Wei-Jing Zhu. 2002. Bleu: a method for automatic evaluation of machine translation. In *Proceedings of the 40th Annual Meeting of the Association for Computational Linguistics*, pages 311–318, Philadelphia, Pennsylvania, USA. Association for Computational Linguistics.
- Matt Post. 2018. A call for clarity in reporting BLEU scores. In *Proceedings of the Third Conference on Machine Translation: Research Papers*, pages 186–191, Brussels, Belgium. Association for Computational Linguistics.
- Ricardo Rei, Craig Stewart, Ana C Farinha, and Alon Lavié. 2020. COMET: A neural framework for MT evaluation. In *Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, pages 2685–2702, Online. Association for Computational Linguistics.
- Parker Riley, Timothy Dozat, Jan A Botha, Xavier Garcia, Dan Garrette, Jason Riesa, Orhan Firat, and Noah Constant. 2022. FRMT: A Benchmark for Few-Shot

Region-Aware Machine Translation. *arXiv preprint arXiv:2210.00193*.

Ilya Sutskever, Oriol Vinyals, and Quoc V Le. 2014. Sequence to sequence learning with neural networks. *Advances in neural information processing systems*, 27.

Toshiyuki Takezawa, Genichiro Kikui, Masahide Mizushima, and Eiichiro Sumita. 2007. Multilingual spoken language corpus development for communication research. In *International Journal of Computational Linguistics & Chinese Language Processing, Volume 12, Number 3, September 2007: Special Issue on Invited Papers from ISCSLP 2006*, pages 303–324.

Wheeler M Thackston. 2006. *Sorani Kurdish: A Reference Grammar with Selected Readings*. Harvard University.

Jörg Tiedemann. 2012. Parallel data, tools and interfaces in OPUS. In *Proceedings of the Eighth International Conference on Language Resources and Evaluation (LREC'12)*, pages 2214–2218, Istanbul, Turkey. European Language Resources Association (ELRA).

Ashish Vaswani, Noam Shazeer, Niki Parmar, Jakob Uszkoreit, Llion Jones, Aidan N Gomez, Łukasz Kaiser, and Illia Polosukhin. 2017. Attention is all you need. *Advances in neural information processing systems*, 30.

Thomas Wolf, Lysandre Debut, Victor Sanh, Julien Chaumond, Clement Delangue, Anthony Moi, Pieric Cistac, Tim Rault, Rémi Louf, Morgan Funtowicz, Joe Davison, Sam Shleifer, Patrick von Platen, Clara Ma, Yacine Jernite, Julien Plu, Canwen Xu, Teven Le Scao, Sylvain Gugger, Mariama Drame, Quentin Lhoest, and Alexander M. Rush. 2020. Huggingface’s transformers: State-of-the-art natural language processing.

Marcos Zampieri, Preslav Nakov, and Yves Scherrer. 2020. Natural language processing for similar languages, varieties, and dialects: A survey. *Natural Language Engineering*, 26(6):595–612.

Rabih Zbib, Erika Malchiodi, Jacob Devlin, David Stalard, Spyros Matsoukas, Richard Schwartz, John Makhoul, Omar Zaidan, and Chris Callison-Burch. 2012. Machine translation of Arabic dialects. In *Proceedings of the 2012 conference of the north american chapter of the association for computational linguistics: Human language technologies*, pages 49–59.

## A The Languages of CoDET

**Basque Varieties** Our Basque data is sourced from the Basque Syntactic Database.<sup>14</sup> To gather and analyze the data, researchers initially developed specific questionnaires, each focusing on a distinct linguistic phenomenon characterized by syntactic variation, for a total of 370 different questions. These questionnaires were then provided to informants spanning different age groups, carefully selected from various locations, which comprise 39 variants in the Northern Basque Country in France.

By posing identical questions to speakers of different Basque dialects, this methodology creates contrastive data facilitating an  $n$ -way comparison among the dialects. One challenge encountered in this process is that the questions themselves are presented in French. Consequently, we lack sentences in the standard variant. This said, the provided English translations of French sentences serve as gold-standard reference translations.

**Italian Varieties and Languages** Our Italian data are obtained from the Italian Syntactic Atlas<sup>15</sup> which functions similarly to the Basque one. However, in the Italian Syntactic Atlas, the questions are presented in standard Italian. This extensive dataset consists of 792 questions that speakers of various Italian dialects have answered. The dataset encompasses a rich collection of 439 dialects from different regions across Italy. Additionally, the dataset provides information about the specific locations where these dialects are spoken. This comprehensive resource enables in-depth analysis and exploration of the dialectal variations found within the Italian language.

It is important to note that many of the vernaculars spoken around Italy are recognized as officially distinct languages (e.g., Neapolitan, Ligurian, and Venetian, to name a few). Some of these also have a distinct online presence (e.g., with decent Wikipedias), and some MT research is devoted to them (NLLB Team et al., 2022). However, this "discretization" of the language continuum observed in the Italian peninsula, where each city/village is said to have its dialect, is far from realistic. Hence we focus on the fine-grained evaluation that our data from over 439 locales allows.

<sup>14</sup><http://ixa2.si.ehu.eus/atlas2/index.php>

<sup>15</sup><http://svrims2.dei.unipd.it:8080/asit-maldura/pages/search.jsp>

**Swiss German Varieties** Our Swiss German data was obtained by scraping the Syntactic Atlas of German Switzerland (SADS).<sup>16</sup> The SADS website hosts a total of 118 questionnaires, each accompanied by answers provided in 368 different locales. This dataset allows for an  $n$ -way comparison between the dialects and the standard (Swiss) German variant, providing valuable contrastive information. However, the data available on the website primarily focuses on highlighting the changes present in the sentences, necessitating manual annotation to identify instances where alterations occur in standard German sentences. Through this manual annotation process, we captured the specific linguistic variations exhibited by the Swiss German dialects.

**Central Occitan and Aranese** Occitan is a Romance language spoken in southern France, Monaco, Italy, and Catalonia, also known as Provençal or Languedocian (*lange d'oc*), and acknowledged as a language continuum with multiple variations. In this work, we use data from the dissertation of (Dansereau, 1985) who studied the syntax of central Occitan, providing additional translations of all examples to "standard" French. In total, we have 379 in the Occitan portion of CODET. Note, of course, that French and Occitan are widely accepted as different languages; nevertheless, most Occitan speakers live in France, and therefore most systems will direct these speakers' input to a French model.

Aranese is a standardized form of the Pyrenean Gascon variety of the Occitan language. It is primarily spoken in the Val d'Aran, located in northwestern Catalonia near the border between Spain and France. Aranese holds official status alongside Catalan and Spanish as one of the three recognized languages in this region. In our research, we scraped a total of 476 sentences from the gencat website,<sup>17</sup> in Aranese and English.

**Griko** Griko is a Greek dialect spoken in southern Italy, in the Grecìa Salentina area southeast of Lecce. It is also known as *Italiot Greek* when combined with the Greko variety of Calabria. For CODET, we use a sample of Griko data from (Anastasopoulos et al., 2018), for which we also create "translations" into modern standard Greek, ending up with a total of 163 sentences.

<sup>16</sup><https://dialektsyntax.linguistik.uzh.ch>

<sup>17</sup><https://web.gencat.cat/en/actualitat/darreres-noticies/index.html>

**Arabic Vernaculars** Arabic, as a macro-language, encompasses a range of dialects within its language continuum. Modern Standard Arabic (MSA) is a standardized form of the language used across various regions, encompassing cultural, media, and educational domains from Morocco to the west to Oman to the east. However, it is important to note that MSA is not the native language of Arabic speakers. In informal and spontaneous settings where spoken MSA is typically expected, such as in TV talk shows, speakers often code-switch between their respective vernaculars and MSA.

To examine MT performance in Arabic dialects, we use the MADAR corpus (Bouamor et al., 2018). This extensive corpus consists of 12000 sentences on varieties from 25 different Arabic-speaking cities. The corpus is created by translating selected sentences from the Basic Traveling Expression Corpus (BTEC) (Takezawa et al., 2007) into various dialects and MSA. This unique dataset is highly suitable for conducting contrastive machine translation (MT) research for Arabic dialects, but to our knowledge has not been extensively used for this purpose.

**Tigrinya** Tigrinya is an Ethio-Semitic language predominantly spoken in Eritrea and by the Tigrayan people in the Tigray Region of northern Ethiopia. Within Tigrinya, two major varieties exist the Eritrean dialect and the Ethiopian dialect. To explore and compare these two, we leverage the dataset available from TICO-19 (Anastasopoulos et al., 2020). The TICO-19 dataset is the result of a collective translation initiative during the COVID-19 pandemic, aiming to enhance society's readiness to respond to the ongoing crisis through the utilization of translation technologies effectively. This dataset specifically focuses on the COVID-19 domain, containing translations of the same content in multiple languages. The same 3071 English sentences were professionally translated into both varieties of Tigrinya, making it ideal for our purposes.

**Farsi and Dari** We use the same TICO-19 dataset to obtain the data we need for Farsi as spoken in Iran and one of its variants, Dari, as spoken in Afghanistan. 7.6 million people speak Dari. These 2 languages are mutually intelligible in written format but very different when spoken.

**Malay and Indonesian** The TICO-19 dataset also provides data in Malay and one of its stan-

dardized variants, Indonesian. Malay serves as the official language in Brunei, Indonesia, Malaysia, and Singapore, and it is also spoken in East Timor, parts of the Philippines, and Thailand. Overall, Malay is spoken by approximately 290 million individuals. Out of this total, the Indonesian variant is spoken by around 260 million people in Indonesia. Though both languages are generally mutually intelligible, the spelling, grammar, pronunciation, vocabulary, and source of loanwords make a noticeable difference between them.

**Swahili** We use the Coastal and Congolese Swahili data produced by the TICO-19 dataset, as before. The two varieties are largely intelligible, although the Coastal one (spoken in Tanzania and Kenya) has more influences from English, while the Congolese one incorporates more elements from French.

## B Quantitative Analysis

**Basque Varieties** Tables C.6 and C.7 contain the benchmark scores for Basque dialects.<sup>18</sup> The lowest-scoring dialect is Maule-Lextarre, and the highest-scoring one is Urruna, with a difference of around 0.15 COMET points. This shows that further work is needed for a good MT system for under-represented dialects.

**Other Languages** Table 3 displays the results for all the other languages<sup>19</sup> encompassing only 1-3 dialects. As for Griko, Central Occitan, and Aranese, we have no other dialects to compare their results. Nevertheless, we benchmark them for future work. We base our discussion below on the best-performing NLLB-3.3B model.

For Tigrinya, the Ethiopian dialect has a higher COMET score (0.82) than the Eritrean dialect (0.8). This is consistent for all pre-trained models. Even though Tigrinya is the largest language of Eritrea (unlike Ethiopia), the model seems better suited to the Ethiopian dialect – we suspect this is because most online resources are in this variety.

Regarding Farsi and Dari, the pre-trained models perform almost equally well despite a small difference between these two dialects (around 0.01 COMET points on average). For Malay-Indonesian, the results are more mixed. The distilled models obtain better COMET scores for In-

donesian than Malay in general. This may be expected because the NLLB models support Indonesian but not Malay. However, we observe an opposite trend for the two non-distilled models, where the Malay language gets a higher COMET score.

For Swahili, the result is consistent for all the pre-trained models: Coastal variety is better handled than Congolese. The Coastal variety is highly resourced and included in the models’ training, unlike the Congolese one, which is primarily spoken.

Comparing average results across languages (Figure C.2 depicts the average COMET scores), we find that the baseline system performs well for the various dialects of Swiss German, Farsi, and Arabic but not as well for other languages, especially low-resourced ones. Comparing the models based on size, we find that larger ones consistently outperformed the smaller ones.

## C Complete Results

<sup>18</sup>Due to space constraints, these results are provided in the Appendix C.

<sup>19</sup>In Appendix C, we present the benchmark results for all languages.

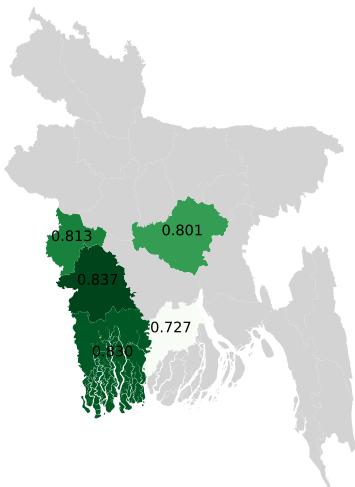


Figure C.1: Map of Bangladesh with COMET scores for different regions.

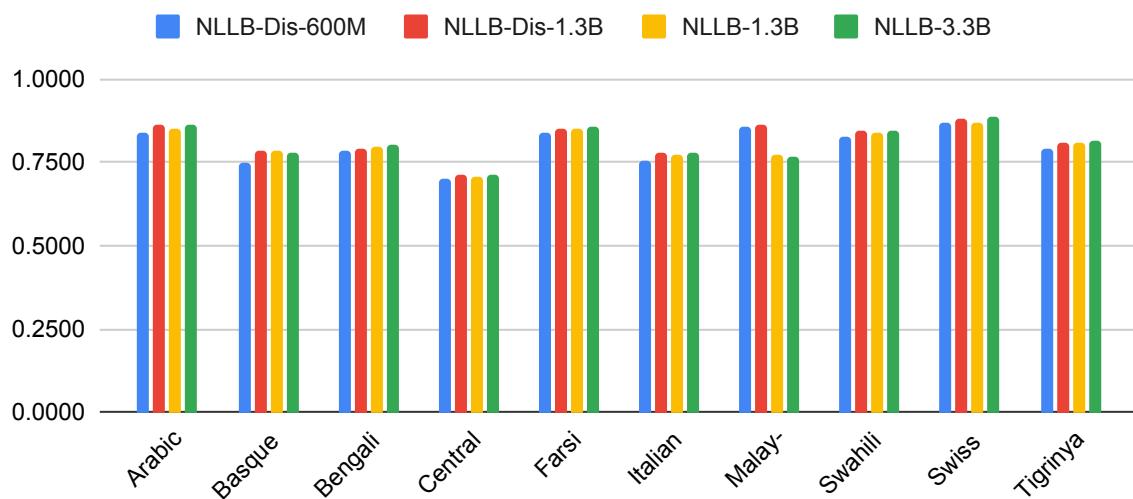


Figure C.2: Average COMET score of all the dialects of languages with more than one variety.

Language	# Sentences (common)	# Sentences (coverage)
Arabic	2000	
Basque	0	34
Italian	0	
Swiss German	0	87

Table C.1: The subset of common sentences and those with the highest coverage in all dialects of the indicated languages. Except for Arabic, there is no common sentence for the other languages.

Arabic	# of Sentences	COMET			
		NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>Alexandria</b>	2000	0.8655	0.8895	0.8811	0.8947
<b>Baghdad</b>	2000	0.8445	0.8649	0.8595	0.8711
<b>Doha</b>	12000	0.8380	0.8572	0.8509	0.8588
<b>Benghazi</b>	2000	0.8336	0.8496	0.8452	0.8520
<b>Khartoum</b>	2000	0.8488	0.8656	0.8626	0.8695
<b>Sfax</b>	2000	0.7815	0.8015	0.7990	0.8010
<b>Muscat</b>	2000	0.8639	0.8839	0.8790	0.8855
<b>Mosul</b>	2000	0.8430	0.8649	0.8619	0.8753
<b>Riyadh</b>	2000	0.8859	0.9011	0.8966	0.9028
<b>Sanaa</b>	2000	0.8452	0.8704	0.8633	0.8733
<b>Aswan</b>	2000	0.8496	0.8736	0.8680	0.8800
<b>Algiers</b>	2000	0.8162	0.8330	0.8276	0.8357
<b>Tripoli</b>	2000	0.8271	0.8406	0.8380	0.8465
<b>Jeddah</b>	2000	0.8420	0.8653	0.8615	0.8683
<b>Rabat</b>	12000	0.8181	0.8366	0.8318	0.8418
<b>Cairo</b>	12000	0.8578	0.8805	0.8735	0.8839
<b>Jerusalem</b>	2000	0.8450	0.8632	0.8559	0.8666
<b>Beirut</b>	12000	0.8315	0.8553	0.8391	0.8512
<b>Basra</b>	2000	0.8436	0.8640	0.8575	0.8700
<b>Tunis</b>	12000	0.7931	0.8134	0.8061	0.8152
<b>Damascus</b>	2000	0.8457	0.8660	0.8545	0.8686
<b>Salt</b>	2000	0.8569	0.8767	0.8650	0.8772
<b>Fes</b>	2000	0.8594	0.8750	0.8695	0.8769
<b>Aleppo</b>	2000	0.8311	0.8518	0.8389	0.8537
<b>Amman</b>	2000	0.8618	0.8767	0.8683	0.8811

Table C.2: COMET score of different Arabic dialects on all sentences.

Arabic	# of Sentences	COMET			
		NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>Sfax</b>	2000	0.7815	0.8015	0.7990	0.8010
<b>Tunis</b>	2000	0.7942	0.8124	0.8062	0.8159
<b>Algiers</b>	2000	0.8162	0.8330	0.8276	0.8357
<b>Rabat</b>	2000	0.8205	0.8400	0.8358	0.8457
<b>Tripoli</b>	2000	0.8271	0.8406	0.8380	0.8465
<b>Beirut</b>	2000	0.8285	0.8518	0.8363	0.8503
<b>Benghazi</b>	2000	0.8336	0.8496	0.8452	0.8520
<b>Aleppo</b>	2000	0.8311	0.8518	0.8389	0.8537
<b>Doha</b>	2000	0.8389	0.8591	0.8520	0.8595
<b>Jerusalem</b>	2000	0.8450	0.8632	0.8559	0.8666
<b>Jeddah</b>	2000	0.8420	0.8653	0.8615	0.8683
<b>Damascus</b>	2000	0.8457	0.8660	0.8545	0.8686
<b>Khartoum</b>	2000	0.8488	0.8656	0.8626	0.8695
<b>Basra</b>	2000	0.8436	0.8640	0.8575	0.8700
<b>Baghdad</b>	2000	0.8445	0.8649	0.8595	0.8711
<b>Sanaa</b>	2000	0.8452	0.8704	0.8633	0.8733
<b>Mosul</b>	2000	0.8430	0.8649	0.8619	0.8753
<b>Fes</b>	2000	0.8594	0.8750	0.8695	0.8769
<b>Salt</b>	2000	0.8569	0.8767	0.8650	0.8772
<b>Aswan</b>	2000	0.8496	0.8736	0.8680	0.8800
<b>Amman</b>	2000	0.8618	0.8767	0.8683	0.8811
<b>Cairo</b>	2000	0.8583	0.8790	0.8724	0.8853
<b>Muscat</b>	2000	0.8639	0.8839	0.8790	0.8855
<b>Alexandria</b>	2000	0.8655	0.8895	0.8811	0.8947
<b>Riyadh</b>	2000	0.8859	0.9011	0.8966	0.9028

Table C.3: Comparable COMET score of different Arabic dialects on a subset of 2000 sentences.

Arabic	# of Sentences	BLEU			
		NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>Sfax</b>	2000	21.48	24.11	23.80	24.53
<b>Tunis</b>	12000	23.75	26.87	25.76	27.28
<b>Algiers</b>	2000	25.20	28.11	27.84	28.91
<b>Rabat</b>	12000	28.21	32.13	31.45	33.03
<b>Tripoli</b>	2000	28.48	32.38	32.32	33.70
<b>Beirut</b>	12000	29.65	35.53	32.10	34.44
<b>Benghazi</b>	2000	30.72	35.11	34.06	35.68
<b>Aleppo</b>	2000	30.17	34.92	32.86	36.36
<b>Doha</b>	12000	31.04	35.76	34.75	36.37
<b>Jerusalem</b>	2000	31.40	36.22	34.55	37.87
<b>Jeddah</b>	2000	31.29	36.33	35.32	37.70
<b>Damascus</b>	2000	31.29	36.85	34.58	38.49
<b>Khartoum</b>	2000	35.84	40.19	39.99	42.18
<b>Basra</b>	2000	32.34	36.84	35.83	39.02
<b>Baghdad</b>	2000	32.71	37.26	37.03	40.04
<b>Sanaa</b>	2000	32.25	38.68	37.18	39.67
<b>Mosul</b>	2000	33.16	39.32	38.07	41.44
<b>Fes</b>	2000	34.77	39.04	38.44	40.90
<b>Salt</b>	2000	35.12	41.15	38.32	41.56
<b>Aswan</b>	2000	31.60	38.29	36.61	39.61
<b>Amman</b>	2000	33.29	38.55	36.35	40.30
<b>Cairo</b>	12000	33.60	40.22	38.41	41.17
<b>Muscat</b>	2000	37.01	43.10	42.29	44.13
<b>Alexandria</b>	2000	36.19	43.19	40.51	44.98
<b>Riyadh</b>	2000	40.48	46.55	45.03	47.60

Table C.4: BLEU score of different Arabic dialects on all sentences.

Arabic	# of Sentences	BLEU			
		NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>Sfax</b>	2000	21.48	24.11	23.80	24.53
<b>Tunis</b>	2000	24.31	27.73	25.97	28.13
<b>Algiers</b>	2000	25.20	28.11	27.84	28.91
<b>Rabat</b>	2000	29.32	32.93	32.47	33.99
<b>Tripoli</b>	2000	28.48	32.38	32.32	33.70
<b>Beirut</b>	2000	29.34	34.91	31.78	34.83
<b>Benghazi</b>	2000	30.72	35.11	34.06	35.68
<b>Aleppo</b>	2000	30.17	34.92	32.86	36.36
<b>Doha</b>	2000	32.05	36.71	35.30	37.64
<b>Jerusalem</b>	2000	31.40	36.22	34.55	37.87
<b>Jeddah</b>	2000	31.29	36.33	35.32	37.70
<b>Damascus</b>	2000	31.29	36.85	34.58	38.49
<b>Khartoum</b>	2000	35.84	40.19	39.99	42.18
<b>Basra</b>	2000	32.34	36.84	35.83	39.02
<b>Baghdad</b>	2000	32.71	37.26	37.03	40.04
<b>Sanaa</b>	2000	32.25	38.68	37.18	39.67
<b>Mosul</b>	2000	33.16	39.32	38.07	41.44
<b>Fes</b>	2000	34.77	39.04	38.44	40.90
<b>Salt</b>	2000	35.12	41.15	38.32	41.56
<b>Aswan</b>	2000	31.60	38.29	36.61	39.61
<b>Amman</b>	2000	33.29	38.55	36.35	40.30
<b>Cairo</b>	2000	34.30	40.96	39.37	41.86
<b>Muscat</b>	2000	37.01	43.10	42.29	44.13
<b>Alexandria</b>	2000	36.19	43.19	40.51	44.98
<b>Riyadh</b>	2000	40.48	46.55	45.03	47.60

Table C.5: Comparable BLEU score of different Arabic dialects on a subset of 2000 sentences.

<b>Basque</b>	# of Sentences	COMET			
		<b>NLLB-Dis-600M</b>	<b>NLLB-Dis-1.3B</b>	<b>NLLB-1.3B</b>	<b>NLLB-3.3B</b>
<b>Ahetze</b>	197	0.8045	0.8058	0.8073	0.8050
<b>Amenduze-Unaso</b>	198	0.8109	0.8111	0.8180	0.8095
<b>Arbona</b>	196	0.8188	0.8032	0.8168	0.8056
<b>Azkaine</b>	198	0.8276	0.8279	0.8314	0.8225
<b>Baigorri</b>	198	0.8009	0.8088	0.8070	0.7961
<b>Barkoxe</b>	198	0.6728	0.7014	0.6904	0.6878
<b>Behorlegi</b>	198	0.8225	0.8151	0.8269	0.8176
<b>Beskoitze</b>	197	0.8156	0.8109	0.8144	0.8174
<b>Bidarrai</b>	198	0.7812	0.7882	0.7949	0.7903
<b>Bidarte</b>	197	0.7955	0.7969	0.7991	0.7968
<b>Donibane-Lohizune</b>	198	0.8009	0.8102	0.8045	0.7980
<b>Ezpeize-Undureine</b>	167	0.6847	0.7124	0.7121	0.6906
<b>Gabadi</b>	196	0.7967	0.7958	0.8018	0.7962
<b>Garruze</b>	198	0.8217	0.8252	0.8215	0.8185
<b>Hazparne</b>	180	0.8445	0.8409	0.8433	0.8302
<b>Heleta</b>	198	0.8084	0.8098	0.8075	0.8013
<b>Hendaia</b>	176	0.8027	0.8143	0.8016	0.8015
<b>Iholdi</b>	198	0.7405	0.7440	0.7473	0.7506
<b>Isturitz</b>	109	0.7875	0.7954	0.7965	0.7922
<b>Itsasu</b>	198	0.7927	0.7994	0.8047	0.7886
<b>Jatsu</b>	198	0.7662	0.7643	0.7608	0.7654
<b>Jutsi</b>	198	0.8165	0.8144	0.8223	0.8171
<b>Larraine</b>	162	0.6540	0.6935	0.6723	0.6686
<b>Larzabale-Arroze-Zibitze</b>	198	0.7966	0.7979	0.7988	0.7993
<b>Luhuso</b>	198	0.8167	0.8278	0.8248	0.8201
<b>Maule-Lextarre</b>	198	0.6703	0.6931	0.6712	0.6802
<b>Mitikile</b>	147	0.7195	0.7391	0.7399	0.7328
<b>Mugerre</b>	198	0.8046	0.8181	0.8017	0.8143
<b>Muskildi</b>	184	0.6946	0.7168	0.7062	0.7007
<b>Pagola</b>	197	0.6633	0.6941	0.6834	0.6873
<b>Sara</b>	198	0.8113	0.8118	0.8161	0.8098
<b>Senpere</b>	198	0.8181	0.8246	0.8086	0.8234
<b>Suhuskune</b>	198	0.7964	0.7868	0.8004	0.7975
<b>Uhart-Garazi</b>	198	0.7964	0.7868	0.8004	0.7975
<b>Urdinarbe</b>	217	0.6857	0.7088	0.6897	0.6966
<b>Urepele</b>	197	0.7831	0.7838	0.7873	0.7832
<b>Urruna</b>	197	0.8591	0.8523	0.8593	0.8480
<b>Ziburu</b>	237	0.8263	0.8255	0.8296	0.8236

Table C.6: COMET score of different Basque dialects on all sentences.

Basque	COMET			
	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>Luhuso</b>	0.7894	0.8278	0.8236	0.8202
<b>Jutsi</b>	0.7863	0.8144	0.8218	0.8173
<b>Muskildi</b>	0.6499	0.7165	0.7065	0.7011
<b>Donibane-Lohizune</b>	0.7713	0.8102	0.8032	0.7982
<b>Uharte-Garazi</b>	0.7636	0.7877	0.8008	0.7977
<b>Maule-Lextarre</b>	0.6254	0.6949	0.6723	0.6816
<b>Mugerre</b>	0.7787	0.8179	0.8027	0.8147
<b>Baigorri</b>	0.7722	0.8105	0.8070	0.7990
<b>Hendaia</b>	0.7738	0.8131	0.8008	0.8023
<b>Urdinarbe</b>	0.6347	0.7108	0.6892	0.6970
<b>Beskoitze</b>	0.7897	0.8110	0.8143	0.8168
<b>Suhuskune</b>	0.7636	0.7877	0.8008	0.7977
<b>Senpere</b>	0.7919	0.8237	0.8083	0.8230
<b>Itsasu</b>	0.7601	0.7988	0.8035	0.7879
<b>Bidarrai</b>	0.7492	0.7876	0.7949	0.7909
<b>Azkaime</b>	0.8045	0.8283	0.8315	0.8244
<b>Barkoxe</b>	0.6244	0.7022	0.6897	0.6884
<b>Isturitz</b>	0.7609	0.7951	0.7957	0.7909
<b>Iholdi</b>	0.7001	0.7445	0.7485	0.7510
<b>Larraine</b>	0.6019	0.6961	0.6735	0.6682
<b>Ezpeize-Undureine</b>	0.6401	0.7140	0.7120	0.6900
<b>Ahetze</b>	0.7764	0.8059	0.8075	0.8056
<b>Sara</b>	0.7847	0.8115	0.8151	0.8089
<b>Ziburu</b>	0.8016	0.8239	0.8277	0.8223
<b>Pagola</b>	0.6124	0.6962	0.6855	0.6894
<b>Bidarte</b>	0.7684	0.7978	0.7984	0.7955
<b>Mitikile</b>	0.6730	0.7383	0.7384	0.7323
<b>Behorlegi</b>	0.7951	0.8146	0.8278	0.8184
<b>Amenduze-Unaso</b>	0.7824	0.8115	0.8183	0.8097
<b>Jatsu</b>	0.7274	0.7643	0.7617	0.7656
<b>Hazparne</b>	0.8261	0.8392	0.8414	0.8281
<b>Arbona</b>	0.7917	0.8028	0.8181	0.8049
<b>Gabadi</b>	0.7662	0.7964	0.8024	0.7974
<b>Larzabale-Arroze-Zibitze</b>	0.7621	0.7972	0.7986	0.7987
<b>Urepele</b>	0.7470	0.7864	0.7884	0.7842
<b>Garruze</b>	0.7956	0.8251	0.8210	0.8182
<b>Heleta</b>	0.7794	0.8089	0.8058	0.8012
<b>Urruna</b>	0.8400	0.8546	0.8623	0.8503

Table C.7: Comparable COMET score of different Basque dialects

<b>Basque</b>	# of Sentences	BLEU			
		<b>NLLB-Dis-600M</b>	<b>NLLB-Dis-1.3B</b>	<b>NLLB-1.3B</b>	<b>NLLB-3.3B</b>
<b>Luhuso</b>	198	21.61	19.79	21.06	19.52
<b>Jutsi</b>	198	21.30	19.54	20.09	19.85
<b>Muskildi</b>	184	9.57	8.04	9.30	8.40
<b>Donibane-Lohizune</b>	198	20.15	18.99	18.12	17.62
<b>Uharte-Garazi</b>	198	20.46	17.09	18.67	17.82
<b>Maule-Lextarre</b>	198	11.33	11.35	10.41	10.58
<b>Mugerre</b>	198	21.21	19.99	19.81	20.40
<b>Baigorri</b>	198	20.57	18.00	18.90	17.15
<b>Hendaia</b>	176	20.86	19.20	18.74	19.75
<b>Urdinarbe</b>	217	8.07	8.05	7.82	7.99
<b>Beskoitze</b>	197	23.08	20.54	21.34	21.13
<b>Suhuskune</b>	198	20.46	17.09	18.67	17.82
<b>Senpere</b>	198	22.80	20.48	20.45	21.05
<b>Itsasu</b>	198	20.22	19.00	20.62	18.43
<b>Bidarrai</b>	198	18.03	17.12	16.84	16.97
<b>Azkaine</b>	198	24.38	21.06	22.55	21.09
<b>Barkoxe</b>	198	11.02	11.23	10.64	10.52
<b>Isturitze</b>	109	14.21	13.24	13.96	12.09
<b>Iholdi</b>	198	16.16	13.97	14.80	14.75
<b>Larraine</b>	162	9.37	9.71	10.20	8.99
<b>Ezpeize-Undureine</b>	167	12.13	12.88	12.85	11.37
<b>Ahetze</b>	197	20.97	18.46	19.54	19.45
<b>Sara</b>	198	22.58	19.37	20.36	20.08
<b>Ziburu</b>	237	22.08	18.17	20.55	20.39
<b>Pagola</b>	197	10.22	10.44	10.21	9.39
<b>Bidarte</b>	197	21.21	18.88	19.58	18.69
<b>Mitikile</b>	147	16.39	14.51	14.65	14.61
<b>Behorlegi</b>	198	23.13	20.30	21.46	20.82
<b>Amenduze-Unaso</b>	198	23.38	18.91	20.96	19.91
<b>Jatsu</b>	198	16.82	14.19	14.29	15.67
<b>Hazparne</b>	180	19.64	17.34	19.05	15.43
<b>Arbona</b>	196	21.93	18.66	21.33	19.42
<b>Gabadi</b>	196	20.88	16.60	18.54	17.07
<b>Larzabale-Arroze-Zibitze</b>	198	19.35	17.68	17.97	18.88
<b>Urepele</b>	197	17.65	15.65	18.02	17.63
<b>Garruze</b>	198	24.64	20.72	22.11	22.34
<b>Heleta</b>	198	22.43	20.15	22.14	19.30
<b>Urruna</b>	197	27.85	23.76	24.91	22.89

Table C.8: BLEU score of different Basque dialects on all sentences.

Basque	BLEU			
	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>Luhuso</b>	21.38	19.68	20.68	19.54
<b>Jutsi</b>	21.06	19.35	19.99	19.88
<b>Muskildi</b>	9.72	8.23	9.41	8.53
<b>Donibane-Lohizune</b>	20.30	18.95	17.93	17.71
<b>Uharte-Garazi</b>	20.66	17.16	18.75	18.00
<b>Maule-Lextarre</b>	11.29	11.51	10.21	10.34
<b>Mugerre</b>	21.34	19.93	19.94	20.44
<b>Baigorri</b>	20.50	17.97	18.76	17.25
<b>Hendaia</b>	20.96	19.24	18.79	19.95
<b>Urdinarbe</b>	8.03	8.15	7.82	8.02
<b>Beskoitze</b>	23.01	20.41	21.25	21.21
<b>Suhuskune</b>	20.66	17.16	18.75	18.00
<b>Senpere</b>	22.77	20.38	20.56	21.16
<b>Itsasu</b>	20.11	18.65	20.42	18.58
<b>Bidarrai</b>	18.16	17.05	16.82	17.31
<b>Azkaime</b>	24.66	20.98	22.59	21.32
<b>Barkoxe</b>	11.25	11.01	10.57	10.56
<b>Isturitz</b>	14.17	13.16	13.99	12.04
<b>Iholdi</b>	16.23	14.06	14.85	14.84
<b>Larraine</b>	9.39	9.89	10.37	8.87
<b>Ezpeize-Undureine</b>	12.08	12.88	12.82	11.29
<b>Ahetze</b>	20.95	18.32	19.58	19.48
<b>Sara</b>	22.53	19.13	20.43	20.13
<b>Ziburu</b>	21.66	17.80	19.77	19.90
<b>Pagola</b>	10.33	10.52	10.22	9.60
<b>Bidarte</b>	21.16	18.84	19.46	18.45
<b>Mitikile</b>	16.51	14.57	14.51	14.73
<b>Behorlegi</b>	23.03	20.12	21.61	20.95
<b>Amenduze-Unaso</b>	23.39	18.93	20.90	19.60
<b>Jatsu</b>	16.71	14.11	14.18	15.69
<b>Hazparne</b>	19.36	17.29	18.82	15.08
<b>Arbona</b>	21.78	18.51	21.52	19.48
<b>Gabadi</b>	21.10	16.62	18.51	17.14
<b>Larzabale-Arroze-Zibitze</b>	19.16	17.60	17.90	18.77
<b>Urepele</b>	17.84	15.72	18.09	17.96
<b>Garruze</b>	24.74	20.71	21.95	22.30
<b>Heleta</b>	22.36	19.87	21.96	19.26
<b>Urruna</b>	27.86	23.65	25.23	23.03

Table C.9: Comparable BLEU score of different Basque dialects

Italian	# of Sentences	COMET				
		DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>Albosaggia</b>	268	0.6218	0.6954	0.7058	0.7132	0.7209
<b>Aldeno</b>	1448	0.7473	0.8199	0.8426	0.8390	0.8434
<b>Altare</b>	292	0.5701	0.6370	0.6748	0.6659	0.6764
<b>Arcola</b>	305	0.6846	0.7438	0.7672	0.7721	0.7805
<b>Arenzano</b>	304	0.6004	0.6926	0.7294	0.7118	0.7239
<b>Ne</b>	286	0.6130	0.7384	0.7704	0.7489	0.7733
<b>Bergantino</b>	570	0.6291	0.6981	0.7226	0.7134	0.7142
<b>Bologna</b>	294	0.5697	0.6386	0.6637	0.6473	0.6667
<b>Bondeno</b>	274	0.6211	0.7259	0.7443	0.7439	0.7447
<b>Borgofranco d'Ivrea</b>	107	0.6202	0.7200	0.7564	0.7413	0.7386
<b>Borgomanero</b>	234	0.6007	0.6707	0.7101	0.6844	0.6962
<b>Calizzano</b>	302	0.6565	0.7018	0.7347	0.7318	0.7380
<b>Casalmaggiore</b>	94	0.6137	0.6870	0.7136	0.6969	0.7212
<b>Casarza Ligure</b>	289	0.6257	0.7356	0.7673	0.7511	0.7621
<b>Villa Lagarina</b>	107	0.7642	0.8342	0.8800	0.8627	0.8594
<b>Cencenighe Agordino</b>	292	0.6289	0.7198	0.7522	0.7440	0.7481
<b>Cesena</b>	304	0.6027	0.6770	0.7082	0.6937	0.7115
<b>Cicagna</b>	291	0.5936	0.7082	0.7384	0.7317	0.7344
<b>Cividale del Friuli</b>	296	0.6059	0.7086	0.7337	0.7244	0.7563
<b>Colle di Val d'Elsa</b>	255	0.8325	0.8320	0.8580	0.8478	0.8569
<b>Comano</b>	288	0.6454	0.7226	0.7416	0.7451	0.7564
<b>Farra di Soligo</b>	567	0.7573	0.8184	0.8432	0.8396	0.8399
<b>Favale di Malvaro</b>	286	0.6499	0.7414	0.7578	0.7450	0.7532
<b>Finale Ligure</b>	302	0.6141	0.6953	0.7365	0.7157	0.7300
<b>Firenze</b>	305	0.9090	0.9230	0.9281	0.9239	0.9309
<b>Forlì</b>	293	0.6141	0.6985	0.7209	0.7148	0.7153
<b>La Spezia</b>	305	0.6560	0.7270	0.7613	0.7581	0.7688
<b>Lecco</b>	304	0.6197	0.7445	0.7653	0.7589	0.7681
<b>Longare</b>	151	0.7146	0.8008	0.8250	0.8318	0.8177
<b>Malonno</b>	304	0.6179	0.6824	0.7146	0.7174	0.7156
<b>Mantova</b>	107	0.6122	0.7212	0.7417	0.7418	0.7420
<b>Venezia</b>	459	0.7540	0.8435	0.8647	0.8558	0.8608
<b>Milano</b>	911	0.6173	0.7362	0.7608	0.7612	0.7719
<b>Moimacco</b>	305	0.6428	0.7386	0.7587	0.7601	0.7765
<b>Moncalieri</b>	107	0.5986	0.7149	0.7569	0.7275	0.7295
<b>Mondovì</b>	111	0.6225	0.6861	0.7089	0.7019	0.7150
<b>Monno</b>	304	0.5998	0.6603	0.6993	0.6833	0.7100
<b>Sover</b>	107	0.7606	0.8299	0.8494	0.8563	0.8552
<b>Motta di Livenza</b>	305	0.7594	0.8405	0.8620	0.8583	0.8586
<b>Novi Ligure</b>	33	0.5701	0.6275	0.6503	0.6404	0.6732
<b>Imperia</b>	277	0.6494	0.7421	0.7772	0.7500	0.7782
<b>Padova</b>	1773	0.7533	0.8285	0.8486	0.8473	0.8497
<b>Palazzolo dello Stella</b>	107	0.5510	0.7098	0.7277	0.7344	0.7370
<b>Palmanova</b>	107	0.7584	0.8580	0.8910	0.8788	0.8775
<b>Poirino</b>	302	0.6107	0.6864	0.7089	0.7029	0.7167
<b>Pontinvrea</b>	304	0.6392	0.6965	0.7333	0.7209	0.7288
<b>Pramaggiore</b>	305	0.7784	0.8340	0.8604	0.8583	0.8499
<b>Chiomonte</b>	444	0.5139	0.6424	0.6455	0.6397	0.6549
<b>Fontanigorda</b>	290	0.6507	0.7696	0.8035	0.7815	0.7902
<b>Remanzacco</b>	305	0.6064	0.6951	0.7207	0.7201	0.7381
<b>Rimini</b>	107	0.6020	0.6801	0.7024	0.6839	0.7141
<b>Riomaggiore</b>	305	0.6245	0.7263	0.7638	0.7544	0.7528
<b>Chieri</b>	291	0.6204	0.6858	0.7168	0.7056	0.7145
<b>Rivarossa</b>	107	0.6197	0.7207	0.7539	0.7343	0.7505
<b>Prali</b>	291	0.5476	0.6665	0.6746	0.6741	0.6859
<b>Rovereto</b>	107	0.7706	0.8489	0.8723	0.8698	0.8548
<b>Salzano</b>	374	0.7187	0.8297	0.8515	0.8476	0.8491
<b>San Michele al Tagliamento</b>	885	0.6457	0.7382	0.7596	0.7557	0.7585
<b>Scorzè</b>	107	0.7627	0.8262	0.8627	0.8585	0.8548
<b>Selva di Val Gardena</b>	203	0.5652	0.6430	0.6712	0.6676	0.6632
<b>Tezze sul Brenta</b>	304	0.7396	0.8245	0.8475	0.8416	0.8384
<b>Torino</b>	1484	0.6348	0.7135	0.7493	0.7377	0.7435
<b>Trecate</b>	107	0.5553	0.6102	0.6357	0.6196	0.6540

Italian	# of Sentences	COMET				
		DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Treviso	107	0.7397	0.8254	0.8629	0.8476	0.8517
Montecchio Maggiore	127	0.7650	0.8364	0.8633	0.8576	0.8567
Amblar	127	0.6629	0.7417	0.7620	0.7638	0.7687
Andreis	127	0.6368	0.7156	0.7507	0.7189	0.7439
Aquileia	198	0.6151	0.7236	0.7421	0.7437	0.7457
Arsiero	184	0.7514	0.8455	0.8704	0.8675	0.8697
Bagnolo San Vito	185	0.6133	0.7147	0.7249	0.7214	0.7396
Barcis	127	0.6749	0.7417	0.7607	0.7631	0.7621
Biancavilla	199	0.7619	0.8461	0.8575	0.8485	0.8493
Borghetto di Vara	197	0.6834	0.7667	0.7828	0.7729	0.7870
Corte Franca	889	0.6489	0.6964	0.7163	0.7087	0.7150
Borgo San Martino	198	0.5918	0.6809	0.7174	0.7003	0.7078
Bormio	269	0.5800	0.6929	0.7379	0.7232	0.7364
Bovolone	127	0.7650	0.8233	0.8389	0.8394	0.8373
Noale	254	0.7593	0.8227	0.8445	0.8344	0.8402
Brione	195	0.6705	0.7475	0.7732	0.7676	0.7775
Cairo Montenotte	198	0.6614	0.7160	0.7416	0.7278	0.7382
Calalzo di Cadore	152	0.7259	0.7766	0.8000	0.7924	0.7967
Calcinate	127	0.6142	0.6728	0.6718	0.6830	0.6935
Caldogno	127	0.7682	0.8295	0.8427	0.8357	0.8381
Asti	127	0.6872	0.7261	0.7430	0.7409	0.7469
Camisano Vicentino	127	0.7431	0.8145	0.8506	0.8443	0.8490
Brugine	126	0.7429	0.8324	0.8334	0.8418	0.8342
Carcare	198	0.6673	0.7178	0.7572	0.7562	0.7630
Carmignano di Brenta	442	0.7205	0.8014	0.8158	0.8146	0.8141
Carpi	183	0.6026	0.6891	0.7214	0.7072	0.7225
Carrara	199	0.5266	0.6528	0.6748	0.6736	0.6809
Campitello di Fassa	392	0.6368	0.7121	0.7364	0.7384	0.7374
Cesiomaggiore	184	0.7582	0.8285	0.8513	0.8506	0.8438
Chiavari	382	0.6573	0.7689	0.7948	0.7809	0.7908
Chies d'Alpago	199	0.7700	0.8170	0.8397	0.8311	0.8443
Chioggia	155	0.7562	0.8462	0.8687	0.8674	0.8680
Cimolais	127	0.6620	0.7202	0.7316	0.7233	0.7425
Belluno	227	0.7212	0.7614	0.7941	0.7826	0.7915
Claut	126	0.6583	0.7108	0.7362	0.7434	0.7497
Forni Avoltri	188	0.5309	0.6681	0.6924	0.6698	0.6981
Colognola ai Colli	127	0.7315	0.7773	0.7857	0.7919	0.7801
Cordenons	183	0.6631	0.7462	0.7544	0.7630	0.7683
Corvara in Badia/Corvara	347	0.5774	0.6726	0.6995	0.6860	0.6838
Due Carrare	381	0.7513	0.8277	0.8461	0.8485	0.8527
Erto e Casso	127	0.6359	0.6751	0.7019	0.6828	0.7194
Cittadella	254	0.7463	0.8190	0.8451	0.8423	0.8423
Falcade	153	0.6641	0.7071	0.7305	0.7266	0.7328
Sernaglia della Battaglia	127	0.7291	0.8012	0.8113	0.8081	0.8263
Ferrara	543	0.6014	0.6895	0.7046	0.7055	0.7049
Sondalo	270	0.6289	0.7150	0.7364	0.7511	0.7409
Galliera Veneta	254	0.7480	0.8160	0.8361	0.8324	0.8382
Gazzo	127	0.7261	0.7853	0.8093	0.7968	0.8072
Arcole	127	0.7208	0.7932	0.8221	0.8108	0.8186
Montegaldella	127	0.7590	0.8393	0.8479	0.8383	0.8430
Gorizia	387	0.6525	0.7415	0.7800	0.7649	0.7805
Gradara	153	0.6388	0.7116	0.7222	0.7258	0.7158
Grosio	211	0.6086	0.7485	0.7680	0.7561	0.7772
Illasi	390	0.7029	0.7802	0.7990	0.7929	0.7995
Iseo	1016	0.6513	0.7108	0.7346	0.7252	0.7263
Jesolo	198	0.7562	0.8270	0.8374	0.8411	0.8434
Lamon	154	0.6957	0.7563	0.7822	0.7831	0.7748
Rocca Pietore	391	0.6500	0.7058	0.7269	0.7279	0.7294
Albignasego	127	0.7398	0.8125	0.8338	0.8262	0.8329
Livigno	301	0.5871	0.6750	0.6902	0.6826	0.7005
Lonato del Garda	198	0.6331	0.7255	0.7589	0.7556	0.7442
Sandrigo	127	0.7650	0.8443	0.8603	0.8479	0.8506

Italian	# of Sentences	COMET				
		DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Luzzara	127	0.6210	0.6771	0.6869	0.6821	0.7054
Marostica	326	0.7271	0.8047	0.8283	0.8239	0.8247
Maserà di Padova	127	0.7527	0.8239	0.8394	0.8464	0.8471
Mason Vicentino	199	0.7272	0.8074	0.8441	0.8331	0.8311
Arsìè	308	0.7072	0.7742	0.8055	0.8042	0.8105
Mirano	853	0.7695	0.8380	0.8589	0.8529	0.8549
Monselice	127	0.7483	0.8248	0.8367	0.8362	0.8312
Montecchio Precalcino	127	0.7617	0.8284	0.8338	0.8282	0.8341
Montereale Valcellina	126	0.6577	0.7413	0.7538	0.7595	0.7599
Nimis	153	0.5986	0.6943	0.7285	0.7217	0.7671
Tassullo	152	0.6590	0.7412	0.7668	0.7640	0.7640
Ortisei/St. Ulrich	33	0.5974	0.6730	0.6505	0.6623	0.6602
Osimo	126	0.7491	0.8033	0.8190	0.8086	0.8287
Comelico Superiore	199	0.5796	0.6753	0.7107	0.6941	0.7007
Vodo Cadore	153	0.6713	0.7341	0.7595	0.7548	0.7713
Pianiga	508	0.7643	0.8241	0.8443	0.8368	0.8404
Piove di Sacco	379	0.7537	0.8344	0.8470	0.8500	0.8514
Pozza di Fassa	75	0.6365	0.7202	0.7049	0.7241	0.7064
Pieve di Cadore	351	0.7120	0.7662	0.7983	0.7908	0.7993
Angrogna	40	0.6083	0.6932	0.6664	0.6969	0.7055
Puos d'Alpago	199	0.7381	0.7958	0.8140	0.8154	0.8151
Reana del Rojale	247	0.6138	0.7309	0.7542	0.7391	0.7578
Quinto Vicentino	127	0.7666	0.8395	0.8442	0.8446	0.8415
Redondesco	393	0.6111	0.7052	0.7297	0.7299	0.7214
Revò	127	0.6594	0.7329	0.7515	0.7526	0.7462
Romano d'Ezzelino	199	0.7656	0.8474	0.8705	0.8524	0.8609
Ronzone	254	0.6661	0.7337	0.7451	0.7645	0.7514
Rovigo	184	0.7855	0.8500	0.8786	0.8696	0.8785
Rovolon	184	0.7605	0.8393	0.8527	0.8515	0.8529
Badia/Abtei	153	0.6068	0.6895	0.7206	0.7186	0.7169
San Martino di Lupari	1016	0.7448	0.8194	0.8377	0.8306	0.8324
San Pietro in Gu	453	0.7403	0.8183	0.8455	0.8347	0.8363
Santa Maria di Sala	845	0.7623	0.8272	0.8463	0.8425	0.8434
Savona	197	0.6238	0.7518	0.7799	0.7667	0.7900
Samolaco	199	0.5184	0.6388	0.6634	0.6747	0.6817
Schio	127	0.7303	0.8245	0.8478	0.8429	0.8341
Selvazzano Dentro	127	0.7468	0.8195	0.8416	0.8483	0.8322
Valdidentro	250	0.6609	0.7356	0.7532	0.7482	0.7472
Solesino	127	0.7747	0.8379	0.8578	0.8513	0.8353
Calasetta	232	0.5135	0.6465	0.6885	0.6835	0.6751
Taggia	198	0.7107	0.7856	0.8086	0.8006	0.8119
Taglio di Po	374	0.6952	0.7832	0.7863	0.7840	0.7907
Teglio Veneto	198	0.6639	0.7722	0.7850	0.7669	0.7920
Teolo	127	0.7391	0.8104	0.8292	0.8428	0.8350
Pieve d'Alpago	184	0.7593	0.8055	0.8366	0.8291	0.8214
Tollegno	153	0.6083	0.7028	0.7160	0.7092	0.7195
Treia	126	0.7318	0.7789	0.7963	0.8010	0.8011
Triggiano	199	0.5890	0.6631	0.7206	0.6898	0.7067
Valdagno	154	0.7634	0.8228	0.8545	0.8491	0.8389
Valfurva	479	0.6489	0.7317	0.7536	0.7485	0.7523
Vallarsa	149	0.7293	0.8143	0.8333	0.8299	0.8200
Verona	184	0.7453	0.8251	0.8390	0.8288	0.8378
Vicenza	226	0.7633	0.8369	0.8563	0.8408	0.8461
Vidor	226	0.7607	0.8315	0.8415	0.8380	0.8508
Villa di Chiavenna	185	0.5199	0.6785	0.6960	0.6983	0.7022
Stazzona	241	0.5904	0.7407	0.7599	0.7511	0.7570
Villafranca Padovana	113	0.7330	0.8232	0.8490	0.8447	0.8325
Villaverla	113	0.7623	0.8168	0.8507	0.8334	0.8355
Villorba	144	0.6997	0.8177	0.8355	0.8339	0.8396
Zero Branco	113	0.7437	0.8253	0.8480	0.8344	0.8426

Italian	# of Sentences	COMET				
		DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>Correzzola</b>	122	0.7767	0.8450	0.8570	0.8594	0.8692
<b>Agugliaro</b>	11	0.7494	0.8134	0.8253	0.8239	0.8457
<b>Vittorio Veneto</b>	56	0.7933	0.8322	0.8561	0.8640	0.8768
<b>Ariano Irpino</b>	218	0.6570	0.7970	0.8180	0.8154	0.8051
<b>Avellino</b>	1088	0.6058	0.7226	0.7509	0.7293	0.7375
<b>Bari</b>	107	0.6520	0.7072	0.7322	0.7242	0.7321
<b>Bitti</b>	218	0.5791	0.6624	0.6951	0.6767	0.6926
<b>Castrignano del Capo</b>	218	0.6701	0.7549	0.7703	0.7518	0.7724
<b>Catania</b>	762	0.6482	0.7615	0.7730	0.7632	0.7708
<b>Corigliano d'Otranto</b>	214	0.7370	0.8081	0.8267	0.8149	0.8213
<b>Corleone</b>	218	0.7068	0.8064	0.8277	0.8246	0.8257
<b>Cosenza</b>	109	0.6327	0.7708	0.7876	0.7781	0.7864
<b>Crotone</b>	218	0.5663	0.7157	0.7635	0.7366	0.7291
<b>Gallipoli</b>	218	0.6493	0.7258	0.7548	0.7401	0.7486
<b>Laino Castello</b>	109	0.7335	0.8044	0.8150	0.8001	0.8027
<b>Locorotondo</b>	215	0.5814	0.6781	0.7007	0.7016	0.6929
<b>Locri</b>	195	0.6904	0.7886	0.8033	0.8052	0.8068
<b>Macerata</b>	217	0.6930	0.7814	0.8199	0.8050	0.8146
<b>Marcianise</b>	218	0.7822	0.8393	0.8464	0.8454	0.8495
<b>Melfi</b>	108	0.4740	0.7297	0.7855	0.7696	0.7647
<b>Messina</b>	654	0.6683	0.7937	0.8154	0.8056	0.8027
<b>Molfetta</b>	1524	0.6239	0.6891	0.7093	0.6992	0.7016
<b>Monasterace</b>	436	0.6655	0.7675	0.7926	0.7781	0.7846
<b>Montella</b>	217	0.7004	0.7599	0.7665	0.7523	0.7725
<b>Ortelle</b>	218	0.6944	0.7836	0.8021	0.7997	0.8000
<b>Ossi</b>	217	0.6271	0.7209	0.7440	0.7423	0.7431
<b>Paciano</b>	218	0.8516	0.8703	0.8822	0.8718	0.8817
<b>Palermo</b>	1048	0.6336	0.7334	0.7592	0.7551	0.7444
<b>Papasidero</b>	108	0.6486	0.7621	0.8087	0.7888	0.7823
<b>Pennapiedimonte</b>	109	0.3908	0.6113	0.6781	0.6387	0.6599
<b>Posada</b>	216	0.5834	0.6889	0.7181	0.7167	0.7136
<b>San Cesario di Lecce</b>	216	0.7471	0.7990	0.8260	0.8138	0.8178
<b>San Marco in Lamis</b>	364	0.7139	0.7736	0.7886	0.7964	0.7909
<b>San Martino in Pensilis</b>	50	0.4177	0.6113	0.6813	0.6888	0.6990
<b>Sciacca</b>	78	0.7356	0.7745	0.7989	0.7780	0.7917
<b>Terravecchia</b>	146	0.5984	0.7332	0.7579	0.7474	0.7591
<b>Trepuzzi</b>	177	0.6702	0.7281	0.7539	0.7412	0.7406
<b>Trevico</b>	218	0.6588	0.7362	0.7453	0.7466	0.7498
<b>Troina</b>	2174	0.6887	0.7924	0.8090	0.7991	0.8031
<b>Venosa</b>	218	0.5879	0.6840	0.7023	0.7127	0.6928
<b>Santa Cesarea Terme</b>	108	0.6852	0.7477	0.7578	0.7589	0.7737
<b>Termoli</b>	76	0.7099	0.7574	0.7844	0.7591	0.7662
<b>Tricase</b>	109	0.6965	0.7714	0.7872	0.7789	0.7610
<b>Capurso</b>	159	0.4442	0.6721	0.7348	0.7242	0.7217
<b>Lesina</b>	177	0.4330	0.7151	0.7795	0.7656	0.7629
<b>Bagnoregio</b>	194	0.8065	0.8371	0.8504	0.8438	0.8581
<b>Campi Salentina</b>	104	0.6995	0.7689	0.7973	0.7672	0.7857
<b>Campobasso</b>	103	0.6206	0.7231	0.7426	0.7073	0.7315
<b>Cardito</b>	502	0.5173	0.7105	0.7564	0.7505	0.7633
<b>Carosino</b>	103	0.6615	0.7293	0.7565	0.7157	0.7498
<b>Castiglione Messer Marino</b>	101	0.5652	0.6345	0.6836	0.6333	0.6579
<b>Copertino</b>	93	0.6701	0.6887	0.7372	0.7014	0.7299
<b>Cutrofiano</b>	104	0.6672	0.7325	0.7674	0.7403	0.7528
<b>Faggiano</b>	104	0.6673	0.7357	0.7562	0.7314	0.7415
<b>Francavilla Fontana</b>	104	0.6736	0.7264	0.7498	0.7154	0.7624
<b>Gragnano</b>	102	0.6010	0.6961	0.7234	0.6917	0.7035
<b>Grottaglie</b>	104	0.6526	0.7050	0.7469	0.7026	0.7366
<b>Iglesias</b>	104	0.5972	0.6776	0.7122	0.6797	0.6898
<b>Lanciano</b>	104	0.6028	0.7301	0.7529	0.7334	0.7480
<b>L'Aquila</b>	96	0.7356	0.7632	0.7799	0.7746	0.7703
<b>Lecce</b>	206	0.6852	0.7590	0.7865	0.7597	0.7621
<b>Liscia</b>	95	0.4443	0.6048	0.6367	0.6236	0.6303

Italian	# of Sentences	COMET				
		DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Lubriano	96	0.7452	0.7883	0.8033	0.7904	0.7980
Maglie	102	0.7212	0.7843	0.8233	0.8071	0.7984
Civitanova Marche	95	0.8129	0.8387	0.8424	0.8372	0.8506
Martina Franca	103	0.5450	0.6082	0.6240	0.6116	0.6123
Trieste	637	0.7718	0.8510	0.8703	0.8578	0.8689
Trissino	234	0.7560	0.8370	0.8696	0.8661	0.8593
Vallecrosia	304	0.6358	0.7324	0.7655	0.7475	0.7636
Vaprio d'Adda	220	0.6028	0.6963	0.7068	0.7006	0.7077
Vione	107	0.6159	0.6889	0.7286	0.7325	0.7307
Alassio	127	0.6924	0.7542	0.7747	0.7708	0.7724
Alba	128	0.6069	0.7144	0.7347	0.7288	0.7217
Altavilla Vicentina	198	0.7514	0.8182	0.8530	0.8514	0.8478
Martinsicuro	101	0.4688	0.6454	0.7070	0.6871	0.6933
Massafra	104	0.6091	0.6817	0.6730	0.6915	0.6731
Mazara del Vallo	104	0.6471	0.7314	0.7504	0.7495	0.7432
Monteiasi	208	0.6539	0.7128	0.7485	0.7013	0.7375
Monteroni di Lecce	95	0.7016	0.7291	0.7457	0.7305	0.7374
Monterotondo	78	0.8446	0.8797	0.8837	0.8912	0.9018
Morolo	95	0.8095	0.8265	0.8304	0.8260	0.8434
Mussomeli	104	0.6454	0.7525	0.7809	0.7538	0.7649
Napoli	100	0.5049	0.6871	0.7357	0.7190	0.7408
Nardò	103	0.6903	0.7576	0.7720	0.7397	0.7471
Orvieto	85	0.8006	0.8515	0.8622	0.8489	0.8574
Pescara	104	0.5258	0.7069	0.7611	0.7348	0.7420
Pianella	967	0.5875	0.7114	0.6724	0.6982	0.6993
Ragusa	80	0.5543	0.6769	0.6993	0.6592	0.6894
Roma	63	0.7994	0.8359	0.8387	0.8501	0.8576
Salerno	80	0.5654	0.6721	0.6821	0.6633	0.6669
San Valentino in Abruzzo Citeriore	108	0.5562	0.6585	0.6817	0.6732	0.7005
Sinagra	79	0.6447	0.7576	0.7896	0.7757	0.7610
Soleto	80	0.7362	0.7889	0.8173	0.7882	0.7929
Squinzano	79	0.6712	0.7403	0.7575	0.7266	0.7298
Taranto	80	0.6212	0.6799	0.6816	0.6766	0.6522
Torre del Greco	158	0.5032	0.7053	0.7505	0.7396	0.7420
Villacidro	78	0.5875	0.6642	0.6686	0.6591	0.6939
Sutrio	3	0.5225	0.7665	0.7952	0.8134	0.8578
Lizzano	1	0.5552	0.7724	0.6567	0.7650	0.7241
Abano Terme	3	0.8638	0.8676	0.8671	0.8895	0.8891
Udine	2	0.6183	0.5971	0.6708	0.5565	0.6937
Selva di Progno	3	0.4775	0.5217	0.5354	0.5498	0.5672
Luserna	3	0.5484	0.5623	0.5307	0.5497	0.6571
Palù del Fersina	3	0.5072	0.6096	0.5241	0.5473	0.5886
Casale sul Sile	1	0.9824	0.9896	0.9879	0.9896	0.9927

Table C.10: COMET score of different Italian communes on all sentences.

Itlaian	COMET				
	DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>Albosaggia</b>	0.6226	0.6966	0.7068	0.7138	0.7234
<b>Aldeno</b>	0.7480	0.8190	0.8422	0.8383	0.8439
<b>Altare</b>	0.5717	0.6393	0.6755	0.6650	0.6778
<b>Arcola</b>	0.6846	0.7449	0.7659	0.7734	0.7796
<b>Arenzano</b>	0.6039	0.6936	0.7280	0.7128	0.7239
<b>Ne</b>	0.6119	0.7339	0.7709	0.7446	0.7691
<b>Bergantino</b>	0.6269	0.6992	0.7181	0.7108	0.7135
<b>Bologna</b>	0.5667	0.6395	0.6643	0.6471	0.6676
<b>Bondeno</b>	0.6198	0.7245	0.7432	0.7416	0.7435
<b>Borgofranco d'Ivrea</b>	0.6214	0.7203	0.7572	0.7447	0.7391
<b>Borgomanero</b>	0.5992	0.6670	0.7071	0.6807	0.6941
<b>Calizzano</b>	0.6621	0.7053	0.7379	0.7349	0.7405
<b>Casalmaggiore</b>	0.6128	0.6838	0.7130	0.6960	0.7187
<b>Casarza Ligure</b>	0.6243	0.7355	0.7670	0.7504	0.7631
<b>Villa Lagarina</b>	0.7628	0.8354	0.8811	0.8641	0.8597
<b>Cencenighe Agordino</b>	0.6288	0.7171	0.7483	0.7418	0.7457
<b>Cesena</b>	0.5907	0.6655	0.6989	0.6823	0.7005
<b>Cicagna</b>	0.5934	0.7073	0.7382	0.7298	0.7333
<b>Cividale del Friuli</b>	0.6067	0.7097	0.7357	0.7224	0.7575
<b>Colle di Val d'Elsa</b>	0.8311	0.8288	0.8550	0.8443	0.8540
<b>Comano</b>	0.6452	0.7241	0.7421	0.7444	0.7563
<b>Farra di Soligo</b>	0.7575	0.8173	0.8441	0.8388	0.8391
<b>Favale di Malvaro</b>	0.6488	0.7432	0.7572	0.7459	0.7553
<b>Finale Ligure</b>	0.6126	0.6915	0.7329	0.7104	0.7272
<b>Firenze</b>	0.9085	0.9227	0.9266	0.9234	0.9302
<b>Forlì</b>	0.6166	0.6967	0.7206	0.7133	0.7137
<b>La Spezia</b>	0.6558	0.7253	0.7588	0.7566	0.7690
<b>Lecco</b>	0.6224	0.7443	0.7650	0.7585	0.7687
<b>Longare</b>	0.7171	0.8018	0.8239	0.8291	0.8162
<b>Malonno</b>	0.6191	0.6797	0.7167	0.7176	0.7172
<b>Mantova</b>	0.6124	0.7220	0.7421	0.7422	0.7417
<b>Venezia</b>	0.7551	0.8437	0.8645	0.8557	0.8607
<b>Milano</b>	0.6199	0.7383	0.7628	0.7655	0.7765
<b>Moimacco</b>	0.6390	0.7351	0.7533	0.7572	0.7741
<b>Moncalieri</b>	0.5986	0.7167	0.7598	0.7294	0.7292
<b>Mondovì</b>	0.6264	0.6890	0.7096	0.7033	0.7163
<b>Monno</b>	0.6008	0.6594	0.7017	0.6850	0.7111
<b>Sover</b>	0.7591	0.8275	0.8457	0.8559	0.8534
<b>Motta di Livenza</b>	0.7602	0.8388	0.8585	0.8563	0.8576
<b>Imperia</b>	0.6475	0.7417	0.7768	0.7483	0.7767
<b>Padova</b>	0.7549	0.8275	0.8485	0.8464	0.8499
<b>Palazzolo dello Stella</b>	0.5528	0.7126	0.7284	0.7354	0.7385
<b>Palmanova</b>	0.7586	0.8578	0.8914	0.8797	0.8764
<b>Poirino</b>	0.6131	0.6886	0.7111	0.7054	0.7180
<b>Pontinvrea</b>	0.6374	0.6948	0.7318	0.7200	0.7289
<b>Pramaggiore</b>	0.7798	0.8336	0.8594	0.8574	0.8500
<b>Chiomonte</b>	0.5121	0.6411	0.6444	0.6391	0.6551
<b>Fontanigorda</b>	0.6510	0.7698	0.8022	0.7828	0.7885
<b>Remanzacco</b>	0.6086	0.6962	0.7190	0.7192	0.7371
<b>Rimini</b>	0.6026	0.6823	0.7050	0.6880	0.7157
<b>Riomaggiore</b>	0.6243	0.7251	0.7645	0.7549	0.7555
<b>Chieri</b>	0.6208	0.6887	0.7163	0.7093	0.7162
<b>Rivarossa</b>	0.6253	0.7241	0.7582	0.7367	0.7529
<b>Prali</b>	0.5471	0.6656	0.6740	0.6720	0.6835

Itlaian	COMET				
	DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Rovereto	0.7717	0.8507	0.8739	0.8725	0.8572
Salzano	0.7228	0.8309	0.8510	0.8483	0.8495
San Michele al Tagliamento	0.6534	0.7436	0.7621	0.7584	0.7616
Scorzè	0.7609	0.8233	0.8615	0.8583	0.8530
Selva di Val Gardena	0.5664	0.6448	0.6731	0.6686	0.6652
Tezze sul Brenta	0.7400	0.8240	0.8440	0.8394	0.8364
Torino	0.6316	0.7139	0.7528	0.7382	0.7465
Trecate	0.5574	0.6133	0.6416	0.6236	0.6560
Treviso	0.7399	0.8242	0.8628	0.8479	0.8525
Trieste	0.7694	0.8488	0.8676	0.8562	0.8662
Trissino	0.7569	0.8357	0.8698	0.8666	0.8611
Vallecrosia	0.6392	0.7336	0.7665	0.7486	0.7619
Vaprio d'Adda	0.6020	0.6951	0.7062	0.7002	0.7069
Vione	0.6171	0.6890	0.7286	0.7317	0.7315
Alassio	0.6923	0.7520	0.7745	0.7700	0.7726
Alba	0.6071	0.7141	0.7331	0.7270	0.7219
Altavilla Vicentina	0.7549	0.8177	0.8515	0.8498	0.8483
Montecchio Maggiore	0.7669	0.8383	0.8646	0.8564	0.8589
Amblar	0.6623	0.7373	0.7577	0.7607	0.7647
Andreis	0.6340	0.7128	0.7476	0.7167	0.7432
Aquileia	0.6134	0.7220	0.7406	0.7423	0.7437
Arsiero	0.7510	0.8437	0.8706	0.8675	0.8710
Bagnolo San Vito	0.6111	0.7114	0.7190	0.7172	0.7360
Barcis	0.6723	0.7387	0.7560	0.7597	0.7604
Biancavilla	0.7570	0.8432	0.8530	0.8445	0.8452
Borghetto di Vara	0.6814	0.7664	0.7823	0.7737	0.7862
Corte Franca	0.6497	0.7013	0.7164	0.7111	0.7170
Borgo San Martino	0.5914	0.6816	0.7190	0.7021	0.7099
Bormio	0.5787	0.6928	0.7385	0.7229	0.7356
Bovolone	0.7645	0.8217	0.8382	0.8358	0.8376
Noale	0.7611	0.8237	0.8456	0.8339	0.8417
Brione	0.6719	0.7460	0.7718	0.7667	0.7781
Cairo Montenotte	0.6597	0.7136	0.7376	0.7272	0.7351
Calalzo di Cadore	0.7260	0.7763	0.7988	0.7919	0.7974
Calcinate	0.6144	0.6737	0.6714	0.6845	0.6974
Caldogno	0.7677	0.8277	0.8440	0.8337	0.8379
Asti	0.6851	0.7250	0.7424	0.7385	0.7454
Camisano Vicentino	0.7453	0.8151	0.8517	0.8435	0.8488
Brugine	0.7444	0.8331	0.8315	0.8412	0.8346
Carcare	0.6680	0.7141	0.7535	0.7541	0.7595
Carmignano di Brenta	0.7331	0.8090	0.8262	0.8199	0.8270
Carpi	0.6020	0.6892	0.7202	0.7054	0.7227
Carrara	0.5239	0.6503	0.6727	0.6724	0.6801
Campitello di Fassa	0.6371	0.7109	0.7350	0.7398	0.7370
Cesiomaggiore	0.7568	0.8264	0.8491	0.8480	0.8431
Chiavari	0.6599	0.7714	0.7974	0.7824	0.7927
Chies d'Alpago	0.7712	0.8181	0.8404	0.8335	0.8455
Chioggia	0.7580	0.8475	0.8682	0.8677	0.8662
Cimolais	0.6565	0.7198	0.7297	0.7206	0.7426
Belluno	0.7029	0.7476	0.7819	0.7661	0.7782
Claut	0.6577	0.7116	0.7372	0.7452	0.7504
Forni Avoltri	0.5290	0.6686	0.6921	0.6676	0.6975
Colognola ai Colli	0.7329	0.7771	0.7854	0.7933	0.7816
Cordenons	0.6603	0.7439	0.7522	0.7613	0.7641
Corvara in Badia/Corvara	0.5767	0.6732	0.6994	0.6859	0.6843
Due Carrare	0.7524	0.8264	0.8463	0.8464	0.8528
Erto e Casso	0.6354	0.6748	0.7003	0.6812	0.7206

Italia	COMET				
	DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Cittadella	0.7455	0.8175	0.8455	0.8408	0.8422
Falcade	0.6657	0.7095	0.7326	0.7264	0.7342
Sernaglia della Battaglia	0.7268	0.7978	0.8102	0.8064	0.8285
Ferrara	0.6116	0.7036	0.7163	0.7194	0.7190
Sondalo	0.6281	0.7172	0.7390	0.7525	0.7412
Galliera Veneta	0.7470	0.8158	0.8367	0.8318	0.8396
Gazzo	0.7250	0.7846	0.8110	0.7952	0.8092
Arcole	0.7208	0.7935	0.8218	0.8095	0.8208
Montegaldella	0.7627	0.8365	0.8508	0.8386	0.8454
Gorizia	0.6415	0.7409	0.7770	0.7617	0.7784
Gradara	0.6388	0.7123	0.7216	0.7253	0.7151
Grosio	0.6078	0.7498	0.7666	0.7575	0.7759
Illasi	0.7016	0.7798	0.8000	0.7916	0.7968
Iseo	0.6531	0.7145	0.7351	0.7265	0.7282
Jesolo	0.7572	0.8250	0.8349	0.8386	0.8412
Lamon	0.6934	0.7558	0.7808	0.7821	0.7735
Rocca Pietore	0.6488	0.7056	0.7266	0.7264	0.7271
Albignasego	0.7402	0.8113	0.8360	0.8249	0.8322
Livigno	0.5816	0.6754	0.6921	0.6784	0.6959
Lonato del Garda	0.6349	0.7282	0.7597	0.7550	0.7456
Sandriga	0.7669	0.8430	0.8607	0.8453	0.8511
Luzzara	0.6221	0.6779	0.6873	0.6826	0.7073
Marostica	0.7282	0.8045	0.8274	0.8221	0.8234
Maserà di Padova	0.7542	0.8235	0.8400	0.8449	0.8483
Mason Vicentino	0.7259	0.8065	0.8417	0.8298	0.8280
Arsie	0.7065	0.7723	0.8036	0.8023	0.8086
Mirano	0.7703	0.8374	0.8571	0.8503	0.8530
Monselice	0.7504	0.8223	0.8374	0.8335	0.8307
Montecchio Precalcino	0.7618	0.8274	0.8377	0.8295	0.8370
Montereale Valcellina	0.6570	0.7416	0.7545	0.7606	0.7593
Nimis	0.5996	0.6980	0.7306	0.7229	0.7684
Tassullo	0.6615	0.7400	0.7653	0.7607	0.7599
Osimo	0.7502	0.8048	0.8216	0.8109	0.8306
Comelico Superiore	0.5817	0.6742	0.7099	0.6933	0.6995
Vodo Cadore	0.6698	0.7331	0.7573	0.7550	0.7713
Pianiga	0.7637	0.8241	0.8447	0.8360	0.8412
Piove di Sacco	0.7534	0.8347	0.8462	0.8487	0.8517
Pozza di Fassa	0.6381	0.7205	0.7050	0.7252	0.7076
Pieve di Cadore	0.7172	0.7704	0.7996	0.7936	0.8007
Puos d'Alpago	0.7377	0.7940	0.8118	0.8141	0.8151
Reana del Rojale	0.6129	0.7306	0.7538	0.7381	0.7578
Quinto Vicentino	0.7679	0.8386	0.8465	0.8449	0.8439
Redondesco	0.6105	0.7022	0.7268	0.7263	0.7211
Revò	0.6586	0.7320	0.7496	0.7513	0.7431
Romano d'Ezzelino	0.7643	0.8459	0.8687	0.8486	0.8586
Ronzone	0.6626	0.7300	0.7403	0.7612	0.7477
Rovigo	0.7838	0.8492	0.8789	0.8699	0.8792
Rovolon	0.7608	0.8391	0.8534	0.8523	0.8543
Badia/Abtei	0.6108	0.6902	0.7209	0.7181	0.7176
San Martino di Lupari	0.7437	0.8187	0.8385	0.8289	0.8334
San Pietro in Gu	0.7384	0.8167	0.8444	0.8305	0.8349
Santa Maria di Sala	0.7630	0.8277	0.8469	0.8425	0.8441
Savona	0.6235	0.7539	0.7814	0.7684	0.7890
Samolaco	0.5217	0.6423	0.6634	0.6774	0.6850
Schio	0.7303	0.8240	0.8467	0.8417	0.8344

Itlaian	COMET				
	DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>Selvazzano Dentro</b>	0.7490	0.8178	0.8426	0.8465	0.8331
<b>Valdidentro</b>	0.6587	0.7375	0.7555	0.7494	0.7488
<b>Solesino</b>	0.7757	0.8358	0.8600	0.8503	0.8367
<b>Calasetta</b>	0.5142	0.6494	0.6897	0.6862	0.6756
<b>Taggia</b>	0.7094	0.7870	0.8093	0.8023	0.8109
<b>Taglio di Po</b>	0.6965	0.7822	0.7858	0.7836	0.7909
<b>Teglio Veneto</b>	0.6641	0.7713	0.7829	0.7656	0.7913
<b>Teolo</b>	0.7390	0.8101	0.8296	0.8419	0.8361
<b>Pieve d'Alpago</b>	0.7583	0.8049	0.8351	0.8286	0.8213
<b>Tollegno</b>	0.6104	0.7024	0.7156	0.7115	0.7214
<b>Treia</b>	0.7319	0.7762	0.7957	0.7994	0.7999
<b>Triggiano</b>	0.5882	0.6586	0.7160	0.6848	0.7038
<b>Valdagno</b>	0.7646	0.8217	0.8545	0.8475	0.8381
<b>Valfurva</b>	0.6492	0.7313	0.7555	0.7469	0.7509
<b>Vallarsa</b>	0.7300	0.8130	0.8340	0.8292	0.8196
<b>Verona</b>	0.7445	0.8235	0.8379	0.8267	0.8345
<b>Vicenza</b>	0.7635	0.8346	0.8543	0.8381	0.8437
<b>Vidor</b>	0.7580	0.8285	0.8387	0.8346	0.8482
<b>Villa di Chiavenna</b>	0.5190	0.6802	0.6962	0.6997	0.7036
<b>Stazzona</b>	0.5864	0.7389	0.7566	0.7500	0.7558
<b>Villafranca Padovana</b>	0.7288	0.8213	0.8480	0.8434	0.8320
<b>Villaverla</b>	0.7614	0.8128	0.8461	0.8295	0.8319
<b>Villorba</b>	0.7013	0.8139	0.8308	0.8295	0.8380
<b>Zero Branco</b>	0.7426	0.8225	0.8464	0.8319	0.8401
<b>Correzzola</b>	0.7774	0.8485	0.8582	0.8592	0.8715
<b>Vittorio Veneto</b>	0.7917	0.8298	0.8555	0.8649	0.8767
<b>Ariano Irpino</b>	0.6546	0.7992	0.8190	0.8148	0.8056
<b>Avellino</b>	0.6034	0.7219	0.7511	0.7289	0.7378
<b>Bari</b>	0.6564	0.7082	0.7322	0.7262	0.7327
<b>Bitti</b>	0.5822	0.6628	0.6973	0.6771	0.6946
<b>Castrignano del Capo</b>	0.6694	0.7528	0.7689	0.7491	0.7716
<b>Catania</b>	0.6472	0.7613	0.7728	0.7625	0.7720
<b>Corigliano d'Otranto</b>	0.7331	0.8075	0.8263	0.8135	0.8209
<b>Corleone</b>	0.7080	0.8060	0.8311	0.8241	0.8246
<b>Cosenza</b>	0.6294	0.7708	0.7892	0.7792	0.7872
<b>Crotone</b>	0.5641	0.7165	0.7640	0.7372	0.7283
<b>Gallipoli</b>	0.6518	0.7290	0.7585	0.7431	0.7503
<b>Laino Castello</b>	0.7324	0.8037	0.8141	0.7995	0.8028
<b>Locorotondo</b>	0.5842	0.6784	0.7023	0.7036	0.6964
<b>Locri</b>	0.6919	0.7881	0.8040	0.8048	0.8060
<b>Macerata</b>	0.6914	0.7793	0.8179	0.8043	0.8120
<b>Marcianise</b>	0.7828	0.8411	0.8471	0.8458	0.8504
<b>Melfi</b>	0.4775	0.7318	0.7878	0.7729	0.7672
<b>Messina</b>	0.6684	0.7932	0.8139	0.8024	0.8001
<b>Molfetta</b>	0.6223	0.6870	0.7080	0.6981	0.7022
<b>Monasterace</b>	0.6654	0.7672	0.7947	0.7768	0.7858
<b>Montella</b>	0.6972	0.7597	0.7655	0.7517	0.7725
<b>Ortelle</b>	0.6974	0.7844	0.8055	0.8005	0.8010
<b>Ossi</b>	0.6287	0.7227	0.7452	0.7420	0.7441
<b>Paciano</b>	0.8500	0.8696	0.8818	0.8692	0.8813
<b>Palermo</b>	0.6342	0.7306	0.7571	0.7546	0.7432
<b>Papasidero</b>	0.6504	0.7645	0.8087	0.7904	0.7819
<b>Pennapiedimonte</b>	0.3926	0.6138	0.6808	0.6418	0.6643
<b>Posada</b>	0.5856	0.6904	0.7148	0.7154	0.7150

Itlaian	COMET				
	DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
San Cesario di Lecce	0.7481	0.8000	0.8274	0.8143	0.8181
San Marco in Lamis	0.7022	0.7617	0.7746	0.7848	0.7788
San Martino in Pensilis	0.4193	0.6121	0.6844	0.6908	0.7033
Sciacca	0.7333	0.7744	0.7986	0.7775	0.7911
Terravecchia	0.5993	0.7373	0.7617	0.7517	0.7633
Trepuzzi	0.6663	0.7262	0.7512	0.7376	0.7365
Trevico	0.6577	0.7361	0.7433	0.7466	0.7498
Troina	0.6874	0.7912	0.8078	0.7968	0.8020
Venosa	0.5869	0.6817	0.7024	0.7109	0.6920
Santa Cesarea Terme	0.6853	0.7503	0.7603	0.7607	0.7762
Termoli	0.7107	0.7580	0.7846	0.7623	0.7662
Tricase	0.6949	0.7716	0.7860	0.7806	0.7622
Capurso	0.4462	0.6763	0.7376	0.7271	0.7248
Lesina	0.4325	0.7157	0.7794	0.7637	0.7623
Bagnoregio	0.8077	0.8390	0.8514	0.8445	0.8592
Campi Salentina	0.6986	0.7667	0.7940	0.7648	0.7831
Campobasso	0.6200	0.7205	0.7425	0.7041	0.7321
Cardito	0.5164	0.7089	0.7538	0.7499	0.7625
Carosino	0.6616	0.7296	0.7533	0.7148	0.7452
Castiglione Messer Marino	0.5617	0.6325	0.6805	0.6280	0.6576
Copertino	0.6710	0.6906	0.7378	0.7020	0.7306
Cutrofiano	0.6657	0.7289	0.7635	0.7382	0.7498
Faggiano	0.6666	0.7357	0.7561	0.7312	0.7409
Francavilla Fontana	0.6723	0.7245	0.7479	0.7120	0.7625
Gragnano	0.5968	0.6932	0.7234	0.6872	0.7029
Grottaglie	0.6540	0.7040	0.7469	0.7015	0.7353
Iglesias	0.5955	0.6758	0.7118	0.6780	0.6862
Lanciano	0.5973	0.7290	0.7497	0.7300	0.7455
L'Aquila	0.7293	0.7603	0.7773	0.7707	0.7673
Lecce	0.6833	0.7591	0.7864	0.7593	0.7629
Liscia	0.4427	0.6018	0.6330	0.6218	0.6292
Lubriano	0.7441	0.7876	0.8037	0.7914	0.7985
Maglie	0.7224	0.7860	0.8247	0.8083	0.7999
Civitanova Marche	0.8143	0.8385	0.8410	0.8357	0.8503
Martina Franca	0.5456	0.6068	0.6224	0.6093	0.6097
Martinsicuro	0.4640	0.6435	0.7047	0.6854	0.6911
Massafra	0.6079	0.6811	0.6729	0.6919	0.6737
Mazara del Vallo	0.6471	0.7283	0.7471	0.7466	0.7435
Monteiasi	0.6530	0.7095	0.7472	0.7007	0.7359
Monteroni di Lecce	0.7036	0.7308	0.7453	0.7311	0.7380
Monterotondo	0.8490	0.8825	0.8842	0.8925	0.9026
Morolo	0.8074	0.8228	0.8268	0.8214	0.8404
Mussomeli	0.6468	0.7562	0.7813	0.7568	0.7683
Napoli	0.4984	0.6833	0.7326	0.7162	0.7382
Nardò	0.6885	0.7575	0.7736	0.7425	0.7482
Orvieto	0.7979	0.8526	0.8623	0.8496	0.8565
Pescara	0.5246	0.7046	0.7583	0.7326	0.7383
Pianella	0.5828	0.7100	0.6714	0.6960	0.6983
Ragusa	0.5573	0.6814	0.7011	0.6603	0.6910
Roma	0.7983	0.8341	0.8363	0.8491	0.8577
Salerno	0.5656	0.6697	0.6822	0.6618	0.6661
San Valentino in Abruzzo Citeriore	0.5789	0.6609	0.6851	0.6777	0.7057
Sinagra	0.6446	0.7574	0.7901	0.7754	0.7605
Soleto	0.7405	0.7936	0.8187	0.7917	0.7949
Squinzano	0.6722	0.7424	0.7582	0.7295	0.7313
Taranto	0.6226	0.6795	0.6808	0.6762	0.6516
Torre del Greco	0.5041	0.7054	0.7494	0.7395	0.7417
Villacidro	0.5859	0.6655	0.6688	0.6583	0.6941

Table C.11: Comparable COMET score of different Italian communes.

Italian	# of Sentences	BLEU				
		DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>Albosaggia</b>	268	1.47	14.78	15.00	15.35	14.53
<b>Aldeno</b>	1448	9.72	27.33	32.14	30.51	32.16
<b>Altare</b>	292	2.02	9.57	12.63	10.66	11.70
<b>Arcola</b>	305	4.66	16.23	17.89	18.32	19.48
<b>Arenzano</b>	304	2.77	13.00	16.61	13.79	15.40
<b>Ne</b>	286	1.90	17.78	21.40	17.13	21.19
<b>Bergantino</b>	570	2.42	12.71	15.35	13.08	14.77
<b>Bologna</b>	294	1.58	8.87	10.78	9.98	10.52
<b>Bondeno</b>	274	3.97	17.04	19.90	18.94	18.28
<b>Borgofranco d'Ivrea</b>	107	3.10	14.21	19.15	16.96	14.03
<b>Borgomanero</b>	234	2.16	13.79	16.30	12.39	14.63
<b>Calizzano</b>	302	3.83	15.58	17.23	16.99	16.40
<b>Casalmaggiore</b>	94	2.45	13.69	17.05	12.53	15.15
<b>Casarza Ligure</b>	289	2.34	18.35	21.46	17.82	20.07
<b>Villa Lagarina</b>	107	12.63	32.53	45.49	39.02	37.88
<b>Cencenighe Agordino</b>	292	3.84	16.29	20.29	18.42	19.38
<b>Cesena</b>	304	2.50	12.17	14.88	12.73	15.21
<b>Cicagna</b>	291	1.52	14.94	16.84	16.76	15.25
<b>Cividale del Friuli</b>	296	3.04	14.16	16.91	16.18	18.08
<b>Colle di Val d'Elsa</b>	255	30.23	36.22	44.42	44.05	47.72
<b>Comano</b>	288	2.26	15.65	16.98	17.45	18.27
<b>Farra di Soligo</b>	567	8.97	26.70	32.84	29.76	31.64
<b>Favale di Malvaro</b>	286	3.46	17.04	19.14	18.17	19.15
<b>Finale Ligure</b>	302	4.54	14.27	18.68	16.48	18.83
<b>Firenze</b>	305	46.58	61.05	64.36	61.82	64.38
<b>Forlì</b>	293	1.78	16.12	19.23	16.79	16.19
<b>La Spezia</b>	305	2.96	17.13	19.30	20.07	21.18
<b>Lecco</b>	304	3.44	21.91	22.74	20.95	21.31
<b>Longare</b>	151	8.58	27.65	30.28	32.08	30.52
<b>Malonno</b>	304	3.09	12.34	14.96	14.11	14.55
<b>Mantova</b>	107	3.11	15.47	17.09	16.12	17.00
<b>Venezia</b>	459	8.10	34.85	38.23	34.80	38.72
<b>Milano</b>	911	3.09	18.22	19.96	18.77	19.97
<b>Moimacco</b>	305	3.32	17.34	21.20	19.12	22.85
<b>Moncalieri</b>	107	4.06	15.15	19.15	16.23	14.80
<b>Mondovì</b>	111	2.65	11.81	13.07	12.36	13.49
<b>Monno</b>	304	1.53	12.26	14.78	12.93	14.56
<b>Sover</b>	107	9.76	31.87	38.32	39.70	36.66
<b>Motta di Livenza</b>	305	10.72	30.27	39.02	34.59	37.50
<b>Novi Ligure</b>	33	3.55	4.97	8.62	5.76	6.98
<b>Imperia</b>	277	5.91	19.51	23.53	19.44	24.06
<b>Padova</b>	1773	9.82	31.02	34.94	32.41	35.60
<b>Palazzolo dello Stella</b>	107	0.68	14.53	16.86	16.77	17.22
<b>Palmanova</b>	107	8.26	39.40	44.97	40.39	40.72
<b>Poirino</b>	302	2.68	13.18	15.95	14.36	15.74
<b>Pontinvrea</b>	304	4.10	14.10	17.08	16.28	15.93
<b>Pramaggiore</b>	305	9.20	30.18	36.00	33.16	32.96
<b>Chiomonte</b>	444	0.26	8.40	9.85	8.69	9.34
<b>Fontanigorda</b>	290	3.30	21.17	23.88	24.43	25.58
<b>Remanzacco</b>	305	2.43	13.29	16.52	14.96	16.78
<b>Rimini</b>	107	2.19	10.62	13.09	10.74	15.06
<b>Riomaggiore</b>	305	2.95	16.77	20.76	19.40	18.21
<b>Chieri</b>	291	2.80	12.60	14.97	13.39	14.08
<b>Rivarossa</b>	107	2.63	15.10	19.43	17.72	17.99
<b>Prali</b>	291	1.16	9.63	11.53	11.09	11.83
<b>Rovereto</b>	107	15.27	34.88	41.90	41.68	38.57
<b>Salzano</b>	374	8.02	30.33	36.01	32.83	36.52
<b>San Michele al Tagliamento</b>	885	3.75	17.35	20.85	19.82	20.80
<b>Scorzè</b>	107	13.74	32.26	35.60	34.83	34.36
<b>Selva di Val Gardena</b>	203	1.94	10.61	12.01	11.62	12.24
<b>Tezze sul Brenta</b>	304	8.96	29.58	34.98	30.83	32.96
<b>Torino</b>	1484	3.20	15.10	18.89	16.83	18.58
<b>Trecate</b>	107	2.18	7.24	9.16	8.26	8.63

Italian	# of Sentences	BLEU				
		DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Treviso	107	7.37	34.86	43.43	35.07	36.43
Trieste	637	12.45	34.52	38.30	35.43	37.17
Trissino	234	8.21	33.47	40.50	36.21	38.49
Vallecrosia	304	4.22	16.78	21.57	18.98	20.84
Vaprio d'Adda	220	1.62	14.62	12.77	14.48	14.59
Vione	107	4.12	11.06	13.80	16.96	15.48
Alassio	127	8.88	24.91	26.10	23.84	24.88
Alba	128	1.99	15.60	19.75	16.00	17.38
Altavilla Vicentina	198	9.31	28.81	34.19	31.47	33.69
Montecchio Maggiore	127	11.75	33.99	37.91	35.60	33.96
Amblar	127	3.13	16.51	22.27	19.42	21.41
Andreis	127	2.57	16.00	21.27	16.54	18.32
Aquileia	198	3.02	14.47	18.56	16.55	18.02
Arsiero	184	12.06	33.47	38.69	36.53	39.23
Bagnolo San Vito	185	2.51	15.25	16.92	13.99	16.52
Barcis	127	5.18	19.07	24.23	21.81	21.51
Biancavilla	199	12.72	31.17	37.44	32.77	34.64
Borghetto di Vara	197	5.41	22.04	23.04	19.90	24.99
Corte Franca	889	4.53	15.25	17.33	16.85	16.89
Borgo San Martino	198	0.60	12.74	14.65	13.24	13.98
Bormio	269	1.35	12.16	15.23	14.00	14.56
Bovolone	127	10.68	27.39	29.17	26.99	31.83
Noale	254	10.32	27.99	33.73	29.18	33.70
Brione	195	5.43	18.12	20.79	18.41	21.81
Cairo Montenotte	198	4.35	16.01	19.55	16.94	18.97
Calalzo di Cadore	152	6.91	20.83	20.86	20.74	24.14
Calcinate	127	2.09	10.66	11.52	11.21	13.34
Caldogno	127	13.25	28.97	33.91	31.24	31.31
Asti	127	4.34	16.89	23.04	20.59	21.94
Camisano Vicentino	127	8.20	27.78	36.77	30.19	34.77
Brugine	126	9.01	32.33	33.64	32.62	34.78
Carcare	198	4.35	15.65	18.91	18.26	19.92
Carmignano di Brenta	442	7.45	25.38	28.36	25.85	29.06
Carpi	183	1.82	14.91	17.01	16.51	17.72
Carrara	199	0.94	9.26	12.46	11.59	11.10
Campitello di Fassa	392	3.14	14.88	17.22	17.07	17.28
Cesiomaggiore	184	10.19	29.24	33.92	31.52	34.50
Chiavari	382	5.16	22.09	25.22	23.34	23.24
Chies d'Alpago	199	9.13	25.32	31.08	26.77	32.54
Chioggia	155	10.44	32.51	38.31	36.18	37.54
Cimolais	127	1.96	15.56	19.00	18.23	21.07
Belluno	227	5.01	17.79	23.49	19.39	21.91
Claut	126	4.31	16.53	17.92	17.70	17.46
Forni Avoltri	188	1.43	11.13	14.43	11.44	15.43
Colognola ai Colli	127	4.62	19.97	21.59	19.27	22.88
Cordenons	183	5.11	18.68	22.37	22.70	22.50
Corvara in Badia/Corvara	347	1.45	10.47	12.66	10.75	11.51
Due Carrare	381	8.56	29.62	35.65	29.86	36.08
Erto e Casso	127	1.61	12.82	14.82	12.73	14.80
Cittadella	254	7.83	30.05	34.95	31.04	35.45
Falcade	153	3.08	11.75	14.06	13.02	16.22
Sernaglia della Battaglia	127	6.05	24.86	30.05	27.49	33.47
Ferrara	543	2.22	12.63	14.77	13.05	14.50
Sondalo	270	2.41	15.50	17.34	18.09	19.14
Galliera Veneta	254	9.51	30.53	34.32	30.07	35.26
Gazzo	127	9.20	22.65	27.32	25.14	29.78
Arcole	127	6.89	22.19	27.25	26.89	31.34
Montegaldella	127	9.79	29.74	33.98	27.86	32.20
Gorizia	387	2.97	17.17	22.59	20.50	20.97
Gradara	153	3.01	12.91	15.47	14.25	16.38
Grosio	211	2.75	15.89	19.93	18.49	19.97
Illasi	390	6.56	20.24	23.64	21.08	24.16

Italian	# of Sentences	BLEU				
		DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>Luzzara</b>	127	3.21	13.07	14.04	12.58	14.41
<b>Marostica</b>	326	8.45	27.62	30.88	28.79	32.56
<b>Maserà di Padova</b>	127	9.16	28.80	33.82	30.18	33.93
<b>Mason Vicentino</b>	199	9.61	26.54	31.90	28.29	32.07
<b>Arsiè</b>	308	5.38	19.74	25.80	23.11	25.80
<b>Mirano</b>	853	11.47	31.99	34.96	32.56	35.74
<b>Monselice</b>	127	6.31	30.39	31.23	26.73	33.15
<b>Montecchio Precalcino</b>	127	9.32	24.76	31.47	25.61	27.91
<b>Montereale Valcellina</b>	126	3.03	16.00	21.46	20.36	23.68
<b>Nimis</b>	153	3.47	11.43	18.00	16.28	20.70
<b>Tassullo</b>	152	4.84	15.96	15.94	16.90	18.79
<b>Ortisei/St. Ulrich</b>	33	3.03	13.01	10.31	12.18	11.09
<b>Osimo</b>	126	7.12	27.70	30.13	27.09	34.86
<b>Comelico Superiore</b>	199	1.49	11.62	16.37	12.78	14.13
<b>Vodo Cadore</b>	153	3.50	16.66	19.19	16.41	18.81
<b>Pianiga</b>	508	12.39	30.10	32.99	28.65	32.95
<b>Piove di Sacco</b>	379	8.95	30.53	35.26	31.04	36.76
<b>Pozza di Fassa</b>	75	3.19	12.30	10.58	12.71	14.48
<b>Pieve di Cadore</b>	351	5.28	20.93	25.99	21.91	25.54
<b>Angrogna</b>	40	2.50	9.46	7.06	9.28	12.25
<b>Puos d'Alpago</b>	199	9.31	24.58	28.22	26.19	29.22
<b>Reana del Rojale</b>	247	2.31	14.42	17.83	14.19	18.22
<b>Quinto Vicentino</b>	127	8.46	30.08	32.96	29.18	30.81
<b>Redondesco</b>	393	1.79	12.97	14.97	12.99	14.95
<b>Revò</b>	127	2.95	16.50	18.61	17.99	18.78
<b>Romano d'Ezzelino</b>	199	10.58	33.16	40.64	30.70	37.30
<b>Ronzone</b>	254	3.14	16.01	19.01	18.84	18.69
<b>Rovigo</b>	184	11.56	32.74	41.09	34.30	40.08
<b>Rovolon</b>	184	10.11	31.61	33.75	31.41	34.81
<b>Badia/Abtei</b>	153	2.27	11.29	13.99	12.96	14.21
<b>San Martino di Lupari</b>	1016	8.90	29.47	32.73	28.82	32.78
<b>San Pietro in Gu</b>	453	9.82	28.87	34.74	29.68	33.83
<b>Santa Maria di Sala</b>	845	10.76	30.72	35.09	31.88	33.45
<b>Savona</b>	197	3.13	18.93	23.41	20.99	25.32
<b>Samolaco</b>	199	0.16	9.52	12.48	11.47	10.64
<b>Schio</b>	127	8.26	29.09	32.30	29.52	31.72
<b>Selvazzano Dentro</b>	127	7.15	29.18	34.63	31.43	34.51
<b>Valdidentro</b>	250	3.78	14.81	17.44	15.43	17.72
<b>Solesino</b>	127	11.58	28.67	37.65	33.43	33.08
<b>Calasetta</b>	232	1.17	8.54	10.17	10.22	9.08
<b>Taggia</b>	198	9.36	27.66	31.58	27.89	29.66
<b>Taglio di Po</b>	374	4.12	19.56	20.44	19.46	22.44
<b>Teglio Veneto</b>	198	3.47	19.74	24.83	20.54	25.18
<b>Teolo</b>	127	7.28	27.06	28.96	26.64	32.51
<b>Pieve d'Alpago</b>	184	11.26	26.01	30.43	27.97	31.16
<b>Tollegno</b>	153	0.99	14.19	17.45	14.70	14.71
<b>Treia</b>	126	10.13	26.68	33.92	31.70	36.74
<b>Triggiano</b>	199	1.47	9.37	14.68	10.82	12.08
<b>Valdagno</b>	154	9.36	26.89	35.46	31.78	32.10
<b>Valfurva</b>	479	3.93	14.81	17.99	16.63	15.89
<b>Vallarsa</b>	149	11.46	25.76	28.75	25.65	29.04
<b>Verona</b>	184	6.95	31.91	33.66	28.47	33.49
<b>Vicenza</b>	226	10.31	30.84	37.89	30.80	33.04
<b>Vidor</b>	226	10.18	29.84	33.87	30.75	35.79
<b>Villa di Chiavenna</b>	185	0.58	11.04	12.70	12.92	13.43
<b>Stazzona</b>	241	1.42	15.65	17.81	16.70	17.78
<b>Villafranca Padovana</b>	113	8.17	31.25	38.38	31.00	34.18
<b>Villaverla</b>	113	9.08	28.41	35.63	29.54	31.82
<b>Villorba</b>	144	8.84	28.26	30.28	26.59	32.66
<b>Zero Branco</b>	113	6.86	30.48	36.14	29.09	33.93

Italian	# of Sentences	BLEU				
		DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Correzzola	122	13.31	35.29	37.33	34.02	40.72
Agugliaro	11	6.38	31.50	27.29	28.26	34.44
Vittorio Veneto	56	17.63	19.69	23.68	26.45	33.33
Ariano Irpino	218	4.16	26.30	27.74	24.31	23.98
Avellino	1088	2.50	15.37	17.00	14.99	15.16
Bari	107	0.74	10.94	14.95	13.11	13.16
Bitti	218	1.43	10.55	12.54	11.72	11.86
Castrignano del Capo	218	5.82	22.45	22.07	19.75	22.47
Catania	762	2.05	20.16	21.37	18.98	19.20
Corigliano d'Otranto	214	6.86	27.26	29.00	26.58	28.91
Corleone	218	7.08	31.44	32.51	31.91	28.66
Cosenza	109	3.79	22.34	23.28	22.92	22.43
Crotone	218	3.05	16.92	20.84	18.52	14.96
Gallipoli	218	4.06	20.09	19.59	17.08	17.51
Laino Castello	109	6.30	22.66	23.77	24.62	25.90
Locorotondo	215	0.49	9.79	11.73	11.21	10.80
Locri	195	4.78	23.85	24.17	24.07	22.66
Macerata	217	6.22	22.11	26.41	23.88	26.80
Marcianise	218	14.64	33.96	35.22	33.87	33.43
Melfi	108	0.00	14.90	19.42	16.17	17.52
Messina	654	3.45	26.47	27.64	26.52	25.30
Molfetta	1524	0.95	12.66	13.10	11.11	12.23
Monasterace	436	3.80	20.40	24.40	21.16	21.95
Montella	217	5.73	17.18	18.82	16.15	17.66
Ortelle	218	6.00	26.62	26.41	25.23	26.19
Ossi	217	1.70	14.39	19.09	17.09	16.93
Paciano	218	25.99	40.22	43.29	40.08	39.37
Palermo	1048	1.87	17.80	19.06	18.11	16.94
Papasidero	108	3.57	19.67	20.83	19.63	17.99
Pennapiedimonte	109	0.00	7.93	10.42	8.25	9.62
Posada	216	1.08	12.66	15.12	14.36	15.84
San Cesario di Lecce	216	10.65	28.28	30.56	29.89	27.71
San Marco in Lamis	364	6.82	22.43	23.46	22.96	22.76
San Martino in Pensilis	50	0.00	7.58	13.93	11.83	13.91
Sciacca	78	8.40	27.51	23.95	23.35	21.25
Terravecchia	146	3.19	13.82	16.69	14.03	15.99
Trepuzzi	177	3.59	18.36	19.23	17.41	19.70
Trevico	218	2.78	16.38	15.32	15.94	16.00
Troina	2174	5.03	26.42	27.94	26.92	25.38
Venosa	218	0.61	10.37	11.30	11.63	10.68
Santa Cesarea Terme	108	3.89	16.88	16.15	16.24	16.51
Termoli	76	5.47	18.22	19.43	15.18	18.37
Tricase	109	4.68	24.73	24.34	22.06	19.80
Capurso	159	0.47	9.61	13.71	12.90	12.95
Lesina	177	0.61	13.98	19.61	17.25	16.92
Bagnoregio	194	15.23	27.69	30.30	24.10	28.97
Campi Salentina	104	5.47	21.75	23.41	17.84	25.44
Campobasso	103	2.78	11.93	14.74	9.69	16.81
Cardito	502	2.07	13.51	15.43	14.46	16.22
Carosino	103	2.15	11.17	17.85	11.32	15.77
Castiglione Messer Marino	101	1.98	6.37	9.30	7.28	7.23
Copertino	93	4.12	15.28	16.09	11.74	15.54
Cutrofiano	104	4.99	20.18	18.77	15.89	19.67
Faggiano	104	3.72	12.20	16.82	11.80	13.44
Francavilla Fontana	104	1.39	15.71	15.76	14.08	17.53
Gragnano	102	2.36	11.52	12.19	9.01	10.29
Grottaglie	104	1.31	10.80	15.17	9.22	14.01
Iglesias	104	1.83	10.30	14.35	9.90	11.04
Lanciano	104	3.76	13.57	17.17	12.75	15.57
L'Aquila	96	4.97	14.47	16.02	15.49	15.81
Lecce	206	2.07	17.61	21.05	15.03	19.06
Liscia	95	0.00	5.50	7.00	5.60	6.29

Italian	# of Sentences	BLEU				
		DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Lubriano	96	7.61	17.83	18.98	15.65	19.96
Maglie	102	5.04	21.68	27.33	24.29	25.41
Civitanova Marche	95	14.67	26.31	25.99	23.76	26.08
Martina Franca	103	0.37	4.39	5.91	5.09	5.16
Martinsicuro	101	0.99	8.19	11.38	10.71	8.81
Massafra	104	2.39	9.29	9.10	11.54	8.99
Mazara del Vallo	104	1.15	16.70	16.01	14.38	16.32
Monteiasi	208	2.24	11.01	14.99	11.76	15.44
Monteroni di Lecce	95	8.39	15.84	17.01	14.19	18.30
Monterotondo	78	18.63	36.39	36.38	37.88	44.55
Morolo	95	15.81	26.24	28.07	26.18	30.79
Mussomeli	104	2.86	15.98	21.72	18.45	21.52
Napoli	100	1.00	11.80	13.69	10.34	12.67
Nardò	103	4.36	20.44	18.98	14.86	15.79
Orvieto	85	17.87	29.26	30.95	25.55	30.50
Pescara	104	1.82	11.56	13.85	11.46	12.74
Pianella	967	3.05	10.53	9.45	7.69	10.91
Ragusa	80	1.25	10.22	13.22	11.95	12.00
Roma	63	14.76	30.60	29.73	35.50	30.42
Salerno	80	2.22	9.52	11.47	9.96	7.58
San Valentino in Abruzzo Citeriore	108	0.00	8.83	9.75	7.83	10.24
Sinagra	79	2.58	16.88	20.44	18.86	17.38
Soleto	80	4.68	22.76	25.08	20.95	22.94
Squinzano	79	1.95	16.52	18.20	11.91	13.90
Taranto	80	0.77	8.29	9.75	8.39	7.97
Torre del Greco	158	1.90	12.78	11.64	12.46	12.61
Villacidro	78	0.91	9.57	7.25	8.77	8.17
Sutrio	3	6.82	10.22	23.24	26.13	23.37
Lizzano	1	0.00	5.80	8.30	8.91	6.27
Abano Terme	3	33.33	33.33	33.33	0.00	33.33
Udine	2	0.00	0.00	10.68	0.00	0.00
Selva di Progno	3	0.00	1.55	1.47	1.75	2.84
Luserna	3	0.00	1.50	1.40	1.47	6.44
Palù del Fersina	3	0.00	5.86	4.23	1.27	3.22
Casale sul Sile	1	0.00	0.00	0.00	0.00	0.00

Table C.12: BLEU score of different Italian communes on all sentences.

Itlaian	BLEU				
	DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>Albosaggia</b>	8.33	14.62	14.98	15.63	14.68
<b>Aldeno</b>	18.31	26.83	31.52	30.30	32.03
<b>Altare</b>	8.00	9.73	12.50	10.72	11.77
<b>Arcola</b>	12.60	16.33	18.11	18.56	19.71
<b>Arenzano</b>	8.32	13.17	16.55	14.23	15.45
<b>Ne</b>	8.31	16.90	20.67	16.59	20.38
<b>Bergantino</b>	9.78	12.72	15.02	12.82	14.73
<b>Bologna</b>	6.19	8.82	10.80	9.99	10.57
<b>Bondeno</b>	11.45	16.81	20.02	18.83	17.98
<b>Borgofranco d'Ivrea</b>	10.16	14.35	19.44	17.44	14.04
<b>Borgomanero</b>	8.65	13.37	16.16	12.09	14.34
<b>Calizzano</b>	12.78	16.63	17.95	18.11	17.03
<b>Casalmaggiore</b>	9.13	13.28	16.64	12.33	14.58
<b>Casarza Ligure</b>	9.15	18.47	21.31	17.56	19.88
<b>Villa Lagarina</b>	20.17	32.61	44.82	39.00	37.41
<b>Cencenighe Agordino</b>	9.70	15.81	19.74	18.04	18.89
<b>Cesena</b>	8.21	11.30	13.95	11.82	13.93
<b>Cicagna</b>	7.32	15.02	16.98	16.82	15.03
<b>Cividale del Friuli</b>	9.41	13.84	16.85	15.98	18.19
<b>Colle di Val d'Elsa</b>	37.25	35.43	43.49	43.16	46.47
<b>Comano</b>	9.63	15.74	17.09	17.27	18.27
<b>Farra di Soligo</b>	18.57	26.73	33.14	30.37	31.52
<b>Favale di Malvaro</b>	11.46	16.71	18.87	17.96	18.70
<b>Finale Ligure</b>	10.08	14.20	18.38	15.92	18.56
<b>Firenze</b>	52.61	60.88	63.51	61.82	64.28
<b>Forlì</b>	9.46	15.96	19.27	16.59	16.01
<b>La Spezia</b>	10.70	17.07	18.96	19.81	21.19
<b>Lecco</b>	10.19	22.58	23.35	21.11	21.36
<b>Longare</b>	15.94	27.39	29.55	31.37	30.27
<b>Malonno</b>	9.39	12.39	15.32	14.63	15.02
<b>Mantova</b>	9.72	15.46	17.00	16.17	16.95
<b>Venezia</b>	18.89	34.81	37.81	34.62	38.53
<b>Milano</b>	9.95	18.86	19.58	19.27	20.36
<b>Moimacco</b>	10.40	17.13	20.75	18.96	22.63
<b>Moncalieri</b>	8.90	15.47	19.45	16.50	14.97
<b>Mondovì</b>	9.49	12.02	13.06	12.21	13.30
<b>Monno</b>	8.43	12.52	15.16	13.50	14.81
<b>Sover</b>	19.46	31.37	37.20	39.57	36.08
<b>Motta di Livenza</b>	20.51	30.11	38.81	34.38	37.34
<b>Imperia</b>	12.91	19.22	23.00	19.02	23.43
<b>Padova</b>	19.23	30.86	35.00	32.42	35.68
<b>Palazzolo dello Stella</b>	5.64	14.64	16.73	16.72	17.27
<b>Palmanova</b>	18.90	39.01	44.60	40.33	40.43
<b>Poirino</b>	9.38	13.36	16.09	14.18	15.87
<b>Pontinvrea</b>	10.90	14.18	16.86	16.30	16.05
<b>Pramaggiore</b>	19.94	30.22	36.23	32.74	33.06
<b>Chiomonte</b>	5.25	8.35	9.86	8.46	9.40
<b>Fontanigorda</b>	10.91	21.25	23.70	24.34	25.03
<b>Remanzacco</b>	8.45	13.51	16.55	15.06	16.77
<b>Rimini</b>	9.42	10.56	13.33	11.01	15.32
<b>Riomaggiore</b>	9.96	16.27	20.68	19.31	18.51
<b>Chieri</b>	8.72	12.67	14.73	13.59	13.90
<b>Rivarossa</b>	9.12	15.54	19.86	18.20	18.51
<b>Prali</b>	6.34	9.52	11.70	11.04	11.75

Itlaian	BLEU				
	DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Rovereto	23.56	35.34	41.92	42.71	39.37
Salzano	16.19	29.93	35.28	32.41	36.39
San Michele al Tagliamento	11.63	17.69	20.96	19.85	20.99
Scorzè	21.32	31.45	34.98	34.61	34.09
Selva di Val Gardena	7.71	10.69	11.95	11.59	12.35
Tezze sul Brenta	17.76	29.63	34.60	30.73	32.77
Torino	9.97	15.11	18.84	16.75	18.59
Trecate	6.59	7.42	9.61	8.36	8.69
Treviso	16.39	34.13	42.98	34.86	36.19
Trieste	20.99	33.76	37.74	35.24	36.67
Trissino	16.96	33.32	40.40	35.81	38.42
Vallecrosia	11.07	16.96	21.91	18.97	20.83
Vaprio d'Adda	8.28	14.84	12.84	14.38	14.63
Vione	9.33	11.00	13.81	16.74	15.42
Alassio	17.26	24.50	25.94	23.81	25.00
Alba	8.17	14.88	19.66	15.48	17.70
Altavilla Vicentina	18.37	28.10	33.83	30.78	33.89
Montecchio Maggiore	20.80	33.98	38.29	35.56	34.40
Amblar	11.37	16.06	21.79	19.48	21.10
Andreis	10.87	15.77	20.80	16.52	18.50
Aquileia	9.73	14.49	18.30	16.47	18.26
Arsiero	19.17	33.10	38.68	36.35	38.89
Bagnolo San Vito	9.75	14.64	16.23	13.56	15.70
Barcis	13.46	18.75	23.55	21.23	21.23
Biancavilla	21.81	30.73	35.76	32.27	33.51
Borghetto di Vara	13.69	22.14	23.16	20.06	25.08
Corte Franca	11.29	15.25	17.46	17.16	17.09
Borgo San Martino	8.48	13.20	14.67	13.56	14.50
Bormio	7.47	12.25	15.16	14.13	14.53
Bovolone	18.79	26.96	28.73	26.20	31.61
Noale	19.42	28.15	34.13	29.49	33.92
Brione	12.82	17.57	20.30	17.90	21.19
Cairo Montenotte	12.29	15.69	19.38	16.60	18.61
Calalzo di Cadore	15.72	20.49	20.84	20.08	24.47
Calcinate	8.38	10.57	11.68	11.16	13.78
Caldogno	23.05	28.48	33.99	31.35	31.49
Asti	12.79	16.59	22.80	20.50	21.48
Camisano Vicentino	17.44	27.91	36.54	30.21	34.74
Brugine	17.95	32.13	33.04	32.23	34.46
Carcare	12.28	15.44	18.45	18.07	19.51
Carmignano di Brenta	16.17	27.05	30.22	27.69	31.42
Carpi	9.43	14.89	16.50	16.46	17.23
Carrara	5.94	9.25	12.51	11.50	10.90
Campitello di Fassa	9.21	14.89	17.18	17.33	17.31
Cesiomaggiore	18.97	28.75	32.66	30.88	34.17
Chiavari	12.81	22.40	25.24	23.46	23.19
Chies d'Alpago	19.95	25.56	31.15	27.48	32.84
Chioggia	19.98	32.96	38.68	36.59	37.56
Cimolais	10.52	15.46	18.63	18.10	21.17
Belluno	13.74	16.40	21.61	17.15	20.04
Claut	11.58	16.52	17.91	18.13	17.29
Forni Avoltri	6.36	11.41	14.58	11.63	15.72
Colognola ai Colli	15.25	19.31	21.19	19.55	22.93
Cordenons	11.55	17.93	21.65	22.03	21.80
Corvara in Badia/Corvara	7.24	10.63	12.64	10.86	11.61
Due Carrare	17.43	29.20	35.93	29.70	36.12
Erto e Casso	9.89	12.85	14.94	12.77	14.95

Itlaian	BLEU				
	DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Cittadella	18.10	30.28	34.98	31.50	35.46
Falcade	10.96	11.98	14.47	13.40	17.07
Sernaglia della Battaglia	16.39	24.28	29.58	27.34	33.45
Ferrara	9.21	13.54	15.72	13.86	15.59
Sondalo	8.45	15.90	17.60	18.36	19.04
Galliera Veneta	18.79	30.50	34.50	30.30	35.71
Gazzo	17.57	22.86	27.55	25.33	30.08
Arcole	15.01	22.02	27.05	26.32	31.69
Montegaldella	20.83	29.38	34.31	28.11	32.52
Gorizia	10.14	16.46	22.46	19.58	19.81
Gradara	10.15	13.04	15.39	14.31	16.69
Grosio	9.87	15.86	19.81	18.14	20.03
Illasi	14.04	20.22	23.63	20.96	24.04
Iseo	11.78	15.79	20.45	19.00	18.06
Jesolo	20.51	26.68	30.54	29.96	32.77
Lamon	11.77	18.92	20.95	20.98	23.39
Rocca Pietore	10.05	14.68	17.15	14.33	17.15
Albignasego	17.95	29.43	30.37	26.66	31.47
Livigno	7.11	11.20	12.49	9.67	12.11
Lonato del Garda	11.27	17.84	21.95	19.94	20.21
Sandrigo	22.87	31.59	37.54	33.84	37.05
Luzzara	10.49	13.08	13.97	12.35	14.27
Marostica	17.01	27.83	30.60	28.80	32.69
Maserà di Padova	18.43	28.78	34.50	30.08	34.20
Mason Vicentino	16.84	26.29	31.95	28.64	31.81
Arsie	14.20	19.72	25.62	23.16	25.31
Mirano	22.27	32.01	34.33	31.97	35.31
Monselice	15.63	30.29	31.70	26.39	33.55
Montecchio Precalcino	19.31	24.56	32.13	26.12	28.48
Montereale Valcellina	11.09	15.99	21.50	20.65	23.19
Nimis	9.90	11.67	18.52	16.47	21.33
Tassullo	11.81	15.77	15.98	16.59	18.15
Osimo	18.31	27.38	29.83	27.53	34.67
Comelico Superiore	6.62	11.61	15.98	12.40	13.93
Vodo Cadore	12.00	16.97	19.43	16.38	19.35
Pianiga	21.24	29.99	33.18	28.58	33.07
Piove di Sacco	18.48	30.27	34.91	30.54	36.65
Pozza di Fassa	10.06	12.10	10.66	12.84	14.34
Pieve di Cadore	15.61	21.45	26.47	22.64	26.08
Puos d'Alpago	18.93	24.35	27.47	26.17	29.28
Reana del Rojale	9.11	14.56	18.05	14.18	18.04
Quinto Vicentino	19.28	29.98	33.02	29.49	30.91
Redondesco	8.04	12.85	15.00	12.71	15.03
Revò	10.33	16.36	18.41	18.24	18.51
Romano d'Ezzelino	20.55	32.90	40.13	30.35	36.61
Ronzone	11.15	15.52	18.58	18.52	18.26
Rovigo	22.22	32.58	40.48	34.26	40.05
Rovolon	18.81	31.84	33.62	31.54	34.72
Badia/Abtei	9.62	11.54	14.32	12.85	14.82
San Martino di Lupari	17.45	29.59	32.83	28.94	32.99
San Pietro in Gu	18.48	29.16	34.81	29.90	33.79
Santa Maria di Sala	20.59	30.74	35.25	32.04	33.64
Savona	10.30	19.08	23.42	20.84	25.03
Samolaco	4.86	9.88	12.15	11.25	10.67
Schio	16.69	29.30	32.00	29.49	31.89

Itlaian	BLEU				
	DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>Selvazzano Dentro</b>	18.32	28.95	34.80	31.11	34.93
<b>Valdidentro</b>	11.35	15.02	17.67	15.56	18.05
<b>Solesino</b>	22.05	28.29	38.45	33.73	33.50
<b>Calasetta</b>	5.34	8.53	10.27	10.51	9.26
<b>Taggia</b>	19.21	27.82	31.81	28.56	30.19
<b>Taglio di Po</b>	13.17	19.45	21.09	19.85	22.72
<b>Teglio Veneto</b>	11.06	19.15	24.28	20.08	24.82
<b>Teolo</b>	17.06	27.12	29.42	26.66	32.65
<b>Pieve d'Alpago</b>	19.43	25.48	29.72	27.59	30.91
<b>Tollegno</b>	8.07	14.13	17.74	14.79	15.05
<b>Treia</b>	20.24	25.61	33.38	31.34	36.16
<b>Triggiano</b>	7.54	8.93	14.16	10.54	11.83
<b>Valdagno</b>	18.24	26.94	35.52	31.93	32.36
<b>Valfurva</b>	11.39	14.63	17.96	16.30	15.54
<b>Vallarsa</b>	20.05	25.69	28.91	26.11	29.21
<b>Verona</b>	15.69	31.65	33.04	28.17	33.16
<b>Vicenza</b>	19.83	30.34	37.14	30.20	32.10
<b>Vidor</b>	20.71	29.09	32.99	30.23	34.52
<b>Villa di Chiavenna</b>	5.77	11.10	12.78	12.91	13.92
<b>Stazzona</b>	7.23	15.60	17.62	16.63	17.61
<b>Villafranca Padovana</b>	17.83	30.46	38.17	30.23	33.56
<b>Villaverla</b>	19.87	27.50	34.11	28.44	30.69
<b>Villorba</b>	15.64	27.92	29.49	25.83	32.03
<b>Zero Branco</b>	17.41	29.96	35.43	28.49	33.11
<b>Correzzola</b>	22.93	35.33	37.17	33.37	40.83
<b>Vittorio Veneto</b>	24.37	19.63	23.55	26.72	33.62
<b>Ariano Irpino</b>	11.02	26.61	27.72	24.39	24.18
<b>Avellino</b>	8.82	15.35	16.95	15.21	15.30
<b>Bari</b>	8.43	10.86	14.82	13.18	13.00
<b>Bitti</b>	7.52	10.63	12.70	11.85	11.87
<b>Castrignano del Capo</b>	14.72	22.22	22.08	19.40	22.48
<b>Catania</b>	10.22	19.97	21.31	18.92	19.15
<b>Corigliano d'Otranto</b>	17.46	27.42	29.15	26.55	29.02
<b>Corleone</b>	15.96	31.79	33.26	31.89	29.01
<b>Cosenza</b>	12.37	22.07	23.44	22.91	22.50
<b>Crotone</b>	10.25	16.92	20.98	18.64	14.96
<b>Gallipoli</b>	13.21	20.39	19.86	17.14	17.63
<b>Laino Castello</b>	15.05	22.60	23.61	24.53	26.06
<b>Locorotondo</b>	7.70	9.93	11.91	11.36	10.99
<b>Locri</b>	14.16	23.24	23.98	23.95	22.57
<b>Macerata</b>	14.01	21.60	26.01	23.76	26.05
<b>Marcianise</b>	24.24	34.37	35.64	34.17	33.90
<b>Melfi</b>	3.74	15.36	20.12	16.28	17.61
<b>Messina</b>	12.89	26.23	27.47	26.08	25.05
<b>Molfetta</b>	8.70	12.33	13.06	10.99	12.19
<b>Monasterace</b>	12.18	20.70	25.19	21.73	22.72
<b>Montella</b>	13.08	17.45	18.82	16.19	17.91
<b>Ortelle</b>	15.99	26.57	26.83	25.06	26.44
<b>Ossi</b>	8.90	14.76	19.52	17.29	17.11
<b>Paciano</b>	34.55	40.17	43.15	39.70	39.26
<b>Palermo</b>	8.52	17.50	19.14	17.98	17.01
<b>Papasidero</b>	10.19	19.96	20.68	19.91	18.13
<b>Pennapiedimonte</b>	1.94	7.87	10.38	8.11	9.88
<b>Posada</b>	8.38	12.66	15.01	14.49	15.70

Itlaian	BLEU				
	DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>San Cesario di Lecce</b>	20.69	28.06	30.93	29.72	27.80
<b>San Marco in Lamis</b>	14.11	20.38	21.89	20.46	20.96
<b>San Martino in Pensilis</b>	2.21	7.90	14.49	12.41	14.54
<b>Sciacca</b>	17.02	27.92	24.31	23.58	21.45
<b>Terravecchia</b>	10.91	14.31	17.20	14.47	16.57
<b>Trepuzzi</b>	10.90	18.83	19.11	17.29	19.46
<b>Trevico</b>	11.15	16.61	15.31	16.25	16.21
<b>Troina</b>	14.05	26.29	27.94	26.78	25.51
<b>Venosa</b>	8.05	10.23	10.93	11.31	10.40
<b>Santa Cesarea Terme</b>	12.64	16.98	16.24	16.22	16.46
<b>Termoli</b>	15.11	18.35	19.27	15.44	18.31
<b>Tricase</b>	15.46	24.57	23.89	22.08	19.99
<b>Capurso</b>	6.34	9.77	14.18	13.05	13.12
<b>Lesina</b>	6.78	13.67	19.24	16.90	16.92
<b>Bagnoregio</b>	23.08	28.11	30.60	24.16	28.91
<b>Campi Salentina</b>	12.92	21.72	23.65	18.05	25.38
<b>Campobasso</b>	7.01	11.89	14.80	9.76	17.06
<b>Cardito</b>	4.02	13.42	15.37	14.61	16.22
<b>Carosino</b>	8.73	10.97	17.53	11.90	15.34
<b>Castiglione Messer Marino</b>	4.73	6.30	9.09	7.15	7.11
<b>Copertino</b>	10.70	15.56	16.21	11.71	15.77
<b>Cutrofiano</b>	11.10	19.70	18.48	15.98	19.29
<b>Faggiano</b>	10.86	12.15	16.99	11.93	13.78
<b>Francavilla Fontana</b>	9.37	15.87	16.04	14.14	17.62
<b>Gragnano</b>	5.49	11.58	12.31	9.12	10.17
<b>Grottaglie</b>	7.32	10.69	15.29	9.06	13.95
<b>Iglesias</b>	7.77	10.48	14.14	9.96	10.80
<b>Lanciano</b>	9.54	13.80	16.93	12.59	15.80
<b>L'Aquila</b>	13.05	14.54	16.05	14.69	15.67
<b>Lecce</b>	10.64	17.57	21.15	15.08	19.00
<b>Liscia</b>	1.70	5.45	7.01	5.88	6.34
<b>Lubriano</b>	14.08	17.83	19.17	15.63	19.90
<b>Maglie</b>	13.72	22.02	27.68	24.86	25.70
<b>Civitanova Marche</b>	23.13	26.30	26.08	23.69	25.92
<b>Martina Franca</b>	2.75	4.38	6.05	5.13	5.27
<b>Martinsicuro</b>	1.69	8.51	11.41	10.77	8.68
<b>Massafra</b>	6.06	9.35	9.35	11.83	8.99
<b>Mazara del Vallo</b>	8.41	16.59	16.01	14.18	16.42
<b>Monteiasi</b>	8.37	10.95	15.09	11.68	15.69
<b>Monteroni di Lecce</b>	16.13	16.13	17.17	14.54	18.34
<b>Monterotondo</b>	28.47	37.50	37.06	38.73	44.70
<b>Morolo</b>	24.07	25.76	27.51	25.93	30.27
<b>Mussomeli</b>	9.51	16.56	22.34	18.84	21.43
<b>Napoli</b>	2.36	11.60	13.78	10.18	12.41
<b>Nardò</b>	11.06	20.97	18.80	15.28	15.86
<b>Orvieto</b>	25.80	29.94	31.03	25.61	29.91
<b>Pescara</b>	4.06	11.61	14.15	11.62	12.65
<b>Pianella</b>	7.40	10.59	9.39	7.69	10.76
<b>Ragusa</b>	6.86	10.22	13.02	11.77	11.96
<b>Roma</b>	24.04	30.37	28.72	35.16	29.88
<b>Salerno</b>	4.91	9.33	11.57	9.88	7.52
<b>San Valentino in Abruzzo Citeriore</b>	5.85	8.75	9.37	7.14	9.25
<b>Sinagra</b>	7.27	17.22	20.74	19.16	17.66
<b>Soleto</b>	13.13	23.32	24.83	21.00	23.42
<b>Squinzano</b>	7.81	16.87	18.08	12.18	14.04
<b>Taranto</b>	3.66	8.32	9.76	8.18	8.01
<b>Torre del Greco</b>	2.59	13.27	11.68	12.56	12.97
<b>Villacidro</b>	4.62	9.78	7.25	8.90	8.16

Table C.13: Comparable BLEU score of different Italian communes.

Italian	# of Sentences	COMET				
		DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>Lombardia</b>	8027	0.6209	0.7091	0.7319	0.7281	0.7342
<b>Trentino Alto Adige</b>	3787	0.6871	0.7637	0.7859	0.7845	0.7834
<b>Liguria</b>	5939	0.6404	0.7277	0.7588	0.7467	0.7578
<b>Veneto</b>	21723	0.7330	0.8066	0.8280	0.8234	0.8255
<b>Emilia Romagna</b>	2125	0.6028	0.6854	0.7071	0.6997	0.7091
<b>Piemonte</b>	4264	0.6048	0.6914	0.7179	0.7074	0.7166
<b>Friuli Venezia Giulia</b>	3878	0.6526	0.7439	0.7675	0.7598	0.7760
<b>Toscana</b>	1047	0.7452	0.7943	0.8116	0.8086	0.8174
<b>Sicilia</b>	5500	0.6700	0.7752	0.7941	0.7849	0.7857
<b>Marche</b>	717	0.7140	0.7775	0.7977	0.7923	0.7984
<b>Sardegna</b>	1065	0.5778	0.6779	0.7080	0.6987	0.7031
<b>Puglia</b>	6100	0.6470	0.7236	0.7490	0.7343	0.7401
<b>Campania</b>	2901	0.6083	0.7342	0.7614	0.7483	0.7562
<b>Calabria</b>	1321	0.6469	0.7612	0.7883	0.7746	0.7774
<b>Basilicata</b>	326	0.5502	0.6992	0.7299	0.7315	0.7166
<b>Umbria</b>	303	0.8373	0.8650	0.8766	0.8654	0.8748
<b>Abruzzo</b>	1785	0.5633	0.6920	0.6896	0.6931	0.6997
<b>Molise</b>	229	0.6059	0.7101	0.7431	0.7205	0.7359
<b>Lazio</b>	526	0.8007	0.8324	0.8417	0.8386	0.8509

Table C.14: COMET score of different Italian regions on all sentences.

Italian	COMET				
	DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>Lombardia</b>	0.6257	0.7103	0.7316	0.7278	0.7341
<b>Trentino Alto Adige</b>	0.6826	0.7584	0.7793	0.7805	0.7763
<b>Liguria</b>	0.6445	0.7311	0.7612	0.7495	0.7604
<b>Veneto</b>	0.7400	0.8117	<b>0.8330</b>	0.8276	0.8311
<b>Emilia Romagna</b>	0.6034	0.6848	0.7071	0.6981	0.7109
<b>Piemonte</b>	0.6113	0.6969	0.7266	0.7139	0.7231
<b>Friuli Venezia Giulia</b>	0.6456	0.7378	0.7614	0.7537	0.7695
<b>Toscana</b>	0.7272	0.7815	<b>0.7991</b>	0.7961	0.8051
<b>Sicilia</b>	0.6627	0.7654	0.7857	0.7758	0.7764
<b>Marche</b>	0.7253	0.7822	<b>0.7996</b>	0.7951	0.8016
<b>Sardegna</b>	0.5820	0.6777	0.7046	0.6928	0.7016
<b>Puglia</b>	0.6507	0.7241	0.7493	0.7323	0.7396
<b>Campania</b>	0.5821	0.7235	0.7545	0.7420	0.7511
<b>Calabria</b>	0.6498	0.7644	0.7914	0.7770	0.7801
<b>Basilicata</b>	0.5322	0.7067	0.7451	0.7419	0.7296
<b>Umbria</b>	0.8240	0.8611	<b>0.8720</b>	0.8594	0.8689
<b>Abruzzo</b>	0.5622	0.6915	0.6880	0.6915	0.6990
<b>Molise</b>	0.5833	0.6968	0.7372	0.7191	0.7339
<b>Lazio</b>	0.8024	0.8342	<b>0.8423</b>	0.8406	0.8529

Table C.15: Comparable COMET score of different Italian regions.

Italian	# of Sentences	BLEU				
		DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>Lombardia</b>	8027	3.04	15.01	17.40	16.23	16.88
<b>Trentino Alto Adige</b>	3787	6.58	20.98	24.71	23.53	24.46
<b>Liguria</b>	5939	3.92	17.34	20.39	18.66	20.08
<b>Veneto</b>	21723	8.36	26.92	31.20	27.97	31.13
<b>Emilia Romagna</b>	2125	2.36	13.22	15.57	14.01	15.07
<b>Piemonte</b>	4264	2.39	13.14	16.17	14.30	15.39
<b>Friuli Venezia Giulia</b>	3878	4.64	19.03	22.96	20.90	22.84
<b>Toscana</b>	1047	21.73	32.67	36.61	35.74	37.51
<b>Sicilia</b>	5500	4.03	23.55	25.11	23.72	22.76
<b>Marche</b>	717	7.50	22.49	26.00	23.76	27.66
<b>Sardegna</b>	1065	1.36	11.23	13.67	12.63	12.75
<b>Puglia</b>	6100	3.16	16.28	17.86	15.51	16.84
<b>Campania</b>	2901	3.63	16.92	18.19	16.53	17.03
<b>Calabria</b>	1321	3.94	19.90	22.49	20.67	20.28
<b>Basilicata</b>	326	0.41	11.87	13.99	13.13	12.94
<b>Umbria</b>	303	23.71	37.15	39.83	36.00	36.88
<b>Abruzzo</b>	1785	2.41	10.08	10.55	8.70	10.86
<b>Molise</b>	229	3.07	13.07	16.12	11.98	16.70
<b>Lazio</b>	526	14.39	27.27	28.66	26.34	30.14

Table C.16: BLEU score of different Italian regions on all sentences.

Italian	BLEU				
	DeltaLM	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>Lombardia</b>	10.02	15.20	17.66	16.69	17.12
<b>Trentino Alto Adige</b>	13.99	20.27	23.97	23.24	23.70
<b>Liguria</b>	11.53	17.90	20.83	19.09	20.49
<b>Veneto</b>	17.94	27.68	31.92	28.62	32.01
<b>Emilia Romagna</b>	9.13	12.98	15.32	13.66	15.04
<b>Piemonte</b>	9.04	13.65	16.99	14.94	15.89
<b>Friuli Venezia Giulia</b>	11.39	18.12	22.23	20.21	21.88
<b>Toscana</b>	26.36	30.32	34.15	33.44	34.98
<b>Sicilia</b>	11.62	22.12	23.78	22.28	21.56
<b>Marche</b>	17.17	22.79	26.14	24.12	27.90
<b>Sardegna</b>	7.09	11.14	13.15	12.17	12.15
<b>Puglia</b>	10.50	15.86	17.71	15.02	16.65
<b>Campania</b>	7.45	15.68	16.85	15.49	16.10
<b>Calabria</b>	12.16	20.06	22.53	20.98	20.78
<b>Basilicata</b>	5.89	12.80	15.52	13.79	14.00
<b>Umbria</b>	30.18	35.05	37.09	32.66	34.58
<b>Abruzzo</b>	6.48	10.15	10.46	8.60	10.72
<b>Molise</b>	8.11	12.71	16.18	12.54	16.64
<b>Lazio</b>	22.81	27.95	28.94	27.29	30.43

Table C.17: Comparable BLEU score of different Italian regions.

Swiss-German	# of Sentences	COMET			
		NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Aarau,AG	121	0.8734	0.8787	0.8714	0.8882
Aarberg,BE	117	0.8701	0.8772	0.8616	0.8839
Aarburg,AG	118	0.8706	0.8808	0.8663	0.8905
Adelboden,BE	120	0.8686	0.8684	0.8675	0.8829
Aedermannsdorf,SO	115	0.8655	0.8744	0.8591	0.8806
Aesch,BL	118	0.8712	0.8759	0.8688	0.8865
Aeschi,SO	113	0.8624	0.8761	0.8606	0.8799
Agarn,VS	124	0.8584	0.8650	0.8629	0.8713
Alpnach,OW	115	0.8659	0.8799	0.8641	0.8825
Alpthal,SZ	118	0.8721	0.8751	0.8669	0.8814
Altdorf,UR	115	0.8652	0.8808	0.8646	0.8868
Altsttten,SG	121	0.8705	0.8773	0.8705	0.8874
Amden,SG	115	0.8763	0.8876	0.8761	0.8926
Amriswil,TG	115	0.8697	0.8830	0.8699	0.8854
Andelfingen,ZH	116	0.8786	0.8864	0.8712	0.8912
Andermatt,UR	120	0.8658	0.8717	0.8643	0.8866
Andwil,SG	119	0.8709	0.8783	0.8719	0.8851
Appenzell,AI	116	0.8658	0.8804	0.8704	0.8881
Arosa,GR	119	0.8749	0.8761	0.8689	0.8827
Ausserberg,VS	121	0.8657	0.8689	0.8639	0.8806
Avers,GR	117	0.8763	0.8786	0.8715	0.8894
Bretswhil,ZH	118	0.8736	0.8854	0.8694	0.8866
Baldingen,AG	119	0.8794	0.8842	0.8730	0.8858
Basadingen-Schlattingen,TG	118	0.8752	0.8818	0.8727	0.8882
Basel,BS	116	0.8724	0.8853	0.8682	0.8895
Bassersdorf,ZH	124	0.8769	0.8856	0.8753	0.8889
Bauma,ZH	117	0.8760	0.8799	0.8745	0.8905
Belp,BE	115	0.8755	0.8828	0.8690	0.8899
Benken,SG	110	0.8746	0.8875	0.8712	0.8938
Bern,BE	119	0.8688	0.8801	0.8664	0.8874
Berneck,SG	115	0.8701	0.8785	0.8726	0.8812
Betten,VS	119	0.8599	0.8665	0.8612	0.8769
Bettingen,BS	112	0.8714	0.8810	0.8670	0.8892
Bettlach,SO	117	0.8664	0.8715	0.8641	0.8797
Bibern,SH	116	0.8761	0.8763	0.8663	0.8847
Binn,VS	118	0.8659	0.8746	0.8684	0.8825
Birmenstorf,AG	119	0.8777	0.8810	0.8755	0.8926
Birwinken,TG	117	0.8721	0.8854	0.8702	0.8892
Blatten,VS	126	0.8660	0.8680	0.8624	0.8734
Bleienbach,BE	115	0.8710	0.8810	0.8619	0.8849
Boltigen,BE	109	0.8635	0.8699	0.8566	0.8761
Boniswil,AG	115	0.8727	0.8780	0.8717	0.8852
Boswil,AG	118	0.8697	0.8803	0.8696	0.8822
Bottighofen,TG	116	0.8741	0.8850	0.8714	0.8874
Bremgarten,AG	115	0.8760	0.8883	0.8729	0.8917
Brienz,BE	121	0.8714	0.8800	0.8756	0.8877
Brig-Glis,VS	122	0.8608	0.8687	0.8590	0.8780
Rte,AI	115	0.8669	0.8798	0.8677	0.8875
Brugg,AG	120	0.8745	0.8837	0.8724	0.8955
Brunnadern,SG	118	0.8770	0.8828	0.8698	0.8871
Ingenbohl,SZ	120	0.8709	0.8742	0.8690	0.8862
Buchberg,SH	121	0.8758	0.8835	0.8726	0.8864
Buckten,BL	118	0.8658	0.8678	0.8591	0.8786
Bhler,AR	116	0.8734	0.8818	0.8754	0.8881
Blach,ZH	121	0.8770	0.8917	0.8763	0.8940
Brchen,VS	119	0.8638	0.8685	0.8622	0.8803
Bren an der Aare,BE	121	0.8683	0.8704	0.8606	0.8791
Buochs,NW	116	0.8640	0.8768	0.8629	0.8782
Busswil bei Bren,BE	116	0.8708	0.8721	0.8673	0.8849
Chur,GR	116	0.8735	0.8771	0.8708	0.8863
Churwalden,GR	117	0.8712	0.8883	0.8700	0.8880
Dagmersellen,LU	118	0.8695	0.8754	0.8678	0.8836
Davos,GR	118	0.8741	0.8834	0.8682	0.8912
Degersheim,SG	113	0.8706	0.8840	0.8722	0.8859

Swiss-German	# of Sentences	COMET			
		NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Densbüren,AG	121	0.8732	0.8762	0.8704	0.8866
Diemtigen,BE	118	0.8676	0.8775	0.8674	0.8850
Diepoldsau,SG	113	0.8732	0.8849	0.8719	0.8898
Diessbach bei Büren,BE	115	0.8657	0.8771	0.8635	0.8867
Düdingen,FR	114	0.8679	0.8765	0.8633	0.8881
Ebnat-Kappel,SG	122	0.8757	0.8783	0.8738	0.8873
Egg,ZH	120	0.8714	0.8847	0.8690	0.8870
Eglisau,ZH	116	0.8769	0.8902	0.8740	0.8948
Einsiedeln,SZ	115	0.8745	0.8787	0.8724	0.8853
Elfingen,AG	117	0.8828	0.8853	0.8768	0.8912
Elgg,ZH	118	0.8749	0.8826	0.8731	0.8906
Ellikon an der Thur,ZH	116	0.8730	0.8887	0.8705	0.8915
Elm,GL	122	0.8720	0.8813	0.8736	0.8943
Engelberg,OW	116	0.8725	0.8813	0.8638	0.8849
Engi,GL	121	0.8759	0.8800	0.8711	0.8881
Entlebuch,LU	117	0.8760	0.8820	0.8773	0.8900
Erlach,BE	119	0.8704	0.8746	0.8654	0.8840
Ermatingen,TG	113	0.8707	0.8811	0.8726	0.8877
Erschwil,SO	112	0.8639	0.8746	0.8588	0.8802
Eschenbach,LU	115	0.8724	0.8837	0.8697	0.8893
Escholzmatt,LU	116	0.8726	0.8732	0.8670	0.8848
Ettingen,BL	114	0.8717	0.8731	0.8684	0.8862
Fällanden,ZH	117	0.8701	0.8820	0.8647	0.8863
Trub,BE	114	0.8688	0.8790	0.8640	0.8856
Spiez,BE	118	0.8730	0.8684	0.8668	0.8853
Ferden,VS	122	0.8645	0.8622	0.8582	0.8706
Fiesch,VS	116	0.8613	0.8698	0.8654	0.8769
Fischingen,TG	114	0.8766	0.8871	0.8748	0.8906
Flaach,ZH	117	0.8746	0.8827	0.8760	0.8890
Fläsch,GR	117	0.8789	0.8809	0.8718	0.8864
Flawil,SG	116	0.8717	0.8821	0.8686	0.8870
Flühli,LU	117	0.8651	0.8710	0.8615	0.8793
Flums,SG	120	0.8706	0.8836	0.8717	0.8873
Maur,ZH	121	0.8758	0.8801	0.8739	0.8877
Frauenfeld,TG	114	0.8735	0.8826	0.8685	0.8864
Frauenkappelen,BE	118	0.8751	0.8758	0.8673	0.8850
Fribourg,FR	118	0.8692	0.8738	0.8646	0.8823
Frick,AG	121	0.8759	0.8779	0.8700	0.8852
Frutigen,BE	118	0.8679	0.8725	0.8686	0.8839
Gadmen,BE	118	0.8724	0.8827	0.8744	0.8921
Gächlingen,SH	119	0.8724	0.8805	0.8700	0.8835
Gais,AR	118	0.8707	0.8836	0.8728	0.8893
Gelterkinden,BL	119	0.8689	0.8696	0.8622	0.8833
Giffers,FR	115	0.8691	0.8789	0.8627	0.8847
Giswil,OW	113	0.8718	0.8773	0.8659	0.8863
Glarus,GL	123	0.8760	0.8880	0.8728	0.8930
Göschenen,UR	118	0.8757	0.8765	0.8666	0.8848
Grabs,SG	116	0.8758	0.8846	0.8788	0.8886
Grafenried,BE	119	0.8681	0.8714	0.8674	0.8821
Grindelwald,BE	119	0.8757	0.8846	0.8715	0.8918
Grosswangen,LU	117	0.8688	0.8747	0.8679	0.8830
Gossau,ZH	121	0.8720	0.8738	0.8683	0.8858
Gsteig,BE	116	0.8659	0.8717	0.8653	0.8834
Guggisberg,BE	114	0.8633	0.8754	0.8620	0.8817
Gurmels,FR	118	0.8656	0.8789	0.8614	0.8836
Gurtnellen,UR	117	0.8756	0.8764	0.8675	0.8830
Guttannen,BE	121	0.8666	0.8737	0.8677	0.8819
Guttet-Feschel,VS	122	0.8692	0.8727	0.8652	0.8794
Habkern,BE	113	0.8694	0.8749	0.8662	0.8783
Hägglingen,AG	115	0.8753	0.8803	0.8716	0.8896
Hallau,SH	117	0.8736	0.8781	0.8679	0.8882

Swiss-German	# of Sentences	COMET			
		NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Schlatt-Haslen,AI	112	0.8656	0.8806	0.8685	0.8847
Hedingen,ZH	116	0.8710	0.8821	0.8660	0.8862
Heiden,AR	118	0.8707	0.8825	0.8724	0.8909
Heitenried,FR	118	0.8622	0.8710	0.8538	0.8740
Herisau,AR	113	0.8729	0.8826	0.8731	0.8894
Hölstein,BL	120	0.8711	0.8735	0.8644	0.8858
Homburg,TG	110	0.8730	0.8828	0.8721	0.8891
Horw,LU	116	0.8728	0.8785	0.8711	0.8915
Hünenberg,ZG	116	0.8753	0.8793	0.8725	0.8837
Hütten,ZH	120	0.8748	0.8784	0.8713	0.8863
Hüttwilen,TG	114	0.8772	0.8893	0.8738	0.8958
Huttwil,BE	116	0.8661	0.8806	0.8674	0.8840
Illnau-Effretikon,ZH	122	0.8744	0.8806	0.8715	0.8842
Inden,VS	122	0.8686	0.8772	0.8692	0.8861
Innerthal,SZ	113	0.8701	0.8788	0.8689	0.8843
Innertkirchen,BE	121	0.8682	0.8792	0.8689	0.8891
Ins,BE	113	0.8645	0.8714	0.8600	0.8823
Interlaken,BE	116	0.8725	0.8767	0.8716	0.8881
Iseltwald,BE	120	0.8672	0.8715	0.8682	0.8826
Isenthal,UR	117	0.8769	0.8832	0.8697	0.8912
Ittigen,BE	114	0.8774	0.8813	0.8724	0.8907
Jaun,FR	118	0.8665	0.8679	0.8585	0.8757
Jenins,GR	113	0.8751	0.8715	0.8678	0.8830
Kaiserstuhl,AG	117	0.8751	0.8849	0.8673	0.8899
Kaisten,AG	119	0.8749	0.8901	0.8733	0.8939
Kandersteg,BE	114	0.8705	0.8750	0.8719	0.8894
Kappel am Albis,ZH	116	0.8750	0.8880	0.8690	0.8891
Kesswil,TG	115	0.8739	0.8854	0.8715	0.8864
Reichenbach im Kandertal,BE	115	0.8646	0.8786	0.8691	0.8848
Kirchberg,SG	112	0.8739	0.8895	0.8751	0.8903
Kirchleerau,AG	120	0.8787	0.8797	0.8730	0.8896
Kleinlützel,SO	116	0.8729	0.8743	0.8679	0.8850
Klosters-Serneus,GR	121	0.8719	0.8847	0.8738	0.8883
Konolfingen,BE	116	0.8724	0.8731	0.8683	0.8848
Krauchthal,BE	117	0.8740	0.8775	0.8717	0.8903
Krinau,SG	114	0.8704	0.8852	0.8717	0.8877
Küblis,GR	113	0.8733	0.8880	0.8689	0.8903
Küschnacht,ZH	122	0.8733	0.8903	0.8694	0.8866
Küssnacht am Rigi,SZ	119	0.8774	0.8831	0.8753	0.8912
Lachen,SZ	115	0.8760	0.8860	0.8737	0.8945
Langenbruck,BL	112	0.8663	0.8778	0.8679	0.8817
Langenthal,BE	113	0.8692	0.8758	0.8622	0.8885
Langnau im Emmental,BE	119	0.8699	0.8734	0.8714	0.8847
Langnau am Albis,ZH	118	0.8752	0.8857	0.8708	0.8899
Langwies,GR	110	0.8690	0.8813	0.8644	0.8890
Laufen,BL	114	0.8652	0.8716	0.8567	0.8818
Laupen,BE	115	0.8689	0.8727	0.8636	0.8844
Lauterbrunnen,BE	125	0.8711	0.8738	0.8721	0.8845
Leibstadt,AG	120	0.8787	0.8839	0.8762	0.8909
Leissigen,BE	118	0.8686	0.8699	0.8590	0.8777
Lenk,BE	120	0.8643	0.8711	0.8599	0.8770
Lenzburg,AG	120	0.8731	0.8759	0.8704	0.8877
Liesberg,BL	121	0.8689	0.8741	0.8672	0.8819
Liestal,BL	116	0.8690	0.8726	0.8642	0.8815
Ligerz,BE	111	0.8686	0.8694	0.8652	0.8801
Linthal,GL	119	0.8741	0.8792	0.8675	0.8879
Luchsingen,GL	123	0.8787	0.8913	0.8762	0.8988
Lützelflüh,BE	118	0.8653	0.8702	0.8629	0.8808
Lungern,OW	115	0.8672	0.8724	0.8630	0.8798
Lupfig,AG	112	0.8718	0.8834	0.8710	0.8912
Thundorf,TG	116	0.8745	0.8896	0.8736	0.8926
Luzern,LU	119	0.8714	0.8760	0.8673	0.8849
Silenen,UR	117	0.8750	0.8804	0.8668	0.8881

Swiss-German	# of Sentences	COMET			
		NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Magden,AG	114	0.8729	0.8739	0.8663	0.8852
Maisprach,BL	116	0.8705	0.8725	0.8666	0.8836
Malans,GR	114	0.8772	0.8802	0.8750	0.8879
Malters,LU	117	0.8711	0.8729	0.8664	0.8856
Mammern,TG	120	0.8776	0.8821	0.8738	0.8881
Marbach,LU	121	0.8769	0.8793	0.8732	0.8899
Marthalen,ZH	115	0.8747	0.8799	0.8757	0.8884
St.Stephan,BE	117	0.8681	0.8779	0.8648	0.8829
Meikirch,BE	115	0.8607	0.8740	0.8592	0.8804
Meilen,ZH	124	0.8746	0.8829	0.8742	0.8869
Meiringen,BE	120	0.8718	0.8785	0.8718	0.8880
Melchnau,BE	112	0.8711	0.8826	0.8668	0.8939
Kerns,OW	116	0.8669	0.8776	0.8607	0.8814
Mels,SG	125	0.8690	0.8822	0.8739	0.8851
Brunegg,AG	113	0.8742	0.8887	0.8732	0.8938
Menzingen,ZG	116	0.8733	0.8849	0.8722	0.8920
Merenschwand,AG	115	0.8731	0.8795	0.8725	0.8843
Merishausen,SH	118	0.8780	0.8846	0.8734	0.8901
Metzerlen,SO	111	0.8670	0.8758	0.8649	0.8835
Möhlin,AG	121	0.8739	0.8759	0.8685	0.8853
Mörel,VS	124	0.8683	0.8776	0.8706	0.8832
Mörschwil,SG	117	0.8701	0.8801	0.8685	0.8876
Mollis,GL	125	0.8793	0.8821	0.8757	0.8923
Mosnang,SG	117	0.8718	0.8790	0.8668	0.8813
Mümliswil-Ramiswil,SO	113	0.8662	0.8780	0.8634	0.8857
Münchenbuchsee,BE	114	0.8694	0.8773	0.8655	0.8894
Muhen,AG	114	0.8753	0.8786	0.8690	0.8897
Muotathal,SZ	117	0.8599	0.8754	0.8580	0.8788
Murten,FR	114	0.8626	0.8731	0.8578	0.8805
Mutten,GR	112	0.8720	0.8835	0.8675	0.8887
Muttenz,BL	116	0.8790	0.8816	0.8736	0.8901
Näfels,GL	117	0.8765	0.8874	0.8733	0.8932
Uster,ZH	118	0.8733	0.8853	0.8695	0.8863
Neftenbach,ZH	117	0.8776	0.8837	0.8753	0.8888
Neuenegg,BE	115	0.8768	0.8749	0.8692	0.8904
Neuenkirch,LU	113	0.8691	0.8815	0.8666	0.8889
Kradolf-Schönenberg,TG	113	0.8732	0.8832	0.8727	0.8883
Niederbipp,BE	115	0.8715	0.8734	0.8648	0.8881
Niederrohrdorf,AG	120	0.8765	0.8822	0.8726	0.8884
Niederweningen,ZH	124	0.8752	0.8806	0.8715	0.8832
Nunningen,SO	114	0.8672	0.8717	0.8631	0.8792
Oberägeri,ZG	118	0.8666	0.8702	0.8619	0.8786
Oberhof,AG	118	0.8681	0.8758	0.8690	0.8799
Oberiberg,SZ	118	0.8681	0.8737	0.8651	0.8846
Oberriet,SG	117	0.8683	0.8775	0.8647	0.8864
Obersaxen,GR	120	0.8776	0.8766	0.8696	0.8867
Oberwald,VS	117	0.8625	0.8736	0.8635	0.8752
Oberwichtach,BE	115	0.8639	0.8773	0.8623	0.8859
Obstalden,GL	122	0.8779	0.8792	0.8758	0.8902
Pfäfers,SG	120	0.8745	0.8788	0.8736	0.8868
Pfäffikon,ZH	116	0.8748	0.8837	0.8735	0.8907
Pfaffnau,LU	114	0.8736	0.8837	0.8695	0.8913
Pieterlen,BE	120	0.8716	0.8725	0.8652	0.8807
Plaffeien,FR	116	0.8618	0.8726	0.8560	0.8752
Pratteln,BL	120	0.8666	0.8722	0.8639	0.8828
Quarten,SG	117	0.8765	0.8853	0.8748	0.8920
Rafz,ZH	121	0.8728	0.8801	0.8695	0.8850
Ramsen,SH	116	0.8742	0.8801	0.8711	0.8860
Randa,VS	118	0.8585	0.8676	0.8600	0.8794
Rapperswil,BE	116	0.8724	0.8815	0.8674	0.8910
Reckingen,VS	121	0.8588	0.8732	0.8638	0.8785
Regensberg,ZH	120	0.8761	0.8803	0.8718	0.8872

Swiss-German	# of Sentences	COMET			
		NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Reutigen,BE	118	0.8652	0.8781	0.8688	0.8844
Rheineck,SG	119	0.8695	0.8823	0.8670	0.8877
Medels im Rheinwald,GR	111	0.8760	0.8773	0.8668	0.8843
Wattwil,SG	117	0.8700	0.8826	0.8668	0.8866
Rickenbach,SO	118	0.8697	0.8733	0.8681	0.8843
Rifferswil,ZH	114	0.8731	0.8864	0.8694	0.8927
Murgenthal,AG	120	0.8739	0.8800	0.8696	0.8902
Römerswil,LU	116	0.8706	0.8746	0.8693	0.8852
Röthenbach im Emmental,BE	118	0.8715	0.8797	0.8694	0.8875
Roggensburg,BL	112	0.8754	0.8776	0.8677	0.8883
Roggwil,TG	119	0.8755	0.8791	0.8708	0.8862
Romanshorn,TG	116	0.8731	0.8853	0.8697	0.8910
Rorbas,ZH	120	0.8733	0.8856	0.8719	0.8892
Risch,ZG	116	0.8759	0.8808	0.8740	0.8893
Rubigen,BE	116	0.8717	0.8756	0.8685	0.8899
Rüeggisberg,BE	115	0.8743	0.8871	0.8723	0.8933
Rümlang,ZH	119	0.8783	0.8850	0.8749	0.8924
Ruswil,LU	117	0.8749	0.8798	0.8722	0.8922
Saanen,BE	122	0.8670	0.8671	0.8632	0.8780
Saas Grund,VS	119	0.8639	0.8713	0.8660	0.8776
Safien,GR	117	0.8753	0.8720	0.8685	0.8816
Salgesch,VS	124	0.8633	0.8695	0.8637	0.8782
Sarnen,OW	118	0.8689	0.8713	0.8663	0.8831
Schänis,SG	113	0.8747	0.8879	0.8741	0.8887
Schaffhausen,SH	114	0.8787	0.8868	0.8778	0.8917
Schangnau,BE	111	0.8686	0.8823	0.8670	0.8891
Schiers,GR	113	0.8717	0.8837	0.8752	0.8916
Schleitheim,SH	115	0.8752	0.8812	0.8749	0.8862
Schnottwil,SO	116	0.8697	0.8742	0.8658	0.8840
Schönenbuch,BL	117	0.8702	0.8741	0.8646	0.8827
Schüpfeim,LU	117	0.8680	0.8737	0.8649	0.8852
Schwanden,GL	119	0.8745	0.8865	0.8733	0.8938
Wahlern,BE	113	0.8676	0.8792	0.8653	0.8880
Schwyz,SZ	117	0.8660	0.8822	0.8652	0.8840
Seftigen,BE	110	0.8696	0.8782	0.8664	0.8891
Sempach,LU	117	0.8738	0.8783	0.8712	0.8866
Sennwald,SG	120	0.8721	0.8741	0.8721	0.8846
Sevelen,SG	119	0.8749	0.8796	0.8694	0.8877
Siglistorf,AG	115	0.8801	0.8861	0.8773	0.8886
Signau,BE	111	0.8685	0.8810	0.8677	0.8880
Simplon,VS	123	0.8669	0.8761	0.8662	0.8848
Zihlschlacht-Sitterdorf,TG	116	0.8765	0.8896	0.8755	0.8945
Solothurn,SO	115	0.8662	0.8784	0.8652	0.8828
St.Antönien,GR	116	0.8720	0.8825	0.8734	0.8888
St.Gallen,SG	116	0.8735	0.8868	0.8689	0.8871
St.Niklaus,VS	120	0.8595	0.8664	0.8612	0.8726
Stadel,ZH	118	0.8783	0.8874	0.8723	0.8925
Stallikon,ZH	121	0.8727	0.8764	0.8721	0.8869
Stans,NW	119	0.8729	0.8755	0.8671	0.8887
Steffisburg,BE	116	0.8647	0.8781	0.8643	0.8841
Steg,VS	118	0.8668	0.8778	0.8712	0.8826
Stein,AG	116	0.8725	0.8848	0.8702	0.8889
Stein am Rhein,SH	116	0.8740	0.8865	0.8746	0.8886
Sternenberg,ZH	120	0.8739	0.8809	0.8689	0.8870
Stüsslingen,SO	114	0.8728	0.8831	0.8680	0.8913
Sumiswald,BE	113	0.8664	0.8791	0.8641	0.8842
Sursee,LU	118	0.8694	0.8773	0.8698	0.8850
Täuffelen,BE	118	0.8645	0.8693	0.8618	0.8788
Tafers,FR	115	0.8644	0.8716	0.8557	0.8761
Tamins,GR	122	0.8729	0.8749	0.8668	0.8898
Teufenthal,AG	118	0.8758	0.8820	0.8737	0.8902
Thalwil,ZH	117	0.8782	0.8908	0.8776	0.8944
Thun,BE	116	0.8717	0.8760	0.8675	0.8847
Thusis,GR	117	0.8754	0.8759	0.8657	0.8873

Swiss-German	# of Sentences	COMET			
		NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Triengen,LU	118	0.8692	0.8734	0.8679	0.8840
Trimmis,GR	117	0.8662	0.8803	0.8682	0.8864
Trogen,AR	118	0.8692	0.8825	0.8693	0.8870
Tüscherz-Alfermée,BE	115	0.8706	0.8761	0.8696	0.8865
Tuggen,SZ	120	0.8787	0.8833	0.8741	0.8920
Turbenthal,ZH	124	0.8774	0.8832	0.8755	0.8901
Ueberstorf,FR	116	0.8692	0.8779	0.8640	0.8887
Unterschächen,UR	120	0.8671	0.8686	0.8608	0.8780
Unterstammheim,ZH	115	0.8701	0.8788	0.8716	0.8828
Untervaz,GR	121	0.8687	0.8758	0.8693	0.8860
Urdorf,ZH	115	0.8752	0.8884	0.8705	0.8879
Urnäsch,AR	117	0.8715	0.8757	0.8689	0.8848
Ursenbach,BE	116	0.8661	0.8766	0.8623	0.8842
Utzenstorf,BE	116	0.8709	0.8757	0.8652	0.8869
Vals,GR	120	0.8701	0.8786	0.8676	0.8870
Villigen,AG	117	0.8824	0.8857	0.8743	0.8932
Visp,VS	118	0.8632	0.8748	0.8693	0.8797
Visperterminen,VS	120	0.8620	0.8643	0.8558	0.8736
Wädenswil,ZH	118	0.8788	0.8848	0.8792	0.8917
Wängi,TG	115	0.8733	0.8836	0.8713	0.8898
Walchwil,ZG	116	0.8702	0.8768	0.8683	0.8861
Wald,ZH	116	0.8735	0.8831	0.8707	0.8904
Waldstatt,AR	113	0.8692	0.8809	0.8640	0.8888
Walenstadt,SG	125	0.8732	0.8777	0.8693	0.8831
Wangen an der Aare,BE	119	0.8668	0.8759	0.8613	0.8859
Wartau,SG	123	0.8727	0.8794	0.8731	0.8850
Wegenstetten,AG	121	0.8741	0.8815	0.8751	0.8896
Weggis,LU	118	0.8705	0.8764	0.8671	0.8838
Weinfelden,TG	116	0.8771	0.8864	0.8731	0.8874
Welschenrohr,SO	123	0.8635	0.8706	0.8654	0.8832
Wengi,BE	118	0.8693	0.8728	0.8685	0.8871
Wiesen,GR	116	0.8728	0.8887	0.8733	0.8929
Wil,SG	116	0.8732	0.8858	0.8720	0.8899
Wilchingen,SH	117	0.8728	0.8787	0.8746	0.8866
Wildhaus,SG	115	0.8753	0.8772	0.8743	0.8840
Willisau Stadt,LU	116	0.8752	0.8793	0.8717	0.8899
Winterthur,ZH	125	0.8806	0.8867	0.8748	0.8906
Wolfenschiessen,NW	117	0.8762	0.8744	0.8703	0.8850
Wolhusen,LU	117	0.8717	0.8758	0.8698	0.8873
Wollerau,SZ	121	0.8754	0.8809	0.8753	0.8859
Worb,BE	118	0.8747	0.8786	0.8728	0.8900
Würenlos,AG	113	0.8737	0.8838	0.8739	0.8913
Wynigen,BE	119	0.8678	0.8750	0.8672	0.8835
Zell,LU	111	0.8676	0.8816	0.8652	0.8907
Zermatt,VS	122	0.8636	0.8713	0.8673	0.8774
Ziefen,BL	118	0.8727	0.8777	0.8681	0.8829
Zofingen,AG	119	0.8738	0.8856	0.8694	0.8883
Zürich,ZH	118	0.8735	0.8844	0.8711	0.8900
Zug,ZG	114	0.8693	0.8788	0.8656	0.8863
Zunzgen,BL	116	0.8723	0.8734	0.8672	0.8873
Zweisimmen,BE	118	0.8623	0.8690	0.8647	0.8808

Table C.18: COMET score of different Swiss-German dialects on all sentences.

Swiss-German	COMET			
	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Aarau,AG	0.8723	0.8784	0.8725	0.8881
Aarberg,BE	0.8707	0.8774	0.8628	0.8841
Aarburg,AG	0.8697	0.8805	0.8655	0.8900
Adelboden,BE	0.8678	0.8677	0.8671	0.8827
Aedermannsdorf,SO	0.8645	0.8738	0.8588	0.8804
Aesch,BL	0.8703	0.8752	0.8691	0.8856
Aeschi,SO	0.8616	0.8761	0.8599	0.8793
Agarn,VS	0.8583	0.8651	0.8627	0.8718
Alpnach,OW	0.8643	0.8804	0.8644	0.8821
Alpthal,SZ	0.8722	0.8752	0.8662	0.8816
Altdorf,UR	0.8649	0.8823	0.8655	0.8875
Altsttten,SG	0.8707	0.8781	0.8716	0.8888
Amden,SG	0.8755	0.8879	0.8763	0.8918
Amriswil,TG	0.8698	0.8846	0.8708	0.8869
Andelfingen,ZH	0.8793	0.8874	0.8724	0.8921
Andermatt,UR	0.8665	0.8726	0.8649	0.8882
Andwil,SG	0.8703	0.8799	0.8724	0.8857
Appenzell,AI	0.8660	0.8820	0.8718	0.8896
Arosa,GR	0.8759	0.8776	0.8711	0.8841
Ausserberg,VS	0.8654	0.8686	0.8642	0.8815
Avers,GR	0.8760	0.8794	0.8736	0.8891
Bretswil,ZH	0.8740	0.8853	0.8694	0.8866
Baldingen,AG	0.8778	0.8844	0.8729	0.8850
Basadingen-Schlattingen,TG	0.8751	0.8821	0.8741	0.8878
Basel,BS	0.8718	0.8851	0.8675	0.8885
Bassersdorf,ZH	0.8759	0.8856	0.8757	0.8896
Bauma,ZH	0.8765	0.8811	0.8760	0.8917
Belp,BE	0.8735	0.8820	0.8686	0.8886
Benken,SG	0.8744	0.8873	0.8703	0.8938
Bern,BE	0.8690	0.8808	0.8676	0.8877
Berneck,SG	0.8699	0.8797	0.8740	0.8818
Betten,VS	0.8617	0.8688	0.8625	0.8785
Bettingen,BS	0.8715	0.8816	0.8660	0.8894
Bettlach,SO	0.8667	0.8725	0.8658	0.8805
Bibern,SH	0.8757	0.8767	0.8671	0.8836
Binn,VS	0.8647	0.8736	0.8688	0.8814
Birmenstorf,AG	0.8778	0.8822	0.8770	0.8935
Birwinken,TG	0.8714	0.8852	0.8708	0.8885
Blatten,VS	0.8651	0.8669	0.8613	0.8732
Bleienbach,BE	0.8695	0.8815	0.8622	0.8844
Boltigen,BE	0.8639	0.8697	0.8556	0.8768
Boniswil,AG	0.8712	0.8789	0.8723	0.8846
Boswil,AG	0.8676	0.8782	0.8678	0.8801
Bottighofen,TG	0.8741	0.8862	0.8728	0.8884
Bremgarten,AG	0.8752	0.8894	0.8737	0.8915
Brienz,BE	0.8723	0.8813	0.8772	0.8892
Brig-Glis,VS	0.8623	0.8705	0.8604	0.8797
Rte,AI	0.8670	0.8797	0.8682	0.8877
Brugg,AG	0.8735	0.8826	0.8720	0.8944
Brunnadern,SG	0.8771	0.8838	0.8715	0.8879
Ingenbohl,SZ	0.8702	0.8743	0.8701	0.8855
Buchberg,SH	0.8766	0.8850	0.8743	0.8884
Buckten,BL	0.8659	0.8689	0.8619	0.8791
Bhler,AR	0.8744	0.8834	0.8765	0.8893
Blach,ZH	0.8777	0.8930	0.8789	0.8954
Brchen,VS	0.8633	0.8688	0.8624	0.8809
Bren an der Aare,BE	0.8688	0.8708	0.8625	0.8799
Buochs,NW	0.8633	0.8774	0.8629	0.8773
Busswil bei Bren,BE	0.8716	0.8738	0.8690	0.8852
Chur,GR	0.8731	0.8774	0.8716	0.8864
Churwalden,GR	0.8698	0.8863	0.8691	0.8866

Swiss-German	COMET			
	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Dagmersellen,LU	0.8701	0.8766	0.8697	0.8840
Davos,GR	0.8742	0.8837	0.8683	0.8912
Degersheim,SG	0.8707	0.8850	0.8741	0.8867
Densbüren,AG	0.8740	0.8778	0.8721	0.8881
Diemtigen,BE	0.8677	0.8774	0.8664	0.8846
Diepoldsau,SG	0.8737	0.8858	0.8737	0.8904
Diessbach bei Büren,BE	0.8653	0.8767	0.8631	0.8861
Düdingen,FR	0.8677	0.8779	0.8648	0.8891
Ebnat-Kappel,SG	0.8764	0.8796	0.8742	0.8883
Egg,ZH	0.8712	0.8857	0.8696	0.8878
Eglisau,ZH	0.8755	0.8906	0.8739	0.8941
Einsiedeln,SZ	0.8736	0.8783	0.8714	0.8841
Elfingen,AG	0.8828	0.8870	0.8789	0.8930
Elgg,ZH	0.8743	0.8830	0.8736	0.8903
Ellikon an der Thur,ZH	0.8737	0.8903	0.8720	0.8920
Elm,GL	0.8724	0.8813	0.8751	0.8950
Engelberg,OW	0.8723	0.8826	0.8648	0.8845
Engi,GL	0.8764	0.8813	0.8723	0.8896
Entlebuch,LU	0.8755	0.8822	0.8787	0.8897
Erlach,BE	0.8706	0.8759	0.8677	0.8846
Ermatingen,TG	0.8713	0.8841	0.8747	0.8897
Erschwil,SO	0.8637	0.8736	0.8571	0.8791
Eschenbach,LU	0.8721	0.8853	0.8709	0.8899
Escholzmatt,LU	0.8735	0.8755	0.8695	0.8850
Ettingen,BL	0.8714	0.8732	0.8680	0.8857
Fällanden,ZH	0.8698	0.8822	0.8657	0.8859
Trub,BE	0.8669	0.8766	0.8619	0.8834
Spiez,BE	0.8725	0.8692	0.8682	0.8852
Ferden,VS	0.8646	0.8624	0.8576	0.8717
Fiesch,VS	0.8615	0.8718	0.8666	0.8777
Fischingen,TG	0.8769	0.8869	0.8758	0.8904
Flaach,ZH	0.8753	0.8842	0.8772	0.8900
Fläsch,GR	0.8788	0.8807	0.8726	0.8861
Flawil,SG	0.8724	0.8837	0.8700	0.8884
Flühli,LU	0.8651	0.8722	0.8627	0.8790
Flums,SG	0.8712	0.8851	0.8728	0.8886
Maur,ZH	0.8758	0.8811	0.8750	0.8887
Frauenfeld,TG	0.8737	0.8830	0.8696	0.8869
Frauenkappelen,BE	0.8753	0.8762	0.8685	0.8847
Fribourg,FR	0.8696	0.8748	0.8662	0.8823
Frick,AG	0.8763	0.8787	0.8716	0.8861
Frutigen,BE	0.8683	0.8742	0.8689	0.8842
Gadmen,BE	0.8731	0.8838	0.8757	0.8924
Gächlingen,SH	0.8719	0.8803	0.8710	0.8839
Gais,AR	0.8720	0.8861	0.8746	0.8909
Gelterkinden,BL	0.8698	0.8714	0.8642	0.8851
Giffers,FR	0.8684	0.8791	0.8637	0.8848
Giswil,OW	0.8711	0.8774	0.8650	0.8861
Glarus,GL	0.8758	0.8881	0.8728	0.8935
Göschenen,UR	0.8747	0.8763	0.8673	0.8839
Grabs,SG	0.8752	0.8855	0.8793	0.8888
Grafenried,BE	0.8683	0.8719	0.8682	0.8820
Grindelwald,BE	0.8754	0.8845	0.8715	0.8913
Grosswangen,LU	0.8686	0.8749	0.8694	0.8829
Gossau,ZH	0.8717	0.8744	0.8688	0.8869
Gsteig,BE	0.8653	0.8718	0.8655	0.8820
Guggisberg,BE	0.8627	0.8756	0.8604	0.8807
Gurmels,FR	0.8640	0.8769	0.8611	0.8812

Swiss-German	COMET			
	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Gurnellen,UR	0.8757	0.8778	0.8695	0.8825
Guttannen,BE	0.8671	0.8738	0.8687	0.8828
Guttet-Feschel,VS	0.8701	0.8747	0.8661	0.8811
Habkern,BE	0.8688	0.8749	0.8652	0.8783
Hägglingen,AG	0.8744	0.8804	0.8708	0.8893
Hallau,SH	0.8732	0.8780	0.8683	0.8885
Schlatt-Haslen,AI	0.8666	0.8826	0.8697	0.8859
Hedingen,ZH	0.8712	0.8832	0.8669	0.8870
Heiden,AR	0.8733	0.8856	0.8749	0.8937
Heitenried,FR	0.8625	0.8716	0.8559	0.8739
Herisau,AR	0.8735	0.8839	0.8744	0.8902
Hölstein,BL	0.8705	0.8741	0.8657	0.8854
Homburg,TG	0.8716	0.8822	0.8711	0.8883
Horw,LU	0.8725	0.8799	0.8724	0.8914
Hünenberg,ZG	0.8750	0.8808	0.8743	0.8835
Hütten,ZH	0.8748	0.8793	0.8730	0.8872
Hüttwilen,TG	0.8771	0.8901	0.8739	0.8962
Huttwil,BE	0.8652	0.8802	0.8663	0.8836
Illnau-Effretikon,ZH	0.8737	0.8802	0.8711	0.8845
Inden,VS	0.8691	0.8781	0.8703	0.8873
Innerthal,SZ	0.8704	0.8795	0.8703	0.8849
Innertkirchen,BE	0.8688	0.8800	0.8716	0.8896
Ins,BE	0.8637	0.8705	0.8582	0.8813
Interlaken,BE	0.8717	0.8776	0.8718	0.8879
Iseltwald,BE	0.8676	0.8726	0.8690	0.8840
Isenthal,UR	0.8747	0.8818	0.8685	0.8889
Ittigen,BE	0.8769	0.8812	0.8716	0.8902
Jaun,FR	0.8669	0.8681	0.8589	0.8756
Jenins,GR	0.8737	0.8714	0.8662	0.8818
Kaiserstuhl,AG	0.8754	0.8862	0.8690	0.8905
Kaisten,AG	0.8736	0.8905	0.8733	0.8935
Kandersteg,BE	0.8706	0.8753	0.8714	0.8891
Kappel am Albis,ZH	0.8755	0.8899	0.8710	0.8909
Kesswil,TG	0.8744	0.8870	0.8743	0.8878
Reichenbach im Kandertal,BE	0.8652	0.8805	0.8720	0.8863
Kirchberg,SG	0.8733	0.8900	0.8750	0.8901
Kirchleerau,AG	0.8790	0.8805	0.8752	0.8905
Kleinlützel,SO	0.8725	0.8757	0.8690	0.8853
Klosters-Serneus,GR	0.8708	0.8834	0.8727	0.8876
Konolfingen,BE	0.8726	0.8747	0.8697	0.8848
Krauchthal,BE	0.8743	0.8787	0.8736	0.8913
Krinau,SG	0.8709	0.8862	0.8727	0.8891
Küblis,GR	0.8733	0.8886	0.8694	0.8897
Küschnacht,ZH	0.8736	0.8906	0.8705	0.8878
Küssnacht am Rigi,SZ	0.8755	0.8825	0.8754	0.8900
Lachen,SZ	0.8740	0.8847	0.8734	0.8927
Langenbruck,BL	0.8667	0.8795	0.8679	0.8822
Langenthal,BE	0.8678	0.8748	0.8603	0.8871
Langnau im Emmental,BE	0.8698	0.8746	0.8729	0.8849
Langnau am Albis,ZH	0.8740	0.8855	0.8708	0.8890
Langwies,GR	0.8670	0.8804	0.8627	0.8874
Laufen,BL	0.8639	0.8713	0.8560	0.8813
Laupen,BE	0.8672	0.8720	0.8632	0.8827
Lauterbrunnen,BE	0.8718	0.8757	0.8740	0.8868
Leibstadt,AG	0.8784	0.8835	0.8779	0.8905
Leissigen,BE	0.8688	0.8713	0.8595	0.8768
Lenk,BE	0.8650	0.8723	0.8610	0.8767
Lenzburg,AG	0.8721	0.8755	0.8712	0.8874
Liesberg,BL	0.8701	0.8760	0.8693	0.8831
Liestal,BL	0.8679	0.8730	0.8646	0.8815
Ligerz,BE	0.8705	0.8717	0.8674	0.8815
Linthal,GL	0.8742	0.8808	0.8687	0.8888
Luchsingen,GL	0.8785	0.8914	0.8762	0.8998

Swiss-German	COMET			
	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Lützelflüh,BE	0.8654	0.8705	0.8631	0.8807
Lungern,OW	0.8672	0.8733	0.8645	0.8799
Lupfig,AG	0.8704	0.8828	0.8694	0.8898
Thundorf,TG	0.8742	0.8909	0.8751	0.8928
Luzern,LU	0.8712	0.8772	0.8684	0.8851
Silenen,UR	0.8740	0.8800	0.8667	0.8873
Magden,AG	0.8725	0.8744	0.8667	0.8849
Maisprach,BL	0.8694	0.8729	0.8670	0.8832
Malans,GR	0.8765	0.8805	0.8755	0.8879
Malters,LU	0.8710	0.8745	0.8690	0.8864
Mammern,TG	0.8778	0.8826	0.8747	0.8890
Marbach,LU	0.8767	0.8786	0.8741	0.8893
Marthalen,ZH	0.8741	0.8805	0.8769	0.8886
St.Stephan,BE	0.8686	0.8790	0.8654	0.8835
Meikirch,BE	0.8591	0.8738	0.8577	0.8794
Meilen,ZH	0.8733	0.8824	0.8738	0.8874
Meiringen,BE	0.8718	0.8796	0.8714	0.8886
Melchnau,BE	0.8718	0.8820	0.8664	0.8942
Kerns,OW	0.8676	0.8805	0.8631	0.8827
Mels,SG	0.8675	0.8823	0.8736	0.8853
Brunegg,AG	0.8731	0.8885	0.8722	0.8929
Menzingen,ZG	0.8711	0.8838	0.8714	0.8894
Merenschwand,AG	0.8715	0.8803	0.8728	0.8833
Merishausen,SH	0.8779	0.8853	0.8745	0.8906
Metzerlen,SO	0.8641	0.8727	0.8618	0.8814
Möhlin,AG	0.8746	0.8776	0.8712	0.8872
Mörel,VS	0.8692	0.8792	0.8727	0.8852
Mörschwil,SG	0.8706	0.8813	0.8695	0.8882
Mollis,GL	0.8781	0.8829	0.8749	0.8922
Mosnang,SG	0.8723	0.8801	0.8679	0.8823
Mümliswil-Ramiswil,SO	0.8650	0.8779	0.8627	0.8845
Münchenbuchsee,BE	0.8679	0.8767	0.8643	0.8887
Muhen,AG	0.8741	0.8784	0.8681	0.8895
Muotathal,SZ	0.8587	0.8748	0.8569	0.8783
Murten,FR	0.8616	0.8732	0.8578	0.8802
Mutten,GR	0.8726	0.8843	0.8680	0.8891
Muttentz,BL	0.8794	0.8836	0.8750	0.8908
Näfels,GL	0.8750	0.8857	0.8720	0.8917
Uster,ZH	0.8731	0.8857	0.8702	0.8859
Neftenbach,ZH	0.8773	0.8842	0.8764	0.8885
Neuenegg,BE	0.8768	0.8772	0.8714	0.8906
Neuenkirch,LU	0.8675	0.8810	0.8653	0.8877
Kradolf-Schönenberg,TG	0.8730	0.8831	0.8733	0.8876
Niederbipp,BE	0.8708	0.8739	0.8656	0.8880
Niederrohrdorf,AG	0.8770	0.8833	0.8741	0.8900
Niederweningen,ZH	0.8739	0.8797	0.8716	0.8827
Nunningen,SO	0.8666	0.8720	0.8619	0.8795
Oberägeri,ZG	0.8655	0.8701	0.8610	0.8779
Oberhof,AG	0.8680	0.8767	0.8698	0.8793
Oberiberg,SZ	0.8680	0.8741	0.8665	0.8852
Oberriet,SG	0.8681	0.8784	0.8656	0.8870
Obersaxen,GR	0.8778	0.8774	0.8715	0.8865
Oberwald,VS	0.8622	0.8740	0.8634	0.8752
Oberwichtrach,BE	0.8632	0.8767	0.8618	0.8849
Obstalden,GL	0.8771	0.8795	0.8763	0.8911
Pfäfers,SG	0.8747	0.8786	0.8733	0.8878
Pfäffikon,ZH	0.8752	0.8853	0.8752	0.8913
Pfaffnau,LU	0.8724	0.8840	0.8691	0.8910

Swiss-German	COMET			
	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Pieterlen,BE	0.8727	0.8733	0.8674	0.8815
Plaffeien,FR	0.8612	0.8743	0.8572	0.8752
Pratteln,BL	0.8666	0.8728	0.8651	0.8839
Quarten,SG	0.8757	0.8870	0.8758	0.8921
Rafz,ZH	0.8737	0.8816	0.8712	0.8865
Ramsen,SH	0.8748	0.8809	0.8724	0.8866
Randa,VS	0.8578	0.8678	0.8597	0.8798
Rapperswil,BE	0.8714	0.8810	0.8680	0.8902
Reckingen,VS	0.8608	0.8769	0.8660	0.8820
Regensberg,ZH	0.8760	0.8806	0.8719	0.8879
Reutigen,BE	0.8645	0.8777	0.8674	0.8831
Rheineck,SG	0.8694	0.8827	0.8671	0.8879
Medels im Rheinwald,GR	0.8748	0.8769	0.8653	0.8827
Wattwil,SG	0.8697	0.8827	0.8668	0.8868
Rickenbach,SO	0.8691	0.8731	0.8680	0.8834
Rifferswil,ZH	0.8734	0.8873	0.8681	0.8927
Murgenthal,AG	0.8736	0.8813	0.8707	0.8905
Römerswil,LU	0.8703	0.8757	0.8711	0.8850
Röthenbach im Emmental,BE	0.8704	0.8789	0.8684	0.8864
Roggenburg,BL	0.8762	0.8783	0.8674	0.8885
Roggwil,TG	0.8756	0.8797	0.8720	0.8875
Romanshorn,TG	0.8721	0.8849	0.8699	0.8899
Rorbas,ZH	0.8727	0.8859	0.8722	0.8896
Risch,ZG	0.8737	0.8802	0.8734	0.8870
Rubigen,BE	0.8710	0.8766	0.8686	0.8896
Rüeggisberg,BE	0.8723	0.8859	0.8710	0.8912
Rümlang,ZH	0.8781	0.8862	0.8759	0.8928
Ruswil,LU	0.8743	0.8792	0.8723	0.8905
Saanen,BE	0.8688	0.8687	0.8643	0.8799
Saas Grund,VS	0.8641	0.8719	0.8661	0.8784
Safien,GR	0.8754	0.8729	0.8679	0.8813
Salgesch,VS	0.8626	0.8697	0.8634	0.8782
Sarnen,OW	0.8690	0.8721	0.8675	0.8831
Schänis,SG	0.8747	0.8878	0.8745	0.8880
Schaffhausen,SH	0.8783	0.8870	0.8775	0.8914
Schagnau,BE	0.8690	0.8826	0.8652	0.8886
Schiens,GR	0.8719	0.8849	0.8759	0.8922
Schleitheim,SH	0.8747	0.8821	0.8763	0.8867
Schnottwil,SO	0.8706	0.8757	0.8676	0.8846
Schönenbuch,BL	0.8703	0.8753	0.8668	0.8836
Schüpfeim,LU	0.8672	0.8739	0.8656	0.8844
Schwanden,GL	0.8763	0.8889	0.8764	0.8955
Wahlern,BE	0.8667	0.8787	0.8644	0.8868
Schwyz,SZ	0.8672	0.8848	0.8679	0.8857
Seftigen,BE	0.8685	0.8774	0.8652	0.8886
Sempach,LU	0.8718	0.8773	0.8711	0.8849
Sennwald,SG	0.8716	0.8738	0.8721	0.8856
Sevelen,SG	0.8757	0.8811	0.8714	0.8885
Siglistorf,AG	0.8780	0.8854	0.8761	0.8860
Signau,BE	0.8676	0.8804	0.8677	0.8870
Simplon,VS	0.8671	0.8770	0.8668	0.8851
Zihlschlacht-Sitterdorf,TG	0.8766	0.8892	0.8762	0.8950
Solothurn,SO	0.8655	0.8785	0.8655	0.8819
St.Antönien,GR	0.8713	0.8828	0.8741	0.8891
St.Gallen,SG	0.8744	0.8886	0.8706	0.8888
St.Niklaus,VS	0.8596	0.8677	0.8616	0.8744
Stadel,ZH	0.8775	0.8864	0.8718	0.8911
Stallikon,ZH	0.8720	0.8763	0.8737	0.8869
Stans,NW	0.8736	0.8770	0.8694	0.8896
Steffisburg,BE	0.8629	0.8771	0.8636	0.8824
Steg,VS	0.8657	0.8776	0.8710	0.8829
Stein,AG	0.8708	0.8834	0.8701	0.8866
Stein am Rhein,SH	0.8722	0.8855	0.8749	0.8867
Sternenberg,ZH	0.8727	0.8812	0.8697	0.8875
Stüsslingen,SO	0.8714	0.8832	0.8670	0.8911
Sumiswald,BE	0.8654	0.8778	0.8630	0.8828

Swiss-German	COMET			
	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>Sursee,LU</b>	0.8689	0.8781	0.8723	0.8852
<b>Täuffelen,BE</b>	0.8640	0.8696	0.8633	0.8787
<b>Tafers,FR</b>	0.8653	0.8732	0.8586	0.8766
<b>Tamins,GR</b>	0.8733	0.8756	0.8683	0.8907
<b>Teufenthal,AG</b>	0.8749	0.8820	0.8741	0.8899
<b>Thalwil,ZH</b>	0.8776	0.8909	0.8777	0.8938
<b>Thun,BE</b>	0.8714	0.8765	0.8681	0.8839
<b>Thusis,GR</b>	0.8751	0.8762	0.8672	0.8880
<b>Triengen,LU</b>	0.8694	0.8739	0.8681	0.8836
<b>Trimmis,GR</b>	0.8654	0.8800	0.8685	0.8861
<b>Trogen,AR</b>	0.8705	0.8843	0.8707	0.8884
<b>Tüscherz-Alfermée,BE</b>	0.8696	0.8760	0.8695	0.8857
<b>Tuggen,SZ</b>	0.8786	0.8843	0.8751	0.8927
<b>Turbenthal,ZH</b>	0.8772	0.8842	0.8756	0.8914
<b>Ueberstorf,FR</b>	0.8689	0.8790	0.8651	0.8890
<b>Unterschächen,UR</b>	0.8668	0.8687	0.8611	0.8781
<b>Unterstammheim,ZH</b>	0.8701	0.8807	0.8736	0.8840
<b>Untervaz,GR</b>	0.8679	0.8755	0.8701	0.8867
<b>Urdorf,ZH</b>	0.8752	0.8898	0.8715	0.8880
<b>Urnäsch,AR</b>	0.8718	0.8766	0.8691	0.8855
<b>Ursenbach,BE</b>	0.8644	0.8756	0.8618	0.8831
<b>Utzenstorf,BE</b>	0.8710	0.8771	0.8672	0.8879
<b>Vals,GR</b>	0.8690	0.8790	0.8669	0.8870
<b>Villigen,AG</b>	0.8802	0.8843	0.8718	0.8906
<b>Visp,VS</b>	0.8650	0.8772	0.8721	0.8811
<b>Visperterminen,VS</b>	0.8611	0.8644	0.8549	0.8733
<b>Wädenswil,ZH</b>	0.8781	0.8852	0.8796	0.8919
<b>Wängi,TG</b>	0.8740	0.8848	0.8734	0.8908
<b>Walchwil,ZG</b>	0.8704	0.8784	0.8700	0.8864
<b>Wald,ZH</b>	0.8747	0.8852	0.8728	0.8920
<b>Waldstatt,AR</b>	0.8700	0.8830	0.8661	0.8899
<b>Walenstadt,SG</b>	0.8720	0.8777	0.8692	0.8834
<b>Wangen an der Aare,BE</b>	0.8665	0.8759	0.8630	0.8859
<b>Wartau,SG</b>	0.8709	0.8798	0.8733	0.8852
<b>Wegenstetten,AG</b>	0.8737	0.8812	0.8749	0.8894
<b>Weggis,LU</b>	0.8709	0.8778	0.8696	0.8844
<b>Weinfelden,TG</b>	0.8786	0.8884	0.8753	0.8887
<b>Welschenrohr,SO</b>	0.8645	0.8717	0.8672	0.8839
<b>Wengi,BE</b>	0.8695	0.8735	0.8694	0.8868
<b>Wiesen,GR</b>	0.8725	0.8878	0.8731	0.8922
<b>Wil,SG</b>	0.8730	0.8866	0.8735	0.8902
<b>Wilchingen,SH</b>	0.8720	0.8776	0.8748	0.8856
<b>Wildhaus,SG</b>	0.8750	0.8785	0.8761	0.8845
<b>Willisau Stadt,LU</b>	0.8746	0.8805	0.8735	0.8901
<b>Winterthur,ZH</b>	0.8787	0.8858	0.8739	0.8900
<b>Wolfenschiessen,NW</b>	0.8767	0.8761	0.8723	0.8857
<b>Wolhusen,LU</b>	0.8702	0.8750	0.8695	0.8850
<b>Wollerau,SZ</b>	0.8758	0.8822	0.8773	0.8865
<b>Worb,BE</b>	0.8749	0.8794	0.8737	0.8901
<b>Würenlos,AG</b>	0.8721	0.8833	0.8714	0.8903
<b>Wynigen,BE</b>	0.8676	0.8754	0.8686	0.8829
<b>Zell,LU</b>	0.8672	0.8814	0.8641	0.8903
<b>Zermatt,VS</b>	0.8635	0.8708	0.8667	0.8769
<b>Ziefen,BL</b>	0.8732	0.8795	0.8706	0.8830
<b>Zofingen,AG</b>	0.8738	0.8865	0.8705	0.8889
<b>Zürich,ZH</b>	0.8726	0.8835	0.8702	0.8892
<b>Zug,ZG</b>	0.8691	0.8794	0.8660	0.8861
<b>Zunzgen,BL</b>	0.8720	0.8744	0.8685	0.8875
<b>Zweisimmen,BE</b>	0.8639	0.8703	0.8652	0.8815

Table C.19: Compare COMET score of different Swiss-German dialects on a subset of 87 sentences.

Swiss-German	# of Sentences	BLEU			
		NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Aarau,AG	121	42.68	45.48	41.85	45.29
Aarberg,BE	117	43.83	46.08	41.73	46.68
Aarburg,AG	118	43.51	45.44	42.02	46.03
Adelboden,BE	120	41.16	41.33	39.97	41.82
Aedermannsdorf,SO	115	43.34	45.56	41.56	45.76
Aesch,BL	118	43.57	44.50	41.46	45.56
Aeschi,SO	113	42.75	46.62	41.68	45.66
Agarn,VS	124	41.48	43.07	42.28	43.52
Alpnach,OW	115	42.34	45.81	41.03	46.29
Alpthal,SZ	118	44.72	45.42	42.23	46.04
Altdorf,UR	115	42.34	45.60	41.23	47.08
Altsttten,SG	121	42.99	44.43	42.41	45.79
Amden,SG	115	44.56	47.58	44.22	48.01
Amriswil,TG	115	43.59	46.07	42.67	46.27
Andelfingen,ZH	116	45.26	46.45	44.44	48.33
Andermatt,UR	120	43.19	43.95	41.49	46.73
Andwil,SG	119	43.58	45.95	43.06	46.33
Appenzell,AI	116	42.81	44.03	42.36	47.65
Arosa,GR	119	43.82	46.90	42.83	45.15
Ausserberg,VS	121	41.21	43.27	41.73	44.63
Avers,GR	117	43.55	47.02	43.39	46.60
Bretswhil,ZH	118	43.34	46.23	43.75	46.84
Baldingen,AG	119	45.65	47.26	44.78	47.79
Basadingen-Schlattingen,TG	118	43.83	45.40	43.22	46.62
Basel,BS	116	42.78	46.60	43.54	46.21
Bassersdorf,ZH	124	44.16	48.41	43.90	46.56
Bauma,ZH	117	43.10	46.12	44.00	46.95
Belp,BE	115	43.86	46.72	44.23	47.58
Benken,SG	110	46.39	46.81	45.69	48.79
Bern,BE	119	44.88	47.26	42.62	47.06
Berneck,SG	115	42.38	44.09	41.00	45.01
Betten,VS	119	41.49	41.82	41.61	44.45
Bettingen,BS	112	43.89	46.38	43.13	47.96
Bettlach,SO	117	42.86	44.97	40.82	45.04
Bibern,SH	116	44.59	46.18	43.17	46.29
Binn,VS	118	42.93	46.28	44.46	46.07
Birmenstorf,AG	119	44.35	45.91	43.67	47.05
Birwinken,TG	117	43.57	46.86	43.37	46.93
Blatten,VS	126	40.35	41.07	41.98	42.71
Bleienbach,BE	115	42.23	46.18	40.38	45.29
Boltigen,BE	109	40.49	42.60	40.77	42.95
Boniswil,AG	115	43.49	47.19	42.26	44.73
Boswil,AG	118	44.10	47.66	43.70	45.26
Bottighofen,TG	116	44.77	47.41	43.20	46.20
Bremgarten,AG	115	44.67	46.73	44.01	47.25
Brienz,BE	121	43.30	45.64	44.25	45.53
Brig-Glis,VS	122	41.58	42.07	42.25	43.81
Rte,AI	115	42.53	44.61	42.78	47.07
Brugg,AG	120	44.50	46.30	43.93	47.12
Brunnadern,SG	118	45.09	46.30	42.20	47.16
Ingenbohl,SZ	120	43.14	44.99	42.80	46.61
Buchberg,SH	121	43.82	46.20	43.05	45.45
Buckten,BL	118	42.28	44.18	40.58	44.43
Bhler,AR	116	45.12	45.37	43.21	46.58
Blach,ZH	121	45.39	48.44	44.77	47.20
Brchen,VS	119	42.26	42.29	42.12	43.96
Bren an der Aare,BE	121	43.07	45.97	41.45	45.47
Buochs,NW	116	42.00	44.33	41.00	44.73
Busswil bei Bren,BE	116	43.04	44.46	41.60	45.31
Chur,GR	116	43.46	46.15	43.11	46.42
Churwalden,GR	117	43.61	48.47	43.80	47.56
Dagmersellen,LU	118	42.60	45.22	41.13	44.13
Davos,GR	118	42.99	48.81	43.81	48.13
Degersheim,SG	113	44.01	47.68	43.36	47.13

Swiss-German	# of Sentences	BLEU			
		NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Densbüren,AG	121	42.90	45.41	41.66	45.67
Diemtigen,BE	118	43.25	44.20	42.60	45.45
Diepoldsau,SG	113	44.76	46.68	42.86	47.97
Diessbach bei Büren,BE	115	41.72	44.78	41.32	45.89
Düdingen,FR	114	43.28	43.40	41.91	46.62
Ebnat-Kappel,SG	122	44.41	44.93	42.36	45.33
Egg,ZH	120	44.48	48.28	43.16	46.98
Eglisau,ZH	116	44.27	47.79	44.53	48.54
Einsiedeln,SZ	115	43.58	44.81	42.34	45.69
Elfingen,AG	117	45.53	47.73	44.11	46.54
Elgg,ZH	118	43.78	45.69	43.28	45.77
Ellikon an der Thur,ZH	116	43.23	47.37	43.41	46.57
Elm,GL	122	42.29	44.57	42.61	47.61
Engelberg,OW	116	42.85	45.14	40.49	46.43
Engi,GL	121	42.93	45.34	42.37	46.43
Entlebuch,LU	117	44.17	44.93	43.06	45.78
Erlach,BE	119	42.13	45.47	40.93	45.15
Ermatingen,TG	113	43.35	45.56	41.94	45.92
Erschwil,SO	112	43.10	46.18	41.56	46.45
Eschenbach,LU	115	44.57	46.89	43.24	46.35
Escholzmatt,LU	116	42.85	44.08	41.29	44.40
Ettingen,BL	114	43.94	43.43	41.60	46.71
Fällanden,ZH	117	43.20	46.46	43.35	45.70
Trub,BE	114	42.78	44.80	41.58	46.00
Spiez,BE	118	42.22	44.69	40.80	44.24
Ferden,VS	122	40.68	40.96	41.82	43.94
Fiesch,VS	116	42.33	43.01	42.55	44.75
Fischingen,TG	114	45.10	48.05	43.92	46.61
Flaach,ZH	117	43.14	48.09	44.14	46.69
Fläsch,GR	117	44.53	46.61	43.19	46.97
Flawil,SG	116	43.39	45.39	42.39	46.46
Flühli,LU	117	42.20	44.65	41.22	44.79
Flums,SG	120	43.15	45.93	42.74	45.84
Maur,ZH	121	44.33	46.64	44.65	47.93
Frauenfeld,TG	114	45.34	47.28	43.19	45.77
Frauenkappelen,BE	118	43.54	45.20	41.79	44.91
Fribourg,FR	118	43.22	43.74	40.53	46.04
Frick,AG	121	44.35	45.77	42.84	45.92
Frutigen,BE	118	42.80	44.14	42.32	44.51
Gadmen,BE	118	43.79	46.37	43.99	45.83
Gächlingen,SH	119	43.25	44.34	42.05	45.22
Gais,AR	118	45.05	47.31	43.47	47.43
Gelterkinden,BL	119	42.65	45.00	40.83	45.46
Giffers,FR	115	41.94	44.42	41.09	45.66
Giswil,OW	113	43.03	43.85	40.61	45.78
Glarus,GL	123	44.63	47.17	43.85	48.66
Göschenen,UR	118	46.12	47.65	43.45	48.06
Grabs,SG	116	43.84	46.52	42.92	46.58
Grafenried,BE	119	42.85	45.03	42.33	44.72
Grindelwald,BE	119	44.38	47.50	44.82	48.27
Grosswangen,LU	117	41.91	42.83	40.94	44.65
Gossau,ZH	121	43.55	44.04	43.08	45.56
Gsteig,BE	116	41.98	43.83	41.56	43.48
Guggisberg,BE	114	40.68	43.74	40.03	44.24
Gurmels,FR	118	43.66	45.91	42.86	47.73
Gurtnellen,UR	117	45.46	47.43	42.76	47.28
Guttannen,BE	121	41.19	43.44	43.56	44.57
Guttet-Feschel,VS	122	43.04	43.56	43.02	45.23
Habkern,BE	113	41.87	43.66	41.93	43.11
Häggingen,AG	115	43.33	45.39	41.65	44.75
Hallau,SH	117	43.16	44.35	41.72	46.02

Swiss-German	# of Sentences	BLEU			
		NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Schlatt-Haslen,AI	112	43.00	45.35	41.44	46.68
Hedingen,ZH	116	43.58	46.64	42.48	46.60
Heiden,AR	118	43.34	46.14	42.52	46.02
Heitenried,FR	118	41.19	43.01	39.87	44.37
Herisau,AR	113	44.67	46.57	42.95	46.84
Hölstein,BL	120	43.77	45.67	41.34	45.70
Homburg,TG	110	44.39	45.85	42.55	46.81
Horw,LU	116	43.34	45.08	42.57	46.29
Hünenberg,ZG	116	43.25	46.48	42.64	44.76
Hütten,ZH	120	43.72	45.82	44.02	46.89
Hüttwilen,TG	114	44.91	46.20	44.08	48.06
Huttwil,BE	116	43.18	45.44	41.43	45.44
Illnau-Effretikon,ZH	122	43.26	46.54	42.42	45.83
Inden,VS	122	41.91	44.32	43.06	45.63
Innerthal,SZ	113	44.37	46.03	42.54	45.87
Innertkirchen,BE	121	42.65	46.37	43.81	44.97
Ins,BE	113	43.06	45.14	41.11	45.61
Interlaken,BE	116	43.33	46.24	42.12	45.21
Iseltwald,BE	120	43.49	44.45	41.92	45.46
Isenthal,UR	117	46.10	47.12	43.20	48.94
Ittigen,BE	114	44.07	45.68	42.42	45.89
Jaun,FR	118	41.79	41.47	40.62	43.19
Jenins,GR	113	43.57	44.42	41.81	45.94
Kaiserstuhl,AG	117	44.22	46.50	42.81	47.13
Kaisten,AG	119	45.30	48.33	44.62	47.99
Kandersteg,BE	114	42.79	43.93	41.76	44.53
Kappel am Albis,ZH	116	43.54	47.00	43.36	47.30
Kesswil,TG	115	44.34	47.71	42.23	45.57
Reichenbach im Kandertal,BE	115	43.54	46.31	43.38	45.04
Kirchberg,SG	112	45.33	47.57	44.45	47.01
Kirchleerau,AG	120	45.17	45.48	43.36	46.01
Kleinlützel,SO	116	43.56	44.56	40.52	45.04
Klosters-Serneus,GR	121	43.87	49.55	44.94	48.79
Konolfingen,BE	116	43.34	44.26	41.52	44.75
Krauchthal,BE	117	43.44	45.89	43.21	46.89
Krinau,SG	114	44.11	46.80	42.82	46.33
Küblis,GR	113	43.58	49.79	44.37	48.57
Küschnacht,ZH	122	45.06	48.33	44.40	47.39
Küssnacht am Rigi,SZ	119	45.73	48.47	44.19	48.58
Lachen,SZ	115	44.87	47.61	45.00	48.13
Langenbruck,BL	112	44.18	47.47	42.29	46.35
Langenthal,BE	113	42.00	45.87	41.91	46.01
Langnau im Emmental,BE	119	41.93	43.73	41.25	44.82
Langnau am Albis,ZH	118	44.89	47.84	43.73	47.04
Langwies,GR	110	43.81	48.92	43.67	49.30
Laufen,BL	114	43.55	44.84	41.50	45.99
Laupen,BE	115	43.03	44.17	40.66	45.37
Lauterbrunnen,BE	125	41.80	45.67	43.89	45.06
Leibstadt,AG	120	44.68	47.03	43.77	46.59
Leissigen,BE	118	42.04	43.08	40.49	43.01
Lenk,BE	120	41.43	43.57	41.12	43.40
Lenzburg,AG	120	42.57	44.96	42.39	45.87
Liesberg,BL	121	43.88	46.08	42.08	45.44
Liestal,BL	116	42.28	45.57	41.11	44.97
Ligerz,BE	111	42.14	43.95	41.67	45.34
Linthal,GL	119	43.69	46.21	43.21	48.08
Luchsingen,GL	123	45.75	47.67	44.80	49.52
Lützelflüh,BE	118	40.90	42.84	40.84	44.22
Lungerm,OW	115	41.86	43.08	40.42	45.37
Lupfig,AG	112	43.05	46.31	42.59	46.75
Thundorf,TG	116	44.06	46.66	43.30	47.27
Luzern,LU	119	42.98	45.49	42.13	45.79
Silenen,UR	117	44.40	45.06	41.75	47.26

Swiss-German	# of Sentences	BLEU			
		NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Magden,AG	114	42.59	44.77	41.13	45.16
Maisprach,BL	116	43.95	45.07	42.59	45.70
Malans,GR	114	43.78	47.20	42.79	46.06
Malters,LU	117	42.62	44.17	40.39	43.99
Mammern,TG	120	44.85	47.15	44.87	47.44
Marbach,LU	121	44.63	46.40	43.94	46.55
Marthalen,ZH	115	44.31	46.01	43.94	47.07
St.Stephan,BE	117	42.73	44.50	42.24	44.22
Meikirch,BE	115	40.46	43.61	40.14	45.00
Meilen,ZH	124	43.62	47.38	44.55	45.47
Meiringen,BE	120	43.76	45.80	44.15	44.29
Melchnau,BE	112	43.62	45.76	41.07	46.41
Kerns,OW	116	42.88	45.26	41.14	46.81
Mels,SG	125	43.38	45.83	42.61	45.72
Brunegg,AG	113	44.24	47.23	42.96	46.43
Menzingen,ZG	116	45.39	48.38	44.68	48.68
Merenschwand,AG	115	43.56	45.94	42.55	46.33
Merishausen,SH	118	45.29	44.84	42.86	45.74
Metzerlen,SO	111	45.03	47.28	44.08	48.05
Möhlin,AG	121	43.73	45.95	42.47	45.77
Mörel,VS	124	43.16	45.79	43.96	46.12
Mörschwil,SG	117	43.63	44.55	42.22	46.43
Mollis,GL	125	44.95	46.92	44.54	48.41
Mosnang,SG	117	44.03	44.76	41.39	45.58
Mümliswil-Ramiswil,SO	113	43.04	45.17	41.78	45.14
Münchenbuchsee,BE	114	43.37	45.55	41.95	46.66
Muhen,AG	114	42.15	44.18	40.51	44.80
Muotathal,SZ	117	39.71	44.37	38.53	44.37
Murten,FR	114	42.74	45.02	41.23	45.43
Mutten,GR	112	45.95	49.00	45.25	49.56
Muttenz,BL	116	44.21	46.60	43.30	46.98
Näfels,GL	117	45.95	48.83	44.94	49.39
Uster,ZH	118	43.70	46.87	43.18	46.90
Neftenbach,ZH	117	44.67	46.53	43.90	46.93
Neuenegg,BE	115	42.91	44.37	41.52	45.44
Neuenkirch,LU	113	42.58	45.21	41.65	46.34
Kradolf-Schönenberg,TG	113	45.31	46.35	43.21	46.23
Niederbipp,BE	115	43.81	45.90	41.48	45.68
Niederrohrdorf,AG	120	44.26	46.00	43.05	45.52
Niederweningen,ZH	124	43.99	46.68	43.30	45.84
Nunningen,SO	114	42.14	45.19	40.04	44.58
Oberägeri,ZG	118	41.60	44.03	41.28	45.92
Oberhof,AG	118	42.17	44.36	41.13	44.19
Oberiberg,SZ	118	42.71	44.38	40.90	46.09
Oberriet,SG	117	42.66	43.67	41.29	46.39
Obersaxen,GR	120	44.71	46.13	42.95	47.11
Oberwald,VS	117	42.53	43.23	42.00	44.30
Oberwichtstrach,BE	115	41.89	43.91	40.91	45.82
Obstalden,GL	122	43.72	46.14	43.04	46.01
Pfäfers,SG	120	44.13	45.48	42.90	46.78
Pfäffikon,ZH	116	44.57	47.24	44.01	47.89
Pfaffnau,LU	114	44.69	46.88	42.86	46.95
Pieterlen,BE	120	43.98	44.66	41.63	45.00
Plaffeien,FR	116	40.25	42.16	39.30	43.42
Pratteln,BL	120	41.61	44.17	39.99	45.25
Quarten,SG	117	45.27	46.47	42.97	48.38
Rafz,ZH	121	43.13	46.27	42.66	46.53
Ramsen,SH	116	43.25	43.74	42.20	44.63
Randa,VS	118	41.95	41.84	40.98	44.91
Rapperswil,BE	116	44.92	47.31	44.74	47.44
Reckingen,VS	121	41.49	43.80	42.82	45.10
Regensberg,ZH	120	43.89	45.60	42.80	46.47

Swiss-German	# of Sentences	BLEU			
		NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Reutigen,BE	118	43.08	45.58	42.86	45.27
Rheineck,SG	119	43.50	45.45	42.15	47.24
Medels im Rheinwald,GR	111	44.75	47.27	43.00	46.92
Wattwil,SG	117	43.08	46.42	42.32	46.12
Rickenbach,SO	118	42.66	43.94	41.46	44.53
Rifferswil,ZH	114	43.75	46.14	43.29	46.58
Murgenthal,AG	120	43.61	46.13	42.56	45.41
Römerswil,LU	116	42.82	43.92	41.54	45.47
Röthenbach im Emmental,BE	118	43.15	45.73	42.64	46.14
Roggensburg,BL	112	44.71	45.86	41.87	45.97
Roggwil,TG	119	43.96	45.03	42.14	44.53
Romanshorn,TG	116	43.88	47.21	43.53	47.13
Rorbas,ZH	120	44.27	47.68	44.34	48.19
Risch,ZG	116	45.07	46.04	43.88	47.43
Rubigen,BE	116	42.04	45.13	42.49	45.75
Rüeggisberg,BE	115	44.73	49.26	43.62	47.86
Rümlang,ZH	119	45.52	46.61	44.40	46.97
Ruswil,LU	117	44.65	45.06	42.18	46.55
Saanen,BE	122	41.74	43.30	40.96	43.67
Saas Grund,VS	119	42.64	42.40	42.59	45.67
Safien,GR	117	43.19	43.14	42.51	45.17
Salgesch,VS	124	41.77	44.16	42.64	45.11
Sarnen,OW	118	42.33	44.12	40.98	45.06
Schänis,SG	113	46.54	47.66	44.78	47.66
Schaffhausen,SH	114	44.83	46.57	43.51	47.37
Schangnau,BE	111	42.87	46.38	42.87	47.42
Schiers,GR	113	43.76	48.21	45.52	47.21
Schleitheim,SH	115	43.87	45.29	42.84	46.05
Schnottwil,SO	116	42.42	45.26	40.74	45.66
Schönenbuch,BL	117	44.10	45.07	41.52	45.46
Schüpfeim,LU	117	41.35	44.12	40.77	44.68
Schwanden,GL	119	44.05	46.48	43.00	47.59
Wahlern,BE	113	42.16	44.34	40.40	44.85
Schwyz,SZ	117	42.23	47.23	41.34	46.30
Seftigen,BE	110	43.46	46.03	41.53	46.77
Sempach,LU	117	42.90	44.17	41.67	45.49
Sennwald,SG	120	42.22	44.28	41.71	45.91
Sevelen,SG	119	43.55	44.41	41.63	45.88
Siglistorf,AG	115	46.05	48.10	45.71	47.96
Signau,BE	111	43.54	45.70	42.08	46.84
Simplon,VS	123	41.73	44.66	42.09	46.69
Zihlschlacht-Sitterdorf,TG	116	44.99	47.26	43.92	47.58
Solothurn,SO	115	43.88	47.45	42.50	46.51
St.Antönien,GR	116	44.19	49.63	45.30	49.07
St.Gallen,SG	116	44.29	46.23	42.23	46.36
St.Niklaus,VS	120	40.52	42.44	41.37	43.27
Stadel,ZH	118	44.41	47.50	45.36	48.10
Stallikon,ZH	121	42.93	45.14	43.55	45.77
Stans,NW	119	43.80	44.42	41.96	45.64
Steffisburg,BE	116	42.59	44.92	41.06	45.15
Steg,VS	118	42.29	44.85	43.45	45.54
Stein,AG	116	45.13	47.05	43.73	46.66
Stein am Rhein,SH	116	43.89	47.04	44.46	46.62
Sternenberg,ZH	120	43.34	46.76	43.10	45.73
Stüsslingen,SO	114	44.26	46.91	42.54	46.42
Sumiswald,BE	113	42.69	45.35	41.03	44.59
Sursee,LU	118	44.06	45.72	42.74	46.14
Täuffelen,BE	118	43.04	44.00	40.21	44.43
Tafers,FR	115	41.50	42.19	39.42	43.56
Tamins,GR	122	42.84	44.54	42.16	47.36
Teufenthal,AG	118	43.48	44.83	41.23	44.33
Thalwil,ZH	117	45.43	48.98	45.65	48.20
Thun,BE	116	43.33	45.36	42.01	44.90
Thusis,GR	117	44.66	46.54	42.75	47.48

Swiss-German	# of Sentences	BLEU			
		NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Triengen,LU	118	42.98	44.26	42.42	44.36
Trimmis,GR	117	42.94	45.24	42.59	47.24
Trogen,AR	118	43.28	44.89	41.74	46.20
Tüscherz-Alfermée,BE	115	43.25	45.20	43.30	45.97
Tuggen,SZ	120	45.74	46.84	43.51	47.35
Turbenthal,ZH	124	44.83	47.59	44.28	47.45
Ueberstorf,FR	116	42.94	43.42	40.69	45.95
Unterschächen,UR	120	42.77	42.09	40.95	43.06
Unterstammheim,ZH	115	43.39	45.52	42.61	44.94
Untervaz,GR	121	43.39	45.89	43.13	46.80
Urdorf,ZH	115	43.36	48.10	44.04	47.17
Urnäsch,AR	117	43.75	43.19	40.74	46.07
Ursenbach,BE	116	43.00	45.79	41.84	45.71
Utzenstorf,BE	116	41.99	44.37	40.89	45.37
Vals,GR	120	41.33	44.18	41.93	44.23
Villigen,AG	117	45.27	46.95	44.05	46.02
Visp,VS	118	41.71	44.88	43.11	45.14
Visperterminen,VS	120	41.10	41.87	40.31	44.02
Wädenswil,ZH	118	44.92	47.91	45.51	47.51
Wängi,TG	115	44.26	46.97	44.85	46.73
Walchwil,ZG	116	42.21	45.28	41.27	46.86
Wald,ZH	116	43.68	46.00	43.00	47.07
Waldstatt,AR	113	44.63	45.08	41.62	46.79
Walenstadt,SG	125	43.86	45.27	42.49	45.60
Wangen an der Aare,BE	119	42.54	46.25	42.30	46.30
Wartau,SG	123	43.53	45.94	43.22	45.94
Wegenstetten,AG	121	44.23	47.84	44.06	47.23
Weggis,LU	118	42.83	45.34	41.30	45.44
Weinfelden,TG	116	44.71	46.87	43.44	46.39
Welschenrohr,SO	123	41.71	43.94	41.11	44.49
Wengi,BE	118	41.36	43.38	40.78	44.89
Wiesen,GR	116	45.03	49.35	44.99	49.60
Wil,SG	116	43.38	45.22	42.75	46.23
Wilchingen,SH	117	43.55	44.05	43.29	45.02
Wildhaus,SG	115	44.08	45.33	43.14	45.39
Willisau Stadt,LU	116	44.18	45.89	42.53	45.29
Winterthur,ZH	125	45.34	47.79	44.30	46.05
Wolfenschiessen,NW	117	44.33	44.65	41.91	45.60
Wolhusen,LU	117	43.26	45.19	42.57	45.95
Wollerau,SZ	121	44.71	46.45	44.43	46.75
Worb,BE	118	44.55	45.58	42.98	45.63
Würenlos,AG	113	43.76	46.35	43.99	47.74
Wynigen,BE	119	42.80	45.21	42.20	45.50
Zell,LU	111	43.43	46.08	40.76	46.44
Zermatt,VS	122	41.03	43.52	43.32	45.16
Ziefen,BL	118	43.83	47.12	40.91	45.74
Zofingen,AG	119	43.55	46.68	42.95	46.04
Zürich,ZH	118	44.00	44.97	43.72	46.36
Zug,ZG	114	42.94	45.54	41.85	46.70
Zunzgen,BL	116	42.40	44.90	41.42	45.69
Zweisimmen,BE	118	42.27	43.02	41.96	44.49

Table C.20: BLEU score of different Swiss-German dialects on all sentences.

Swiss-German	BLEU			
	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Aarau,AG	42.37	44.92	41.80	45.08
Aarberg,BE	43.92	45.63	41.64	46.50
Aarburg,AG	43.55	45.04	41.73	45.80
Adelboden,BE	41.32	40.88	40.20	41.82
Aedermannsdorf,SO	43.51	45.18	41.40	45.76
Aesch,BL	43.32	44.28	41.30	45.70
Aeschi,SO	42.75	46.79	41.48	45.63
Agarn,VS	41.53	42.94	42.31	43.53
Alpnach,OW	42.23	45.57	41.01	46.33
Alpthal,SZ	44.47	45.02	41.82	45.78
Altdorf,UR	42.57	45.44	41.21	47.20
Altsttten,SG	42.73	43.95	42.65	45.92
Amden,SG	44.34	47.73	43.80	47.82
Amriswil,TG	43.76	45.71	42.71	46.46
Andelfingen,ZH	45.24	45.89	44.35	48.11
Andermatt,UR	43.12	43.27	41.04	46.45
Andwil,SG	43.53	45.69	42.77	46.20
Appenzell,AI	42.90	43.83	42.52	47.73
Arosa,GR	44.24	46.96	43.68	45.66
Ausserberg,VS	40.88	42.69	41.56	44.45
Avers,GR	43.87	47.14	43.93	46.78
Bretswil,ZH	42.98	45.68	43.57	46.52
Baldingen,AG	45.60	47.05	44.45	47.60
Basadingen-Schlattingen,TG	43.81	44.78	43.00	46.30
Basel,BS	42.51	46.50	43.07	46.06
Bassersdorf,ZH	43.64	47.85	43.56	46.21
Bauma,ZH	42.79	45.74	43.93	46.85
Belp,BE	43.70	46.46	44.18	47.25
Benken,SG	45.97	46.18	45.23	48.53
Bern,BE	45.29	46.93	42.84	47.18
Berneck,SG	42.70	44.22	41.59	45.30
Betten,VS	41.95	42.08	41.84	45.01
Bettingen,BS	43.69	46.16	42.58	47.88
Bettlach,SO	43.41	44.87	41.23	45.31
Bibern,SH	44.69	45.93	43.07	46.03
Binn,VS	42.85	46.07	44.61	45.89
Birmenstorf,AG	44.18	45.47	43.31	46.82
Birwinken,TG	43.52	46.32	43.15	46.49
Blatten,VS	39.64	40.38	41.61	42.43
Bleienbach,BE	42.49	46.30	40.62	45.50
Boltigen,BE	40.62	42.31	40.42	43.19
Boniswil,AG	43.72	47.37	42.48	44.91
Boswil,AG	43.72	47.34	43.07	44.95
Bottighofen,TG	44.52	46.78	42.88	45.70
Bremgarten,AG	44.64	46.28	43.65	46.86
Brienz,BE	43.38	45.25	44.75	45.83
Brig-Glis,VS	42.05	42.50	42.83	44.54
Rte,AI	42.66	43.79	42.87	46.85
Brugg,AG	44.53	45.92	43.70	47.02
Brunnadern,SG	45.34	45.91	42.28	47.15
Ingenbohl,SZ	43.79	45.07	43.36	46.82
Buchberg,SH	44.01	46.10	43.80	45.78
Buckten,BL	42.79	44.07	41.18	44.72
Bhler,AR	45.38	45.05	43.22	46.49
Blach,ZH	45.74	48.50	45.47	47.60
Brchen,VS	41.96	42.00	41.73	43.88
Bren an der Aare,BE	42.77	45.27	41.40	45.14
Buochs,NW	41.79	44.16	40.75	44.48
Busswil bei Bren,BE	43.82	44.72	42.20	45.67
Chur,GR	43.52	45.92	43.35	46.38
Churwalden,GR	43.62	48.35	43.80	47.60

Swiss-German	BLEU			
	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Dagmersellen,LU	43.37	45.40	41.86	44.30
Davos,GR	42.51	48.28	43.25	47.52
Degersheim,SG	43.95	47.30	43.46	47.20
Densbüren,AG	43.13	45.45	42.36	46.12
Diemtigen,BE	43.64	44.05	42.47	45.65
Diepoldsau,SG	44.82	46.39	43.17	48.11
Diessbach bei Büren,BE	41.73	44.67	41.10	45.92
Düdingen,FR	43.44	43.49	42.09	46.80
Ebnat-Kappel,SG	44.43	44.56	42.24	45.08
Egg,ZH	44.01	47.55	42.97	46.59
Eglisau,ZH	44.09	47.56	44.17	48.27
Einsiedeln,SZ	43.37	44.46	41.82	45.47
Elfingen,AG	45.89	47.91	44.37	46.85
Elgg,ZH	43.80	45.24	42.98	45.56
Ellikon an der Thur,ZH	43.37	47.21	43.29	46.50
Elm,GL	41.96	43.80	42.39	47.50
Engelberg,OW	42.94	44.97	40.68	46.23
Engi,GL	43.07	45.20	42.84	46.95
Entlebuch,LU	44.34	44.47	42.98	45.58
Erlach,BE	42.07	45.41	40.96	44.94
Ermatingen,TG	43.59	45.63	42.02	46.20
Erschwil,SO	43.26	46.17	41.39	46.59
Eschenbach,LU	44.61	46.54	42.91	46.18
Escholzmatt,LU	43.75	44.60	42.01	44.92
Ettingen,BL	43.97	43.10	41.31	46.88
Fällanden,ZH	43.38	45.89	42.99	45.39
Trub,BE	42.62	44.26	41.13	45.93
Spiez,BE	42.50	44.49	41.36	44.14
Ferden,VS	40.72	40.79	41.77	43.93
Fiesch,VS	42.38	42.76	42.46	44.71
Fischingen,TG	45.47	47.82	44.14	46.46
Flaach,ZH	42.82	47.78	44.01	46.40
Fläsch,GR	44.59	46.03	43.07	46.69
Flawil,SG	43.39	44.79	42.27	46.30
Flühli,LU	42.51	44.50	41.25	44.68
Flums,SG	43.42	45.93	42.93	45.84
Maur,ZH	43.86	45.91	44.52	47.66
Frauenfeld,TG	45.61	46.93	43.46	45.87
Frauenkappelen,BE	43.61	44.61	41.66	44.45
Fribourg,FR	43.85	43.73	41.18	46.28
Frick,AG	43.84	45.05	42.61	45.61
Frutigen,BE	43.13	44.27	42.52	44.85
Gadmen,BE	44.33	46.41	44.62	45.92
Gächlingen,SH	42.63	43.50	41.73	45.07
Gais,AR	45.34	47.52	43.47	47.58
Gelterkinden,BL	43.41	45.42	41.72	46.13
Giffers,FR	41.84	43.99	40.88	45.57
Giswil,OW	43.01	43.74	40.42	45.98
Glarus,GL	44.62	47.02	44.18	49.05
Göschenen,UR	46.27	47.64	43.55	48.22
Grabs,SG	43.63	46.04	42.56	46.00
Grafenried,BE	42.82	44.66	42.31	44.48
Grindelwald,BE	44.21	47.08	44.97	48.61
Grosswangen,LU	42.15	42.26	40.83	44.56
Gossau,ZH	43.73	44.20	43.52	45.91
Gsteig,BE	42.57	43.88	42.10	43.74
Guggisberg,BE	40.72	43.55	39.54	44.10
Gurmels,FR	43.76	44.95	42.85	47.40

Swiss-German	BLEU			
	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Gurnellen,UR	45.79	47.38	43.16	47.10
Guttannen,BE	41.24	43.07	44.10	45.16
Guttet-Feschel,VS	43.40	43.76	43.24	45.38
Habkern,BE	41.95	43.22	41.68	43.27
Hägglingen,AG	43.12	44.81	41.02	44.39
Hallau,SH	42.79	43.39	41.39	45.57
Schlatt-Haslen,AI	43.08	45.04	41.44	46.77
Hedingen,ZH	43.49	46.05	42.08	46.28
Heiden,AR	43.75	46.14	42.99	46.15
Heitenried,FR	41.32	42.63	39.88	43.85
Herisau,AR	44.83	46.16	43.00	46.70
Hölstein,BL	44.56	46.03	42.10	46.03
Homburg,TG	43.84	45.43	41.85	46.55
Horw,LU	43.66	45.17	42.88	46.54
Hünenberg,ZG	43.98	46.76	43.29	45.10
Hütten,ZH	43.41	45.17	43.85	46.55
Hüttwilen,TG	45.48	46.50	44.47	48.67
Huttwil,BE	42.96	45.13	40.96	45.23
Illnau-Effretikon,ZH	43.27	46.46	42.76	45.94
Inden,VS	42.10	44.38	43.37	45.79
Innerthal,SZ	44.93	45.98	42.96	46.23
Innertkirchen,BE	42.59	46.11	44.00	44.68
Ins,BE	42.97	45.21	40.81	45.64
Interlaken,BE	43.77	46.37	42.56	45.46
Iseltwald,BE	43.50	44.03	42.10	45.67
Isenthal,UR	45.67	46.64	42.53	48.33
Ittigen,BE	44.12	45.57	42.23	45.97
Jaun,FR	41.73	41.06	40.49	43.14
Jenins,GR	43.61	44.46	41.56	46.04
Kaiserstuhl,AG	44.29	46.38	42.74	47.09
Kaisten,AG	45.09	48.08	44.08	47.73
Kandersteg,BE	43.18	44.01	41.81	44.60
Kappel am Albis,ZH	43.51	46.39	43.22	47.04
Kesswil,TG	44.41	47.63	42.50	45.65
Reichenbach im Kandertal,BE	43.78	46.48	44.00	45.36
Kirchberg,SG	44.93	47.46	43.96	46.76
Kirchleerau,AG	45.07	44.87	43.25	45.82
Kleinlützel,SO	44.14	44.82	41.02	45.32
Klosters-Serneus,GR	43.53	49.25	44.57	48.64
Konolfingen,BE	43.74	44.29	41.68	44.83
Krauchthal,BE	43.71	45.88	43.55	47.04
Krinau,SG	44.49	46.55	43.09	46.49
Küblis,GR	43.73	49.87	44.56	48.65
Küschnacht,ZH	44.57	47.65	44.35	47.23
Küssnacht am Rigi,SZ	45.47	48.25	43.85	48.37
Lachen,SZ	44.85	47.50	44.92	48.03
Langenbruck,BL	43.98	47.44	41.70	46.08
Langenthal,BE	41.29	45.40	41.05	45.24
Langnau im Emmental,BE	42.52	44.05	42.17	45.31
Langnau am Albis,ZH	44.67	47.42	43.12	46.72
Langwies,GR	43.09	48.42	42.90	48.82
Laufen,BL	43.52	44.93	41.28	46.16
Laupen,BE	42.74	43.74	40.30	44.92
Lauterbrunnen,BE	42.09	45.69	44.66	45.71
Leibstadt,AG	44.88	46.81	43.67	46.52
Leissigen,BE	42.71	43.29	41.12	43.32
Lenk,BE	41.77	43.44	41.44	43.61
Lenzburg,AG	42.59	44.46	42.55	45.76
Liesberg,BL	44.20	46.37	42.83	45.72
Liestal,BL	42.63	45.48	41.44	45.00
Ligerz,BE	42.87	44.47	42.52	45.98
Linthal,GL	43.73	46.05	43.42	48.14
Luchsingen,GL	45.34	47.28	44.64	49.47

Swiss-German	BLEU			
	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Lützelflüh,BE	41.08	42.60	40.63	44.27
Lungern,OW	41.99	43.15	40.55	45.49
Lupfig,AG	42.64	46.24	41.92	46.65
Thundorf,TG	44.29	46.58	43.28	47.28
Luzern,LU	43.36	45.41	42.75	45.94
Silenen,UR	44.72	45.03	41.89	47.40
Magden,AG	42.90	44.99	41.32	45.59
Maisprach,BL	44.14	44.78	42.65	45.64
Malans,GR	43.66	46.97	42.70	45.85
Malters,LU	43.45	44.49	41.25	44.50
Mammern,TG	44.52	46.49	44.90	47.34
Marbach,LU	44.69	45.78	43.69	46.17
Marthalen,ZH	44.41	45.85	44.25	47.20
St.Stephan,BE	43.10	44.49	42.35	44.28
Meikirch,BE	39.90	43.18	39.10	44.37
Meilen,ZH	42.97	46.94	44.28	45.13
Meiringen,BE	43.35	45.64	44.04	44.19
Melchnau,BE	44.05	45.61	40.94	46.70
Kerns,OW	43.26	45.50	41.40	47.06
Mels,SG	43.50	45.94	42.58	45.68
Brunegg,AG	44.05	47.09	42.35	46.06
Menzingen,ZG	44.93	48.23	44.11	48.34
Merenschwand,AG	43.40	45.45	42.04	45.94
Merishausen,SH	44.96	44.14	42.71	45.34
Metzerlen,SO	44.48	46.86	43.44	47.75
Möhlin,AG	43.92	45.95	43.39	46.29
Mörel,VS	43.55	46.25	44.63	46.66
Mörschwil,SG	43.41	43.90	42.11	46.24
Mollis,GL	44.68	46.76	44.16	48.21
Mosnang,SG	44.54	44.42	41.48	45.66
Mümliswil-Ramiswil,SO	42.76	44.98	41.34	45.03
Münchenbuchsee,BE	43.28	45.39	41.43	46.65
Muhen,AG	42.47	44.06	40.33	44.94
Muotathal,SZ	39.07	44.03	37.90	44.07
Murten,FR	42.73	45.21	41.23	45.61
Mutten,GR	46.08	48.68	45.16	49.39
Muttentz,BL	44.32	46.40	43.23	46.94
Näfels,GL	46.06	48.81	44.86	49.31
Uster,ZH	43.70	46.28	42.97	46.53
Neftenbach,ZH	44.93	46.11	43.70	46.85
Neuenegg,BE	43.59	45.01	42.21	45.97
Neuenkirch,LU	42.26	44.93	40.96	46.01
Kradolf-Schönenberg,TG	45.67	46.37	43.30	46.38
Niederbipp,BE	44.01	45.87	41.70	45.86
Niederrohrdorf,AG	44.09	45.46	43.22	45.65
Niederweningen,ZH	43.64	45.99	42.93	45.50
Nunningen,SO	42.23	45.17	39.96	44.68
Oberägeri,ZG	41.77	43.51	41.27	45.87
Oberhof,AG	42.21	44.18	41.05	44.16
Oberiberg,SZ	42.88	43.85	41.18	46.01
Oberriet,SG	42.29	42.87	41.04	45.93
Obersaxen,GR	44.65	45.78	42.95	47.00
Oberwald,VS	42.29	42.79	41.38	43.94
Oberwichtrach,BE	42.11	43.80	40.88	46.06
Obstalden,GL	43.09	45.50	42.62	45.52
Pfäfers,SG	43.76	44.86	42.86	46.76
Pfäffikon,ZH	44.84	47.25	44.04	47.93
Pfaffnau,LU	44.69	46.75	42.38	46.94

Swiss-German	BLEU			
	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
Pieterlen,BE	43.94	44.26	41.64	44.77
Plaffeien,FR	40.10	41.86	39.09	42.91
Pratteln,BL	41.85	43.90	40.42	45.64
Quarten,SG	45.51	46.65	43.12	48.35
Rafz,ZH	43.35	46.20	43.41	46.96
Ramsen,SH	43.22	43.17	42.17	44.32
Randa,VS	41.64	41.40	40.54	44.79
Rapperswil,BE	45.25	47.19	44.96	47.52
Reckingen,VS	42.08	44.23	43.27	45.56
Regensberg,ZH	43.65	45.16	42.75	46.47
Reutigen,BE	43.52	45.69	42.99	45.62
Rheineck,SG	43.01	44.64	41.69	46.77
Medels im Rheinwald,GR	44.43	46.78	42.89	46.52
Wattwil,SG	42.56	45.36	41.73	45.55
Rickenbach,SO	42.65	43.76	41.35	44.43
Rifferswil,ZH	44.04	46.30	43.30	46.85
Murgenthal,AG	43.62	46.14	42.74	45.55
Römerswil,LU	43.09	43.64	41.56	45.51
Röthenbach im Emmental,BE	43.19	45.46	42.35	45.98
Roggenburg,BL	45.03	46.19	41.91	46.45
Roggwil,TG	43.67	44.41	41.98	44.28
Romanshorn,TG	44.13	47.05	43.55	47.09
Rorbas,ZH	43.83	46.96	44.08	47.94
Risch,ZG	44.78	46.01	43.60	47.01
Rubigen,BE	41.88	45.39	42.24	45.65
Rüeggisberg,BE	44.85	48.96	43.72	47.85
Rümlang,ZH	45.38	46.30	44.02	46.66
Ruswil,LU	44.84	45.09	42.30	46.87
Saanen,BE	42.09	43.33	41.38	44.19
Saas Grund,VS	42.46	42.33	42.34	46.00
Safien,GR	43.20	43.17	42.28	45.11
Salgesch,VS	41.83	44.12	42.79	45.17
Sarnen,OW	43.00	44.23	41.78	45.28
Schänis,SG	46.80	47.53	44.89	47.65
Schaffhausen,SH	44.71	46.22	43.27	47.30
Schangnau,BE	42.85	46.53	42.52	47.40
Schiers,GR	43.81	48.02	45.79	47.21
Schleitheim,SH	43.92	45.00	43.08	46.29
Schnottwil,SO	42.68	45.13	40.76	45.77
Schönenbuch,BL	44.58	45.11	42.08	45.94
Schüpfbheim,LU	41.76	44.29	41.11	45.07
Schwanden,GL	44.36	46.62	43.48	47.91
Wahlern,BE	41.99	44.21	40.04	44.65
Schwyz,SZ	42.74	47.11	41.51	46.41
Seftigen,BE	43.07	45.85	40.81	46.70
Sempach,LU	42.88	44.02	41.64	45.56
Sennwald,SG	41.80	43.77	41.78	45.91
Sevelen,SG	44.09	44.47	42.39	46.38
Siglistorf,AG	45.88	47.99	45.17	47.68
Signau,BE	43.37	45.35	42.00	46.71
Simplon,VS	41.96	45.21	42.39	47.27
Zihlschlacht-Sitterdorf,TG	45.15	46.76	44.13	47.67
Solothurn,SO	43.70	47.45	42.21	46.41
St.Antönien,GR	44.20	49.37	45.38	49.05
St.Gallen,SG	44.26	45.72	42.01	46.17
St.Niklaus,VS	40.55	42.26	41.18	43.72
Stadel,ZH	44.34	46.94	45.25	47.71
Stallikon,ZH	42.65	44.65	43.79	45.61
Stans,NW	44.37	44.68	42.53	45.98
Steffisburg,BE	42.34	44.69	40.65	44.87
Steg,VS	41.65	44.18	42.78	45.23
Stein,AG	45.32	46.91	43.72	46.51
Stein am Rhein,SH	43.85	47.02	44.18	46.30

Swiss-German	BLEU			
	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>Sursee,LU</b>	44.06	45.50	42.94	46.22
<b>Täuffelen,BE</b>	43.07	43.73	40.37	44.37
<b>Tafers,FR</b>	41.72	42.16	39.89	43.73
<b>Tamins,GR</b>	42.72	44.48	42.30	47.25
<b>Teufenthal,AG</b>	43.60	44.72	41.27	44.33
<b>Thalwil,ZH</b>	44.94	48.49	45.24	47.56
<b>Thun,BE</b>	43.50	45.27	41.94	44.61
<b>Thusis,GR</b>	44.78	46.07	42.95	47.45
<b>Triengen,LU</b>	43.10	43.89	42.13	44.10
<b>Trimmis,GR</b>	42.89	44.77	42.44	46.90
<b>Trogen,AR</b>	43.35	44.55	41.68	46.09
<b>Tüscherz-Alfermée,BE</b>	42.86	45.29	43.06	45.91
<b>Tuggen,SZ</b>	45.78	46.64	43.68	47.53
<b>Turbenthal,ZH</b>	44.82	47.77	44.42	47.71
<b>Ueberstorf,FR</b>	42.98	42.90	40.51	45.53
<b>Unterschächen,UR</b>	43.23	41.62	41.01	43.12
<b>Unterstammheim,ZH</b>	43.49	45.57	42.91	45.11
<b>Untervaz,GR</b>	42.52	45.05	42.80	46.42
<b>Urdorf,ZH</b>	43.54	48.34	44.37	47.40
<b>Urnäsch,AR</b>	43.71	42.48	40.47	45.65
<b>Ursenbach,BE</b>	42.87	45.45	41.57	45.37
<b>Utzenstorf,BE</b>	42.32	44.30	40.91	45.50
<b>Vals,GR</b>	41.27	43.79	42.09	44.08
<b>Villigen,AG</b>	45.06	46.51	43.60	45.77
<b>Visp,VS</b>	42.59	45.13	43.92	45.73
<b>Visperterminen,VS</b>	40.85	41.75	39.91	43.72
<b>Wädenswil,ZH</b>	44.94	47.37	45.28	47.26
<b>Wängi,TG</b>	44.68	46.99	45.29	47.03
<b>Walchwil,ZG</b>	42.62	45.21	41.51	47.08
<b>Wald,ZH</b>	43.70	45.46	42.84	46.78
<b>Waldstatt,AR</b>	45.06	45.00	41.79	47.01
<b>Walenstadt,SG</b>	43.75	45.16	42.72	45.67
<b>Wangen an der Aare,BE</b>	42.58	46.09	42.45	46.25
<b>Wartau,SG</b>	43.32	45.32	43.17	45.56
<b>Wegenstetten,AG</b>	43.96	47.07	44.05	47.07
<b>Weggis,LU</b>	43.48	45.34	41.92	45.68
<b>Weinfelden,TG</b>	44.91	46.69	43.69	46.35
<b>Welschenrohr,SO</b>	42.45	44.30	42.14	44.90
<b>Wengi,BE</b>	41.60	43.33	40.85	44.98
<b>Wiesen,GR</b>	45.24	49.02	45.18	49.69
<b>Wil,SG</b>	43.48	44.88	42.73	46.15
<b>Wilchingen,SH</b>	43.50	43.44	43.09	44.52
<b>Wildhaus,SG</b>	44.85	45.61	44.10	45.69
<b>Willisau Stadt,LU</b>	44.96	46.10	43.17	45.58
<b>Winterthur,ZH</b>	44.42	47.06	43.87	45.68
<b>Wolfenschiessen,NW</b>	45.35	45.15	43.01	46.31
<b>Wolhusen,LU</b>	43.39	45.30	42.61	46.20
<b>Wollerau,SZ</b>	45.14	46.44	44.78	46.92
<b>Worb,BE</b>	44.82	45.76	43.38	45.88
<b>Würenlos,AG</b>	43.78	46.76	43.80	48.01
<b>Wynigen,BE</b>	42.82	44.99	42.24	45.39
<b>Zell,LU</b>	43.10	45.94	40.09	46.22
<b>Zermatt,VS</b>	40.75	42.75	43.28	45.02
<b>Ziefen,BL</b>	44.31	47.28	41.37	45.84
<b>Zofingen,AG</b>	43.71	46.70	43.05	46.28
<b>Zürich,ZH</b>	43.96	44.60	43.65	46.21
<b>Zug,ZG</b>	43.22	45.58	42.00	47.07

Table C.21: Compare BLEU score of different Swiss-German dialects on a subset of 87 sentences.

Swiss-German	# of Sentences	COMET			
		NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>AG</b>	3881	0.8750	0.8817	0.8717	0.8889
<b>BE</b>	8389	0.8691	0.8758	0.8665	0.8853
<b>SO</b>	1498	0.8672	0.8750	0.8643	0.8831
<b>BL</b>	1867	0.8703	0.8740	0.8657	0.8840
<b>VS</b>	2775	0.8636	0.8707	0.8642	0.8782
<b>OW</b>	693	0.8689	0.8766	0.8640	0.8830
<b>SZ</b>	1293	0.8718	0.8792	0.8694	0.8862
<b>UR</b>	824	0.8716	0.8767	0.8657	0.8855
<b>SG</b>	3522	0.8726	0.8819	0.8714	0.8870
<b>TG</b>	2077	0.8743	0.8846	0.8721	0.8891
<b>ZH</b>	4871	0.8749	0.8838	0.8721	0.8888
<b>AI</b>	343	0.8661	0.8803	0.8688	0.8868
<b>GR</b>	2677	0.8733	0.8800	0.8697	0.8875
<b>BS</b>	228	0.8719	0.8832	0.8676	0.8893
<b>SH</b>	1169	0.8751	0.8816	0.8723	0.8872
<b>AR</b>	813	0.8711	0.8814	0.8709	0.8883
<b>NW</b>	352	0.8711	0.8756	0.8668	0.8840
<b>LU</b>	2565	0.8714	0.8773	0.8689	0.8869
<b>FR</b>	1162	0.8659	0.8742	0.8598	0.8809
<b>GL</b>	1091	0.8761	0.8839	0.8733	0.8924
<b>ZG</b>	696	0.8718	0.8784	0.8691	0.8860

Table C.22: COMET score of different Swiss-German regions on all sentences.

Swiss-German	COMET			
	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>AG</b>	0.8742	0.8820	0.8720	0.8887
<b>BE</b>	0.8689	0.8762	0.8668	0.8851
<b>SO</b>	0.8666	0.8751	0.8640	0.8827
<b>BL</b>	0.8702	0.8750	0.8667	0.8844
<b>VS</b>	0.8637	0.8715	0.8647	0.8790
<b>OW</b>	0.8686	0.8777	0.8649	0.8831
<b>SZ</b>	0.8713	0.8795	0.8700	0.8861
<b>UR</b>	0.8711	0.8771	0.8662	0.8852
<b>SG</b>	0.8726	0.8828	0.8723	0.8877
<b>TG</b>	0.8743	0.8853	0.8732	0.8896
<b>ZH</b>	0.8747	0.8844	0.8728	0.8892
<b>AI</b>	0.8665	0.8814	0.8699	0.8877
<b>GR</b>	0.8729	0.8801	0.8700	0.8874
<b>BS</b>	0.8717	0.8834	0.8667	0.8889
<b>SH</b>	0.8747	0.8819	0.8731	0.8872
<b>AR</b>	0.8722	0.8833	0.8723	0.8897
<b>NW</b>	0.8712	0.8768	0.8682	0.8842
<b>LU</b>	0.8709	0.8779	0.8698	0.8866
<b>FR</b>	0.8656	0.8748	0.8609	0.8808
<b>GL</b>	0.8760	0.8844	0.8738	0.8930
<b>ZG</b>	0.8708	0.8788	0.8694	0.8850

Table C.23: Comparable COMET score of different Swiss-German regions

Swiss-German	# of Sentences	BLEU			
		NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>AG</b>	3881	44.00	46.28	42.97	46.16
<b>BE</b>	8389	42.79	45.01	41.97	45.31
<b>SO</b>	1498	43.10	45.58	41.54	45.63
<b>BL</b>	1867	43.42	45.34	41.52	45.71
<b>VS</b>	2775	41.78	43.27	42.42	44.77
<b>OW</b>	693	42.55	44.55	40.78	45.95
<b>SZ</b>	1293	43.78	46.06	42.54	46.53
<b>UR</b>	824	44.34	45.54	42.12	46.90
<b>SG</b>	3522	43.94	45.75	42.71	46.49
<b>TG</b>	2077	44.40	46.66	43.32	46.56
<b>ZH</b>	4871	44.06	46.87	43.82	46.82
<b>AI</b>	343	42.78	44.66	42.20	47.14
<b>GR</b>	2677	43.79	47.07	43.46	47.26
<b>BS</b>	228	43.33	46.49	43.34	47.07
<b>SH</b>	1169	43.95	45.26	42.91	45.84
<b>AR</b>	813	44.26	45.51	42.32	46.56
<b>NW</b>	352	43.38	44.47	41.62	45.33
<b>LU</b>	2565	43.25	45.07	41.95	45.53
<b>FR</b>	1162	42.25	43.47	40.75	45.20
<b>GL</b>	1091	44.22	46.59	43.60	47.97
<b>ZG</b>	696	43.41	45.95	42.60	46.72

Table C.24: BLEU score of different Swiss-German regions on all sentences.

Swiss-German	BLEU			
	NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>AG</b>	43.96	46.04	42.85	46.10
<b>BE</b>	42.91	44.88	41.99	45.35
<b>SO</b>	43.25	45.56	41.52	45.69
<b>BL</b>	43.72	45.37	41.79	45.92
<b>VS</b>	41.81	43.16	42.42	44.89
<b>OW</b>	42.74	44.53	40.97	46.06
<b>SZ</b>	43.86	45.85	42.53	46.51
<b>UR</b>	44.48	45.29	42.05	46.83
<b>SG</b>	43.95	45.46	42.75	46.43
<b>TG</b>	44.50	46.38	43.35	46.54
<b>ZH</b>	43.92	46.49	43.73	46.68
<b>AI</b>	42.88	44.22	42.28	47.11
<b>GR</b>	43.73	46.81	43.46	47.16
<b>BS</b>	43.10	46.33	42.82	46.97
<b>SH</b>	43.83	44.79	42.85	45.65
<b>AR</b>	44.49	45.27	42.38	46.52
<b>NW</b>	43.84	44.67	42.10	45.59
<b>LU</b>	43.52	44.97	42.06	45.61
<b>FR</b>	42.35	43.20	40.81	45.08
<b>GL</b>	44.10	46.34	43.62	48.01
<b>ZG</b>	43.55	45.89	42.63	46.75

Table C.25: Comparable BLEU score of different Swiss-German regions

Standard Language	Variety	# Sentences	BLEU			
			NLLB-Dis-600M	NLLB-Dis-1.3B	NLLB-1.3B	NLLB-3.3B
<b>Tigrinya</b>	<b>Ethiopian</b>	3071	17.85	20.85	19.95	21.67
	<b>Eritrean</b>	3071	14.83	17.44	16.68	18.31
<b>Farsi</b>	<b>Farsi</b>	3071	25.48	28.55	28.11	30.28
	<b>Dari</b>	3071	25.21	28.35	27.73	29.86
<b>Malay-Indonesian</b>	<b>Indonesian</b>	3071	32.70	35.20	35.03	36.52
	<b>Malay</b>	3071	32.54	35.48	35.14	37.08
<b>Swahili</b>	<b>Costal</b>	1991	28.51	31.49	31.21	33.34
	<b>Congolese</b>	1991	17.48	19.78	19.20	19.77
<b>Occitan</b>	<b>Aranese</b>	476	12.92	15.18	15.33	16.07
	<b>Occitan</b>	379	17.72	20.81	20.99	9.71
<b>Central Kurdish</b>	<b>Silêmanî</b>	300	12.32	13.55	13.24	13.31
	<b>Hewlêr</b>	300	9.64	11.40	10.17	11.02
	<b>Sine</b>	300	8.84	9.60	9.43	9.52
	<b>Mehabâd</b>	300	10.91	12.49	11.38	12.10
<b>Bengali</b>	<b>Barisal</b>	200	11.22	11.76	12.68	12.06
	<b>Dhakaiya</b>	200	17.20	18.25	18.10	18.32
	<b>Jessore</b>	200	20.76	23.01	21.44	23.24
	<b>Khulna</b>	200	19.04	19.55	19.73	21.34
	<b>Kushtia</b>	200	17.88	17.75	19.04	20.42
<b>Greek</b>	<b>Griko</b>	163	3.81	3.75	3.87	3.80

Table C.26: BLEU scores of different languages' dialects for various model scales.