

Update on Treebanking the WSJ with the ERG

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DELPH-IN Summit, Sofia

July 3, 2012

Goals

- **Annotate** the Penn Treebank WSJ corpus with ERG analyses
- **Distribute** this treebank in a variety of forms
 - Derivation trees
 - Labeled bracketings
 - MRS (and perhaps dependencies)
- **Use** as springboard for other research efforts
 - Training better PCFGs
 - Sharpening focus for robust processing
 - Providing illustrations of linguistic phenomena



Motivation

- Common ground for evaluation and comparison
- Linguistically challenging but parsable text
- Rich array of other annotation resources available



Methodology

- Parse the 50,000 sentences using ERG + PET (but not Sec. 23)
- Manually disambiguate each parsed sentence (Redwoods)
- On second pass, update treebank using newest version of ERG
- Do quality control over treebank to detect errors
- On third pass, correct errors, and update using stable ERG



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Train WSJ-specific maxent model for use on remainder
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Distribute in three stages DELPH-IN-internally
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Status and Schedule

- First pass: now almost complete annotations for all WSJ sections
- Second pass: one-third now ready for DELPH-IN-internal release
- Third (final) pass: aiming for completion by end of 2012
- Will submit paper for 11th TLT in Lisbon in December
- Announce public availability of 'full' treebank in early 2013



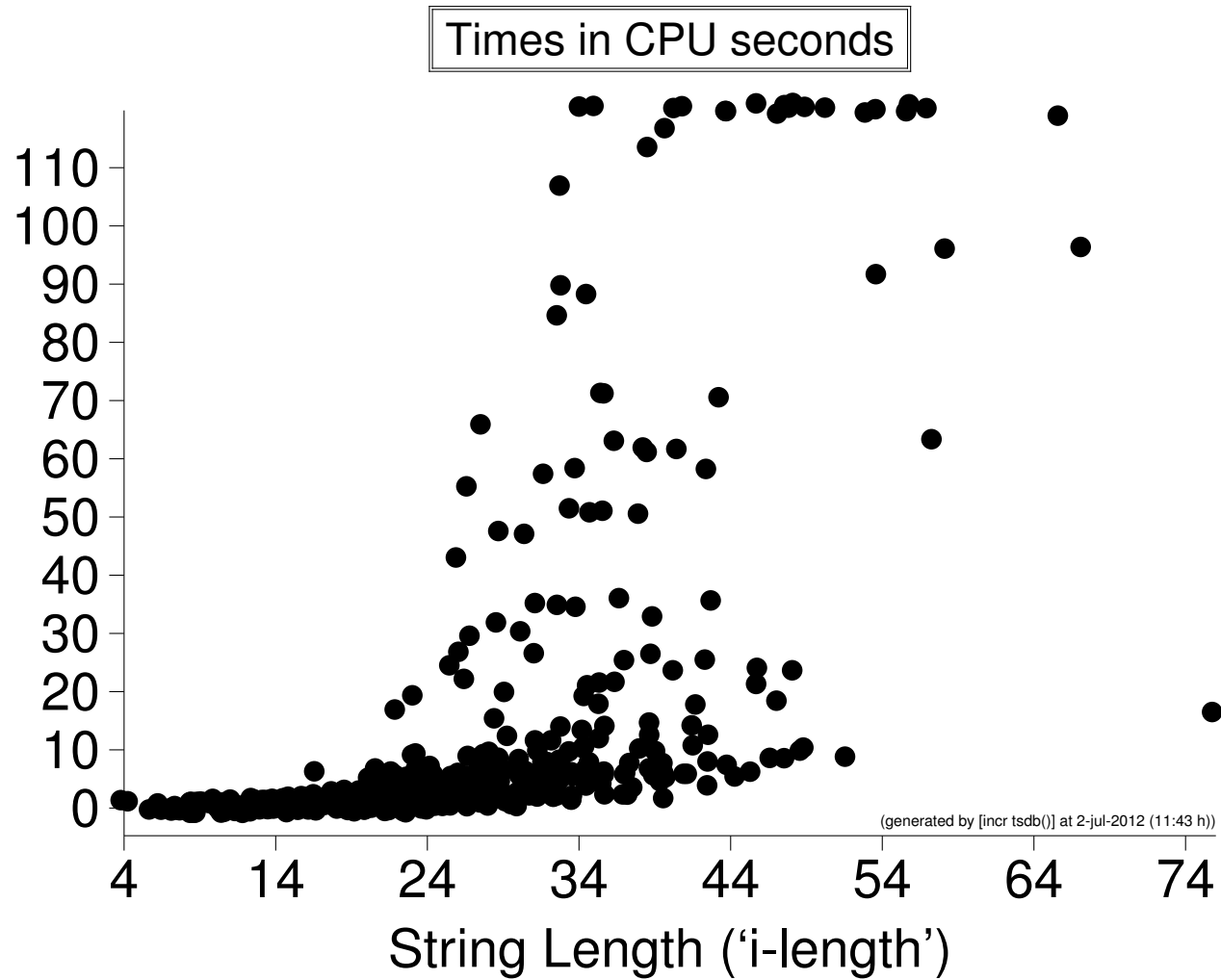
Some numbers on the first third

WSJ Items	Parsed	Banked
14,881	13,640	12,006
	91.7%	80.7%

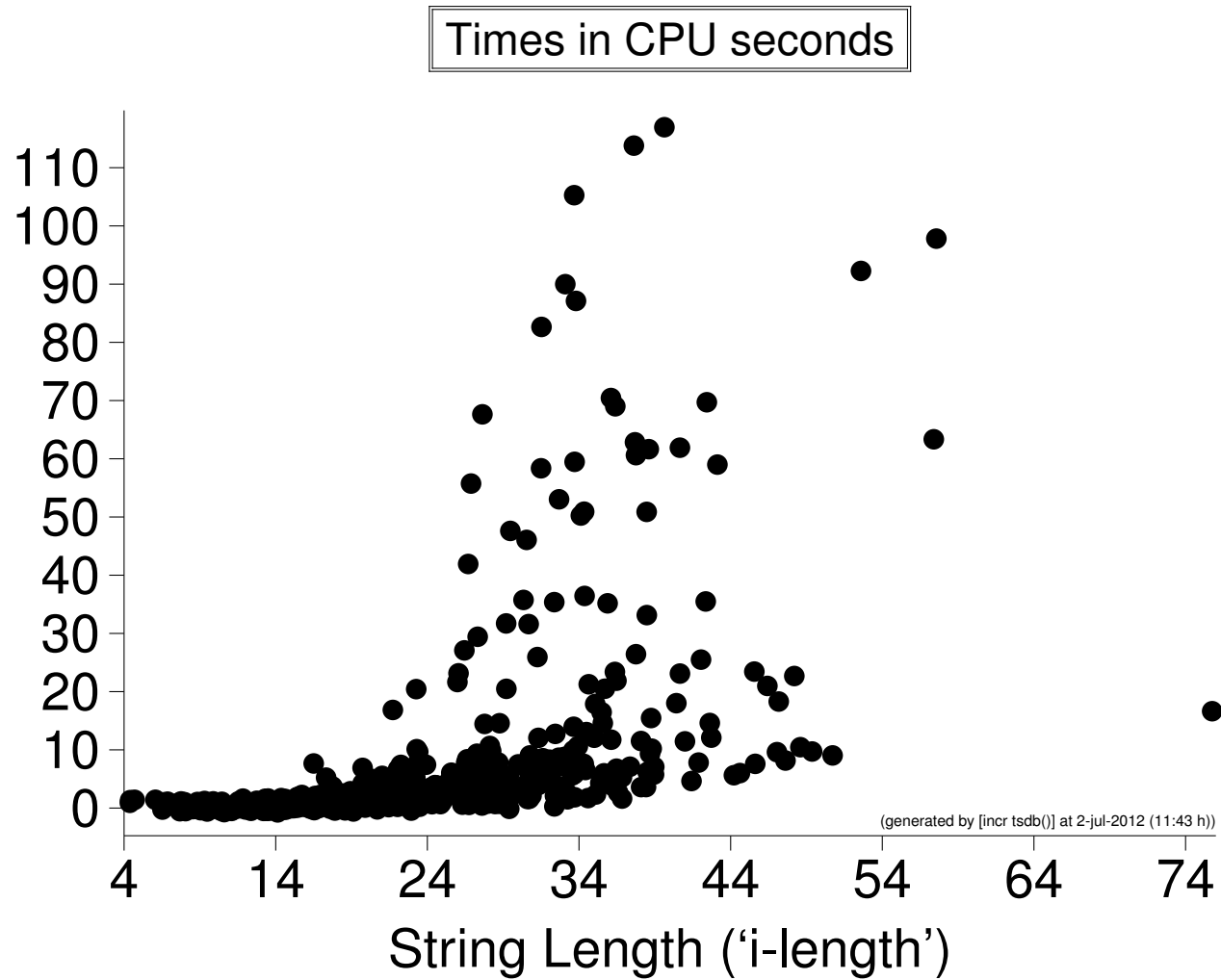
- Average tokens per sentence: 25.4
- Resource limits per sentence for parsing:
 - 120 CPU seconds
 - 200,000 edges



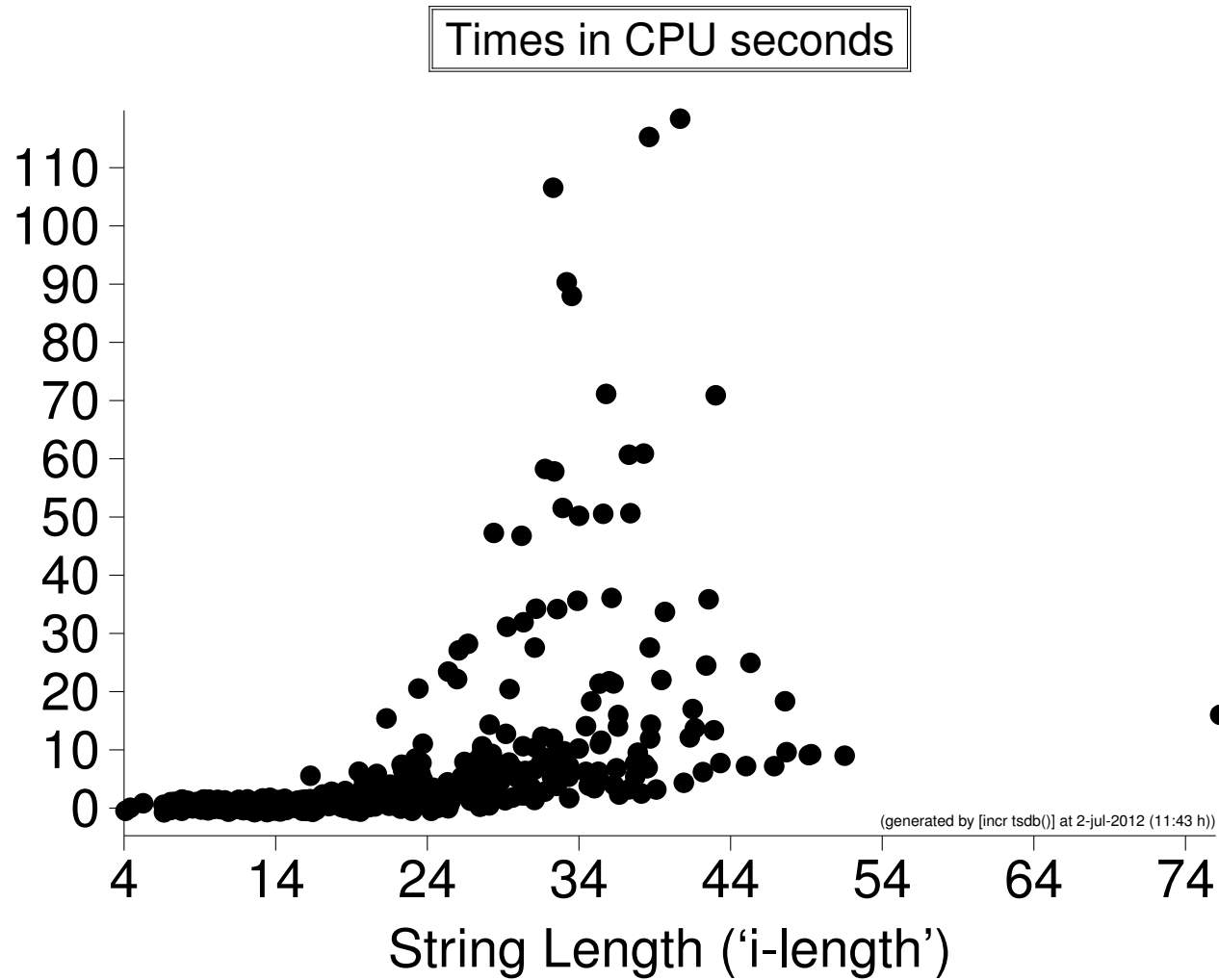
Parsing times: WSJ07d (all items)



Parsing times: WSJ07d (parsed)



Parsing times: WSJ07d (banked)



Internal Release to DELPH-IN

- Full and one-best profiles in SVN hosted at CoLi Saarbrücken
As of now, sections 02-10a available
If interested, contact Yi for access; please do not redistribute
- Feedback welcome – contact Dan
Item-specific errors
Systematic infelicities (syntax or semantics)



Acknowledgements

- We are grateful for Erasmus Mundus support to CoLi Saarbrücken
- Thanks to CoLi annotators, especially Iliana Simova



Naming the Resource



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The Urban Forest



Naming the Resource

Central Park



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ERG RoTree-bank



Naming the Resource

Ergonomic Forestree



Naming the Resource

Pulp Fiction



Naming the Resource

Hardwood Treebank

