

FODESY

Fog detection System

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- ▶ **Fog Detection System**
- ▶ **Realization**
 - ▶ **Highwaysimulator**
 - ▶ **Sensor acquisition**

the telos motes

- ▶ **Telos Hardware**
 - ▶ **MSP430 RISC Processor (up to 8MHz) extremely low powerconsumption**
 - ▶ **2k RAM, 60k ROM**
- ▶ **Telos Sensors**
 - ▶ **CC2420 IEEE 802.15.4 radio chip**
 - ▶ **SHT11 Humidity/Temperature Sensor**
 - ▶ **Hamamatsu Light Sensor**

TinyOs

- ▶ **TinyOS is an open-source operating system designed for wireless embedded sensor networks**
- ▶ **TinyOS's component library includes:**
 - ▶ network protocols
 - ▶ distributed services
 - ▶ sensor drivers
 - ▶ data acquisition tools
- ▶ **TinyOS has been ported to many platforms and numerous sensor boards.**

- ▶ nesC (pronounced "NES-see") is an extension to the C programming language
- ▶ The basic concepts behind nesC are:
 - ▶ Separation of construction and composition
 - ▶ Specification of component behaviour in terms of set of interfaces

FODESY Message Protocol

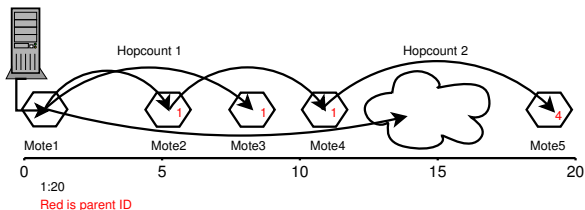


Figure: our multihop message protocol

Problems faced

- ▶ **Displaying data on PC while sending them over radio**
- ▶ **No way to debug the whole stuff**
- ▶ **Setting up the environment under Linux**
- ▶ **Lack of documentation**