PLEASE STAND BY
The television weather broadcaster

- Who they are
- Who they work for
- What they do
- Who the end user is
- Assumptions
- Challenges
- Solutions
Who are these TV people?

- TV show host
- Graphic artist
- Mad scientist
- Computer geek
Who are these TV people?

TV show host

Graphic artist

Mad scientist

Computer geek

The difference between you and me is:
I make this look good.

-- Agent J, Men In Black
Who are these TV people?

Experience and training... or not

• Formally trained meteorologists
• Broadcast meteorology certificates
• Journalism degrees (no formal weather training)
• No formal journalism or meteorology training
TV business structure

Corporate Ownership

General Manager

News Director

Weather Team

2 to 5 members
TV business model

**Sell** ad space between programming (local news usually at a higher rate)
**Sell** ad space on web site
**Sell** ad space on weather SMS/text, emails, alerts

The more people that watch = **high ratings**
Higher ratings = **higher ad rates**
Higher ad rates may = **higher revenue**
Weather broadcast influences

NWS

Weather Team

Viewers
Skywarn/ Spotters
Emergency Management
Law Enforcement
Station newsgathering
Newscast Consultants
Weather data / Station radar
Typical TV day

• **Shifts**
  • Morning overnight to 12:30pm
  • Midday 9am – 5pm
  • Evening 2pm – 11pm (Prime Time)
  • Weekend

• Develop forecast

• Editorial meeting

• Create graphics

• Update station web site and 24-hour local weather channel

• Newscast

• Monitor / review latest data before next show
Community interaction

• Station ambassador
  • School talks
  • Community groups
  • Major event emcees
  • Safety seminars
  • Station tours

• Science ambassador
  • Answers calls and emails
  • Explain everyday science events on tv
    • Earthquakes
    • Tsunamis
    • Space events
    • General nature and conservation
    • CoCoRaHS
    • Climate Change
The big show

- Chroma Key Wall
- Monitors
- Teleprompter and camera
The TV audience is well researched

- Stations hire consultants to tell us how to present news, weather and sports.
  - This includes ideas such as:
    - **No science** – just the forecast, ma’am (less is more)
      - Don’t use cold fronts or High and low pressure systems
    - **How to look**
      - Hair
      - Clothing
      - Makeup
The TV audience is well researched

• Meteorologists don’t always have full control over their show (varies from station to station) depending on consultants review and station’s willingness to follow those guidelines

• Average audience intellect ~ 3rd to 5th grade

• Females 24-54 are largest target demographic
We assume you...

• Have a television
  • Antenna
  • Cable
  • Satellite

• Have internet connectivity
  • Live streams
  • Email
  • Social media

• Cell phone (at least with text)
• Want weather information and watch local news
• Will respond to watches, warnings and other alerts
• Will report adverse weather conditions if they occur
You assume we...

• Have the ability to forecast to a hyper-local level
• Agree on what a 50% chance of rain means
• Can accurately and precisely predict precipitation amount and intensity every time
• Issue the warnings, watches and advisories...
  • ... and try to cover up your TV program on purpose

• Control the tornado sirens

• Know exactly what happens under the radar beam
  • “Why didn’t you say that storm was severe?”

• Will mention every town, especially your town, every time we give the weather report

Many of these are issues come from:
  • Perception
  • Station promotion
Severe weather day

• **Station severe weather policy**
  • Differs from station to station

• **Coverage depends on event scale and severity**
  • Usually one person is on-air
  • Rest of team backs up with data & analysis
  • Can last multiple hours, overnight, etc.
    • Severe weather outbreaks
    • Ice storms
    • Hurricanes

• **NWSChat**
  • Instant messaging with local

• **Vendor products** (Weather Central, GRLevel 2 & 3, WDT iMap, web widgets)

• **Web cams**

• SPC Mesoscale discussions and warning “heads up”
TV Weather challenges

• Warning issuance versus TV newscast time
  Non-convective watches issued with Area Forecast Discussion
  • Thunderstorm & Tornado Watches can be issued anytime
    • Mesoscale discussions give helpful lead time
    • Watches issued during newscasts may get overlooked
      • A watch issued at 5:17 pm is in the middle of the weathercast – and may not reach the viewer immediately
  • The hype and hysteria of TV weather
    • Viewer ratings drive ad revenue; lower ratings = lower revenue
    • Research shows weather is #1 reason viewers watch TV news
    • May be due to false viewer reports, poor communication between news and weather operations, information from NWS
    • Could lead to low or no response (desensitized viewers)
      • “It won’t happen to me”
TV Weather challenges

- Some of these things are not like the other
  - Mets may monitor multiple NWS offices and regions for weather data and warnings
  - Dominant Area of Influence (television market) does not equal National Weather Service CWA (County Warning Area)
TV Weather challenges

• Stay in the viewer’s circle of trust...
  • Continue to be the relevant authority on weather and science

• ...while staying classy
TV Weather challenges

• Convince the public to participate through
  • Storm Spotter Training
  • Trained storm reporting
  • CoCoRaHS
  • Weather Watchers
  • Weather pictures

• Convince the public to act
Current solutions

• Integrated Warning Team Workshop (Kansas City)
  • Coordinate color coding on weather crawls
  • Shorter duration warnings
  • Streamline outdoor warning sirens

• Regular television & National Weather Service Coordination meetings

• Continually review local climate, hazards and history and compare to current situation
  • Remind viewers of Flash Flood history in the Ozarks
  • Review basic weather safety tips during storms and tornado events
  • Consistently explain complicated weather terms

• Encourage personal responsibility and planning
  • It’s not “if” ... but “when”
And in the dying embers
These are my main regrets:

When I'm right no one remembers;
When I'm wrong no one forgets.